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THE METAVERSE AND ITS DOUBLE: TOWARD PHYGITAL ANTHROPOLOGIES

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TABLE OF CONTENTS

The Metaverse and Its Double: Toward Phygital Anthropologies

Francesco Melchiorri

Paths 1

Gazes 12

↳ A different origin for Virtual Reality and immersivity 12

↳ To the roots of Visual Culture 15

↳ Georges Didi-Huberman: Reopening the History of Images 19

↳ The Italian Visual Culture between Cultural Studies and Aesthetics 22

↳ The sensible idea of "arche-screen" and the Phenomenological Aesthetics of Mauro Carbone 33

↳ The broad concept of liveness by Philip Auslander 36

↳ Immediality and Intermediality as bridge concepts between media studies and Aesthetics 40

↳ The imaginative and interactive Aesthetics of Pietro Montani 45

↳ Between Aesthetics and Mediology: Media Archaeology and its Italian declination 62

↳ Beyond 73

Bodies 80

Part one: Expanded Reality and Theatre via a neurocultural perspective 80

↳ From Vision to Embodiment 81

↳ Is theatre (just) a medium? Theatre as Mediological Model 82

↳ XR as Reconfiguration of Embodied Experience 86

↳ Some Merleaupontian scholars' media perspectives 88

↳ Gesture, touch, proxemics as media(-archeology) embodiment 96

↳ Back forward to the theatre 100

↳ The Metaverse and its Double 101

Part two: From the Cinema of Attractions to the Metaverse of Attractions: Reenactment, Wonder, and Performativities in the Phygital Era 105

↳ From Embodiment to the Metaverse of Attractions 106

↳ Genealogies of Attraction: Early Cinema, Revolutionary Theatre, Living Cinema 108

↳ Media, Screens, Virtuality, Ritual, and Spectacle 112

↳ Guy Debord and *The Society of the Spectacle* 113

↳ Roberto Diodato: Virtual Body, Image-Body, and the Actor-Spectator in Immersive Mediation 119

↳ Again, Carbone and Lingua: Arche-Screen, Christian Genealogies, and Dividual Subjectivation 127

↳ Some performance studies contaminations 131

↳ Alloa: *The Theatre of the Virtual* 134

↳ Towards (or backwards?) a Metaverse of Attractions 141

↳ Definition, Scope and Constitutive Principles 143

↳ Limits and Critical Stakes 145

Environments 149

↳ Environments as *Umwelten* 150

↳ *Umwelt* as a relational ontology: "as many worlds as there are subjects" 152

↳ *Wirklichkeit* and the non-appearance of "objective surroundings" 153

↳ The functional circle: *Merkwelt*, *Wirkungswelt*, and perception–action as meaning-production 154

↳ Rule, *Bauplan*, and teleological form: why *Umwelt* is never a mere mechanism 157

↳ The tick as a minimal *Umwelt*: meaning as melodic economy of marks 158

↳ Space, time, and the embodied *schemata* of experience 160

↳ Operative and perceptual images: tones, mood, search, and anticipation 163

↳ Operative space: paths, home, territory, and the critique of "neutral" experiments 166

↳ Free productions, magical environments, and the elasticity of *Umwelt* 167

↳ **Human variability without human exceptionalism: the oak and the pluralization of meaning** 169

↳ Main Themes 172

↳ Before the case studies: a wider prehistory of immersive desire 177

Simulations 198

↳ The invention of the observer, the fairground, and the magic lantern: salience, attraction, and the staging of prominence in early visual culture 198

↳ **Crary and the Modern Reconfiguration of the Observer** 198

↳ **Salience, Projection, and the Environmental Logic of the Magic Lantern** 204

↳ Contemporary theatre and metaversal logics: staging environments as fields of perception and action 217

↳ ***Festen. Il gioco della verità*: the stage as a double operative plane** 220

↳ ***OLEANDRA*: platform dramaturgy without immersive technology** 224

↳ ***Come, Fur(r)ies, Dance!*: ritual, hybrid embodiment, and virtual community** 228

↳ **From Arche-Screen to Experienscreen: Toward a theatrical understanding of metaversal experiences** 233

↳ Metaversal reenactments and the situated environment of the almost-simultaneous 236

↳ **A threshold in immersive practice: from entering bodies to entering events** 239

↳ Hong Kong: protest as a portable, divided, and ultimately overrun world 242

↳ Butler, Pennsylvania: The Trump's assassination attempt as a just-past environment 246

↳ Concerts as reenacted liveness: Travis Scott and Ariana Grande in Fortnite 251

↳ The event after the event 254

↳ The environment as a technical-material and collective ecology 255

↳ e⁻lektron: the virtual stage as relational environment 257

↳ Rodrigo García: the stage as material excess and unstable environment 260

↳ CREW: immersive performance as distributed hybrid ecology 262

↳ Toward an open environmental comparison 266

Anthropologies 268

↳ Anthropologies in the Strong Sense: Image, Memory, Embodiment, Mimesis, and the Making of Worlds 274

↳ Mediological and Screen-Based Rearticulations: Carbone, Carbone–Lingua, Debray 288

↳ Technical-Anthropological and Environmental Rearticulations: Leroi-Gourhan by Stiegler, Ferraris, van Buuren, Morton, Campagna 303

↳ Conceptual Interlocutors and Background Frameworks: Lyotard, Foucault, Anders, Morin, Clarke 311

↳ Returning to the History of Looking: Cousins, Belting's Florence and Baghdad, Debray, and the Closure of the Circle with Gazes 318

↳ Toward Phygital Anthropologies 326

↳ Final Reversal: If Media Were Born Within Ritual-Performative Environments 332

Traces 341

Paths

Immersive media may be considered one of the most revealing thresholds through which the present can be queried. Under the umbrella term of extended reality (XR), which includes virtual reality (VR), augmented reality (AR), mixed reality (MR), together with the broader imaginaries condensed in an undefined notion of metaverse, contemporary culture gathers a series of phenomena that exceed the status of mere technological innovations. In this sense, immersive media emerge as one of the privileged sites in which contemporary culture negotiates reality, presence, attention, embodiment, and relation. They increasingly designate a wider historical condition in which images tend to become environments, interfaces tend to become habitats, and mediation increasingly reorganizes the very terms through which bodies perceive, act, remember, and relate. The present dissertation takes shape from within this threshold. Its object is less a single device or a bounded technological sector than a wider transformation of experience: the emergence of hybrid environments in which bodies, images, screens, gestures, operations, affects, and technical supports enter into increasingly dense relations. Within this horizon, the metaverse appears less as a stable object than as a particularly symptomatic name for a broader reconfiguration of mediated human reality. Accordingly, this dissertation approaches its main theme as a critical symptom: a privileged site through which to rethink, at once, the history of immersive media, the limits of visual paradigms, and the anthropological consequences of increasingly hybrid relations between bodies, screens, environments, and technical supports.

A precise research question guided the initial movement of this inquiry and gave it its first orientation:

> *Can immersive technologies and experiences be more fruitfully understood through the performing arts than through strictly visual genealogies, and if so, how?*

The importance of this question lay in its methodological and epistemological implications. It asked where immersive media should be placed, but it also asked what kind of history is capable of making sense of them. Scholarship on XR has often privileged an optical and visual lineage, situating immersive environments within the histories of perspective, screens, computational images, and technical vision. That lineage remains indispensable in many respects, and this dissertation engages it fully. Yet immersive experience immediately reveals a broader field: presence, address, gesture, embodiment, scenic organization, ritual threshold, sensory intensification, collective participation, and the relational calibration of bodies in technically mediated environments. The question of immersion thus opens onto a field that exceeds the visual without abandoning it. The dissertation begins precisely there, at the point where visual culture proves foundational and at the same time insufficient.

In this sense, Vilém Flusser's *Into the Universe of Technical Images*[1] can be taken as an emblematic predecessor to the present dissertation. Flusser's small but remarkably condensed book belongs to that moment in which the question of media was being reformulated through the fate of technical images. Its object is the universe of photographs, films, video images, television screens, and computer monitors, understood not as a secondary layer added to an already stable reality, but as a decisive mutation in the way human beings apprehend, structure, and inhabit the world. Flusser's wager is well known and remains foundational: technical images do not simply continue the history of traditional images; they mark a new configuration of culture, one in which linear, textual, and historical consciousness gives way to a different regime of abstraction, imagination, and mediation. The great strength of this position lies in the fact that it does not reduce images to representation. Images, for Flusser, are already operators of culture, structures of orientation, and vehicles of world-perception. In that sense, his work belongs fully to the most conceptually powerful moment of visual culture and media theory, where the image is no longer an object among others, but a form through which a civilization reads and organizes itself. What *Into the Universe of Technical Images* formulates with particular clarity is that technical images stand in a radically different relation to the world

[1] Vilém Flusser, *Into the Universe of Technical Images*. Translated by Nancy Ann Roth (Minneapolis: University of Minnesota Press, 2011). See also the Italian edition Id., *Immagini: Come la tecnologia ha cambiato la nostra percezione del mondo* (Roma: Fazi Editore, 2009).

than traditional ones. Traditional images, in Flusser's account, are abstractions from the concrete environment; they condense the world into surfaces that remain tied to imagination and to a symbolic, even magical, organization of experience. Technical images, by contrast, are generated through apparatuses and programs; they are not simple images of things, but visual surfaces produced through the computation and reorganization of concepts. This is why the book insists so strongly on abstraction, imagination, and conceptualization as distinct but historically connected operations. What appears on the screen is not the return of an innocent image. It is the outcome of a new process in which the world is broken down into calculable elements and then reassembled as an apparently immediate surface. Flusser therefore remains foundational for understanding why technical mediation cannot be treated naïvely: it calls for a critical literacy capable of reading images as programmed forms, as products of apparatuses, and as structures that reorganize not only perception but culture itself. For the present dissertation, however, Flusser is foundational not only because of what he explains, but also because of what his explanatory horizon leaves productively open. His account is exemplary of a strong and still understandably diffused visual-cultural paradigm: a paradigm in which the decisive transformation is articulated through technical images, abstraction, apparatuses, and the reorganization of perception. The research developed here begins from that dense inheritance and fully acknowledges its power. At the same time, it takes shape from the conviction that the same field now requires renewal. Immersive media press the question of the image toward embodiment, relation, staging, threshold, and environmentality with a force that a purely image-centered framework can illuminate only partially. Flusser therefore belongs in this introduction as an external support to the dissertation's movement: he names, in concentrated form, the powerful theoretical ground from which the initial question becomes possible. He is emblematic of the question from which the work departs, precisely because his work shows how deeply contemporary mediation has been understood through the destiny of images, and why that same understanding now needs to be widened without being discarded.

For this reason as well, the dissertation is situated in media studies within visual culture, and is oriented by media archaeology, the anthropology of media, and performance theory. This disciplinary location should not be understood as a diplomatic compromise between adjacent fields. It seems to offer the most adequate description of

the object itself. XR belongs to media studies because it concerns *dispositifs*, infrastructures, mediation, technical environments, and changing regimes of presence. It belongs within visual culture because it also concerns images, gazes, symbolic forms, screens, and the historically variable organization of visibility. It calls for media archaeology because the present does not arrive as a simple rupture but as a layered reactivation of older forms, attractions, fantasies, and apparatuses. It also calls for the anthropology of media because immersive environments reveal themselves as spaces in which human world-making, symbolic practice, relation, and embodiment are redistributed. Performance theory becomes equally relevant because XR stages bodies, actions, thresholds, scenes, and relations rather than simply presenting visual contents to a detached observer. The dissertation therefore moves within a disciplinary field already marked by crossings, but it does so with a clear center of gravity: immersive media are approached as historical, embodied, and relational media-environments.

Methodologically, the dissertation is shaped by a primarily genealogical and media-archaeological approach, developed through an interdisciplinary dialogue between media studies, visual culture, aesthetics, the anthropology of media, and performance theory. Genealogy proves central here because the dissertation does not begin from the contemporary technological object as if it were self-evident. It reconstructs the conditions through which the object became thinkable. Media archaeology is equally present insofar as those conditions do not form a linear history of progress. They form a field of returns, survivals, displacements, and refunctionings. Interdisciplinarity enters the method here as a necessary mode of precision rather than as a generic appeal to openness. The metaverse and adjacent immersive environments call for theoretical passages across image theory, theatre theory, phenomenology, aesthetics, anthropology, screen studies, and mediology because they condense problems belonging to all of these areas at once. The dissertation accordingly proceeds by reconstructing long lines of thought, testing their intersections, and bringing them to bear on contemporary cases. Its movement is neither simply historical nor simply speculative. It is historical in order to become conceptually exact, and conceptual in order to remain answerable to historical and medial complexity.

A first decisive gesture of the dissertation consists in displacing the origin of the problem. *Gazes* opens the inquiry by moving away from the familiar account according to which virtuality begins with digital computation, immersive simulation, or advanced

graphics, and by returning instead to Antonin Artaud's phrase "virtual reality of the theatre." That return functions less as an antiquarian detour than as a methodological reorientation. Artaud offers a conceptual threshold in which virtuality already appears as force, ritual efficacy, bodily address, and staging. Through that threshold, XR enters the dissertation as a performative question before becoming a visual one. Presence, gesture, scenic organization, and embodied efficacy therefore emerge from the outset as central coordinates of the inquiry. This initial displacement gives the research its first innovative edge: immersive media begin to appear less as enhanced image-systems than as environments in which relations are staged and perceptual realities are actively reconfigured.

A second movement unfolds as the dissertation passes through visual culture while steadily expanding its field of pressure. *Gazes* reconstructs a genealogy extending from Warburg, Riegl, and Panofsky to Benjamin, McLuhan, Debray, and major Italian contributions to visual culture and contemporary aesthetics. This genealogy provides more than background. It establishes the historical and conceptual density of the visible as a field already traversed by memory, symbolic form, apparatuses, cultural techniques, and distributions of attention. At the same time, the genealogy gradually reveals that the visible itself opens onto a wider terrain. Images carry affects, organize behaviors, orient bodies, and regulate thresholds of proximity and distance. Visibility, in other words, already contains the seeds of embodiment and relation. The dissertation therefore proceeds by taking visual culture fully seriously while also pushing its implications beyond a purely optical horizon.

A third movement takes shape in *Bodies*, where embodiment becomes the central site through which immersive efficacy can be rethought. Here XR is read through presence, gesture, feedback, liveness, and intercorporeal relation, in sustained dialogue with phenomenology, neurocultural approaches, and performance theory. The theatre becomes especially productive at this point because it supplies a long tradition for thinking co-presence, bodily exposure, scenic address, and the reciprocal constitution of event and spectator. XR can thus be approached as a medium that solicits embodied participation rather than merely offering intensified images. This is also the point at which the dissertation begins to formulate one of its central proposals: immersive media become most legible when they are treated as relational thresholds that stage and transform human

experience through embodied and performative interactions. The metaverse itself starts to appear here as a quasi-theatrical condition in which dividual forms of presence, sensory intensification, and ritualized mediation converge.

A further conceptual consolidation takes place already in the second half of *Bodies*, where the dissertation develops the theoretical pathway that leads from the cinema and theatre of attractions toward the proposal of a "Metaverse of Attractions". This is relevant for the architecture of the thesis because the concept does not first emerge at the level of case-study description. It first takes theoretical shape before being tested analytically. The chapter reconstructs, in detail, the attraction lineage through Gunning and Tret'iakov, and brings it into dialogue with remediation, spectacle, reenactment, liminality, communitas, screen anthropology, virtual embodiment, and entanglement. Within that framework, the Metaverse of Attractions is proposed not as a definitive label or a total explanation, but as a hypothetical and functional analytical framework for describing an emergent medial regime in which attraction grammars organize experience across phygital environments. Platforms and hybrid environments, in this sense, begin to be read as event-based ecologies of address, spectacle, apparatus exhibition, iterative reenactment, and synchronized participation.

A fourth movement unfolds in *Environments*, where embodiment widens into ecology. This chapter shows that immersive experience takes shape within hybrid fields composed of interfaces, protocols, material supports, spatial cues, infrastructures, and collective uses. Environments accordingly acquire a central methodological role: they make it possible to understand how bodies, images, and devices co-constitute one another within a relational field. At this point, the dissertation's vocabulary shifts toward relational mediation. Hence, mediation no longer appears merely as the function of a device or as the transmission of content because what matters here is the patterned organization of relations among heterogeneous elements—bodies, screens, spatial arrangements, algorithmic procedures, technical supports, and social expectations—rather than the isolated function of a single technical medium. This ecological passage is one of the moments in which the dissertation most clearly moves beyond both image-centered and body-centered reductions, and toward a denser account of hybrid worlds.

A fifth movement emerges in *Simulations*, where the theoretical premises elaborated earlier are comparatively tested and synthesized through historical

contemporary case studies. The chapter examines magic lantern shows and fairgrounds, as well as reenactments of political violence, protest simulations under conditions of surveillance, platform mega-events, in-game concerts, and analogically immersive theatrical works. These cases actively test the framework, reveal its strengths and limits, and show how attraction logics are actually reworked across games, social platforms, live performance, and screen culture. At this stage, the "Metaverse of Attractions" gains empirical traction as a way of reading a field in which modular event-structures, apparatus exhibition, iterative reenactment, synchronized co-presence, and infrastructural fragility organize contemporary experience. The case studies therefore give the concept its situated thickness: they show how it can illuminate the phygital grammar of address, participation, and presence without pretending to exhaust the complexity of the phenomena it names.

This trajectory also clarifies the broader movement of the dissertation. The argument may be described as advancing through a progressive thickening of the initial research question. *Gazes* relocates immersive media within a performative genealogy of the visible. *Bodies* restores embodiment and theatrical liveness as central operators of immersive efficacy. The second half of *Bodies* develops the theoretical pathway toward the Metaverse of Attractions. *Environments* expands embodiment into hybrid ecologies of relation. *Simulations* then brings that framework to its final comparative testing through historical and contemporary practices and events. What emerges from this sequence is not a final doctrine of immersion but a proposal for reading immersive media as sites where embodiment, scenicity, technical mediation, and sociality intersect with particular intensity. Seen in retrospect, the dissertation advances less from theory to application or from history to present in any linear sense than toward an increasingly dense account of mediated human reality. Thus, it also proceeds less by linear demonstration than by cumulative reframing: each stage gathers what the previous one made visible and carries it toward a more complex account of mediated human reality. In this sense, the initial comparison between performing arts and visual genealogies becomes, step by step, a broader inquiry into the historical co-development of bodies, images, rites, screens, infrastructures, and forms of collective life.

Once these movements have been completed, the dissertation reaches a decisive threshold. The original research question—whether immersive media are closer to the performing arts than to strictly visual genealogies—returns here in transformed form,

shaped by the consequences of the path that has been followed. The answer now takes shape beyond a simple choice between two lineages. The dissertation as a whole suggests that the visible, when retraced through embodiment, staging, ritualization, environmental mediation, and technical exteriorization, already opens onto a broader anthropological field. The concluding movement of the thesis, significantly titled *Anthropologies*, gathers this enlargement into focus. It explores the anthropological scales disclosed by the previous chapters, while also pointing beyond them toward those phygital anthropologies that the dissertation ultimately proposes as its final opening. In this sense, anthropology emerges here as a consequence demanded by the original problem itself. The metaverse and its doubles reveal that immersive media condense several irreducible dimensions of human world-making: image, body, screen, rite, trace, infrastructure, environment, collective, and imaginary. At this point, the title of the dissertation begins to acquire its fuller meaning. The double appears as a mediological and anthropological category rather than as a metaphorical ornament. Immersive media double reality through overlays, reenactments, reflections, thresholds, and alternate actualizations.

A very different, and very recent, external marker can be placed at this threshold: Vittorio Gallese's *Il Sé digitale. Dai neuroni specchio alla mediazione tecnologica*.[2] The book has appeared only now, while this dissertation was reaching completion, and for that very reason it does not determine the trajectory of the thesis. Its significance lies elsewhere. It is emblematic of the fact that the broader theoretical field is now moving, with increasing explicitness, toward questions that this dissertation has also reached through its own path. Gallese, one of the central figures in contemporary neuroscientific and philosophical debates on embodiment, has long worked on the relations between brain, body, intersubjectivity, and image-experience; his trajectory—from mirror neurons to embodied simulation and media studies—already made him a major interlocutor for any inquiry concerned with spectatorship, mediation, and embodied relation. In *Il Sé digitale*, however, that line is extended toward a much more explicit confrontation with digital mediation, immersive environments, algorithmic alterity, and technologically modulated subjectivity. Gallese presents the book itself as the construction of a "new paradigm" for thinking the contemporary subject as embodied, relational, and

[2] Vittorio Gallese, *Il sé digitale: Dai neuroni specchio alla mediazione tecnologica* (Milano: Raffaello Cortina Editore, 2026).

technologically shaped. What is especially striking for the purposes of the present introduction is the way Gallese frames the problem. The volume describes the digital not as a site of simple disembodiment, but as a field in which embodiment is reconfigured. It proposes a new onto-phenomenological approach to subjectivity capable of integrating interactive devices, artificial intelligences, and immersive digital environments into an account of the self as corporeal, relational, and technologically mediated. In this formulation, the body is not left behind by digital culture; it is reorganized within it. Alterity is not cancelled; it is rendered newly ambiguous by predictive systems and affective simulacra. Even more significantly, Gallese names the contemporary moment as one of anthropological mutation, and culminates in the proposal of a radical aesthetics, understood as a politics of feeling adequate to a world increasingly structured by interfaces and algorithms. All this makes the book deeply resonant with the horizon reached by the dissertation, even though the dissertation itself arrives there from media studies, media archaeology, visual culture, and performance theory rather than from neuropsychology, neurophenomenology or cognitive neuroscience. The proximity is therefore real and calls for a precise framing. *Il Sé digitale* belongs primarily to the fields of neuropsychology and cognitive neuroscience, even as it extends its argument toward philosophy, aesthetics, and media theory; likewise, this dissertation reaches anthropology as a culminating horizon through the combined paths of media studies, visual culture, media archaeology, the anthropology of media, and performance theory, rather than taking it as its initial disciplinary foundation. The convergence between them occurs at a later and more revealing point: both are compelled, by different routes, toward the recognition that contemporary media environments are reshaping bodies, relations, perceptual habits, and models of subjectivation in ways that exceed narrowly technical description. Gallese's notion that every vision of the world, including the digital one, has a bodily foundation, and his formulation of the body as the first medium through which any other mediation becomes possible, resonate strongly with the dissertation's insistence on relational mediation, embodied thresholds, hybrid environments, and phygital anthropologies. For that reason, the book is best positioned here as an external after-signal: a publication that arrived too late to guide the work, but early enough to confirm that the work has intercepted a genuine theoretical pressure of the present. If Flusser can stand as emblematic of the question from which this dissertation departs, Gallese stands

as emblematic of the field toward which it has arrived: a field in which bodies and media, mediation and (in)dividuality, relations and technics are increasingly being thought together.

What the dissertation gradually moves toward, then, is a final proposal: that of "Phygital Anthropologies", in the plural. Within the logic of the thesis, the phygital names a demanding historical and experiential condition in which previously stabilized oppositions—actual and virtual, material and immaterial, visible and audible, body and screen, ritual and platform, environment and interface—can no longer be treated as neatly separable domains. The plural form also becomes necessary at a theoretical level. Metaversal and immersive ecologies disclose the irreducible intertwining of several anthropological scales, and the dissertation therefore arrives at the proposal that phygital anthropologies should be simultaneously anthropologies of images, embodiment, screens, ritual passage, mimesis, technics, memory, environments, infrastructures, and collective experimentation. This is also why the move beyond visual culture appears here as its completion under contemporary conditions. Once images become environments, once screens become habitats, once bodies become datafied and yet remain irreducibly embodied, and once relations themselves are technically staged and captured, the question expands beyond how we see. It becomes a question of how human worlds are composed, doubled, exposed, recorded, and transformed across phygital conditions of life.

From this perspective, the dissertation begins with a critique of the dominant visual genealogy of immersive media; it relocates XR closer to theatre and performance in order to reveal the centrality of presence, gesture, embodiment, scenic organization, and ritualized mediation; it widens that line of inquiry through environments, screens, simulations, and contemporary phygital cases; and it finally reaches a broader anthropological threshold where the old partitions between visual studies, performance studies, media theory, anthropology, and philosophy prove insufficient to the object. The metaverse, in this sense, is less the name of a stable future technology than the site where those insufficiencies become unmistakable. To study it is also to ask not only what media are becoming, but what forms of embodied, relational, and technically mediated humanity are becoming thinkable through them. That is why the dissertation ultimately moves toward not a single doctrine of immersion, but a field of Phygital Anthropologies: a field adequate to the fact that the human today is increasingly staged, sensed, remembered, and

negotiated across hybrid environments in which images, bodies, and technical supports no longer stand apart.

Taken as a whole, the dissertation offers a theoretical proposal whose value lies less in the closure of a system than in the opening of a perspective. It suggests that immersive media can be understood more fruitfully when theatre and performance are treated as central interlocutors rather than peripheral analogies; it suggests that visual culture finds one of its most productive renewals when it is pressed toward embodiment and relational mediation; and it suggests that the metaverse becomes analytically legible when approached as one threshold within a broader field of phygital anthropologies. This remains, deliberately, a proposal rather than a definition. Its ambition is to offer a framework sufficiently precise to illuminate the contemporary field, and sufficiently open to invite further developments across media studies, visual culture, performance theory, and anthropology.

Gazes

A different origin for Virtual Reality and immersivity

It is telling that one of the most resonant early occurrences of the phrase 'virtual reality' appears not in a handbook of computational graphics, nor in a neuropsychology lab report, but in a manifesto for a theatre yet to come. In a 1938 essay "The Alchemical Theater," Antonin Artaud writes cryptically:

> the perpetual allusion to the materials and the principle of the theater found in almost all alchemical books should be understood as the expression of an identity (of which alchemists are extremely aware) existing between the world in which the characters, objects, images, and in a general way all that constitutes the *virtual reality* of the theater develops, and the purely fictitious and illusory world in which the symbols of alchemy are evolved. (Artaud 1958: 49)[3]

The observation is not an eccentric metaphor but a radical proposal: to understand theatre as an operative level where symbols and forces act directly upon and with the spectator, generating transformations as real as those sought by alchemy. In Artaud's lexicon, "virtual reality" does not mean an escape from reality but a concentrated level of its operative possibilities—the field where gestures, lights, and sounds act with the immediacy of ritual. From the beginning Artaud himself proposes theater as a laboratory of "virtual reality." In this minor passage of his manifesto, Artaud draws a charged parallel between alchemy and theatrical art. So, the identity he suggests is not metaphorical ornament but a literal claim about levels of reality. From this first sentence

[3] Antonin Artaud, *The Theatre and Its Double* (New York: Grove Press, 1958). See also Id., *Il teatro e il suo doppio*, ed. by Gian Renzo Morteo and Guido Neri (Torino: Einaudi, 2000).

the problem of XR—extended reality, immersive media, environmental images—enters the scene as a performative question rather than a visual one. Artaud's theater is not a frame for looking; it is a space of forces, a metaphysics-in-action that acts upon bodies and is in turn acted upon by them. The "virtual" here names neither simulation nor substitution; it names an operative layer of reality that theater organizes into perceptible efficacy. From this vantage, the contemporary enthusiasm for XR risks starting in the wrong epistemic key, tethered to optics and representation, when the foundational problematic could be considered performative—more akin to choreography and ritual than to the retina.

To argue this, the present dissertation proposes a different genealogical proposal. The itinerary is not a hasty march through "visual culture" as if it were a settled territory, but a return to the points where the visible is continually made and unmade—where image-practices implicate bodies, apparatuses, and forms of attention. Our path runs from Artaud's virtuality-as-theater to the formation of visual culture as a field—Warburg's pathos-formulae and distances, Riegl's *Kunstwollen*, Panofsky's symbolic forms—before confronting Benjamin's aura and social unconscious, McLuhan's media-formalism, the apparatus concept in Agamben and Foucault, and the idea of spectacle in Debord. Keeping them in dialogue with Italian contemporary Aesthetics theories, the attempt would be to relocate XR within a media genealogy of the visible experiences in order to propose a first look at immersive media as problems of staging, embodied perception, and operative media, not as a mere incremental upgrade in visualization.

Stepping back to the Artaudian proposal, if theatre is not a house of representation but a laboratory of forces, then its "virtual reality" is not a metaphor but a model for how bodies, images, sounds, and movements acquire agency. "Light, instead of decorating, assumes the qualities of an actual language, and the stage effects, all humming with significations, take on an order, reveal patterns. And this immediate and physical language is entirely at the director's disposal." (Artaud 1958: 119). The *mise-en-scène* is here conceived not as decoration but as an alchemical crucible where embodied perception is reconfigured and bodies recalibrated: "this whole complex of gestures, signs, postures, and sonorities which constitute the language of stage performance, this language which develops all its physical and poetic effects on every level of consciousness and in all the senses, necessarily induces thought to adopt profound

attitudes which could be called metaphysics-in-action." (Artaud 1958: 44). Artaud's phrases ring with the hard glitter of a laboratory vocabulary. Theater is for him a "metaphysics-in-action," that is, not a discourse about metaphysics but its embodied practice. The point lies in what Artaud called "To know in advance what points of the body to touch[. This] is the key to throwing the spectator into magical trances. And it is this invaluable kind of science that poetry in the theater has been without for a long time." (Artaud 1958: 140). The virtual in this sense is not opposed to the real but is the condition of its effective re-staging.

In this way, Artaud thus inaugurates a genealogy of immersion that cuts across theatre and media: immersion is not simply *seeing more*, but *embodying more*, a reconfiguration of the relation between body, perception, and symbols. This understanding sets the stage—quite literally—for a broader inquiry into immersive media. Extended reality (XR) technologies, from virtual reality headsets to mixed-reality environments, are heirs to this Artaudian grammar: they stage relations of force, rhythm, gesture, light, and sound that recompose perception. When he writes that the theater's "virtual reality" is identical to alchemical symbolization, he is redefining the ontology of the image as an event of energies rather than a picture to be beheld. What Artaud foresaw as the "virtual reality of the theatre"[4] becomes a critical vantage point for rethinking immersive technologies not primarily as innovative visual apparatuses, but as performative *dispositifs* which reconfigure reality.

A preliminary definition of the idea of 'immersive' and 'immersivity' could help to better focus on the topic. Consulting the Cambridge Dictionary, on 'immersive'[5] we find the reference, as an adjective, to the register of "media, theatre & film", followed by the definition: "seeming to surround the audience, player, etc. so that they feel completely involved in something." Being "involved" in something would seem to imply an active engagement with something (be it physical, emotional, or mental) in the situation. Hence, if the adjective 'immersed' finds the term 'immersion' in its reference noun, by contrast,

[4] In cinema, a change in time produces a change in space; this is a simple definition of montage. In VR, by contrast, a change in space produces a change in time, whether artificially or effectively, both within the immersive experience itself and in the external space physically occupied by the body. This marks a first and plain point of contact with theatre: the same dynamic indeed occurs on stage when the scene and/or the set change.

[5] 'immersive', Cambridge Dictionary, Cambridge University Press & Assessment, accessed April 15, 2026, https://dictionary.cambridge.org/dictionary/english/immersive.

the adjective ‘immersive’ will refer to a different term, indicated by the lemma ‘immersivity’. Thus, the diversification in the use of the ‘immersive-immersivity’ combination compared to the corresponding ‘immersed-immersion’ shows how the strong active component that characterizes these lemmas is confirmed. We can therefore conclude that something immersive is more engaging and stimulating than something immersed, as well as immersion is an action that in some way will always be more passive than any immersivity. In this sense, it is no coincidence that the adjective ‘immersive’ is directly associated with the register of the context that gave its birth, namely contemporary media, theatre and cinema, environments which are characterised by the involvement of bodies and subjects in an all-encompassing way, not only with a strictly spectatorial purpose.

Even if the use of this terminology particularly spread in the recent decades, as the Oxford English Dictionary suggests the earliest known use of the adjective ‘immersive’[6] is from 1635, in the writing of John Swan, Church of England clergyman and encyclopaedist. This aspect is particularly interesting: despite the only recent development and diffusion of immersive technologies, the desire for immersivity could be considered older, perhaps even inherent in the development of the modern and contemporary age.

To the roots of Visual Culture

To situate Artaud’s operative virtual in a history of the visible, we should grapple with the disciplinary arc now grouped under the umbrella term ‘visual culture.’ The emergence of *visual culture* as a field has often been narrated as a rupture in the late twentieth century, with the 1990s proliferation of visual culture studies across art history, cultural studies, and media studies. Yet the deeper genealogy reaches back at least to Aby Warburg and the so called ‘Vienna School’, where questions of perception, image, and cultural memory were already central. Warburg, in his introduction to the *Mnemosyne*

[6] ‘immersive’, Oxford English Dictionary, Oxford University Press, accessed April 15, 2026, https://www.oed.com/dictionary/immersive_adj?tl=true.

Atlas[7], defines culture as "the conscious creation of distance between oneself and the external world," a distance that establishes the oscillation between magical absorption and critical reflection (Cirlot 2018: 84). This "founding act of human civilization" is performative: to look at an image is to act upon one's relation to the world, to negotiate absorption and distance. His concept of *pathosformeln*[8]*—formulae* of pathos, gestures and postures surviving across centuries—are evidence that images are not inert representations but carriers of affective energy, embodied habits that reemerge in new contexts[9]. In Warburg's framework, images are always more than seen; they are enacted, rehearsed, transmitted as behaviors.

Aby Warburg's project, especially as it constellates around *Pathosformeln* (pathos-formulae) and the question of psychic and cultural distance, remains foundational for any genealogical approach to visual culture. Warburg teaches that images are not stills but energetic condensations—mnemic charges that circulate, re-attach, and restage affects across distances and epochs. In Italian and Franco-Italian readings of Warburg (central within the visual-culture scene), the decisive motif is distance as a technique—how cultures create room for images to be handled, ritualized, or de-demonized. This is not merely historical iconography; it is a theory of image-operations as cultural technique, a line that converges with Artaud's "metaphysics-in-action." In both cases, the term 'virtual' is not reducible to illusion but names a field of forces where human perception is recalibrated. Warburg's oscillation between absorption and distance parallels Artaud's oscillation between cruelty and trance. Both recognize that images and performances operate not only at the level of signification but at the level of bodily disposition and experience.

[7] Victoria Cirlot, "*Zwischenraum/Denkraum*. Terminological Oscillations in the Introductions to the Atlas by Aby Warburg (1929) and Ernst Gombrich (1937)", translated by D. Carrillo-Rangel, *La Rivista di Engramma* 153 (February 2018): 83-108. See also Giulia Bordignon (ed. by), "Lettura dell'Introduzione all'Atlante della Memoria. Dalla Einleitung al Bilderatlas Mnemosyne di Aby Warburg", *La Rivista di Engramma* 1 (September 2000): 63-69. The complete digital edition of the Mnemosyne Atlas, featuring critical notes and multilingual contributions, is published by Enagramma: https://www.engramma.it/eOS/core/frontend/eos_atlas_index.php accessed April 15, 2026.

[8] See Salvatore Settis, "Aby Warburg, il demone della forma. Antropologia, storia, memoria", *La Rivista di Engramma* 100 (October 2012): 269-289.

[9] See Maria Luisa Meneghetti, *Pathosformeln, retorica del gesto e rappresentazione: ripensando Aby Warburg* (Pisa-Roma: Istituti editoriali e poligrafici internazionali, 2006).

Alois Riegl, in turn, theorized perception as historically variable through his concept of "Kunstwollen". In *Spätrömische Kunstindustrie*[10], Riegl showed how shifts from tactile to optical values, from haptic surface to distant depth, transformed visual regimes (Riegl 2013). For Riegl, styles are not arbitrary but articulate how societies organize perception: whether through linear outline, ornamental surface, or perspectival depth. What matters is not representation but perceptual orientation. This insight would echo in Panofsky's iconology[11] and later in Benjamin's analysis of technical reproducibility. With Alois Riegl we encounter perhaps the most programmatic attempt to historicize seeing as a Wollen—a will to form that organizes the terms of visibility. Riegl's pivots on the shift from haptic (tactile, near) to optic (visual, distant) values, an analysis that makes perception historically variable and technically staged. Riegl's headline term, *Kunstwollen*, names the immanent vector by which a culture wants form, distributing salience and value across the field of the visible[12]. Immersive media scholarship typically invokes Riegl as a prehistory of "embodied vision," but the more radical lesson may be seen as methodological: *Kunstwollen* asks us to consider XR as a cultural will-to-environment, a reallocation of near/far, touch/sight, and ground/figure that immersive systems stage deliberately. Thus, for immersive media Riegl's historicization of perception proposes that what feels "natural" in XR—six degrees of freedom (6DOF)[13], wide field of view, stereoscopy—is culturally produced and historically situated.

Erwin Panofsky extended this tradition by systematizing the discipline of iconology[14], distinguishing pre-iconographical description, iconographical analysis, and iconological interpretation. But perhaps more crucially for media studies, in *Perspective*

[10] Alois Riegl, *Spätrömische Kunstindustrie* (Vienna: Österreichische Staatsdruckerei, 1901). For the present dissertation we used the recent Italian edition Alois Riegl, *Le prime cattedrali. L'industria artistica tardoromana* (Milano: Edizioni Ghibli, 2013).
[11] Erwin Panofsky, *Studies in Iconology; humanistic themes in the art of the Renaissance* (New York: Harper & Row, 1962) and Id., *Perspective as Symbolic Form* (New York: Zone Books, 1991).
[12] For helpful syntheses see on genealogy of the haptic/optic pair see Jas' Elsner, "From Empirical Evidence to the Big Picture: Some Reflections on Riegl's Concept of Kunstwollen." *Critical Inquiry* 32, no. 4 (2006): 741–766 and Matthew Rampley, "The Idea of a Scientific Discipline: Rudolf von Eitelberger and the Emergence of Art History in Vienna, 1847–1873." *Art History* 34, no. 1 (2011): 54–79.
[13] For an exhaustive conceptualization of immersive experiences see Hyunkook Lee "A unified conceptual model of immersive experience in extended reality" (preprint), *Computers in Human Behavior Reports* 18, no. 100663 (2025).
[14] Erwin Panofsky, *Meaning in the visual arts: papers in and on art history* (Garden City, NY: Doubleday Anchor Books, 1955).

as Symbolic Form (1991) Panofsky argued that linear perspective is not a neutral technique but, indeed, a symbolic form, expressing a specific cultural conception of space and subjectivity. The centered, monocular perspective constructs a subject who stands outside the represented space, sovereign and detached. This symbolic form shaped centuries of Western art and prepared the modern subject of vision. Erwin Panofsky's *Perspective as Symbolic Form* completes (and complicates) this picture by reinterpreting Riegl through a neo-Kantian lens. Panofsky's most-cited formulation remains crucial: linear perspective's "intended purpose" is "to realize in the representation of space precisely that homogeneity and boundlessness foreign to the direct experience of that space," thereby "transform[ing] psychophysiological space into mathematical space" (Panofsky 1991: 30-31). Perspective is not a neutral window but a symbolic form, a cultural decision about what space is and how a subject stands within it. In this sense, Panofsky both crowns and unsettles the genealogical line: if perspective is a technique of world-making, then today's immersive renderings are not simply new contents but new symbolic forms—spatial grammars that reconfigure subject-object relations, proprioception, and the coordinates of action. Panofsky also explicitly stages the debate in Rieglian terms: he contrasts haptic/classical regimes with optic/painterly unifications and tracks the morphologies by which bodies, surfaces, and intervals coalesce into coherent spaces (Panofsky 1991: 7-24). In a different register, this is already an XR problem: when headset optics and tracking conjoin with spatialized audio and haptics, they enact a symbolic form of presence, where "homogeneity and boundlessness" become algorithmically controlled variables. The question is no longer whether perspective is "true," but what symbolic form XR imposes, and by what cultural will it is legitimated. For XR, Panofsky's thesis is decisive: immersive technologies undo monocular distance by repositioning the subject inside the image. If perspective framed the spectator as detached, XR reframes the user as implicated. The symbolic form shifts from sovereign eye to embodied participant.

Georges Didi-Huberman: Reopening the History of Images

Georges Didi-Huberman enters this genealogy at the point where the history of art becomes itself an object of critical interrogation. Warburg had already displaced the image away from inert representation and toward survival, pathos, and cultural memory; Riegl had historicized perception through the shifting balance of tactile and optical values; Panofsky had given symbolic form and iconology their most systematic articulation. Didi-Huberman gathers these lines into a new critical problem by asking what kind of knowledge becomes possible once the image is approached as a temporally impure, structurally unstable, and epistemically unsettling object. In *Confronting Images: Questioning the Ends of a Certain History of Art*,[15] this gesture takes the explicit form of a questioning of "the ends of a certain history of art," and it begins from the interval between the visible, the legible, the visual, and the virtual (Didi-Huberman 2005: vii, 11–12). Such a move is especially important here because it transforms the genealogy of visual culture into a reflexive inquiry: the image no longer appears only as an object to be decoded, but as a force that tests the adequacy of the very methods designed to interpret it. This reopening has immediate consequences for the place of Panofsky in the genealogy. Didi-Huberman recognizes the force of iconology as a historical practice of interpretation, yet he also shows how its drive toward synthesis, functional unity, and symbolic intelligibility can smooth over the tensions that images themselves continue to bear. His critique does not consist in dismissing the Panofskian project; it consists in showing that the image exceeds any model that would stabilize it too quickly into conceptual legibility. The image preserves densities of opacity, affect, symptom, and formal disturbance that remain active even when iconography has named their themes and context has secured their place. In this sense, the critique of iconology becomes one of the major ways through which Didi-Huberman renews visual theory: he insists that images carry an internal remainder, a surplus of force, a visual unrest that prevents them from coinciding fully with the discourse produced about them (Didi-Huberman 2005: 93–130). The relevance of this shift for the present dissertation is clear. A thesis concerned with XR and immersive media requires precisely such an expansion of the image beyond

[15] Georges Didi-Huberman, *Confronting Images: Questioning the Ends of a Certain History of Art*. Translated by John Goodman (University Park, PA: Pennsylvania State University Press, 2005).

transparent readability, because immersive formations intensify sensation, attention, and orientation in ways that regularly exceed the logic of mere representation. Didi-Huberman's vocabulary makes this point with unusual sharpness. *Confronting Images* places at the center notions such as the rend, the symptom, and incarnation. The rend designates the moment in which the image opens itself as a tear within representation, a site where visual coherence gives way to fracture and density. The symptom designates an appearance that bears overdetermined forces and unresolved tensions rather than stable symbolic unities. Incarnation, finally, marks the point at which the image acquires a bodily and affective charge irreducible to pure optical form or discursive content (Didi-Huberman 2005: 139–194). These notions matter greatly in the present context because they help establish a conceptual bridge between the genealogy of visual culture and the later chapters on embodiment and immersive environments. The image, from this perspective, already contains a corporeal and affective demand. Visuality itself opens onto touch, flesh, intensity, and disturbance. Didi-Huberman therefore allows the chapter to move beyond a purely optical account of the visible without forcing an abrupt transition away from visual culture altogether.

Time forms the second major axis of Didi-Huberman's importance here. *Storia dell'arte e anacronismo delle immagini*[16] argues that images impose on historical thought a temporality irreducible to chronological concordance. Anachronism here names a constitutive condition of images rather than an error of method. Images carry heterogeneous times within themselves; they survive, reappear, and acquire legibility through temporal disjunctions, recursive returns, and unexpected montages (Didi-Huberman 2011: 6–8). The consequence is decisive: the historian of images is no longer dealing with objects that belong exclusively to their own period, but with formations whose very historicity consists in their impurity, in their capacity to host multiple temporal strata at once. This insight powerfully complements the Warburgian side of the present dissertation. Warburg had already made pathos and distance central to the life of images; Didi-Huberman radicalizes the point by treating the image as a knot of non-contemporaneous times. Such a framework is particularly fertile for a dissertation on immersive media, where the rhetoric of novelty often obscures the persistence of older

[16] Id., *Storia dell'arte e anacronismo delle immagini* (Torino: Bollati Boringhieri, 2007). For the present dissertation we used the Spanish edition Id., *Ante el tiempo: Historia del arte y anacronismo de las imágenes*. Translated by Oscar Antonio Oviedo Funes (Buenos Aires: Adriana Hidalgo editora, 2011).

scenic, ritual, and attractional structures within new technical environments. *The Surviving Image* deepens this temporal model through a sustained engagement with Warburg. There Didi-Huberman reconstructs Warburg's art history as a theory of survival, phantom time, pathos formulas, and symptomatic intensities. The image survives as phantom; it returns as pathos; it becomes legible as symptom; and it enters history through montages of memory rather than through simple continuity (Didi-Huberman 2017: 1–3, 67, 174–180, 317–318)[17]. This re-reading of Warburg matters here in at least two ways. It restores full philosophical and historiographical weight to Warburg's project, allowing visual culture to reconnect with one of its deepest and least pacified genealogies. It also gives the present dissertation a precise language for discussing recurrence and reactivation. Immersive media can thus be read less as unprecedented breaks than as sites where earlier forms of attraction, embodiment, wonder, theatricality, and symbolic intensity survive under altered technical conditions. Didi-Huberman's Warburg therefore does not simply support the genealogy already sketched in this chapter; he makes that genealogy temporally thicker and methodologically more demanding. This same framework gives special force to the category of symptom. Didi-Huberman repeatedly treats the symptom as the form in which an image appears with a density irreducible to stable meaning. Symptoms disturb linear explanation; they emerge through intensities, returns, residues, and displacements. Images, accordingly, cease to function as pacified documents and become active sites of historical and psychic pressure. This is a crucial point for the present study, because the environments later described as immersive do not operate through visibility alone. They organize thresholds of attention, bodily investment, sensory solicitation, and affective activation. The Didi-Hubermanian symptom makes visible that such forces are already at work within the history of images itself. The visible carries tensions; forms carry survivals; appearances carry frictions. Visual culture therefore opens toward a broader field of operative, embodied, and temporally layered experience.

Didi-Huberman's place at this juncture also depends on the particular style of thought his work advances. *La conoscenza accidentale*[18] is useful in this respect because

[17] See Id., *The Surviving Image. Phantoms of Time and Time of Phantoms. Aby Warburg's History of Art* (University Park, PA: Pennsylvania State University Press, 2017).
[18] Id., *La conoscenza accidentale: Apparizione e sparizione delle immagini* (Torino: Bollati Boringhieri, 2011).

it gives a name to a mode of inquiry attuned to appearance, disappearance, irregularity, and the accidental encounter. The image emerges there as something that calls thought through its intermittent visibility, through its capacity to appear and vanish, disturb orientation, and demand a detour in method (Didi-Huberman 2011: 3–10). This sensibility belongs fully to the present chapter. The genealogy of visual culture gains depth once it is understood as a field of unstable manifestations rather than a museum of fully available forms. Such an orientation resonates strongly with a dissertation that treats immersive media through attraction, apparition, staging, and sensory recalibration. At this stage, however, the importance of this point remains methodological rather than fully anthropological: it shows that images ask for forms of knowledge able to remain close to their instability. A further consequence follows from this entire Didi-Hubermanian constellation. The history of visual culture acquires a distinctly critical and non-pacific form. Warburg's survivals, Riegl's historical perception, and Panofsky's symbolic articulation now appear inside a field opened by anachronism, symptom, and the instability of the visible itself. Didi-Huberman's work therefore gives this chapter a decisive inflection. It allows the discourse on images to move beyond the confidence of pure legibility and toward a more demanding account of visuality as temporal impurity, formal unrest, and embodied force. This move does not yet exhaust the broader implications of his thought. Those implications will return later in the dissertation, where memory, embodiment, and the anthropological life of images become more explicit concerns. At this stage, Didi-Huberman's value lies in having reopened the history of images at its methodological core and in having shown that the visible itself already carries within it the pressure of what exceeds visual evidence.

The Italian Visual Culture between Cultural Studies and Aesthetics

The recent Italian new renaissance of visual culture has elaborated via some key recognitions which explore these genealogies into a comprehensive lexicon. In Italian debates, 'visual culture' names a deliberately non-exhaustive umbrella under which

different disciplines converge on the visibile and on practices that produce, circulate, and regulate it. The point is to track how images function as operators within social and sensory ecologies. Andrea Pinotti and Antonio Somaini, in *Cultura visuale. Immagini, sguardi, media, dispositivi* (2016)[19], identify four key vectors: images, gazes, media, and *dispositifs*. Images are not inert objects but dynamic operators; gazes are not passive acts of seeing but power-laden distributions of visibility; media are not channels but environments; *dispositifs* are material-semiotic arrangements that choreograph relations among bodies, spaces, and signs (Pinotti and Somaini 2016: 12). On the same level, Michele Cometa, Roberta Coglitore, and Valeria Cammarata's *Cultura visuale in Italia. Immagini, sguardi, dispositivi* (2020)[20] further situate visual culture in local practices: urban screens, public art, architecture, festivals, policies. They argue that visual culture is not only an academic field but a lived environment where images and *dispositifs* structure everyday life (Cometa et al. 2020: 22). In this sense, visual culture is always already performative: it organizes behaviors, distributes attention, channels affect. A similar *dispositif* could be considered theatrical as much as visual: it stages relations of seeing and being seen. In some way, this framework resonates with both Warburg's images-as-behaviors and Artaud's theatre-as-operation: images and *dispositifs* act. Thus, from Warburg to Riegl to Panofsky to Pinotti, Somaini, and Cometa, visual culture emerges more as an archaeology of perception and power than as a catalogue of images to watch and analyze. To understand XR within this lineage is to recognize it not as a radical rupture but as a mutation in a long history of immersive *dispositifs*. XR inherits the performativity of Artaud's stage, the affective charge of Warburg's pathosformeln, the perceptual regimes of Riegl, the symbolic forms of Panofsky, but also the *dispositif* analysis of Italian visual culture.

Approaching the current and past idea of immersivity, the study of Extended Reality in Italy finds in the aesthetic approach a privileged channel. Specifically, the original analysis developed by Andrea Pinotti and the research group he coordinates in the ERC Advanced Grant *AN-ICON* project[21] put the peculiar status of immersive images

[19] Andrea Pinotti and Antonio Somaini, *Cultura visuale: Immagini, sguardi, media, dispositive* (Torino: Einaudi, 2016).
[20] Michele Cometa, Roberta Coglitore, and Valeria Cammarata, *Cultura visuale in Italia: Immagini, sguardi, dispositivi* (Roma: Carocci, 2020).
[21] *An-Iconology: History, Theory, and Practices of Environmental Images* (2019-2025). See https://an-icon.unimi.it, n

as the core discussion. The topic was introduced by several articles and talks, where starting from the observation of "an ever-increasing blurring of the distinction between image and reality", Pinotti underlines how, thanks to interactivity and immersivity, virtual environments elicit the intense sensation "of being embodied in an independent and self-referential world". Thus, images become "habitable environments, which tend to negate themselves as representational images of something—i.e., as icons: they are veritable 'an-icons'" (Pinotti 2017)[22]. Being "an-icons", in some way they weak the western concept of "re-presentation":

> This notion overlooks the crucial point regarding an-icons: the feeling of "presence" associated with inhabiting the image-world. "Presentification" rather than representation is here the key issue. Subjects relating to an-icons are no longer visual observers in front of images isolated from the real world by a framing device: they become experiencers (ibid.)

of a "quasi-world" where

> [t]he endeavours to implement multisensory stimulations go hand-in-hand with the attempt to create images that appear less and less distinguishable from reality: images negating themselves qua "images-of" something which is in turn not an image, but reality.
> (ibid.)

As the author specifies, the "an-iconic" images, albeit paradoxical, "challenge the condition of insularity—traditionally ensured by a framing *dispositif* delimiting either the canvas or the screen—of separatedness", an intrinsic property of the image, which makes it so, "in order to institute a space-time which is compatible and coherent with the real space-time". They create "a complex experiential phenomenon that mixes virtuality and embodiment, participation and empathy" through

[22] Andrea Pinotti, "Self-Negating Images: Towards An-Iconology", talk for the International and Interdisciplinary Conference *IMMAGINI? Image and Imagination between Representation, Communication, Education and Psychology* (Bressanone, BZ: 27–28 novembre 2017, and more in detail: Id., "Towards an-iconology: the image as environment." Screen 61, no. 4 (2020): 594–603.

> [t]he visual field, integrally saturated like in natural vision […]. There are no edges or frames that can help you distinguish what is inside and what is outside the image. The sensation of "presence", of "being-there", is very intense'. Immersive experiences would thus implement an ontological reversal of the image as a medium, which as an an-icon would lead to the perception of 'an apparent non-mediatedness of the immersive media environments. (Pinotti 2017)

The idea is systematised by the philosopher in *Alla soglia dell'immagine. Da Narciso alla realtà virtuale*[23], subsequent and decisive text for the study of immersive environments in Italy:

> If pre-virtual images (=icons) were characterized by their being framed, representational and mediated, the fact that virtual images tend to deny such markers by virtue of their unframedness, presentness and immediacy suggests us to recognize them as 'an-icons', that is, as images which, in a completely paradoxical way, strive to deny themselves and their status as images, to present themselves to us as if they were the reality of which they are the representation. (Pinotti 2021: XV)

In the study of Pinotti a substantial part of the research revolves around the circumscribed object of study, considering it above all by analysing the digital component of the medium in question, persistently evaluating the experience of the image in this sense, in order to focus on the reconstruction of a history of immersive proto-image (in movement and not), on its different apparatuses, as well as on the different proto-cinematographic ancestors, considered as forerunners both of the "eye of the century" (Casetti 2008)[24] and of the digital media in contemporary visual culture.

An approach such as the one just described, centered above all on the image that gives rise to Extended Reality, can be placed within a wider constellation of theories of apparatus/*dispositif*, device, and screen. Before moving to Foucault's philosophical formulation of the *dispositif*, however, it is useful to recall the specifically cinematic conception proposed by Jean-Louis Baudry in the early 1970s. In his essays on the basic cinematographic apparatus and on the metapsychological conditions of the impression of

[23] Id., *Alla soglia dell'immagine: Da Narciso alla realtà virtuale* (Torino: Einaudi, 2021).
[24] Francesco Casetti, *Eye of the Century: Film, Experience, Modernity* (New York: Columbia University Press, 2008).

reality, Baudry describes cinema as an arrangement in which camera, projector, screen, darkened room, perspective, projection, spectator immobility, and psychic identification cooperate in the production of a reality-effect. The cinematic *dispositif*, in this sense, is a technical, spatial, perceptual, and ideological configuration: it organizes the conditions under which a visible world appears as continuous, inhabitable, and meaningful for a subject.[25]

In this sense, Baudry's model shifts the analysis from the image as isolated representation to the broader arrangement that makes the image experientially effective. The impression of reality does not depend only on the content of the filmic image, but on the whole *dispositif* that places bodies, technologies, spatial positions, projection mechanisms, and forms of identification into relation. From this perspective, the cinematic apparatus already suggests a way of thinking mediation as an operative scene: a structured environment in which technical supports and bodily dispositions participate together in the production of experience. This point is useful for the present dissertation, even where Baudry's psychoanalytic and ideological framework needs to be displaced. His model remains centered on the cinema hall, the frontal screen, the fixed spectator, and the projection of a continuous image. Immersive media and theatre redistribute this configuration differently: the spectator becomes a bodily participant, the screen may become environmental, and the apparatus produces not only a point of view but a field of action.[26] Baudry therefore helps define a crucial threshold. He shows that any impression of reality has to be analyzed through the *dispositif* that produces it; theatre and XR then extend this question toward gesture, co-presence, spatial arrangement, sensory implication, and performative participation.

The later debate around the *dispositif* confirms the importance of this passage from cinema to expanded moving-image environments. Raymond Bellour's *La querelle des*

[25] See Jean-Louis Baudry, "Ideological Effects of the Basic Cinematographic Apparatus," trans. Alan Williams, *Film Quarterly* 28, no. 2 (Winter 1974–1975): 39–47; originally published as "Effets idéologiques produits par l'appareil de base." *Cinéthique*, no. 7–8 (1970). See also Jean-Louis Baudry, "Le dispositif: approches métapsychologiques de l'impression de réalité." *Communications* 23 (1975): 56–72.

[26] This point will return later in a note of the chapter entitled *Simulations*, in the introductory passage to *Solaris*, where the conventional idea of passive cinematic spectatorship is reversed through a brief dialogue with Vivian Sobchack's phenomenology of film experience.

dispositifs: cinéma - installations, expositions[27] develops the question precisely at the boundary between cinema, installations, and exhibitions, asking what happens when moving images leave the traditional cinematic situation and enter spatialized, museum-based, or hybrid forms of spectatorship. Bellour's reflections show that the *dispositif* cannot be reduced either to an abstract philosophical category or to the classical cinematic machine. Thus, the term name a historically variable configuration of image, support, space, duration, bodily placement, institutional frame, and mode of address.

At roughly the same historical moment, Michel Foucault developed a part of his philosophy around the idea of 'apparatus'. In a famous interview he stated:

> What I'm trying to pick out with this term is, firstly, a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions–in short, the said as much as the unsaid. Such are the elements of the apparatus. The apparatus itself is the system of relations that can be established between these elements. (Foucault 1977: 194-195)[28]

The second element to underline in the discourse of Foucault is also the attempt of defining "the nature of the connection that can exist between these heterogeneous elements," which is intrinsically and differently interpretable, "opening out for it a new field of rationality [where] there is a sort of interplay of shifts of position and modifications of function which can also vary very widely". And then, apparently connecting with Benjamin theories we will mention a little below, he declares that his understanding of the idea of apparatus also comprehends a kind of "formation which has as its major function at a given historical moment that of responding to an urgent need. The apparatus thus has a dominant strategic function" (ibid.).

Giorgio Agamben and Gilles Deleuze relaunch the idea of Foucauldian *dispositif*. The Italian philosopher turns again towards his interpretation of the idea of apparatus, further expanding it proposing to consider an apparatus as "literally anything that has in

[27] Raymond Bellour, *La querelle des dispositifs: cinéma - installations, expositions* (Paris: P.O.L, 2012). This issue will be partially developed on regard of the present dissertation in the chapter entitled *Simulations*.
[28] Michel Foucault, "The Confession of the Flesh." In *Power/Knowledge: Selected Interviews and Other Writings, 1972–1977*, ed. by Colin Gordon (New York: Pantheon Books, 1980).

some way the capacity to capture orient, determine, intercept, model, control, or secure the gestures, behaviours, opinions, or discourses of living beings" (Agamben 2009: 14)[29]: institutions (real or imaginary), objects, media, techniques, technical developments, technologies, disciplines, self-regulations, products, routes, and language "which is perhaps most ancient of apparatuses", the prehistorical one, the more involuntary and unconscious, probably (ibid.). The French philosopher, instead, attempts a rereading to highlight its more anthropological component as devices. As such, they

> have a relationship (and a strong impact) in the construction of our identity; and […] are subject to an evolution, determined today also by the emergence of new technologies, which has the effect of shaping our sociality, because they determine what we can say and see, and what we cannot say and see. We belong to devices and act in them. (Deleuze 2007: 27)[30]

If the genealogy traced so far delineates the historical formation of visual culture as symbolic and perceptual form, the next decisive movements emerge from the twentieth century's confrontation with mechanical reproduction and electronic mediation. These two moments—Benjamin's theorization of aura and the optical unconscious, and McLuhan's redefinition of media as environmental forms—both extend and displace the terrain on which immersive media will eventually operate. They move us from static image-forms to technical environments, from representation to perception reorganized by apparatuses.

Extended Reality, and so immersivity, can in some way be traced back to similar interpretations of the, admittedly rather broad, concept of 'apparatus': its ability to be considered in this sense for the contemporary mediosphere is what Walter Benjamin seems to point out when he underlines how human thinking and perception would have been invested by an "unlimited scope": the mutual "adjustment" of reality and masses (Benjamin 1969: 222)[31].

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[29]Giorgio Agamben, "What Is an Apparatus?" In *What Is an Apparatus? And Other Essays* (Stanford, CA: Stanford University Press, 2009).
[30] Gilles Deleuze, *Che cos'è un dispositivo?* (Napoli: Cronopio, 2007).
[31] Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction." In *Illuminations*, translated by Harry Zohn (New York: Schocken, 1969).

> Namely, the desire of contemporary masses to bring things 'closer' spatially and humanly, which is just as ardent as their bent toward overcoming the uniqueness of every reality by accepting its reproduction. Every day the urge grows stronger to get hold of an object at very close range by way of its likeness, its reproduction. (Benjamin 1969: 222)

Not by chance, Walter Benjamin's 1935 essay *The Work of Art in the Age of Mechanical Reproduction* is largely considered the foundational treatise on the media studies. Apparently discussing decline of aura under conditions of reproducibility, yet its deeper significance lies in its reconfiguration of perception through technique. "During long periods of history, the mode of human sense perception changes with humanity's entire mode of existence. The manner in which human sense perception is organized, the medium in which it is accomplished, is determined not only by nature but by historical circumstances as well" (Benjamin 1969: 221). This original assumption echoes and radicalizes Riegl's *Kunstwollen*: perception is not merely shaped by cultural will, but by technical conditions—photographic reproducibility, filmic montage in the case of Benjamin age—that transform collective sensoriums.

Benjamin's distinction between cult value and exhibition value marks the displacement of images from ritual contexts into mass circulation. As artworks are reproduced, their authority no longer resides in their singular presence—"the unique phenomenon of a distance, however close it may be." (Benjamin 1969: 221)—but in their capacity for distribution, iteration, and manipulation. So, aura is not simply "lost"[32] but technically reorganized: the apparatus introduces new modes of proximity and distance, destabilizing inherited modes of reception. This is precisely the terrain immersive media inhabit today. XR technologies promise a return of presence, simulating singularity through individualized interfaces, volumetric rendering, and real-time tracking. Thus, the loss of aura subsumes not only images but the media-spaces that bear them.

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[32] See "Perte de l'auréole" in *Le Spleen de Paris* by Charles Baudelaire. and for a parallel between Benjamin and Adorno on this topic Giuseppe Di Giacomo, "La questione dell'aura tra Benjamin e Adorno." In *Rivista di estetica* 52 (2013): 235-256.

Benjamin's concept of the optical unconscious further clarifies this point. Film, he argues, "extends our comprehension of the necessities which rule our lives" by revealing aspects of reality inaccessible to the naked eye (Benjamin 1969: 232). Slow motion, magnification, and montage expose "unconscious optics" just as psychoanalysis exposes unconscious drives. XR technologies extend this revelation into proprioception: by re-scripting bodily movement, spatial perception, and temporality, they uncover and simultaneously produce unconscious motor patterns. The user is trained to navigate virtual spaces, adopt default gesture grammars, and internalize system latency as proprioceptive law.

Most crucially, Benjamin describes the transformation of attention under mass technological conditions. He distinguishes between concentration, typical of ritual and contemplative contexts, and reception in a state of distraction, characteristic of film audiences and urban modernity (Benjamin 1969: 235-236). Distraction is not a deficit but a historically emergent mode of collective learning: "[t]he public is an examiner, but an absent-minded one" (Benjamin 1969: 236). Film and media architecture trains perceptual habits through shocks, rhythms, and repetitive exposure. In the peculiar and problematic individual fruition of XR environments, likewise, the experience discipline distraction—orchestrating gaze direction, gesture, and motion through interface cues, foveated rendering, or spatial audio triggers. What appears as "immersion" is often a carefully designed attentional choreography. XR's promise may be marketed as aura's return: presence regained, co-presence simulated, distance annulled. Benjamin arms us to stress this promise rigorously: if aura's decay is bound to reproducibility and mass address, then XR's industrialized presence could be considered as the very site where aura is transformed and relaunched in a paradoxically way—a new exhibition-value hybritized with cult-value.

Benjamin's final provocation is that politics should be aestheticized differently: fascism aestheticizes politics to preserve property relations; communism responds by politicizing art to transform social relations (Benjamin 1969: 237). As we will see in the next chapters, as aesthetic-political apparatuses, XR technologies inhabit precisely this battleground: they can aestheticize existing infrastructures (as spectacular environments for consumption), or they can be mobilized to politicize space, relation, and embodiment. Benjamin provides the critical hinge to read XR not as new visualization mode but as

a historical reconfiguration of collective perception with political stakes. From the vantage of Benjamin, the operative hinge is not perspective but technique and collective perception. The famous contrast between cult-value and exhibition-value is considerable as a first sociology of mediation and access, or an intuitive first step for an anthropology of media experience, but the keystone for immersive media is the account of how technologies disclose an optical, and now embodied unconscious—a dimension of the visible that 'for the first time' becomes livable under technically mediated conditions. Benjaminian gestures matter for XR. First, "reception in a state of distraction" (Benjamin 1969: 236) is not merely a degeneration of attention; it is a new form of collective training whereby shock, montage, and architectural rhythms re-educate the sensorium beyond individual fruition. That insight maps cleanly onto headset ecologies, where attentional regimes are scripted across channels and where distraction is not a deficit but a designed affordance—a proprioceptive montage of head turns, reach, proximity, and occlusion. In Benjamin's vocabulary, technique is not technological fetish; it is the hinge by which new collectives are formed and trained. In a strong similarity with photography of that period, nowadays XR enters this field as a discipline of attention, a politics of embodiment in which the unconscious optics of ordinary seeing are re-scripted by operative images. The question is not whether XR "deceives," but how it organizes collective sensory labor—how it partitions distraction and new forms of individualization, how it trains viewers into users and users into co-performers.

If Benjamin reframes perception historically, Marshall McLuhan reframes media ontologically. His famous dictum—"the medium is the message"—is less an aphorism than a structural law: the social effects of media derive from their formal properties, not their contents. "The 'content' of any medium is always another medium," McLuhan writes in *Understanding Media: The Extensions of Man*[33], but "is the medium that shapes and controls the scale and form of human association and action" (McLuhan 2013: 15). For McLuhan, media are environments that reshape human sense ratios and social relations. His example of the electric light clarifies this: light itself "has no content" but transforms night into day, enabling factories, cities, and cultural forms (McLuhan 2013: 15). XR technologies are analogous: the apparatus itself—headset optics, tracking,

[33] Marshall McLuhan, *Understanding Media: The Extensions of Man* (Berkeley, CA: Gingko Press, 2013).

rendering pipelines, spatialized audio—constitutes an environment that transforms perception and interaction. Whether users are exploring a game, an artwork, or a simulation is secondary; the medium's formal affordances (latency thresholds, field-of-view, input mappings) shape embodied relations and collective behaviors. McLuhan also emphasizes speed, scale, and pattern as decisive factors. Electric media collapse distances and produce what he calls the "global village," a world where information circulates instantaneously and previously stable boundaries dissolve (McLuhan 2013: 39, 87). XR extends this logic not by broadcasting information but by enveloping perception, creating shared virtual spaces where distance is not merely collapsed but algorithmically re-authored. The user's proprioceptive and cognitive environment is recalibrated at the level of form, often below conscious awareness. This leads McLuhan to his most radical claim: media are extensions of human faculties. The wheel extends the foot, the book extends the eye, electronic media extend the nervous system. XR technologies extend and fold perception back onto itself: they are a doubling, not a halving of embodied experiences. As extensions of the body's spatial and sensory apparatuses, they work less like external tools and more like environments in which perception happens. To analyze XR, then, is to analyze the medium's structuring of experience—the "message" embedded in its formal affordances, independent of narrative content.

McLuhan supplies the aphoristic but still stimulating formula: "the medium is the message." The synthetic statement it is an ontological claim, that is: the form of mediation—its scale, speed, pattern—reconfigures the social body more profoundly than the content that flows through it. McLuhan's signature example is tellingly performative: "The electric light is pure information," a medium whose "message" is its environment-making capacity (McLuhan 2013: 15). This matters for XR because immersive media are not primarily about the worlds they show on the screen; they are worlds that live on the body of the user. The "message" of a headset apparatus is its pattern of embodied co-ordination—latencies, field of view, motion parallax, audio occlusion, pass-through blending—long before narrative content enters the scene. In this sense McLuhan radicalizes Panofsky's symbolic form: where Panofsky renders perspective into a cultural *a priori*, McLuhan recodes media's formal affordances as the true social content. XR's message, then, is not "the simulation we see," but the habitus it induces: the gesture-grammars and proprioceptive expectations that quietly colonize design, education, labor,

intimacy. Extended Reality, by understanding and representing a technical and historical development which places the body at its center, it presents itself as an element of both rupture and continuity with the past: such a statement will however require further theoretical development which concerns both its component main technique, the screen, as well as its particular apparent 'no-screen' nature.

The sensible idea of "arche-screen" and the Phenomenological Aesthetics of Mauro Carbone

Looking for an appropriate theoretical framework, a particularly fitting phenomenological aesthetic theory, recently developed by Mauro Carbone, is concerning the 'sensible idea' of 'arche-screen' through a discussion about mediality and the body as vision devices, as well as on their relationship with the evolution of thought. In *Philosophy-screens. From Cinema to the Digital Revolution*[34], the Italian philosopher traces the phenomenology of Maurice Merleau-Ponty[35], which suggests that a bodily experience should necessarily start not from the body itself—"a vision independent from our sensible relation to the world"—rather from a "bodily experience as being constituted starting from the relational horizon of the flesh" (Carbone 2019: 30). In other words:

> in this 'sort of folding back, invagination,' a body experienced as a visible which is, at the same time, a viewer, as a sensible which is, at the same time, sentient. Such a condition is what makes me bear a relationship with the world that could be described as a kind of Möbius strip, in virtue of which the sides traditionally defined as "inside" and "outside" trace the obverse and the reverse of the unique circle of vision. (ibid.)

[34] Mauro Carbone, *Philosophy-Screens: From Cinema to the Digital Revolution* (Albany, NY: State University of New York Press, 2019).
[35] Specifically: Maurice Merleau-Ponty, *Senso e non senso* (Milano: Garzanti, 1974); Id., *Fenomenologia della percezione* (Milano: Il Saggiatore, 1980); Id., *Elogio della filosofia* (Roma: Editori Riuniti, 1984); Id., *L'occhio e lo spirito* (Milano: SE, 1989); Id., *È possibile oggi la filosofia? Lezioni al Collège de France 1958–1959 e 1960–1961*. Ed. by Mauro Carbone (Milano: Raffaello Cortina Editore, 2003); Id., *Il visibile e l'invisibile*. Ed. by Mauro Carbone (Milano: Bompiani, 2007).

It is through similar reasoning that Merleau-Ponty can therefore come to declare: "This precession of what is upon what one sees and makes seen, of what one sees and makes seen upon what is—this is vision itself" (Merleau-Ponty in Carbone 2019: 33). Carbone, reporting the quote, highlights how the term "precession" wants to highlight a relationship of "interrelations" as a "kind of precession that cannot be but mutual: that is, the precession of the gaze with regard to the things and of the things with regard to the gaze", where "the primacy of a term rather than the other […] becomes undecidable" (Carbone 2019: 33).

A similar idea consequently invites us to rethink reality at its roots: it "allows us to do without the notion of an absolute *before* in space and in time (or even a 'before' *of* space and *of* time)" (Carbone 2019: 33). By leaving a pre-established time and space, according to Merleau-Ponty, it is possible to get into the realm of "sensible ideas" (Carbone 2019: 34, 37, 42, 69), i.e. inseparable from their sensible presentation.

> More generally, it is a question of ideas that can only be *experienced*—because knowing them means *bodily* experiencing them—by encountering them in one of their sensible manifestations: encountering them on some kind of 'screen' or of 'veil' (here Merleau-Ponty interchangeably uses the two terms), even if only metaphorical […]. In any case, the presence of a surface of mediation proves decisive for this conceptless thought. (Carbone 2019: 37-38)

From these considerations Carbone, also referring to Benjamin, Deleuze and Stiegler, suggests calling this surface of mediation "arche-screen", meaning it as "a transhistorical whole gathering the fundamental conditions of the possibility of 'showing' (*monstration*) and concealing images on whatever surface. In our culture such a whole has been opened and experienced through the human body itself" (Carbone 2019: 66).

In Carbone's reading, the arche-screen can already be understood as a techno-aesthetic field in a markedly Simondonian sense. The screen is not simply a historical object among others, but the focal point where a given "image of vision," a certain image of thought, and a specific "process of individuation that affects groups or people" (Carbone 2019: 73)—to use Deleuze's formula borrowed from Simondon—intersect and crystallise in a concrete optical apparatus. What Carbone calls arche-screen names precisely this structural, transhistorical function: the screen as a quasi-subject that

participates in the individuation of a sensible milieu, shaping how bodies relate to the world and to others. When Carbone insists that screens should be treated as "aesthetic objects capable of expression", endowed with a "margin of freedom" and inserted into a constitutive "coupling" with human beings, he explicitly takes up Simondon's claim that technical objects possess their own mode of existence and are never pure instruments but partners in a metastable process of individuation. In Simondon's terms, the "techno-aesthetic sentiment"[36] is more primitive than both pure aesthetic feeling and purely functional technicity: every technical object is at once a solution to a problem of functioning and a modulation of the sensible field, capable of unforeseen uses (a "margin of freedom") and of reconfiguring the very faculties through which we perceive and desire. Carbone's arche-screen thus appears as the locus where this techno-aesthetic sentiment is condensed: the screen functions as an "interposed object dissimulating what it protects", to recall his etymology, and therefore embodies from the outset a double logic of showing and hiding, exposing and sheltering, making-visible and withdrawing. It is in this sense that the logic of images as a "logic of showing"[37] can only be thought together with a complementary logic of hiding, which Carbone—as we will see, particularly in a later monograph with Graziano Lingua—radicalise when he speak of screens as devices that simultaneously reveal and dissimulate, expose and protect bodies and worlds.

At the same time, Carbone's application of Simondon's notion of individuation opens onto a shift from the classical individual to more complex, "migrant" configurations of identity that he, following Deleuze and Appadurai, can describe in terms of the "dividual" (Carbone 2019: 105, 108). If individuation is, for Simondon, an ongoing metastable process that unfolds through physical, biological, psychical and collective phases, then our contemporary coupling with digital "new prostheses" can be described as a scene of multiple, overlapping individuations, in which technical objects themselves also pass through their own series of individuations. In this context, the subject of the screen is no longer a stable individual, but a dividual configuration distributed across profiles, data traces, avatars, and spectatorial positions—a subject always already partitioned and recomposed by the apparatuses with which it is coupled. Read in this light, the arche-screen is not only the sensible–phenomenological theme rooted in variations of

[36] See Gilbert Simondon, "On Techno-Aesthetics." *Parrhesia* 14 (2012): 1–8.

[37] Here Carbone explicitly refers also to Gottfried Boehm, specifically: Gottfried Boehm "Ce qui montre. De la différence iconique," in Emmanuel Alloa (ed.), *Penser l'image* (Dijon: Les presses du réel, 2010).

screenic thresholds, but also the conceptual bridge that connects an anthropology of screens to a broader media anthropology: it allows us to think the contemporary, techno-aesthetic relation to alterity—our being seen by the screens that we look at, exposed and shielded by them—as the site where individuation, and increasingly *dividuation*, is negotiated.

The broad concept of liveness by Philip Auslander

This particular and open theme, as understood until now, seems to be easily applied to contemporary screen technologies: the "sensible idea" of "arche-screen", the notion of "dividuality" as understood until now, indeed, might remind in their intrinsic variations also some echoes of the concept of "liveness", particularly pertinent when applied to both digital media and performing arts[38]. On this regard Paul Auslander, who devoted his research on the wide concept of liveness, writes:

> liveness does not inhere in a technological artifact or its operations—it results from our engagement with it and our willingness to bring it into full presence for ourselves. We do not perceive interactive technologies as live *because* they respond to us in real time […]. Rather, we perceive real-time response in some cases as a demand that concretizes a claim to liveness, a claim that we, the audience, should accept as binding upon us in order for it to be fulfilled. (Auslander 2012: 8)

Indeed, 'interactive technologies do not disclose themselves to us as live but become so only as a conscious achievement on our part' (Auslander 2012: 8).

In *Liveness: Performance in a Mediatized Culture*[39] Auslander reconstructs the concept of "liveness" from the ground up, treating it not as an ontological given but as a historically shifting effect of media technologies, institutional discourses and cultural economies. The book starts from a simple, polemical question—"Theatre and the media:

[38] Philip Auslander, "Digital Liveness: A Historico-Philosophical Perspective." *PAJ: A Journal of Performance and Ar*t 34, no. 3 (2012): 3–11.
[39] Id., *Liveness: Performance in a Mediatized Culture*. 2nd ed (London and New York: Routledge, 2008).

rivals or partners?"—and answers that, under contemporary conditions, theatre and other live arts are unequal rivals of mass media within the same cultural marketplace. Live performance is the cultural practice "most directly affected by the dominance of media," and any attempt to defend its value through *clichés* about "magic," "energy" or "community" risks reifying a binary between the live and the mediatized that no longer corresponds to how performance actually circulates in a media-saturated world.

In the introduction Auslander anchors his argument in the notion of "cultural economy": not just the real financial relations between forms (who gets audiences, funding, visibility), but also the hierarchies of prestige and power that different media enjoy. In this economy, television—and, in the second edition, the broader "televisual" or screen environment—functions as the dominant medium, a "general illumination" bathing all other cultural practices, to borrow Benjamin and Marx via Blau (Auslander 2008).

To describe this dominance, he adopts the notion of "mediatization" from Baudrillard (Auslander 2008: 5) not just the technical use of cameras and loudspeakers, but the submission of disparate discourses to a single code, a regime of reproducibility and circulation. Live arts, he argues, have become mediatized in Jameson's sense: they now exist as one medium among others inside a larger mediatic system, competing directly with television, film, recordings and digital networks for attention, money and symbolic authority. Signs outside theatres that proclaim a show is "Not Available on Video" are already an admission that live performance can only define itself by reference to the media that overshadow it.

Subsequently, the author opens with a long media-archaeological detour through the early history of cinema and television, which serves as an allegory of the changing relationship between the live and the mediatized. Film, Auslander recalls, initially "strove to be theatrical" (Auslander 2008: 12): narrative cinema borrowed its plotting, blocking and even devices like the close-up from nineteenth-century stage melodrama. Yet in a few decades the new medium economically routed popular theatre, displacing it as the primary form of mass entertainment. Television repeats and radicalises this pattern. Early US television—before videotape, when everything was broadcast in real time—defined itself as a live medium: its essence was thought to lie in transmitting "events exactly when and as they happen," giving viewers the illusion of being "on the scene" in their living

rooms. Drama made for television was explicitly framed as theatre in the home: anthology series called *Playhouse*, *Television Theatre* or *Playhouse 90* (Auslander 2008: 22) sought not simply to relay stage plays but to recreate the experience of theatre through multi-camera studio techniques that mimicked the wandering gaze of the spectator. Early television studios were built as proscenium spaces; the live broadcast was presented as a continuous performance unfolding "now," with the camera acting as the viewer's proxy eye. Once portable cameras and recording became standard, this ontology of immediacy weakened. Production methods shifted toward cinematic styles—reverse angles, complex editing, location shooting—even as television continued to theatricalise itself symbolically through episode "acts," laugh tracks and announcements that a show was "filmed before a live studio audience." The Golden Age "playhouse" programs gave way to series in which theatre survived mainly as format and metaphor. At the same time television remediated film itself: much of what we call "cinema" is now consumed on television or streaming screens, subordinated to televisual flows—and what we call "television" is now consumed on social media, subordinated to their new, frenetic flow. For Auslander, this history crystallises a larger logic: mediatized forms first model themselves on live ones, then displace and replace them, finally presenting themselves as superior versions of the very liveness they have colonised. Having shown how television once tried to be theatre, Auslander reverses the lens and describes how live events now try to be television—and again: social media personalities tend to occupy theatre spaces, and media theatre experiments social media logics. Across genres, the "general response of live performance to the economic superiority of mediatized forms has been to become as much like them as possible." (Auslander 2008: 7) Sports events organise themselves around instant replay and giant screens; spectators find that the primary way they experience a match they are physically attending is by watching the video feed. Stadium rock concerts restage the iconography of music videos; performance art and contemporary dance routinely embed live bodies inside video projection and digital soundscapes. In such situations the live event no longer precedes its mediatized versions; it is itself designed as an instantiation of them. The supposedly "immediate" presence of bodies is shot through with screens, microphones, amplifiers and camera logics. This erosion of older boundaries, Auslander suggests, fuels an anxiety among defenders of theatre and other live arts, who respond by insisting ever more vehemently that live

performance possesses a special value—authenticity, community, resistance—that transcends the market. It is this belief, articulated most programmatically in Peggy Phelan's claim that performance "disappears into memory" and thereby "eludes regulation," that Auslander sets out to question.

The core theoretical move of the book is to show that "liveness" itself is a modern invention, dependent on media history. Before the advent of recording technologies, there was no category of "live performance" in the contemporary sense—Greek tragedy was not "live" because no alternative mode of reproduction existed. With sound recording, an older regime of performance is suddenly flanked by an unprecedented power to fix events and repeat them; only in this contrast does the live/recorded distinction start to matter. Initially, recording and live events coexist in a complementary way: a concert and a gramophone disc are clearly different experiences. It is radio that destabilises this complementarity. Listening to disembodied sound, the audience cannot see whether the source is present or a record; hence the first documented use of "live" in the BBC Yearbook of 1934, where complaints are voiced that "recorded material was too liberally used." (See Auslander 2008: 59) The term appears here as a defensive label, trying to preserve a distinction that radio has thrown into crisis. From this moment, Auslander argues, the live/recorded relationship is reconstructed as binary opposition—live vs canned—even though experience no longer supports such clarity. As new technologies emerge, the vocabulary of liveness stretches to accommodate them. We speak of "live broadcasts" (temporal simultaneity without spatial co-presence) and "recorded live" albums (no simultaneity at all, but an affective claim to eventfulness). With digital media the expansion accelerates. Drawing on Nick Couldry, Auslander maps "online liveness" (a sense of co-presence among users on networked platforms) and "group liveness" (mobile phone and messaging cultures in which a group feels continuously connected). Margaret Morse's analysis of interactive computers shows how the feedback loop between user and machine generates a "feeling of liveness" attributed even to non-human agents—websites "go live," chatbots are experienced as quasi-persons. In a table that synthesises these developments, Auslander distinguishes "classic" liveness (co-present bodies in a shared here-and-now), broadcast liveness, live recording, internet liveness, social liveness and device liveness. The throughline is clear: liveness is no longer anchored in physical co-presence but in the audience's affective sense of immediacy,

responsiveness and connectivity. It is, he concludes, “a historically contingent term,” not a neutral descriptor of an immutable ontology.

In a new edition of the study, the author return to the expanding field of liveness in digital culture. Auslander notes that we now describe not only events and broadcasts but also websites, platforms and networks as “going live.” The key criterion is no longer mutual bodily presence but the experience of real-time feedback: a system feels live when it responds to us. In this sense, contemporary liveness is increasingly “built around the audience’s affective experience” rather than around strict spatial-temporal parameters. This does not mean that all distinctions between live and mediatized vanish. Auslander explicitly acknowledges that phenomenological differences remain between, say, attending a performance in a theatre and seeing it streamed on a screen, and that these differences matter. But he insists that we should stop treating them as expressions of a timeless, ontological divide. Instead, each configuration of the live and the mediatized has to be analysed historically and locally: What technologies are involved? Which institutions define the value of liveness here? What kinds of authenticity, community or control are being produced? Across its development, *Liveness* thus dismantles the consoling notion that live performance naturally resists mediatized culture. Rather than a refuge outside representation, the live emerges as a product of mediatization itself—a category that arises when recording and broadcast make repetition and distance possible, and that continues to mutate as digital networks, interactive systems and legal frameworks reshape how presence is felt, staged and governed.

Immediality and Intermediality as bridge concepts between media studies and Aesthetics

The liveness as proposed by Auslander, kept in dialogue with the Simondonian–Carbonean framework, provides a decisive hinge towards the more explicitly techno-aesthetic proposals of Cecchi and Citton: on the one hand, it prepares Cecchi’s redefinition of aesthetics as a theory of sensibility that is intrinsically technical, historically innervated by media and *dispositifs*; on the other, it anticipates Citton’s

account of intra-active immediality and aesthetic intermediality, where subjects and objects emerge from agential cuts within a media environment.

As partially introduced, this series of recent contributions in aesthetics and media theory has insisted on the need to rethink aesthetics relaunching the notion of "techno-aesthetics", that is, as a reflection on the original co-belonging of sensibility and technique. In a programmatic essay titled *Intermedialità, interattività (e ritorno). Nuove prospettive estetiche*[40] Dario Cecchi shows how sensibility—understood in a strong sense as *aisthesis*—is always already prolonged into medial prostheses that hyper-aestheticise, anaesthetise, or re-aestheticise its functions, while technical devices innervate experience by selecting what can appear and "count" for subjects. Media do not constitute mere channels of transmission, but operators of experiential configuration: extensions of sensibility that remodel its conditions, intensities, and modes of exercise. In this framework, intermediality and interactivity no longer appear as marginal properties of certain artistic practices, but rather as key categories for thinking the technical constitution of the human and, more generally, of sensible worlds.

It is, however, in the work of Yves Citton that this reorientation of aesthetics towards a fully situated techno-aesthetics in the contemporary media regime receives a more radical ontological and political articulation. In the essay *Immedialité intra-active et intermédiarité esthétique*,[41] Citton proposes to shift the theoretical center of gravity away from the idea of media as external objects, placed "in front of" already constituted subjects, towards a conception in which subjects themselves always already find themselves immersed "*in medias res mediaticas*". The point is no longer to imagine a user confronting images, texts, or sounds as separate entities, but rather to recognise that sensible life unfolds within an inter-mediary space configured by the media themselves. To live among media, Citton suggests, is akin to moving through a crowd in motion: one is at once at its center and largely fused with it.

To describe this condition, Citton introduces the notion of "immediality", distinct both from "immediacy" naively understood as unmediated contact with the real and from sheer spectacular hypermediation. Immediality designates a regime in which mediation is so pervasive that it constitutes the very milieu of existence: the fabric within which

[40] Dario Cecchi, "Intermedialità, interattività (e ritorno). Nuove prospettive estetiche." *Rivista di estetica* 63 (2016): 3–11.
[41] Yves Citton, "Immedialità intra-attiva e intermedialità estetica." *Rivista di estetica* 63 (2016): 99–120.

perceptions, affects, identities, and relations are formed. Here the dialogue with Karen Barad's theory of "agential realism" becomes decisive.[42] Drawing on the notion of "intra-action", Citton assumes that there are no pre-formed subjects and objects that then enter into relation; instead, there are dynamic configurations in which the actors emerge from the cuts operated by apparatuses. Human beings become parts of *dispositifs* that act upon themselves through them; individual perceptions, decisions, and imaginings appear as effects of an intertwining of technical apparatuses, institutions, protocols, infrastructures.

This immedial ontology finds a dramatic exemplification in the figure, analysed by Jeffrey Sconce, of Lee Boyd Malvo, the young man involved in the Washington, D.C. sniper attacks in 2002 and obsessed with *The Matrix* (1999). Citton rereads this case not as a simple "confusion of reality and fiction" but as the symptom of a subject who takes the world of images seriously as a key for interpreting his own condition, to the point of attempting to intervene strategically in the global mediasphere. Identification with the character in *The Matrix* and the implicit formula "I am the media" do not refer merely to an individual pathology, but to a paradoxical form of lucidity with regard to a society in which our grasp on the real is always already mediated by flows of images, narratives, *dispositifs* of visibility[43]. "Technical delirium" thus becomes an extreme symptom of the contemporary immedial ontology: the structural, rather than accidental, difficulty of drawing a clear line between world and mediation, between life and apparatus.

This diagnosis is intertwined with Lev Manovich's notion of "metarealism" and with Marian Hobson's historical reconstruction. Citton shows how, between the eighteenth century and the digital age, there is a shift from a "bimodal" regime of illusion—in which immersion in fiction and awareness of its artificiality coexist without contradiction—to a bipolar conception of truth/falsity, and finally to the current return of a constant oscillation between belief and disbelief, immersion and emergence. In new media, the subject is continually called upon to move from the posture of spectator to that

[42] See Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham and London: Duke University Press, 2007).

[43] On the political side of this logic, one may note the convergence with Elon Musk's recurrent formula "You are the media now," which he also posted on X as Donald Trump's second electoral victory became apparent, turning the platform's users into the imagined substitute for "legacy media." See Giovanna Branca, "«I media sono io». X, l'arma social contro la democrazia." *il manifesto*, January 15, 2025, https://ilmanifesto.it/i-media-sono-io-x-larma-social-contro-la-democrazia. Accessed April 15, 2026. Further analysis of Trump communication strategies will be developed in the chapter entitled *Simulations*.

of user: watching a video, interrupting it to click, select, comment; transiting without solution of continuity between information flows, interactive environments, social platforms. Everyday experience thus takes the form of a pluralism of overlapping "intermediate worlds", in line with Alfred Schutz's description reworked by Alfonso Iacono. Immediality is precisely this condition of permanently inhabiting thresholds between different levels of mediatized reality.

The conceptual core becomes even clearer when Citton mobilises the distinction, made famous by Jay David Bolter and Richard Grusin, between "immediacy" and "hypermediacy".[44] The former designates the tendency of many media to erase their own presence, offering themselves as "transparent windows" onto the world so as to make their technicity forgotten. The latter, by contrast, indicates the exhibition of the medium: the multiplication of frames, layers, screens, indicators that underline the technical and composite character of visual experience. Contemporary immediality is not reducible to either one of these logics but resides in their structural intertwining: subjects live inside *dispositifs* that seek to render themselves invisible in order to produce the effect of reality and, at the same time, are surrounded by interfaces that ostentatiously display their technical configuration.

The adoption of Karen Barad's lexicon allows Citton to specify the role of apparatuses in this context. The notion of "agential cut" makes it possible to think of apparatuses (understood broadly: technical devices, institutions, discursive formats, protocols of visibility) as operators that, by "cutting" the continuity of the real, simultaneously produce objects, subjects, and what "matters" for them. Every perceptual act and every experience are already filtered through agential cuts that select events, framings, relations, values. Immediality therefore does not amount to mere "passive immersion" in media; it appears instead as the outcome of a constellation of apparatuses that continually configure the margins of what can appear, be thought, and become a possible object of action.

In the face of this condition, Citton distances himself both from nostalgia for an extra-medial immediacy deemed impossible and from a totalising discourse on the "society of the spectacle" that tends to treat mediation as a monolithic block. The

[44] Jay David Bolter, and Richard Grusin, *Remediation: Understanding New Media* (Cambridge, MA: MIT Press, 1999). The disruptive monograph and its binary conceptualization will be particularly fruitful for the second half of the next chapter, called *Bodies*.

alternative path passes through a redefinition of "aesthetic intermediality". Intermediality is not understood as the simple combination of languages or crossover between media, but as a threshold space in which images may be manipulated and rethought, uses of apparatuses redirected, dominant agential cuts deviated. As a space *between* media, it offers a certain relative exteriority with respect to the immedial flow: it allows one to play the differences between heterogeneous media (for example between direct sensible experience and photographic recording, between analogue film and digital image, between live stage and XR environment), bringing out gaps, delays, frictions that immediality tends to neutralise.

In the final section of his essay, Citton articulates three forms of "immedial agency". First, the agency of the artist, who pushes the medium beyond its anticipated possibilities, explores its margins, and brings forth unexpected capacities. In Simondon's terms, the artist contributes to the evolution of the *dispositif* by inventing new regimes of use and new relations between technicity and sensibility. Second, the agency of the receiver, central in Jean-Marie Schaeffer's proposal, according to which the aesthetic experience coincides with a "divergent attentional style": a surplus of attention, a suspension of determining judgement, a focus on marginal details that makes it possible to produce unexpected meanings and re-signify what is already given. Third, the agency of apparatuses themselves, highlighted by media archaeology (Friedrich Kittler, Pierre Huyghe, Jussi Parikka): considered as apparatuses and not mere tools, media record noise, sensible excesses, dimensions of *aisthesis* that escape the intentions of programmers. Precisely because they exceed the designs of those who have engineered them, apparatuses can operate unforeseen cuts, configuring worlds and images not fully controllable by dominant logics.

On this basis, Citton proposes the figure of "becoming-medium" ("*devenir-médium*"): experiencing what a medium can do without reducing oneself to the image of self that the apparatus returns (the algorithmic profile, the standard user), and above all without dissociating mediation and care. Immediality is thus interpreted as a field in which an economy of attention, an ethics of care, and a politics of media are intertwined: not only a condition of capture, but also a space of possible transformation.

From the standpoint of an immersive—that is, medial-performative—cultural theory or anthropology, Citton's proposal is particularly relevant. The notion of intra-

active immediality makes it possible to think of screens not as mere surfaces of representation, but as nodes of apparatuses that produce subjectivities, bodies, and possible worlds. At the same time, aesthetic intermediality, understood as an operative space of manipulation and experimentation, can be put into relation with the territories of theatre, performance, and XR environments: places where the body is configured as a medium between media, tests existing agential cuts, and invents new ones. In this sense, Citton's lexicon provides a theoretical framework within which media anthropology can be rethought in performative terms, bringing to the fore the bodily, ritual, and technical dimension as the original matrix of medial experience itself.

The imaginative and interactive Aesthetics of Pietro Montani

Shifting from intra-active immediality and intermediality to a unique interactivity and imaginative aesthetics, which reread Simondon via a peculiar neurocultural approach, Pietro Montani, analysed 'electronical interactivity' from a 'bioesthetics'[45] point of view, emphasised a quite recent feature of electronic interactivity, which

> begins to manifest specific aspects that are not comparable to the traditional forms of interpretative cooperation *only when it produces an applicative movement in the image that has the effect of pushing the image itself out of the condition of* [a] *simulacral autonomy*. […] Interactivity becomes significant only when it begins to make the specific *off-screen* of the electronic image appear. (Montani 2007: 112)

According to this, interactivity 'stands out against a non-reducible background, only that this background […] should be *elaborated and differentiated interactively* (i.e., applicatively) rather than recognized cognitively' (Montani 2007: 112). More specifically, about the theme of immersivity we are focusing on, in recent publications and talks the Italian philosopher suggests how 'the imagination behaves, literally, like a "generator of VR"', specifying that

[45] Pietro Montani, *Bioestetica: Senso comune, tecnica e arte nell'età della globalizzazione* (Roma: Carocci, 2007).

> the *hallucinatory immersivity* of VR must, just like that of dreams, be understood and studied against the backdrop of the network of significant *relations* it can entertain with other performances, e.g. inferential, of an embodied imagination. It seems inadvisable to isolate it from this broader context (Montani 2022: 176)

In *Technological Destinies of the Imagination*[46] Montani further develops his long-duration anthropology of imagination in which technical practices, media and language are not external additions to a pre-given mental faculty, but the very milieu in which imagination takes shape, evolves and is continually reorganised. From the opening pages, the imagination appears as embodied, multimodal and "innervated" by technologies, to borrow Benjamin's expression, rather than as a purely inner, image-producing power. The "technological destinies" of imagination are not only recent (cinema, digital media, VR) but begin with the earliest technical gestures of *Homo faber* and culminate, for now, in contemporary audiovisual and virtual environments. As emblematic starting theoretical starting point, the cinema appears here as a privileged "weave" in which different expressive components are constantly recomposed. It exposes how imagination actually functions: not as a purely optical faculty, but as a syncretic, multimodal process in which sounds, affects, bodily orientations and words continually renegotiate their relations. Montani suggests that this recomposition is already a kind of "writing by pictures" ("*Bilderschrift*", as derived by Freud), an anticipatory figure of what he will later call "extended writing" in the digital age.

Through the notions of Imagination, Technique, Language, the book anchors this cinematic intuition in a re-reading of Kant's transcendental imagination through paleoanthropology and cognitive archaeology. Montani starts from Kant's enigmatic remark that sensibility and understanding are two "stems of human cognition" perhaps issuing from a common but unknown root, and from Heidegger's proposal to identify this root with the transcendental imagination. Rather than treating this as a purely intra-philosophical problem, he relocates it in the very long prehistory of the *Homo genus*. Long before articulated speech, human groups were already engaging the world through technical practices—knapping stone, modelling clay, fashioning tools—that presuppose

[46] Id., *Technological Destinies of the Imagination*. Translated by Barbara Fisher (Milano and Udine: Mimesis International, 2022).

an original synthesis of sensibility and understanding. The "common root" can thus be understood as an embodied, operative imagination that simultaneously receives and organises the world of practice. Here Montani mobilises Lambros Malafouris's Material Engagement Theory (Montani 2022: 19, 25, 45, 57, 70). In the often-repeated example of the potter working wet clay, the vase is not the simple execution of a prior mental design; design intention emerges within the back-and-forth between the hand, the clay, the wheel, the accumulated know-how and the affordances of the situation. To "imagine" is to participate in an interactive process in which cognitive and sensorimotor dimensions cannot be disentangled: "The knapper first thinks *through* and *with* the stone before being able to think *about* the stone." (Montani 2022: 20) Material engagement thus gives empirical body to the Kantian idea of a root in which the receptive (sensible) and the legislative (intellectual) moments are co-implicated rather than opposed. From this starting point Montani distinguishes "technical empowerment" and "internalisation." Technical empowerment is the acquisition of complex motor-perceptual schemas—like a tennis serve—that are at once external (they depend on rackets, balls, surfaces) and deeply embodied (they become part of one's bodily repertoire). Internalisation does not mean withdrawing from the world into pure interiority; it means sedimenting technical patterns so that they can be flexibly re-deployed, varied or suspended. This is why the Italian philosopher prefers to speak of a shift, in human evolution, from a merely "technically assisted" life to a "technically dependent" one: we rely on tools and media not as external crutches, but as elements of our very mode of being, which nonetheless retains a certain plasticity and remains open to ethical and imaginative re-orientation. A series of paleoanthropological and neuroscientific exemplifications deepen this picture. Montani revisits Leroi-Gourhan's account of a crucial shift in stone-tool industries, when the original core ceases to be the tool itself and becomes instead a "source of tools": flakes are detached, then further worked into diverse implements. This is not only a technical refinement; it manifests a new, explicitly reflexive articulation of the world of practice, in which a single block of stone can be seen as a reservoir of multiple possible operations. Likewise, the engraved ochres of Blombos Cave are interpreted not primarily as carriers of symbolic messages but as exercises in mark-making that train the embodied imagination to segment, repeat and organise gestures into protoscripts—proto-writing and proto-number. In each case, imagination is simultaneously listening to the affordances of

the environment and provoking new ones, oscillating between receptive and "susceptive" modes.

Montani then turns to contemporary neuroscience in order to propose how technical mediation induces recursive abilities and a new sense of "having a body" in addition to simply "being a body." For Montani, this exemplifies the transcendence Kant and Heidegger ascribe to the human subject but now understood as an epigenetic effect of material engagement rather than as an a priori property. Against this backdrop, the emergence of articulated speech appears as a later, but decisive, technical empowerment. Stressing the schematism in the *Critique of Pure Reason*, Montani emphasises Kant's claim that the schema is a procedure of the imagination that gives concepts "significance (*Bedeutung*)," that is, denotative reference. Schematism is thus a kind of fundamental semantics, an articulation of the world of practice into stable yet indefinitely differentiable rules and units. When phonetic, denotative language arises—after long anatomical and cognitive preparations—it re-enters this already schematised field, reorganising it rather than creating it ex nihilo. Here Vygotsky's account of "egocentric speech" and its internalisation as inner speech becomes crucial: children first use language socially and pragmatically, then begin to speak to themselves while playing and solving practical problems, and finally interiorise this dialogue as an ongoing "inner speech" that entangles linguistic forms with imaginative, multimodal schemas. This inner speech becomes a permanent laboratory for the reworking of meanings; an ongoing accumulation and re-investment of what Luciano Floridi has called "semantic capital" (Floridi in Montani 2022: 20). The chapter *The Critical Meaning of Techno-aesthetics*, translates these anthropological premises into an aesthetic and political theory. Montani retrieves Gilbert Simondon's term "techno-aesthetics," but relocates it within a broadly Kantian framework that stresses the centrality of *aisthesis*—sensibility—for any critical understanding of experience. Human sensibility is always already technically extended: Merleau-Ponty's blind person who feels with the tip of the stick from *Phenomenology of Perception* is the emblem of a more general condition in which perception is co-constituted by devices, tools and media[47]. Montani calls "technical schematisation" the way in which these extensions participate in the work of the imagination, contributing to

[47] An original and charming memoir with its own analogies and differences on this topic could be found in John M. Hull, *Il dono oscuro*. With a preface by Oliver Sacks. Translated by Francesco Pacifico (Milano: Adelphi, 2019).

the formation of schemas that are at once sensible and conceptual. This leads to a "realism of the imagination": imagination is not the opposite of reality, but a way in which reality—understood as the field of possible practices and affordances—is articulated and expanded. Technical images, in this perspective, are not mere illusions; they are concrete crystallisations of imaginative schemas that can remodel perceptual habits and even our "extended mind." Here Montani re-reads Benjamin's thesis on the historicity and mediality of perception in *The Work of Art in the Age of Its Technological Reproducibility* in light of Simondon's notion of "associated milieus." Technical objects—cameras, projectors, digital networks—co-evolve with the forms of life that take shape around them. Media environments and human subjects are entangled in processes of individuation: neither term is fixed, both are on the move. Within this entangled field, art can be understood as a particularly reflexive use of technical creativity. Montani distinguishes between "art in general" (the mimetic, adaptive technical creativity of *Homo faber*), "fine art" (the modern institution shaped by the aesthetic regime), and "innovative art," which intervenes critically in the ongoing co-evolution of imagination, technique and forms of life. The work of art is exemplary insofar as it makes visible the techno-aesthetic grounding of imagination and, at the same time, institutes historical communities—shared modes of feeling, perceiving and acting—around new technical schemas. The notion of politicisation of art is redefined accordingly. Rather than opposing Benjamin's politicisation of art to an "aestheticisation of politics" in purely ideological terms, Montani insists that politicisation here means bringing to light, and intervening in, the entanglement of perception, media and associated milieus. When technical image production becomes pervasive, the very proportions of natural and artificial in our environments become opaque; art's political task is to render these proportions and tensions sensible, foregrounding the ways in which technical creativity participates in individuation. In this context, Montani analyses Eisenstein, Vertov and Kuleshov not only as filmmakers but as inventors of political techniques: strike as a montage of heterogeneous materials coordinated by a political, rather than purely aesthetic, principle; Vertov's "cinematic writing for the masses" as an attempt to generalise audiovisual literacy; Kuleshov's experiments as early explorations of seeing "with the other's eyes" and of the otherness of the gaze that will become central in later cinema and digital cultures.

In order to broad it into a general theory of the relationship between images and language, Montani later recalls the long history of the "comparison of the arts" (*paragone*), focusing in particular on Leonardo's and Eisenstein's reflections on the image. In Leonardo's anti-Platonism and emphasis on *disegno*, and in Eisenstein's notion of the audiovisual image, the image is already conceived as a kind of schema or writing, a dynamic process that configures relations rather than a static copy of appearances. On this basis, Montani distinguishes two models for the relationship between arts and media. The first is the Wagnerian *Gesamtkunstwerk*, a "synthesis of the arts" where different expressive forms fuse into a higher organic unity. The second is what he calls "friendly cooperation": an intermedial arrangement in which different media—images, sounds, words, gestures—collaborate while retaining their autonomy, often in productive tension. Eisenstein's practice oscillates between these two poles, but Montani suggests that the most interesting tendencies in contemporary cinema and audiovisual culture move toward intermediality rather than fusion, using differences between media as sites of critical comparison and expansion rather than smoothing them into a seamless multimedia flow.

From here he formulates one of the book's central theses: among expressive technologies, cinema has distinguished itself by its capacity to function as a device of "integration/expansion" between the operations of the embodied imagination and those of linguistic thought. Precisely because it is at once iconic and discursive—images, sounds, spoken dialogue, written text, gestures and temporal structures all co-present—the cinema (and digital media even more) is a laboratory in which the entanglement of imagination and language becomes visible and can be experimented with. It contributes to the formation of our "semantic capital," to our ways of feeling and understanding, as powerfully as philosophy or literature. Analyses of recurring gestural schemas show how a single configuration of gesture and object can become the node where ethical decisions, emotional responses, narrative expectations and technical choices converge and are reworked. This cinematic theory of integration/expansion extends into a reflection on time. Drawing on Paul Ricoeur, Montani describes film as a "short form" that configures time (through montage, narrative, framing, use of archive images) and refigures the temporal experience of spectators. He contrasts dispersed and condensed time, the time of fiction and the time of recording, and lingers on forms of "deferred present" in which a past event is made affectively present while remaining temporally distanced.

The final sections take up virtual reality explicitly under the heading *Imagination and linguistic thinking in Virtual Reality*. Montani begins by comparing VR to dreams, stressing two parallel properties: the compelling illusion of reality and the fundamental non-modifiability of what is perceived (except in the special case of lucid dreaming). Both dreams and VR experiences are hallucinatory in the sense that they present internally generated or technically mediated images with the same force as external perception, and both tend to be easily forgotten, which he reads as itself significant. Yet this regression is not simply a fall into irrationality; following psychoanalytic notions of "regression in the service of the ego," he suggests that dreams perform crucial neurophysiological functions (synaptic pruning, resetting inferential devices) by temporarily restoring a state in which imagination operates more autonomously from linguistic guidance.

In this regressive sphere, the link between image and writing—Freud's *Bilderschrift*—becomes especially clear. Montani sees early cinema as already working with this picture-writing in an intermedial way, combining quasi-hallucinatory, naturalistic reception with systematically inserted counter-movements: intertitles, montage, and explicit discursive elements that complicate immersion. The same logic underlies certain contemporary VR installations, which he analyses in detail. In Iñárritu's *Carne y Arena. (Virtually Present, Physically Invisible)* (2017), for instance, the six-minute VR simulation of a nocturnal border crossing is only one component of a larger *dispositif* including the barefoot walk on cold sand, transitional architectures, and a final room of video testimonies.[48] The striking realism of the VR sequence acquires meaning only within this intermedial narrative construction that solicits reflection on migration, violence and spectatorship. In contrast, the all-VR installation *VR_I* is described as a "lucid intermedial dream": visitors, represented by avatars, interact haptically and linguistically with dancers in a metamorphic virtual space that alternates deserts, cityscapes and mountain lofts hung with modern paintings. As participants move and speak, they realise that the rhythmic play of scale (giant and miniature bodies), space and dialogue is itself the theme of the work. Here, too, VR is not isolated but woven into

[48] Since it premiered as the first XR product admitted to the main competition of one of the "Big Three" Film Festivals, *Carne y Arena* constantly returns as case study in Italian Aesthetics and Media Studies recent publications. For a pertinent linked to the contents of this thesis see Francesco Melchiorri, "Il Cinema VR come esperienza immersiva archi-schermica." *Connessioni Remote*, no. 3 (2021): 136–157, from which a small part of this chapter is inspired. Some other examples of XR experiences selected by festivals are considered in the chapter *Simulations*.

dialogues, choreographies and references to other images, reconciling an embodied imagination with its "less docile partner," linguistic thinking.

Finally, Montani explicitly states that the human imagination is from the outset inseparable from technical making: lacking specialised anatomical organs, humans have always extended their bodies through tools and devices, reshaping their conditions of life and, through systematic feedback, their imaginative and cognitive capacities. Some technical inventions, such as articulated speech and later technical images, have such transformative power that they reorient the essential profile of human forms of life. Articulated speech, in particular, redirects communication away from purely expressive vocalisations toward the objectification and re-organisation of the world, feeding back into imagination and forcing it to deploy its plasticity in unprecedented ways. Imagination is now called upon to provide sensible intuition not only for what can be known under existing protocols, but also for what lies at the "boundaries of the knowable," which guides imagination toward different regions of meaning without stabilising them in clear concepts. Throughout *Technological Destinies of the Imagination*, then, imagination and language appear as a genuine *entanglement*: neither has priority as a pure origin, and both are continually redefined by their interaction within techno-aesthetic milieus. By following this entanglement from prehistoric material engagement, through Kantian schematism, Vygotskian inner speech and Benjaminian media theory, up to cinema and VR, Montani offers a unified conceptual frame in which images, words, gestures and sounds are always already embedded in technical *dispositifs* and associated environments. Imagination is not what escapes technology, but what takes shape via the body with and through its historical and technological destinies.

In the previous work *Tecnologie della sensibilità. Estetica e immaginazione interattiva*[49] Montani radicalises the bioaesthetic perspective he had already sketched in earlier writings on electronic interactivity and systematically develops the notion of "interactive imagination" as the hinge between contemporary media technologies and human aisthesis. The book starts from a now familiar diagnosis: the proliferation of digital devices and image-based practices has not simply multiplied representations, but has transformed the very conditions under which human beings perceive, remember, imagine

[49] Pietro Montani, *Tecnologie della sensibilità: Estetica e immaginazione interattiva* (Milano: Raffaello Cortina Editore, 2014).

and act. Our sensibility has reached such a degree of technical externalisation that it is permanently available for what Montani calls an unlimited "technical delegation"; this delegation is at once an opportunity for unprecedented elaboration and a source of serious risks, including automatisation, regression and political capture.

Against this background, Montani's central thesis is that imagination should be understood in a threefold articulation—reproductive, productive and interactive—and that this triad is inseparable from the quality and performance of human sensibility. Imagination does not only preserve and recall perceptual traces; it recombines them into new configurations and, crucially, guides our interventions in the environment. Interactive imagination names the imaginative component of our practical dealings with the world: the capacity to project interpretative schemes onto situations and to reshape them by acting, in constant interplay with language. This is precisely the level at which digital media and electronic interactivity intervene. When users shoot, edit and share images, navigate databases, or participate in collaborative narrative devices, imagination is not merely consuming pre-given contents but externalising its own operative structures into technical forms. The "movements" executed in and with the image actualise an interactive potential that was always already embedded in *aisthesis* and now becomes observable and modulable. Here the book reconnects explicitly with the bioaesthetic account of electronic interactivity quoted from Montani's earlier work. Interactivity becomes genuinely significant only when it pushes the image beyond a condition of autonomous simulacrum, exposing its off-screen and reconnecting it to a non-reducible experiential background that has to be elaborated applicatively rather than merely recognised cognitively. The key question is therefore not whether we interact with images—this is trivially true—but whether interactive operations open the image toward its "outside" and intensify our capacity to differentiate and re-articulate that background, or whether they simply canalise perception into pre-formatted paths.

The first part of the monograph unfolds this question by examining the internal articulation of sensibility, imagination and language. Human *aisthesis* is characterised as a highly specific sensory-motor organisation, whose plasticity underpins imagination's threefold functioning. Interactive imagination presupposes a certain richness and flexibility of aisthesis: only a sensibility capable of nuanced discriminations and of being affected in complex ways can sustain elaborative forms of projection and intervention. At

the same time, imagination's interactive dimension is tightly bound up with language. Symbolic and linguistic schemata do not simply "label" perceptions; they participate in structuring the field of possible actions, making certain paths of transformation salient while occluding others. In digital environments, where linguistic, iconic and procedural codes converge, this entanglement becomes especially visible: tags, interfaces, narrative formats and software architectures all participate in shaping the interactive horizon within which imagination operates. The second movement of this dissertation is devoted to the relation between aesthetics, techno-aesthetics and art. Drawing on Dewey, Montani rejects any conception of aesthetic experience as passive contemplation and insists on its fundamentally active, elaborative character: aesthetic situations reorganise the relation between organism and environment, condensing conflicts, rhythms and tensions into configurations that can be felt and thought. In the human case, however, such configurations are always technically mediated. To speak of aesthetic experience is, in effect, to speak of a techno-aesthetics, since *aisthesis* is from the outset prolonged and modulated by tools, devices and media. The contemporary situation is marked by an unprecedented intensification of this technical delocalisation of sensibility: from photography and cinema to digital networks, mobile screens and algorithmic platforms, our perceptual habits are constantly being re-inscribed in new *dispositifs*.

Montani warns that this condition of "delegation without reserve" has a double face. On the one hand, it facilitates a widespread aestheticisation managed by technological supports that may lower the elaborative tenor of experience—flattening affects, standardising narrative and perceptual forms, and reinforcing automatisms. On the other hand, it also opens a field of genuine possibilities: if handled critically, these same *dispositifs* can sustain forms of interactive imagination that requalify our symbolic behaviours and transform our habitats. It is in this ambivalent zone that the role of art becomes crucial. For centuries, art has been the privileged site for experimenting with new couplings between *aisthesis*, imagination and technique; there is no reason, Montani argues, why this "original kinship" should atrophy today. Rather, the contemporary convergence between artistic practices and emerging technologies suggests that art is once again being pushed toward a new terrain of encounter with technique, where it can contribute to inventing and testing forms of interactive elaboration that exceed the paradigm of the self-contained "work." To substantiate this claim, Montani revisits the

history of audiovisual culture, from early photography and cinema to contemporary digital imaging. He singles out montage as the key procedure through which images become capable of mediating between iconic density and discursive complexity: by cutting and recombining shots, by playing off simultaneous grasp and sequential construction, montage allows images to articulate relations, not simply to present appearances. This articulation is further intensified by what Eisenstein called the "vertical" dimension of montage: the possibility of disarticulating and recombining different expressive strata—sound and image, colour and movement, spatial layout and musical rhythm—as well as different technical formats and media. These historical developments, Montani suggests, prefigure the contemporary condition in which users routinely perform operations of selection, recombination and re-contextualisation across platforms and devices. Interactive imagination, as it manifests itself in digital editing, remix practices or collaborative storytelling, prolongs and generalises the elaborative potentials first explored by cinema as a laboratory of techno-aesthetic experimentation.

From this point Montani turns more directly to contemporary digital practices. Montani analyses a series of examples—crowdsourced film projects, social media storytelling platforms, participatory archives—where users collectively produce and organise audiovisual materials. These practices illustrate both the promise and the peril of interactive imagination in the age of networks. On the one hand, they bring to light a competence in handling images that is widely distributed and can support complex forms of narrative, autobiographical and political elaboration. On the other hand, they remain exposed to commodification, to the reproduction of low-profile models, and to enclosure within regressive or self-referential niches. Once again, the decisive issue is whether interactivity is oriented toward opening the image onto its off-screen—toward the non-reducible background of lived situations and shared histories—or whether it remains confined within purely simulational circuits.

The third major movement of *Tecnologie della sensibilità* introduces what Montani takes to be a genuinely new paradigm: wearable technologies and augmented reality as "technologies of sensitivity" in the strict sense. Having focused so far on interactivity in predominantly virtual environments—screen-based *dispositifs*, digital archives, VR-like installations—he now considers devices such as Google Glass as symptoms of a shift toward an interactivity that is rooted in the real world. Wearables are

intimately incorporated; they accompany the subject in everyday space and feed back into proprioception, into the way we feel our body and its embedding in the environment. They supply an ever-expandable set of abilities and informations capable of reshaping how we are sensitive to phenomena and how we act within our milieu. In this scenario, interactive imagination is no longer exercised primarily in a virtual space separated from ordinary experience, but directly in the "thick" of the world, through operations that change the conditions of visibility, addressability and action in public spaces. Montani explores in detail this new regime of augmented perception by discussing, among other things, the promotional narratives and potential uses associated with Google Glass. The small transparent display, activated by voice, gesture or head movements, overlays data onto the user's field of view; the same device can record images and stream them to the network. The resulting experiential configuration is crucially different from traditional screen-based viewing: information and images are no longer framed at a distance but inscribed into the subject's own line of sight and motor routines. From a bioaesthetic point of view, this amounts to a further delocalisation of *aisthesis*, with profound consequences for interactive imagination. The subject no longer simply navigates a digital environment; she inhabits an "associated milieu" in Simondon's sense, a hybrid habitat that emerges at the intersection of urban space and cyberspace. This hybridisation becomes particularly visible in Montani's analyses of recent protest movements and occupations of public squares. When participants equipped with cameras or wearables simultaneously inhabit and record places such as Zuccotti Park or Tahrir Square, the political space of the polis can no longer be mapped solely onto a bounded urban area. It extends into the network, into the circulation and recombination of images, into distributed archives that preserve and re-elaborate events from multiple viewpoints. These "hybrid places" are intrinsically interactive not only because they are traversed by digital devices, but because they should be continually built and rebuilt through collective practices of perception, narration and negotiation. In them, the off-screen of electronic images coincides with the contested space of public life: the background against which interactivity "stands out" is explicitly political. At this point Montani's earlier definition of electronic interactivity as an "applicative movement" that pushes the image out of its simulacral autonomy acquires a new concreteness. The off-screen that interactivity brings to light is no longer just the invisible remainder of a framed scene; it is the complex mesh

of associated milieus, shared archives and conflictual spaces in which images are produced, exchanged and contested. Wearables and AR systems, by embedding interactive capacities into the subject's perceptual apparatus, intensify the hallucinatory and immersive aspects of technical images, but at the same time they make it possible to articulate these aspects within broader networks of meaning and practice. The same imagination that "behaves like a generator of VR" can now, under certain conditions, become a generator of augmented political spaces.

The final part of the work return to the normative stakes of this transformation. Montani insists that the proliferation of technologies of sensitivity will inevitably make us ever more "sensitive" in a specific, technically mediated sense; what is not guaranteed is that we will also achieve a commensurate critical awareness. Learning to inhabit the in-between of real and digital spaces, to perceive the autonomy and fragility of hybrid environments, and to invent forms of cooperation and shared protocols adequate to them, will increasingly constitute a central field of political exercise for human creativity. In this prospect, art is called upon once more to act as an exploratory force: to devise *dispositifs* that connect the paradigm of virtual interactivity (VR, digital images) with that of real interactivity (AR, wearables, networked urban spaces), and to elaborate techno-aesthetic practices that foreground rather than conceal the conditions of our mediated perception. Read alongside later *Technological Destinies of the Imagination* and most recent *Vita interactiva*, *Tecnologie della sensibilità* appears as a pivotal moment in Montani's project. It consolidates the idea that imagination is an embodied, multimodal power whose "destinies" are inseparable from technical practices; it extends the cinematic model of montage and intermediality into the contemporary ecology of interactive images; and it anticipates the shift from a merely "technically assisted" life to a "technically dependent" and explicitly interactive one. Thus, the book provides a crucial bridge between an anthropology of imagination and an anthropology of media: XR, VR, AR and metaversal environments can be understood as historically specific configurations of technologies of embodied sensitivity, in which interactive imagination is at once empowered and endangered, capable of producing new forms of performative world-construction and equally new forms of control and regression.

Precisely in his last book *Vita interactiva. Da Homo sapiens all'universo digitale*[50] Pietro Montani brings together his long-term reflection on imagination, technique and media into a comprehensive anthropology of interactivity. The guiding thesis is that interactivity is not a recent property of digital devices, but a general mode of being of living systems and, in a specific way, of human culture. The digital revolution makes this ontological dimension newly visible and newly problematic, forcing us to re-think Hannah Arendt's "*vita activa*" as *vita interactiva*: a historically specific condition in which actions, perceptions and relations are increasingly configured within technologically structured interactive fields.

From the outset, Montani takes distance from a purely technological or user-centric understanding of interactivity, as in early Web 2.0 narratives around the "prosumer"[51]. What matters, he argues, is not simply that users can both consume and produce content, but that interactivity always unfolds within an impersonal field of forces that distributes roles, constraints and affordances among human and non-human agents. Interactivity is defined by reversibility: the constant oscillation between activity and passivity, production and reception. When considered from this angle, it appears "as old as the world": a way of naming the mutual implication of heterogeneous forces, rather than an attribute of specific devices. On this basis Montani introduces two fundamental "options" that structure his work. First, a realism of interactive processes: genuine interactivity is always anchored in a world-environment that it can never fully absorb, and with which it maintains a continuous exchange. Second, he distinguishes between integrative and substitutive tendencies. Integrative interactivity links simulated and actual domains into new complex entities (for instance, the coupling between a physical bridge and its three-dimensional digital twin, whose value depends on constant feedback of updated data). Substitutive interactivity, by contrast, aims to install self-sufficient simulated worlds—smart cities conceived as fully automated metaversal ecosystems are privileged example—where autonomous affordances tend to supplant the contingencies of the lived environment. From this point, Montani reconstructs interactivity at the level of biological life and ecological niches. Drawing on evolutionary biology and ecological theory, Montani insists that living beings are not passive inhabitants of pre-given

[50] Id., *Vita interactiva: Da Homo sapiens all'universo digitale* (Torino: Einaudi, 2025)
[51] See Alvin Toffler, *The Third Wave* (New York: Bantam Books, 1980).

environments, but co-construct niches through a reversible process of adaptation and transformation. Human beings occupy a particularly complex position in this picture: their technical and symbolic practices generate increasingly anthropized environments in which feedback between producing and receiving becomes ever more intense and asymmetrical. Digital interactivity is thus only the latest inflection of a much older dynamic, but it makes visible a tendency toward the construction of environments that are strongly organised by human interests and by artificial agencies.

Subsequently, the dissertation focuses on verbal language as the principal symbolic technology of our species, capable of inaugurating interactive fields that would be impossible without it. Here Montani brings together pragmatics, philosophy of language and developmental psychology. Language is not described as a mere code for transmitting information, but as a practice of rule-governed interaction embedded in shared forms of life. Particular attention is given to dialogic and narrative structures: conversation, argumentation, storytelling and poetic speech are analysed as different ways of distributing initiative and receptivity among speakers and listeners, and thus as different regimes of interactivity. Internalisation plays a crucial role: following Vygotskian models, Montani shows how social dialogue is progressively transformed into inner speech, which becomes a permanent laboratory where linguistic and imaginative schemas are recombined. Inner discourse, however, never loses its heterological origin: it is the transformed echo of others' voices, not a self-generated monologue. Within this framework he also situates our contemporary interactions with "speaking machines". Large language models and generative chatbots undeniably open up new dialogical spaces, in which human users often invest emotions and forms of attachment. Yet their semantic competence depends entirely on vast textual corpora previously produced and interpreted by humans. Montani criticises descriptions of such systems as "learning from experience" (Montani 2025: 118): what they process are data already shaped by human semantic decisions, not the open-ended "givenness" of the world. The apparent equivalence between human and machine dialogue obscures this dependence and risks erasing the constitutive link between language and the contingency of lived situations.

Moving also from Simondon assumptions, as a logic consequence, the following reflection turns to the arts as paradigmatic laboratories of interactivity. Without sharply

separating literature, cinema, theatre and installation practices, Montani treats artistic experiences as privileged occasions in which the reciprocity of self and other, activity and passivity, is intensified and reflexively thematised. Reading a novel, viewing a film or inhabiting an installation implies entering into carefully designed interactive fields where the spectator's expectations, memories and bodily orientations are solicited and transformed. Aesthetic experience is characterised by a specific tension: the work both addresses the individual and dispossesses them, suspending immediate practical aims in favour of experimental forms of co-presence. In this sense the arts rehearse the central gesture of *vita interactiva*: they offer situations in which participants discover themselves by engaging with alterity, and where interactivity becomes a space of "serious play"[52] in which new forms of life can be tried out.

Thus, to extend his dissertation Montani addresses the digital ecosystem explicitly. Here Montani brings together his bio-aesthetic premises with a detailed analysis of platforms, videogames, virtual and extended reality, and generative AI. He returns to his initial distinction between integrative and substitutive tendencies in order to interrogate the ambivalence of digital environments. On the one hand, digital infrastructures encourage the formation of "bubbles" or "envelopes" (Montani 2025: 185)[53]: self-contained spaces in which users can pursue highly gratifying forms of interaction—gaming, social networking, personalised recommendation—while losing contact with the open horizon of the world-environment. On the other hand, the same technological resources allow for sophisticated forms of coupling between simulations and reality, as in the case of digital twins or tele-medical and educational applications, where virtual models feed back into concrete interventions. Videogames receive particular attention as emblematic sites of digital interactivity. For Montani they showcase the richest expression of procedural interactivity—the exploitation of the technical affordances of computing for the construction of rule-governed worlds. Complex games generate parallel ontologies whose consistency is negotiated among

[52] In an intentional link with Benjamin and his *Work of Art*, and Harun Farocki's *Serious Games* (2009-2010).

[53] Here Montani refers to the concept of "envelops" as developed by the Luciano Floridi. The acute analysis of the Italian philosopher could be put in dialogue also with the following chapter titled *Environments*; however, focusing Floridi's research specifically on the theme of Artificial Intelligence, it was considered more pertinent not to deepen his thinking within the present work, aimed instead at the study of immersive experiences.

designers and players, enabling a strong sense of co-authorship: players can significantly reshape levels, strategies and sometimes storylines. At the same time, these worlds are often insulated "bubbles" whose very effectiveness as games depends on a negotiated closure with respect to reality, a condition that favours both creativity and clinical levels of addiction. Montani notes, however, that precisely in these spaces unanticipated "antibodies" can emerge therapeutic uses of commercial games, narrative practices that spill over into fan cultures, or experiments in serious gaming that re-connect ludic procedures with care, memory and ethical reflection. In the broader digital ecosystem, similar tensions appear. Projects that imagine urban spaces as fully automated smart environments, or metaverse platforms promising total immersion, tend toward substitutive interactivity: they try to enclose users within environments where affordances are produced and regulated by algorithms largely independent of worldly contingencies. By contrast, configurations in which simulations continuously exchange information with physical processes, or in which digital tools support collaborative forms of learning, design and political action, exemplify integrative interactivity. Montani suggests that the ethical and political stakes of the current digital transition hinge on which of these trajectories becomes hegemonic. Generative AI—both linguistic and visual—offers a particularly instructive case. Montani underlines that such systems are entirely dependent on human-generated "semantic engines": they recombine pre-existing semantic articulations encoded in their training data, without access to the open, resistant dimension of the world that human language should constantly negotiate. This does not mean that AI is useless or inherently regressive; rather, it implies that its integration into *vita interactiva* should be carefully oriented. When used as tools to assist human creativity, to diversify perspectives or to simulate scenarios that are then critically discussed, generative systems can become components of integrative interactivity. When instead they are treated as autonomous agents capable of replacing human judgment and interaction, they reinforce substitutive tendencies and jeopardise the realism of interactive processes.

Throughout his last monograph Montani returns to a central anthropological insight: human life is technically dependent rather than merely technically assisted. Tools, languages and media are not external prostheses added to a pre-formed subject; they are the very milieu in which human capacities emerge and are continually reconfigured.

Interactivity names the dynamic through which this milieu operates: a reversible movement in which bodies, artefacts and environments reciprocally shape one another. The digital age does not inaugurate interactivity, but intensifies and reorganises it, often in ways that obscure its worldly anchoring and its dependence on embodied imagination, linguistic practice and shared forms of life. The book thus completes and updates Montani's previous reflections on imagination and techno-aesthetics by giving them a broader ecological and political scope. By following interactivity from biological strategies of survival through language, the arts and digital media, he is able to articulate a normative proposal: authentic interactivity is integrative, anchored in the world-environment and oriented toward the co-individuation of humans and their technical milieus. Substitutive forms, by contrast, risk enclosing subjects in simulated niches that sever the connection between experience, contingency and shared reality. The task for philosophy, aesthetics and media theory, in this perspective, is not to oppose the digital universe as such, but to discriminate and cultivate those configurations of *vita interactiva* in which technical creativity, embodied imagination and linguistic meaning remain reciprocally accountable.

Between Aesthetics and Mediology: Media Archaeology and its Italian declination

Apparently far from approaches such as the ones reported until now, media archaeology has emerged over the last three decades as one of the most productive—and contested—approaches within media and visual culture studies. Rather than telling a linear story that moves from "old" to "new" media in a succession of clearly demarcated technological stages, media archaeology asks how media histories are stratified, discontinuous and recursive. It takes seriously Foucault's invitation to investigate the "conditions of existence" of practices and discourses, but redirects that question toward concrete devices, infrastructures, and recurring cultural motifs. In this sense, media archaeology is not a subfield defined by a single object (say, early cinema or digital media), but a perspective on media history that foregrounds forgotten, failed or marginal

artifacts, non-linear temporalities (returns, survivals, anachronisms), and the material-technological underpinnings of what we now call media culture.

Despite its young age, there is no single "founder" of media archaeology; the field crystallizes through a transnational conversation in which several figures play formative roles. Friedrich Kittler's work in the 1980s and 1990s—especially *Gramophone, Film, Typewriter*[54]—is often treated as a precursor, because it insists that media technicalities (signal processing, storage, transmission) shape the very possibilities of discourse and experience. Even if Kittler himself rarely uses the term "media archaeology," his influence on later German and Anglo-American debates is decisive. More explicitly, Erkki Huhtamo and Jussi Parikka are usually credited with consolidating the field: their co-edited volume *Media Archaeology: Approaches, Applications, and Implications*[55] gathers a wide range of case studies and methodological reflections and is frequently cited as a foundational collection. Parikka's subsequent monograph *What is Media Archaeology?*[56] functions as a canonical introduction, framing media archaeology as a way of thinking "the new and the old in parallel lines" and of approaching media history as layered and sedimented rather than teleological. Alongside Huhtamo and Parikka, other key names include Siegfried Zielinski, whose *Deep Time of the Media: Toward an Archaeology of Hearing and Seeing by Technical Means*[57] proposes an "archaeology of hearing and seeing" that explores the "hidden layers" and "variantologies" of media development; Wolfgang Ernst, whose *Digital Memory and the Archive*[58] articulates a rigorously technical, "cold" media-archaeological gaze focused on archives and signal processing; and, from the side of film studies, scholars like Thomas Elsaesser and Wanda Strauven, who connect media archaeology to "new film history," early cinema, and tactile, screen-based practices.

Despite this plurality, most accounts agree on a few shared commitments. First, media archaeology rejects linear progress narratives in which each new medium simply

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[54] Friedrich A. Kittler, *Gramophone, Film, Typewriter*. Translated with an introduction by Geoffrey Winthrop-Young and Michael Wutz (Stanford, CA: Stanford University Press, 1999).
[55] Erkki Huhtamo and Jussi Parikka, eds. *Media Archaeology: Approaches, Applications, and Implications* (Berkeley: University of California Press, 2011).
[56] Jussi Parikka, *What Is Media Archaeology?* (Cambridge and Malden, MA: Polity Press, 2012).
[57] Siegfried Zielinski, *Deep Time of the Media: Toward an Archaeology of Hearing and Seeing by Technical Means.* Translated by Gloria Custance. Foreword by Timothy Druckrey (Cambridge, MA: MIT Press, 2006).
[58] Wolfgang Ernst, *Digital Memory and the Archive*. Edited by Jussi Parikka (Minneapolis: University of Minnesota Press, 2012).

replaces its predecessors. Instead, it highlights recursions and anachronisms: nineteenth-century panoramas that anticipate cinematic travelogues; mechanical automata that echo in contemporary robotics; or analog computing machines that complicate simple stories of the "digital revolution." Second, it considers also the materiality of media. Rather than treating media merely as channels for content or signs, media-archaeological work insists on the affordances and constraints of specific devices, formats, and infrastructures—from discs and tapes to cables, projectors, and server farms. Third, it often focuses on minor, failed or forgotten media: prototypes that never became dominant, local or ephemeral practices, "dead ends" that nevertheless reveal other possible genealogies of our present media environment. Media history, from this perspective, is not a straight line but a dense tangle of actualizations and potentials. Within this shared horizon, we can distinguish at least two major strands that have become emblematic in international debates.

The first is a cultural-historical and *topoi*-oriented strand, associated above all with Erkki Huhtamo and, in a different register, with Jussi Parikka and Siegfried Zielinski. Huhtamo proposes that media archaeology should study "*topoi*": recurring motifs, narrative formulas and visual schemes (for example, the peepshow, the panorama, or the fantasy of perfect telepresence) that migrate across media and epochs. In his own work—on peep media, urban screens, or, more recently, moving panoramas—he reconstructs how certain *dispositifs* are "concocted with other humans in mind," (Huhtamo 2012: 17) embedded in specific performance practices and discursive fields, and how their motifs survive long after the original apparatus has vanished. Zielinski, for his part, argues for exploring the "deep time" of media, seeking "dynamic moments of intense activity in media design and construction" that have often been ignored because they do not fit into mainstream histories. Rather than searching for origins or linear antecedents, he advocates a variantology of the "many and the different" in media history. Parikka systematizes these intuitions, presenting media archaeology as both a historical method and a critical theory of contemporary digital technology and culture: to understand networked media, we should excavate older layers of telegraphy, bureaucracy, and environmental extraction, and attend to the "geologies" and "animalities" of media (from cables and rare earths to computer viruses). The second strand is a techno-material, hardware-oriented media archaeology, strongly shaped by the German media theory tradition. Kittler is the paradigmatic reference here, with his insistence that "media

determine our situation" by structuring possibilities for perception, memory, and discourse at the level of circuits, storage and transmission. Wolfgang Ernst radicalizes this approach by turning to what he calls "archival media theory": instead of reading media as texts or images, he analyses their operational, time-critical logic—how signals are stored, processed and replayed. For Ernst, media themselves become "active archaeologists of knowledge," and the media archaeologist should adopt an equally "cold" gaze, focusing less on meaning and more on machine time, algorithmic rhythms, and the micro-temporalities of computation.

These two poles—*topos* study and hardware analysis—do not exhaust media archaeology, but they provide a useful map. Between them lie a range of intermediate and practice-based approaches. For example, Elsaesser and Strauven, connect media archaeology to early cinema and "cinema of attractions,"[59] showing how contemporary interactive screens and immersive environments can be illuminated by pre-cinematic spectacles and tactile viewing practices. Artists, curators and "media archaeology labs" add yet another dimension, using obsolete devices, re-enactments and circuit-bending as ways to experientially explore media history and to question dominant narratives of innovation.

To briefly look also to the different theoretical perspectives: Zielinski's *Deep Time of the Media* takes readers on a non-linear tour from ancient hydraulic telegraphs to Baroque speaking statues and early nineteenth-century electro-acoustic experiments, not to construct a continuous prehistory of television or the internet, but to show how different arrangements of hearing and seeing were imagined and built. Parikka, in turn, uses examples such as computer viruses, spam, and the material infrastructures of the internet to argue that media archaeology should also be an environmental and political critique of how media are embedded in planetary resources and labor. Ernst's essays on digital archives examine oscilloscopes, hard drives and server architectures to demonstrate how digital memory differs from human memory, and why it is misleading to treat storage as if it were remembrance. Finally, as the most exemplar approach for the development of this work, through painstaking archival work on surviving canvases, lecture notes, playbills and parodies, however, Huhtamo shows how a *dispositif* as the Panorama

[59] In particular, see Wanda Strauven, ed. *The Cinema of Attractions Reloaded* (Amsterdam: Amsterdam University Press, 2006), which contains an analytical framework which will be very useful in the second half of the next chapter

articulated new forms of virtual travel, colonial imagination and popular pedagogy, and how the "panoramic topos"[60] survives in later metaphors of history, memory and dream.

As explained, Erkki Huhtamo is one of the central figures in contemporary visual culture studies and, together with Jussi Parikka, a key architect of what we now call Media Archaeology. Trained between film studies, art history and cultural history of technology, he has consistently argued that media history should not be written as a linear march of inventions, but as a stratified field of recurring cultural forms, fantasies and "*topoi*" that migrate across different epochs and media systems. In his never-ending amount of essays, and in the collective volume *Media Archaeology: Approaches, Applications, and Implications* that he co-edited with Parikka, Huhtamo proposes media archaeology as a way to "correct" canonical narratives by excavating forgotten or marginal media, and by following the *longue durée* of motifs like the peepshow, the panorama, or the dream of the "ultimate communication medium." Within visual culture, his work is crucial because it links concrete devices and spectacles (panoramas, dioramas, simulators, peep media) to the discourses, practices and imaginaries that make them meaningful—treating media as "constructed complexes of habits, beliefs, and procedures embedded in elaborate cultural codes of communication," as he likes to quote from Carolyn Marvin.

In *Illusions in Motion: Media Archaeology of the Moving Panorama and Related Spectacles*[61] Huhtamo applies this archaeological method to a spectacular but largely forgotten nineteenth-century medium: the moving panorama. The book is both a meticulous reconstruction of how this medium worked, and a broader reflection on the emergence of modern media culture understood as a dense environment of images, narratives and technical apparatuses. The starting point is the distinction between Barker's famous circular panorama—a huge 360° painting inside a purpose-built rotunda, in which visitors stood on a central platform and were "placed" inside an illusionistic environment—and the later moving panorama, where a long painted canvas (often hundreds of feet) was wound between rollers and cranked past a proscenium-like opening in front of a seated audience. The moving panorama retained the panoramic ambition to

[60] Huhtamo recently expanded this notion proposing to develop the 'immersive *topos*' in the present dissertation during some academic occasions of meeting between 2023 and 2025 at the University of Antwerp and Nicolaus Copernicus University of Toruń. For this and so many others enriching research tips the author feels very grateful to him.

[61] Erkki Huhtamo, *Illusions in Motion: Media Archaeology of the Moving Panorama and Related Spectacles* (Cambridge, MA: MIT Press, 2012).

show “all” (pan-horama), but transformed a stationary immersive environment into a mobile, narrative spectacle. Instead of surrounding the spectator with one continuous view, it simulated travel: cities, landscapes and battlefields unrolled one after another as if the audience were voyaging by boat, balloon or train. Huhtamo insists that this was not a minor variant of Barker’s invention but a “missing medium” with its own cultural logic. Moving panoramas were typically itinerant: they travelled with showmen across Britain, North America, Australia and New Zealand, setting up in churches, local theatres and community halls. They were cheaper to produce than permanent rotundas, could be updated or repainted to follow current events, and brought mediated visions of distant places to small towns far from the great exhibitionary capitals. Yet precisely because their canvases were fragile and often repurposed as theatre scenery, insulation or curtains, only a handful survive today. *Illusions in Motion* presents itself as an attempt to reconstruct this lost medium from scattered traces: playbills, reviews, lecture texts, patents, toy versions, and literary metaphors. Methodologically, the book is framed as a media-archaeological investigation. In the introduction Huhtamo contrasts his approach with the more technological, Kittler-inspired strand of media archaeology, which tends to narrate media history as a “march of the machines” driven by inscription and storage technologies, with “so-called humans” relegated to the margins. He is also wary of grand epistemic breaks in the style of Foucault or Jonathan Crary, which risk selecting only those sources that confirm a prefabricated model. Instead, Huhtamo proposes a media archaeology attentive to humans, practices and discourses—a kind of cultural history of media that looks at how concrete spectacles are concocted “with other humans in mind,” and at how their meanings are shaped by local circumstances and recurring cultural formulas. This is where the notion of *topos* becomes central. For Huhtamo, media are surrounded by persistent motifs—stories of animals fooled by illusionistic images, metaphors of “life as a moving panorama,” dreams that “unroll like a panorama”—which reappear across centuries and in different media. Tracing these topoi allows him to connect the material moving panorama to a broader discursive field in which panoramas serve as ways of thinking about perception, memory, history and imagination.

The first substantive section of the book looks at antecedents and anticipations of the moving panorama. Here Huhtamo turns to early forms of visual storytelling based on scrolls and rolled pictures: from the Javanese *wayang bèbèr*—where a storyteller unrolls

a painted scroll scene by scene while narrating—to European practices of picture rolls used inside peepshow boxes or as "transparencies" illuminated from behind. He also discusses eighteenth-century "miniature panoramas," pocket-sized devices in which small sequences of images could be scrolled in front of a viewer, often with religious or political content. These antecedents do not constitute a direct genealogy, but they reveal a persistent *topos*: the combination of moving image, sequential narrative and a framed viewing window, which will later crystallize in the moving panorama. Subsequently, the author introduces an intermediate form, the peristrephic panorama, which had remained a "blank spot" in panorama historiography. These devices placed viewers on a rotating platform surrounded by a semi-circular or circular painting; instead of walking around the canvas, spectators sat while the image (or the platform) slowly turned. Peristrephic panoramas thus negotiated between the wrap-around enclosure of the rotunda and the linear movement of later scroll panoramas, anticipating the "cinematic" sensation of being carried past a sequence of scenes. From here Huhtamo moves into the theatrical environment, showing how moving panoramas were closely tied to developments in scenography and stage machinery. The chapter on "Rolling Across the Stage" reconstructs a genealogy that leads from the spectacular stage effects of Servandoni and De Loutherbourg to the Eidophusikon, an optical-mechanical theatre in miniature that combined painted scenes, moving parts and complex lighting. These experiments demonstrate that nineteenth-century visual culture was already deeply intermedial: theatrical panoramas, pantomimes, mechanical theatres and balloon panoramas all borrowed from and competed with each other in an expanding "realm of spectacles." Another key interlocutor is the Diorama, invented by Louis Daguerre and Charles-Marie Bouton. Originally housed in permanent urban venues, the Diorama used large translucent paintings, complex backlighting and moving shutters to produce slow transformations—day into night, summer into winter—that critics described as "wondrous" and uncannily real. Huhtamo treats the Diorama as a "vision machine" that both challenged and inspired moving panorama showmen; soon, hybrid "moving dioramas" appeared in which scroll paintings were combined with dioramic lighting effects.

The mid-century chapters then stage the full explosion of "panoramania." In the 1840s and 1850s moving panoramas became a mass craze, especially in Britain and the

United States. John Banvard's colossal Mississippi River panorama—advertised as "three miles of canvas"—toured to enormous acclaim and helped establish the genre of the travelogue panorama, in which spectators undertook virtual journeys along rivers, across continents or through the Holy Land. Other panoramas focused on wars, disasters, biblical history or moral allegories; the attraction was always a mixture of visual spectacle, lecture, music and sometimes comic or sentimental interludes. A detailed case study of Albert Smith's moving panoramas shows how deeply these spectacles were entangled with early media industries. Smith, a journalist and entertainer, turned his ascent of Mont Blanc into an immensely successful show at London's Egyptian Hall, where an Alpine panorama was accompanied by storytelling, songs, ethnic caricatures and aggressive merchandising. Huhtamo reads this as an early instance of cross-media branding and "media marketing," where travel narrative, spectacle, print culture and commodity display reinforce each other. In the analytical heart of the book Huhtamo asks how a moving panorama performance worked in practice. Since very few canvases survive, he turns to parodies, handbills, lecture texts and eyewitness accounts to reconstruct what he calls the "microphysics" of the show. The lecture did not simply describe the images; it provided continuity across abrupt transitions, bridged gaps in the painted narrative, and oriented the audience's emotional response. Music and sound effects (thunder sheets, drums) enhanced the sense of movement and eventfulness. At the same time, discontinuity—sharp cuts between scenes, comic asides, shifts in register—was used strategically to maintain attention and to signal changes of topic or mode.

This reconstruction feeds into a broader discussion of intermedial competition, especially with magic lantern shows. During the American Civil War, moving panoramas depicting battles and campaigns proliferated, but so did lantern shows using dissolving views and, later, photographic slides. Huhtamo shows how panoramists and lanternists engaged in a "discursive tug-of-war" through advertising and journalistic debates, each claiming greater realism, moral value or educative power. Over time, composite forms such as the myriorama emerged: roadshow attractions that combined moving canvases, lantern slides, music and live acts into dense programmes of "sensory bombardment," foreshadowing the multi-media spectaculars of world's fairs and amusement parks. The Théatre Morieux and similar mechanical theatres, reconstructed through archival photographs and surviving apparatus, illustrate how moving panorama mechanisms were

incorporated into elaborate fairground shows featuring animated figures, miniature trains and projected images—complex environments where immersion was achieved through the orchestration of many media rather than the purity of a single device.

In the last part of his study Huhtamo leaves the material canvases to explore what he calls the "discursive panorama." As the nineteenth century progresses, the expression "moving panorama" increasingly appears in literature, journalism, religious tracts and psychological writings as a metaphor for inner or social life: dreams "unroll" before the mind's eye, memory is compared to a panorama of past scenes, politics or history are imagined as vast moving pictures unfolding in time. By tracing such uses—from sermons to science fiction—Huhtamo shows how a concrete medium can be transfigured into a *topos*, a reusable cultural formula that detaches from its original technical base and continues to shape imagination long after the apparatus itself has disappeared. In this sense the moving panorama is still "alive" today, even when it surfaces only as a metaphor in novels or journalism, or in the miniature souvenir toys and pens whose small scrolls animate pin-up girls or cartoon characters when turned in the hand. At the end, Huhtamo explicitly connects this historical reconstruction to the question of media culture. Doing so, he argues that media culture should not be reduced to the age of radio, television or digital networks. Its roots lie in the nineteenth century, when an increasingly dense mesh of technical and discursive media—panoramas, dioramas, stereoscopes, illustrated weeklies, trade cards, telegraphy—began to integrate perception, information and entertainment into everyday life.

Within this emergent media ecology, the moving panorama played a specific role. As a touring spectacle, it brought global wars, colonial landscapes, scientific expeditions and biblical narratives to audiences far from metropolitan centres, contributing to what Huhtamo calls the "democratization of culture" (Huhtamo 2012: 367): city dwellers and "country cousins" could share visual experiences of distant events. At the same time, its mixture of travel, pedagogy and spectacle prepared spectators for the sensory overloads of later media, training them to inhabit composite environments of sound, image and narrative. Yet Huhtamo is careful not to romanticize the medium. Moving panoramas were commercial enterprises embedded in imperial and capitalist frameworks, and they certainly participated in what Debord would later name the "society of the spectacle." Still, he suggests that their mode of address remained more conversational and open than

the one-way flows of later corporate media: the lecturer could improvise, respond to local circumstances, or, as in the case of Henry Box Brown's antislavery panorama, connect the painted scenes to contemporary struggles and solidarities. The book closes on the intimate scale of toy moving panoramas—small cardboard theatres with crank-driven rolls that children could operate at home. Here, anyone could become both showman and spectator, switching roles at will. Huhtamo reads these objects as miniature laboratories of media culture: they condense in domestic space the same logics of framing, sequencing and control that govern public spectacles, while at the same time inviting playful appropriation. Across its twelve chapters, *Illusions in Motion* thus offers not just a history of a single forgotten device, but a model for writing the media archaeology of visual culture: attentive to devices and performances, to economic and geographic circuits, and to the slow circulation of *topoi* that outlive their technical supports. In general, it gives a deep historical layer to contemporary discussions of immersion, spectacle and mediated travel, showing how nineteenth-century audiences already inhabited a world where "figures on the screens" negotiated between illusion and interaction, local life and panoramic visions of the world.

Placed within the broader field of media and visual culture studies, media archaeology occupies a particular position. It intersects with film history, especially where early and pre-cinematic devices are concerned; with media theory, insofar as it continues and complicates apparatus theory and debates on technological determinism; and with visual culture, because it treats images not as isolated artworks but as elements in *dispositifs*, environments and circuits of circulation. It often overlaps with media ecology and infrastructure studies, since it thinks of media as environments and networks rather than as discrete tools. What distinguishes it is its insistence on temporal depth and non-linearity: visual culture is not simply contemporary, but layered with older fantasies, techniques and devices that continue to inform how we see and are seen.

In Italy, the reception and development of media archaeology followed a partly distinct trajectory, closely intertwined with aesthetics, film studies and visual culture. The translation of Parikka's *What is Media Archaeology?*, has played an important role in institutionalizing the term. Ruggero Eugeni[62] in the preface of the Italian edition reads

[62] Jussi Parikka, *Archeologia dei media. Nuove prospettive per la storia e la teoria della comunicazione* (Roma: Carocci, 2019). For another even more recent Italian edition about Media Archaeology and its

media archaeology as an opportunity for the humanities to confront their own "prosthetic" condition and to rethink the relation between human faculties and technical supports; he emphasizes its value as a distributed "style" of research rather than as a closed school. At the same time, Italian debates often connect media archaeology to media ecology and environmental aesthetics. Cases such as the thematic secion "Archaeologies of Immersion" of the Journal *AN-ICON. Studies in Environmental Images*[63] directed by Andrea Pinotti and the volume *Ambienti mediali*[64], edited by Pietro Montani, Dario Cecchi and Martino Feyles, explicitly proposes integrating media archaeology into a broader study of "media environments," where the emphasis falls on how media articulate and re-articulate spaces, atmospheres and forms of life. Here media archaeology is less a purely technical or archival practice and more a way of mapping the mutual adjustments between *dispositifs*, bodies and environments across time. Within Italian visual culture, scholars such as Eugeni, alongside the previous cited Carbone, Montani, and Pinotti, and a younger generation (with excellent works by Anna Caterina Dalmasso and Giancarlo Grossi[65] among others) use media-archaeological references and approach to explore the intersections between cinema, cognitive sciences and immersive media, or between historical *dispositifs* and contemporary virtual environments. As we will see, also Wanda Strauven—an Italian-trained scholar working mainly in German and Dutch institutions—has also been influential, especially through her work on early cinema, tactile media and "media-archaeological" approaches to screens, which has circulated widely in Italian film and media studies.

To summarize the differences, while international debates often polarize between a technical (Kittler, Ernst) and a cultural-topological (Huhtamo, Parikka, Zielinski) media archaeology, Italian discussions tend to integrate media-archaeological concerns into aesthetic, phenomenological and ecological frameworks. There is generally less interest

various trajectories see Anna Caterina Dalmasso, and Barbara Grespi, eds. *Mediarcheologia. I testi fondamentali* (Milano: Raffaello Cortina Editore, 2023).

[63] See https://riviste.unimi.it/index.php/anicon

[64] Dario Cecchi, Martino Feyles, and Pietro Montani, eds. *Ambienti mediali* (Milano: Meltemi, 2018).

[65] Anna Caterina Dalmasso is widely present in this dissertation. About Giancarlo Grossi's work, see Giancarlo Grossi, *Le regole della convulsione: Archeologia del corpo cinematografico* (Milano: Meltemi, 2017); Id., *La notte dei simulacri: Sogno, cinema, realtà virtuale* (Monza: Johan & Levi, 2021). The author is enormously thankful with both. Anna Caterina Dalmasso indicated Nele Wynants and the *Sci-Fair* project as the ideal site for a visiting research fellowship on Media Archaeology, which indeed resulted in a consistent focus also in the next chapter for past environmental and media experiences. The author then owes to a fleeting conversation with Giancarlo Grossi, during one of the many *AN-ICON* seminars attended, the spark from which the research question that opens this thesis later took shape.

in a strictly hardware-centred "cold gaze" and more attention to how *dispositifs* participate in the shaping of perception, imagination and forms of life, in continuity with Italian traditions of aesthetics and semiotics. Thus, the Italian term *archeologia dei media* in Italy circulates across film history, communication theory, philosophy and visual studies, often as a methodological label attached to case studies on early cinema, television, exhibition spaces or immersive environments, rather than as the manifesto of a tightly bounded field. In this sense, the media-archaeological perspective allows to read contemporary media—whether screens, immersive installations, or virtual environments—against a deep, non-linear background of earlier *dispositifs*, spectacles and imaginaries. At the same time, it insists that these genealogies are not merely technical: they are bound up with recurring *topoi*, with shifting regimes of attention and embodiment, and with the long-term negotiation between human faculties and technological supports that underpins any visual culture.

Beyond

This chapter has proposed a deliberate displacement of the usual point of departure for thinking about virtual reality and immersive media. Rather than beginning from the history of computational graphics, interface design, or perceptual psychology—approaches that often treat immersion as an intensification of visual representation—it has insisted on a more radical genealogy: immersion as a performative problem, an issue of staging, embodiment, and operative agency. The initial scene is therefore symptomatic. One of the earliest resonant appearances of the phrase "virtual reality" is found not in a technical manual, but in a theatrical manifesto. When Artaud identifies an "identity" between the "virtual reality of the theater" and the fictive world of alchemical symbols, he offers a conceptual model that remains decisive for contemporary immersive environments: the "virtual" is not an antonym of the real, but a name for an efficacious layer of reality—an organized field of forces that touches bodies, reorganizes perception, and induces transformations.

To start from this Artaudian proposition means, first, to treat immersion as something more than "surrounding visuals." Immersion becomes a question of how

sensory regimes are composed and how attention, gesture, rhythm, and affect are mobilized. Theatre, for Artaud, is not a representational frame but an operational milieu: an arrangement where light becomes language, where sound and movement act directly upon the spectator, where thought is induced as "metaphysics-in-action." This is an crucial methodological cue. It allows immersive media to be approached not as an evolutionary step in visualization, but as a family of *dispositifs* capable of recalibrating the relations among bodies, images, and environments. In that sense, immersion is less a matter of "seeing more" than of being organized differently—a reconfiguration of the sensorium that is at once aesthetic, anthropological, and political.

From this opening, the chapter has traced a path through the roots of visual culture in order to situate immersive experience within a broader history of the visible. This detour is not ancillary: it specifies that what we call "the visual" has never been merely optical. Warburg's notion of culture as the production of distance—an oscillation between absorption and reflection—already frames spectatorship as an active negotiation, a practice in which images act upon bodies and in which bodies learn to handle images. The concept of *Pathosformeln* crystallizes precisely this: images are energetic condensations, carriers of embodied habits and affective charges that survive, migrate, and restage themselves across epochs. In Warburg, the visible is never simply "given"; it is continuously made and unmade through practices of attention, memory, and cultural technique.

Riegl's *Kunstwollen* then radicalizes the historical variability of perception itself. Style becomes a distribution of perceptual values—haptic and optic, near and far—by which a culture organizes what can count as visible, salient, meaningful. This is crucial for immersivity because it prevents the naturalization of any sensory regime. What feels "intuitive" or "immediate" is never simply biological: it is historically composed, technically staged, and socially sedimented. Panofsky's *Perspective as Symbolic Form* completes this line by demonstrating that spatial representation is already an ontology of subjectivity: linear perspective is not a neutral window but a cultural a priori, a grammar that positions a spectator at a distance. Against this background, immersive environments can be understood as the emergence of new symbolic forms that reposition the subject inside the image-space and redistribute relations between seeing and acting, orientation

and implication. The point is not to celebrate "presence" as a technological miracle, but to ask what kind of subject and what kind of space are produced by these grammars.

The chapter then moved into the Italian articulation of visual culture, where the field is explicitly framed as an encounter between cultural studies, aesthetics, and *dispositif* analysis. In this context, "visual culture" is not a catalogue of images but a study of how images, gazes, media, and *dispositifs* co-constitute each other within everyday environments. This is a decisive shift for immersion: it invites us to think of media not as channels for content but as operators of experience, arrangements that choreograph attention, regulate visibility, and shape sociality. The Italian discussion also provides a privileged vocabulary for immersive images through the notion of environmental images and, especially, through the analysis of immersive images as paradoxical "an-icons": images that tend to negate their own status as images by presenting themselves as habitable realities, minimizing framing devices and foregrounding "presentification" rather than representation. Here the phenomenological intensity of presence is not treated as an accidental side effect, but as the core experiential stake: immersive systems do not merely show; they situate.

At this point, the theoretical itinerary unfolded along the axis of *apparatus/dispositif*. The Foucauldian definition of the apparatus as a heterogeneous ensemble of discourses, institutions, architectures, regulations, and practices—held together by strategic relations—makes it possible to see immersive media as embedded in broader economies of power and knowledge. Agamben's expansion of apparatus to "anything" capable of capturing and orienting gestures and behaviors intensifies this insight: immersive systems are not limited to headsets or screens; they include protocols, interfaces, norms of use, and regimes of attention. Deleuze's emphasis on our belonging to devices, and on their role in shaping what can be seen and said, further clarifies that immersivity is never purely sensory: it is always already a politics of perception.

The chapter then confronted the twentieth century's decisive reconfiguration of perception through mechanical reproduction and electronic mediation. Benjamin's account of aura, reproduction, and the optical unconscious provides a hinge: it dislodges perception from contemplative, individualized reception and situates it within historically mutable modes of collective training. The crucial point is not merely the "loss" of aura, but the reorganization of distance and proximity, attention and distraction, through

technical conditions. In this sense, immersive environments do not arrive as an exception to modern mediation; they radicalize modernity's sensorimotor education by introducing a more intimate choreography of orientation, movement, and response. McLuhan's reformulation of media as environments—where the "message" lies in scale, speed, pattern, and the reshaping of association—reinforces this. Immersive systems appear, here, as environmental media in a strong sense: they do not simply transmit content; they configure an embodied milieu in which habits, expectations, and forms of agency are trained.

From this "environmental" turn, the discussion entered a phenomenological-aesthetic register through the notion of the arche-screen. Carbone's proposal is significant because it prevents any simplistic opposition between "screen" and "immersion," as if immersion began only where screens end. By rooting screens in the body's reversible condition—visible and seeing, sensible and sentient—the arche-screen names the transhistorical function of mediation as monstration and concealment, showing and hiding. The screen is not merely a surface; it is a relational operator that shapes how thought and vision fold into each other. This is especially relevant for immersive media that claim "no-screen immediacy": such claims can be re-read as the transformation of the screen-function rather than its disappearance—an intensification of mediation that seeks to render itself imperceptible.

This emphasis on experience as an achieved relation rather than an inherent property then prepared the discussion of liveness. Auslander's argument that liveness is not an ontological essence of co-presence but a historically contingent effect—dependent on media technologies, institutional discourses, and audience investments—aligns closely with the broader thesis of this chapter: "presence" is produced, negotiated, and legitimated. Immersive environments thrive precisely by mobilizing claims to liveness and by demanding the participant's assent to those claims as binding. Thus, the live/mediatized opposition gives way to a more precise question: what configurations of immediacy are staged, by what technical and cultural means, and with what economic and political consequences?

The final portion of the chapter pushed the inquiry toward contemporary techno-aesthetics and media ontology. Cecchi's insistence on the co-belonging of sensibility and technique, and Citton's radicalization of immediality as the condition of living *in medias*

res mediaticas, allow immersion to be understood less as a special effect of exceptional devices than as a paradigmatic expression of our general media condition: mediation becomes milieu. Citton's emphasis on intra-action and agential cuts makes explicit that subjects and objects do not preexist their relations; they emerge through apparatuses that select what matters and how it can matter. From this angle, immersive environments can be analyzed as powerful operators of agential cuts: they produce certain bodies, certain spaces, and certain modes of attention as real, while neutralizing others. Yet Citton's proposal is also crucial because it identifies a space of agency within this condition: aesthetic intermediality as the capacity to work the thresholds between media, to reactivate frictions and delays that immediality tends to smooth out. This is where performative and artistic practices become central—not as illustrative "content," but as laboratories of reconfiguration.

Montani's long-term anthropology of imagination and interactivity then sharpened the focus on what immersive systems do at the level of embodied cognition and symbolic behavior. By treating imagination as an embodied, multimodal power always already innervated by technical practices, and by defining electronic interactivity as significant only when it exposes an off-screen background to be elaborated applicatively, Montani provides a critical criterion for immersive media: the question is not whether immersion is intense, but whether interactivity opens the image toward its outside—toward situations, meanings, and shared worlds—or whether it seals participants within self-sufficient simulacra. This distinction becomes increasingly urgent as immersive environments expand from isolated experiences to pervasive infrastructures of everyday life, where the technical delegation of sensibility risks becoming both total and opaque.

Finally, the chapter situated these questions within the non-linear temporal depth of media archaeology. By rejecting progressivist narratives and excavating recursions, survivals, and forgotten *dispositifs*, media archaeology offered a way to see immersion not as a sudden rupture but as a stratified field of experiments—panoramas, dioramas, peep media, optical theatres—that have long trained spectators in forms of virtual travel, sensory orchestration, and spectacular pedagogy. Huhtamo's *topoi*-oriented method—tracking recurring cultural motifs as they migrate across media—adds a crucial complement to more hardware-centered approaches: it shows that immersion is not only

technical but also discursive, imaginative, and performative. The Italian declination of media archaeology, in turn, has tended to integrate this temporal depth into phenomenological and aesthetic frameworks, emphasizing how *dispositifs* shape perception, imagination, and forms of life rather than isolating machine operations from cultural experience.

Taken together, the chapter has constructed a conceptual scaffold that supports three intertwined claims. First, immersivity should be understood as an operative configuration of bodies, images, and environments, not as a mere enhancement of visual representation. Second, the "virtual" is not opposed to reality but names a field of effective staging—where symbolic forms, apparatuses, and sensory grammars reorganize experience. Third, immersion is never neutral: it is bound to economies of attention, regimes of visibility, and strategic *dispositifs* that shape agency and subjectivation. This scaffold also clarifies why the dissertation should now proceed through three subsequent chapters—"Bodies", "Environments", "Simulations"—as a necessary unfolding of the problem rather than as a thematic segmentation.

The first movement, *Bodies*, follows directly from the Artaudian and phenomenological premises: if immersion is a choreography of sensibility, then the body is not an "end user" but the primary site where media become real—where liveness is achieved, where gesture grammars are learned, where dividual configurations emerge through coupling with devices. Here the key task is to analyze embodiment not as a pre-given substrate but as something continuously reorganized by technical milieus, from attention and affect to proprioception and agency.

The second movement, *Environments*, extends the shift from media-as-objects to media-as-milieus. If *dispositifs* distribute visibility and regulate relations, then immersive systems should be studied as environmental arrangements: spaces of presentification, architectures of attention, ecological couplings between infrastructures and everyday practices. This level also demands the full resources of visual culture, apparatus theory, and media archaeology, because environments are historical, layered, and politically charged.

The third movement, *Simulations*, finally addresses the specific ontological and political stakes of worlds that claim autonomy, closure, or total substitution. The question here is not only how simulation represents, but how it institutes reality-effects—how it

produces credible worlds, operational and relational presences, and actionable truths. This chapter logically emerges from the earlier distinction between integrative and substitutive interactivity: it is the place where the promises of seamless presence should be tested against the frictions of the world, the ethics of mediation, and the possibility of agency within designed realities.

In this sense, the present chapter functions as a state-of-the-art in the strong sense: not merely a review of literature, but a calibration of the conceptual instruments required to treat immersive media as a performative and anthropological problem within an interdisciplinary media studies horizon. By moving from theatrical virtuality to visual culture's historicization of seeing, from *dispositifs* to techno-aesthetics, and from media archaeology's deep time to contemporary immedial conditions, the chapter has established a guiding perspective: immersive media are not simply new images to interpret, but environments to inhabit, operations that act, and cultural techniques that shape what bodies can do in worlds increasingly made through mediation.

Bodies

Part one: Expanded Reality and Theatre via a neurocultural perspective[66]

In recent years, the discourse surrounding Expanded Reality (XR)—a term encompassing virtual, augmented, and mixed realities—has been dominated by its affiliation with the genealogy of visual media, from photography and cinema to digital screens and networked interactivity. However, as immersive technologies increasingly engage bodies, spaces, and gestures, they demand a conceptual framework that moves beyond screen-based visuality. This first half of the chapter proposes an alternative lineage: that of theatre and performance: starting to adopt a neurocultural approach to trace XR's deeper affiliation with performative, embodied, and ritualistic practices that characterize the theatre. The aim is to explore the almost unexplored relationship between Expanded Reality (XR) technologies and theatrical performance, situating both within a mediological framework that underline the centrality of the human body in cultural and technological processes, and to propose an original dialogue between media and performance studies.

[66] An earlier version of the first part of this chapter was published as Francesco Melchiorri, "The Metaverse and Its Double: Expanded Reality and Theatre via a Neurocultural Perspective." Mimesis Journal 14, no. 2 (2025): 103–121. https://doi.org/10.13135/2389-6086/11879.

From Vision to Embodiment

Drawing on Havelock's approach via Derrick de Kerckhove's media theory and neurocultural perspective, the starting point of this theoretical proposal is to reconsider theatre not simply as an art form, but as an early model of cognitive information processing. In this sense, apparently, the idea of *theatron* seems to fit on the common idea of it as ancestor of a whole series of contemporary visual media, XR included. This approach calls for a media archaeology that does not simply excavate technological precedents but also reconsiders how older cultural forms—like the Greek *theatron*—configured spectatorship, memory, and social cognition. The theatre, as Deriu (2013) suggests, can be understood as the first great medium, a proto-interface that organizes human perception and collective experience.

Anyway, later considering Fischer Lichte's *The Transformative Power of Performance: A New Aesthetics*,[67] a change of perspective will arise, considering the whole body and person who attends a show as an involved component of it, via an active spectatorship. This theory, usually referrable to the avantgarde and post-avantgarde performing arts, seems to be suitable to the performing arts in general. Starting from this point, shifting to consider XR, it could be interesting to analyze it through similar and opposite lens: the ones which consider them as a not-only visual medium, enriched by a higher embodied engagement. XR, viewed through this lens, is less an extension of visual media and more a continuation of performative traditions recalibrated for a postdigital sensorium. To support this analysis, the notion of «arche-screen» by Carbone (2019) and «dividual» by Carbone and Lingua (2023) will be central, flanked by the proposition of emphatic (Gallese and Guerra 2015) and gestural screen (Grespi 2019). The idea is to propose XR as a "quasi-theatre", clarified by wider interpretations of what screen and theatre are, as the ones produced again by Streuven (2021) and Artaud (2000).

By reframing performing arts as active bodily engagement media and XR as a performative, rather than solely visual, medium, this first part of the chapter investigates how technological memory systems and embodied social experiences interact to generate new hybrid forms of cognition, perception, and meaning-making, a particular trait of

[67] Erika Fischer-Lichte, *The Transformative Power of Performance: A New Aesthetics* (London and New York: Routledge, 2008).

human evolution which always interconnects social rituals and technology development, in the past as in the present.

Is theatre (just) a medium? Theatre as Mediological Model

In his historical-philological work *The Muse Learns to Write: Reflections on Orality and Literacy from Antiquity to the Present*[68] Eric Alfred Havelock explores the profound cognitive and cultural transformations precipitated by the advent of alphabetic literacy in ancient Greece. He grounds this position in a meticulous analysis of Greek language, poetics, and inscription practices, arguing that the invention of the Greek alphabet was not merely a technical innovation, but a psychocultural revolution: the shift from an oral to a literate culture represents a fundamental reorganization of thought, language, and memory. At the heart of Havelock's thesis is the claim that oral societies encode knowledge through formulaic, poetic speech, which allows for the transmission of tradition via rhythm, meter, and repetition. In such contexts, poetry is not simply aesthetic expression but a repository of social memory and moral instruction. This is exemplified in the figure of the Homeric bard, whose recitations serve as collective cultural encyclopedias. The "muse," in this sense, is a metaphor for the embodied memory techniques of oral culture. With the development of phonetic writing, particularly the Greek alphabet with its unprecedented capacity to fully represent speech sounds (including vowels), knowledge becomes externalized, stored in texts, and subject to analysis and critique. Havelock argues that this technological shift inaugurated a new kind of cognition: abstract, analytical, and reflexive. The alphabet not only changed how people communicated but also altered their inner experience, fostering the development of individual introspection and systematic reasoning—traits that would later underpin Greek philosophy, historiography, and science. The *muse*, in this sense, "learns to write" by transforming from a vehicle of oral performance into a symbol of intellectualized, textualized knowledge via a replacement of mythopoetic knowledge with literate,

[68] Eric A. Havelock, *The Muse Learns to Write: Reflections on Orality and Literacy from Antiquity to the Present* (New Haven and London: Yale University Press, 1986).

conceptual thought. Starting from Havelock thesis and alongside McLuhan definition of medium, in *Theatre as Information-Processing in Western Cultures*[69] Derrick de Kerckhove proposes one of his often contested thesis, namely that Greek theatre, far from being a secondary cultural form, was an active response to the psychological upheaval introduced by the phonetic alphabet. Theatre, he argues, was "an exteriorization of memory techniques previously used by the oral tradition," and thus acted as "a model of information-processing" for societies undergoing the transition from orality to literacy (de Kerckhove 1982: 145). In this sense, the theatre functioned analogously to McLuhan's notion of media as "social extensions of man,"—referred, not by chance, to games in *Understanding Media*—by offering not merely a spectacle but a perceptual and cognitive framework capable of integrating the fragmenting effects of writing in a subjective development of thinking. The question of whether theatre qualifies as a medium in the McLuhanian sense has long lingered on the periphery of media theory. While traditional understandings emphasize media as technical extensions of human faculties in non-human materials, theatre—anchored in living bodies and human interaction—resists straightforward classification. Yet, when reframed through the lenses of mediology and neurocultural theory, as proposed by de Kerckhove and interpreted by Fabrizio Deriu, theatre emerges as a key *dispositif* in the development of Western consciousness and cognition.

Deriu, expanding on McLuhan's silence regarding theatre in *Understanding Media*,[70] argues that this absence may be less an oversight and more a conceptual impasse. According to McLuhan's strict criteria, a medium is "an extension of a human function in a material different from the body itself," such as the wheel extending the foot or clothing extending the skin. Theatre, by contrast, "utilizes human beings as both transmitter and receiver" within the same material substrate—the living body (Deriu 2015: 62). Thus, it resists easy categorization as a medium unless one reframes the term beyond its purely technological connotations. Yet Deriu acknowledges that de Kerckhove provides a compelling mediological bridge. Theatre, in his view, serves as "the social

[69] de Kerckhove, Derrick. "Theatre as Information-Processing in Western Cultures." *Modern Drama* 25, no. 1 (1982): 143–153.
[70] Fabrizio Deriu, "Il teatro è un medium? Questioni e risposte in prospettiva mediologica." *Mantichora* 5 (2015): 59–65. See also Id., "Forma sociale della psicologia alfabetica: Il teatro nell'ipotesi 'neuroculturale' di de Kerckhove." *Between* 4, no. 8 (2014) and Id., *Mediologia della performance: Arti performative nell'epoca della riproducibilità digitale* (Firenze: Le Lettere, 2013).

form of alphabetic psychology"—a stage upon which the shift from tribal collectivity to individual interiority is played out. He summarizes de Kerckhove's view as recognizing an "intrinsic correlation between the affirmation of alphabetic psychology and the development of theatre in fifth-century BCE Greece" (Deriu 2015: 63). Indeed, the stage, by organizing bodies and utterances in a fixed visual space, enacts the same cognitive distancing that the alphabet imposes upon language—turning sound into sight, continuity into segmentation, participation into observation. De Kerckhove articulates this transformation by contrasting the participatory, rhythmic, and gestural qualities of oral performance—embodied in the tribal chorus—with the reflective and isolating position of the theatrical spectator. The *theatron*, literally "the place for seeing," immobilizes the body and prioritizes visual processing: "The stage presents a synthesis of one's visual field; it is an extension or projection of the eye" (de Kerckhove 1982: 146). This displacement of the body's multisensory engagement into a fixed, centralized visual regime parallels the movement from communal memory to individualized cognition. Furthermore, de Kerckhove positions theatre as a foundational apparatus in the history of Western imagination. The stage, as both spatial organizer and cognitive interface, enabled the formation of mental constructs such as Cartesian space, private subjectivity, and narrative identity. "The stage was, in effect, a sort of prototype of imagination, a try-out space for new experiences, emotions, attitudes, and reflections" (de Kerckhove 1982: 149). This mediological operation, whereby theatre performs and installs new epistemic and perceptual regimes, suggests its inclusion—albeit with qualifications—within the category of media. Here, Deriu finds a resolution to the apparent contradiction in McLuhan's taxonomy. If games, which McLuhan defines as "extensions of group awareness," can be considered media despite not being material extensions of the body, then theatre—as both a mimetic ritual and cognitive technology—can likewise be approached as a "medium of transformation" rather than a simple tool. Theatre, in this light, is a primary site of mediated consciousness: it does not extend the body into non-organic material but reprograms the body's relationship to knowledge, time, and space through performance as social extension of human being. de Kerckhove and Deriu, in tandem, shift the focus of media theory from material technologies to symbolic infrastructures. Theatre, when examined through this shared mediological lens, is not a residual artform but a pivotal site of transition: from orality to literacy, from communal

embodiment to reflective subjectivity, from action to representation. In this expanded conception, theatre apparently demands its place in the history of media.

Although we just have tried to demonstrate the importance of considering theatre as a medium, perhaps starting from this assumption to broaden the gaze might make more sense. In *The Transformative Power of Performance: A New Aesthetics*, Erika Fischer-Lichte develops a rigorous theoretical framework to understand live performance not merely as a representational art form but as an autopoietic event that generates real transformations in both performers and spectators. Central to her thesis is the concept of performativity, which she distinguishes from representation, arguing that theatre should not be seen as transmitting fixed meanings from actor to audience, but as an emergent process in which meaning is co-created and perpetually renegotiated through embodied interaction. A key mechanism in this process is what she defines as the "feedback loop" between performer and spectator, which constitutes the performative event as a self-referential and self-organizing system. This loop, dependent on the co-presence of actors and audience in a shared time-space, produces an experience that cannot be reproduced or stabilized through traditional aesthetic categories. The body—both seen and seeing—becomes the primary site of aesthetic and affective engagement. For Fischer-Lichte, performance induces a reconfiguration of perception, disrupting habitual semiotic regimes and opening participants to unexpected corporeal and emotional shifts. Specifically, Fischer-Lichte underscores the liminality of performance, borrowing from Victor Turner's anthropological theory of ritual. Performance becomes a space of transformation, not just of character or narrative, but of sociality *and* subjectivity itself. The spectator is not merely a recipient of meaning but is potentially altered through their immersion in the event. This transformation is not predetermined but arises from the dynamics of the performance itself, which resists closure and authority. In this sense, it could be problematic, even considering past theatre, to read it as a shift from a collective to an individual. Surely subjectivity and individual consciousness are implemented by the spectatorship experience, but as it is an effect of a meeting loop, the discovering of individuality does not remove in fact it increases, the social consciousness: the self as a part of a multitude of other selves. In this sense, Fischer-Lichte proposes her theory as a performative aesthetics that rejects the Cartesian separation of mind and body, privileging presence, contingency, and embodied affect. In

doing so, she positions performance as a uniquely powerful mode of socio-cultural and at the same time individual transformation—one that exceeds representation to engage participants (performers and audience) in a dynamic, embodied negotiation of meaning, identity, and experience.

XR as Reconfiguration of Embodied Experience

The emergence of immersive media environments, collectively referred to as Extended Reality (XR)—including Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR)—has stimulated new taxonomic approaches within media theory. Among the most articulate contributions to this field is that of Ruggero Eugeni, who frames XR within a broader "neurocognitive ecology," conceptualizing immersive environments as not merely technological apparatuses but as cognitive architectures that modulate perception, attention, and meaning-making. His perspective, grounded in semiotics, cognitive science, and again mediology, offers a robust analytical framework for understanding how XR reconfigures the interplay between subjectivity and media environments. Eugeni's theoretical articulation is situated within what he terms "the *postmedial condition*"[71]—a state in which the boundaries between media forms, technological systems, and cultural practices are increasingly fluid and hybridized (Eugeni 2015). In this context, XR environments are no longer perceived as external interfaces but as immersive, sensorially rich spaces in which users are embedded participants. According to Eugeni, the classification of XR experiences should be approached through the interdependence of perceptual immersion, user agency, and narrative engagement.

A first axis of differentiation in the classification of these technologies lies in the degree of sensory immersion and spatial substitution enabled by the medium. Augmented Reality (AR) technologies retain the user's anchorage in the physical world while superimposing digital content, creating a perceptual surplus that enriches rather than displaces reality. Mixed Reality (MR) environments deepen this interactivity by enabling

[71] Ruggero Eugeni, *La condizione postmediale: Media, linguaggi e narrazioni* (Brescia: La Scuola, 2015).

dynamic interaction between real and virtual elements, effectively producing hybrid ontological spaces. In contrast, Virtual Reality (VR) constitutes a complete substitution of the physical environment, in which the user is immersed in a synthetic world and visual detached from the real. To further distinguish the semiotic operations of XR, Eugeni applies a typology grounded in semiotic regimes. Mimetic regimes refer to environments that simulate perceptual reality with high fidelity, often reproducing spatial and sensory realism. Poietic or expressive regimes, by contrast, emphasize aesthetic construction over imitation, privileging metaphor, stylization, and abstraction. Performative regimes, finally, are characterized by the user's active participation in the generation of meaning, making interaction and co-creation central to the media experience (Eugeni, 2014). These regimes align with broader shifts in contemporary media, where, in an incredibly similar situation of the performativity previously considered, the spectator is no longer a passive receiver, but an embodied agent embedded in a feedback loop with the medium. In addition to these dimensions, Eugeni proposes[72] three interrelated axes for understanding XR's experiential structures: spatial anchoring, actional engagement, and narrative involvement (Eugeni 2012). Spatial anchoring concerns the extent to which users remain grounded in the real world or are fully immersed in virtual space. Actional engagement refers to the level of user agency—ranging from passive observation to active manipulation of the environment. Narrative involvement addresses the degree to which the user is embedded in a story-world or cognitive framework that demands interpretative participation. These dimensions underscore Eugeni's commitment to understanding XR as an ecology of attentional modulation, in which media environments actively shape cognitive functions. Finally, Eugeni situates XR within the historical arc of what Francesco Casetti has termed[73] "post-cinema." Here, the experiential logic of cinema—characterized by fixed framing, diegetic containment, and spectator externality—gives way to spatially expansive and sensorially distributed forms of experience. In this sense, XR environments constitute not just a technological innovation but a paradigmatic shift in modes of attention, cognition, and aesthetic participation. The post-cinematic subject is thus conceived not as a viewer in front of the screen, but as a mobile and embodied actor situated within a mediated field of sensory and symbolic stimuli (Eugeni 2015),

[72] Id., "Ecologie cognitive e presenza postmediale." *Comunicazioni Sociali* 1 (2012): 9-21.
[73] Francesco Casetti, *The Lumière Galaxy: Seven Key Words for the Cinema to Come* (New York: Columbia University Press, 2015).

again a liminal space. Eugeni's classification of XR technologies provides a multi-layered framework that synthesizes semiotic, cognitive, and experiential dimensions. Rather than treating XR as a monolithic or exclusively visual phenomenon, his model foregrounds its performative, interactive, and immersive qualities in a dynamic and multidimensional site where media, cognition, and culture converge.

Some Merleaupontian scholars' media perspectives

On similar basis, Vittorio Gallese and Michele Guerra in *Lo schermo empatico: Cinema e neuroscienze*[74] have developed a compelling interdisciplinary framework known as "Embodied Simulation Theory", in order to explain how we perceive and engage with audiovisual media. Rooted in cognitive neuroscience and affect theory, their work explicitly bridges the gap between bodily experience and mediated representation, offering a neurophysiologically grounded account of spectatorship, particularly in cinema and screen-based environments. At the ground of their theory is the discovery of mirror neurons—neurons that fire both when an individual performs an action and when they observe another performing the same action. Gallese originally identified these neural mechanisms in the early 1990s, and in collaboration with Guerra, extended their implications to film and media studies. They argue that these mechanisms underlie embodied simulation, a pre-reflective process by which viewers internally simulate the actions, emotions, and sensations of the characters or events represented on screen. This theory challenges the classical cognitive paradigm that posits a detached, analytical viewer, suggesting instead that media spectatorship is sensorimotor, affective, and corporeal. Watching a film—or interacting with any screen-based medium—is not merely an intellectual act of decoding signs but a bodily experience rooted in shared neural systems of action and emotion. For example, close-up shots of facial expressions or point-of-view tracking shots can activate neural circuits responsible for facial movements or spatial orientation, respectively. Gallese and Guerra emphasize that cinema, and by extension XR and interactive media, "re-enact" in a real performative way

[74] Vittorio Gallese and Michele Guerra. *Lo schermo empatico: Cinema e neuroscienze* (Milano: Raffaello Cortina Editore, 2015).

the perceptual experiences within the viewer's brain, simulating real-world embodied interaction. This means that narrative comprehension and aesthetic engagement are co-constituted by visceral, non-verbal processes, as in real life. The core concept of the "empathic screen" encapsulates this idea: screens are not windows to representation alone, but interfaces that activate embodied, emotional, and intersubjective participation, as the performance definition we offered before. Their theory resonates with phenomenological traditions (such as those of Merleau-Ponty) and affective neuroscience, situating spectatorship within the sensorial dynamics of presence, movement, and spatiality. In contemporary contexts—particularly in immersive environments like XR—these embodied responses are further intensified, as viewers are no longer passive observers, but sensorimotor participants embedded in the media space. Gallese and Guerra's embodied theory reconceptualizes spectatorship as a multimodal, affective, and embodied event, offering a biologically and phenomenologically grounded alternative to disembodied cognitive models on media experience, intersubjectivity, and the neurocognitive basis of cultural participation.

Merleau-Ponty's thought seems to be the one of the most influencing *fil rouges* for the scholars we are trying to keep in dialogue in this original connection of mediology, performance and XR. Considered one of the most influent authorities about the French philosopher phenomenology, Mauro Carbone, as we saw in the previous chapter, has recently developed an original recognition on the idea of screen, specifically starting from Merleau-Ponty's "sensible ideas". Firstly, on his own and in his last monograph together with Graziano Lingua, Carbone focused on the notions of what he called "arche-screen" and "dividual". (Carbone 2019, Carbone and Lingua 2023).

Carbone and Lingua's *Toward an Anthropology of Screens: Showing and Hiding, Exposing and Protecting* [75] is built on a decisive displacement: screens are not approached primarily as objects (devices, surfaces, frames) but as screen experiences—relational and performative configurations in which bodies, images, techniques, and social expectations are reorganized. This displacement is not merely methodological. It responds to a historical threshold in which "screens" proliferate, diversify, and migrate across environments (from handheld displays to wearables, from stationary monitors to ambient

[75] Mauro Carbone and Graziano Lingua. *Toward an Anthropology of Screens: Showing and Hiding, Exposing and Protecting*. London: Palgrave Macmillan, 2023.

surfaces), making it increasingly insufficient to treat them as stable visual media. The theory therefore insists on a pragmatics of screens—an inquiry into what screens do within arrangements of action, interaction, protection, and exposure—and explicitly calls for a relational approach that foregrounds bodily, communicational, and performative implications rather than restricting screen analysis to the visual domain (Carbone and Lingua 2023: 11). From this perspective, the "metaverse" is not a separate technological future but one name for the intensification of tendencies already visible in contemporary screen ecologies: the migration toward "surfaces" operating as "shared interfaces," the growing prominence of mixed and augmented environments, and the reorientation of mediation from "behind screens" toward distributed and wearable interfaces (Carbone and Lingua 2023: 9–10).

As anticipated, at the conceptual core of the anthropology stands the notion of the arche-screen. The arche-screen is not a primitive artifact or an original historical screen form. It is a trans-historical principle—explicitly compared to a musical theme—whose intelligibility emerges retroactively through historically variable configurations of screening. Crucially, this "theme" is not presented first and then varied; it is recognized only through the comparison of variations, which prevents genealogy from collapsing into origin-hunting or evolutionary historicism (Carbone and Lingua 2023: 18–20). The arche-screen thus names a structural logic that persists across different *dispositifs* while never appearing as a fixed, timeless essence. The arche-screen is articulated through a set of functions that exceed the ordinary identification of screens with visibility. Against the tendency to define a screen simply as what shows images (or what displays a visual field), Carbone and Lingua argue that screens involve at least two co-implicated function-pairs: not only showing/hiding, but also exposing/protecting—a chiasmic configuration in which making visible is bound to regulating relations, distances, risks, and vulnerabilities (Carbone and Lingua 2023: 18–21). The screen, in other words, is not reducible to representation. It is an operator that structures how something can appear, to whom, under what conditions, and with what degrees of access or insulation. The "arche-screen" interrogate the historical and ontological conditions of visual mediation. Originating from philosophical reflections on the screen as a *cultural dispositif*, the term denotes not merely a surface of projection or transmission, but an ontological structure of visibility and invisibility, a threshold where vision is both constituted and withheld. The arche-screen

is not simply or strictly the ancestor of cinematic or digital displays; rather, it is an epistemological figure that precedes and subtends all technical and medial screens, grounding their capacity to mediate, frame, and organize the sensible. Particularly in dialogue with Merleau-Ponty's late ontology of *Le Visible et l'invisible*, the arche-screen is theorized as a proto-technical, symbolic interface: a structural fold of experience in which the subject is always already caught in processes of exposure and concealment. The arche-screen thus functions analogously to Merleau-Ponty's *chiasm*, the intertwining of seeing and being seen, rendering perception itself an event of mediation between its interconnected couples of functions: *showing and hiding, exposing and protecting.* Rather than understanding the screen as a neutral surface or as a modern technological development, the arche-screen exposes the screen's ontological relevance and historicity. It gestures toward an originary mediality—an always-already mediated condition of access to the world, through other embodied presences and/or technical extensions. This functional account also reorients the relation between screens and bodies. Rather than assuming that screens stand "in front" of a body as external objects, the arche-screen is anchored in the claim that screening logics are already inscribed in bodily experience. The body is treated as a proto-screen insofar as it is at once visible and seeing, exposed and protecting, surface and agent. The theory mobilizes phenomenological motifs (such as the ambiguity of being both sensible and sentient) to argue that screening is not a secondary technological addition but a structural dimension of embodied life, later technically detached and redistributed into artifacts and environments (Carbone and Lingua 2023: 21–23). This is why an anthropology of screens, in their sense, cannot be a device history alone; it should be a genealogy of relational functions, continuously reconfigured across cultural formations.

The arche-screen becomes historically legible when the functions of screening are traced through processes of detachment and externalization—what Carbone and Lingua frame through the notion of screens as prostheses. The prosthetic dimension is not treated as a simple extension of human capacity in a celebratory technological narrative. Instead, it indicates how human relations with visibility and vulnerability are redistributed across artifacts, surfaces, and interfaces that simultaneously enable action and impose constraints. Screens, in this sense, are prosthetic because they take over, amplify, or reconfigure functions that are already operative in embodied life. Among the many

historical screen forms that could exemplify this, the theory insists that one form is particularly clarifying: the veil. The veil is privileged because it makes immediately visible the co-implication of the two chiasmic function-pairs: showing/hiding and exposing/protecting. The veil is not only a material surface; it is a regulator of relations—a device that governs access to what cannot be approached directly, distributing visibility through mediation and producing an economy of perceptual distance (Carbone and Lingua 2023: 46–49). The veil, therefore, does not merely "block" vision; it organizes a relation to excess. This aligns the screen not only with visual culture, but also with modes of being, embodiment, and relationality. It is this primordial role that distinguishes the arche-screen from the cinematic, televisual, or digital screens that historically follow it. As Carbone notes, the screens do not simply "show" reality but "modulate" it, producing complex regimes of visibility, concealment, presence, and meaning via co-existence of arche-screenic variations. Indeed, importantly, the arche-screen cannot be reduced to a specific artifact or historical moment. Instead, it functions retrospectively, in the Deleuzean sense,[76] as a way of tracing the *a priori* conditions of media *dispositifs*. It is not a historical origin but a transcendental condition that enables the very possibility of visual inscription and performative engagement. From the sacred veil in religious rituals to the theatrical stage, from the mirror to the digital interface, the arche-screen constitutes a paradigm for interfaces variation and development, connecting embodied consciousnesses and media in a reciprocal condition of existence. In this sense, in contemporary immersive environments, such as those enabled by XR technologies, the relevance of the arche-screen becomes especially pronounced. These environments do not merely reproduce images but generate (apparently) expanded, multisensory fields of presence, reconfiguring the relation between the viewer's body, the internal and external media space, and the simulation it occurs. The arche-screen thus persists within these advanced technological contexts not as a static legacy but as a constantly evolving and variating medium, continuously renegotiated by new and old forms of embodiment,

[76] Thus, the term indicates a theme configuration and a "sensible idea"—rather than a transcendental structure given in advance—that, through repetition, variation, and recurrence, retrospectively assumes a quasi-transcendental function. What appears first as a contingent historical or experiential form becomes legible, after its repeated sensible reactivation, as a condition of possibility for a wider field of relations. On this retroactive constitution of the sensible as transcendental, see Mauro Carbone, *An Unprecedented Deformation: Marcel Proust and the Sensible Ideas*, trans. Niall Keane (Albany: State University of New York Press, 2010), especially the second part of the volume.

perception, and interaction. Moreover, it provides a powerful conceptual lens through which to reconsider the classical notion of subjectivity, moving beyond cartesian representational models to embrace the co-constitutive dynamics of vision, space, embodiment, and technological mediation. It underscores that screens are not unanimated instruments but primary perceptive architectures of our sensory and cultural worlds.

The most decisive bridge from screen culture genealogy to present-day media experience is Carbone and Lingua's account of the dividual condition. The theory frames dividuality not as a purely contemporary accident but as a condition whose traces precede the modern "individual." If "individual" etymologically means "indivisible," the term itself signals a negation of an earlier or alternative condition in which subjectivity is not primarily conceived as a unitary, self-identical substance (Carbone and Lingua 2023: 147). Against the modern category of the individual, dividuality designates modes of being that are relational, partitionable, permeable, and multiply situated—modes that contemporary digital environments intensify and operationalize. Carbone and Lingua insist that dividuality cannot be reduced to a single meaning. It can be interpreted as partition, participation, division, pluralization, permeability, or even (paradoxically) singularization—terms that emphasize that dividuality concerns both the fragmentation of subjectivity and its recomposition through relations (Carbone and Lingua 2023: 148). This semantic breadth is not treated as weakness; it is treated as diagnostic, because contemporary subjectivation involves multiple, overlapping processes: datafication that partitions persons into profiles and metrics; network participation that multiplies contexts of belonging; and the aggregation of similarities across differences that produces what is commonly called "identity" (Carbone and Lingua 2023: 148–152).

The theory foregrounds the importance of Deleuze's use of "dividual" in the context of control societies: individuals become dividuals, and masses become samples, data, and information—an explicit conceptualization of how governance operates through partitioned, manipulable units rather than through coherent subjects (Carbone and Lingua 2023: 148). Yet the theory refuses to stop at this diagnosis, because a purely negative account risks naturalizing the very ontology it critiques (as if dividuality were only an imposed degradation of individuality). Carbone and Lingua therefore broaden the frame through anthropological accounts—especially Appadurai's formulation that dividuals are the "elementary constituents" of individuals and other personae, implying an ontological

reversal: the individual is not the foundation but an effect of dividual relations (Carbone and Lingua 2023: 150). Dividuals are unstable, contingent, and open; they generate both in-dividual and collective formations, meaning that subjectivation is fundamentally relational rather than essentially self-contained (Carbone and Lingua 2023: 150–152).

This emphasis on relational ontology is crucial for screen anthropology because it redefines what screens do to subjectivity. Screens are not only surfaces for images; they are infrastructures that distribute positions, permissions, and relations—conditions through which dividuals are partitioned and recomposed. The theory accordingly stresses that contemporary participation is ambivalent: dividuality is not merely partitioned data extraction but also a field of new participatory forms (with limits and constraints), prompting proposals to think in terms of "con-dividuality" as a way to account for collective and relational formations without reducing them to atomized individuals or mere divided data points (Carbone and Lingua 2023: 153).

Finally, the dividual condition is linked back to screen and image temporality: accelerated digital images, multi-environment connectivity, and intensified screen time reshape processes of subjectivation by producing experiences that are never fully stable or self-identical—experiences whose "units" are continuously modulated by technical systems and temporal dynamics (Carbone and Lingua 2023: 154). Dividuality, in this sense, is not only a social diagnosis; it is a phenomenology of contemporary mediation. In *Toward an Anthropology of Screens*, Carbone and Lingua develop the notion of the "dividual" as a key concept for rethinking subjectivity in the age of pervasive visual media. Drawing on philosophical, anthropological, and media-theoretical perspectives, they propose that the contemporary subject is no longer best understood through the classical lens of the individual—a bounded, autonomous entity—but rather as a dividual, a distributed and permeable configuration of selfhood constituted through its exposure to (arche-)screens and processes of mediation. The term describes a form of human presence that is fragmented, inevitably relational, and in some way processual, rather than unified or self-contained. In late modernity, individuals are increasingly partitioned into data, profiles, and operational fragments that circulate across technical systems. The dividual is not automatically a negative consequence; it is a condition in which identity becomes distributed across networks and interfaces (Carbone and Lingua 2023: 146–150). The theory traces the term's etymological and philosophical background, linking it to debates

about the “person” (persona) and to the emergence of a modern multi-subjectivity. Indeed, the dividual is framed as a mode of multi-subjectivation rather than a de-subjectivation: screens and platforms organize persons as sets of divisible attributes—clicks, preferences, avatars, skins, reputational metrics—whose recombination becomes both a source of agency and a site of expanded capture—with its ow limits, of course. For Carbone and Lingua, this dividual condition is intensified and made visible through contemporary screen cultures, where the subject is constantly subjected to regimes of visibility, surveillance, and interfacial interaction. In such a context, the screen does not simply reflect or represent the subject, but actively participates in its constitution, modulation, and dissemination. Carbone and Lingua situate the dividual within what they call an Anthropology of the screen, wherein the boundaries between self and world, private and public, inside and outside, become increasingly unstable. The dividual emerges not as a pathological breakdown of individuality, but as the multiplicative mode of being in a world saturated by images and interfaces. In this sense, previous idea of subjectivity is no longer grounded in interiority or unity, but in its multiplicity—its capacity to be affected, shaped, and partially expressed by the screens that surround it. This reconceptualization of the self has profound implications for anthropology, aesthetics, and ethics. The dividual is an always-changing, plural being, open to others and to the technological systems that mediate social life. It challenges the liberal-modern ideal of autonomy and instead foregrounds relationality, polymorphism, and performativity as the defining traits of human subjectivity in the digital age.

Moreover, the dividual resonates with broader theoretical movements that emphasize posthuman, non-unitary, and affective models of the self and of the medium. In particular, Carbone and Lingua’s analysis of quasi-prosthetic relations helps specify how the dividual becomes a lived condition shaped by the material and symbolic infrastructures of mediation. A quasi-prosthesis designates the temporary status assumed by certain bodily organs when they are integrated into digital devices as additional components required for their functioning. The classical prosthetic model describes a tool that extends the body; the quasi-prosthetic model names the inverse movement through which the body itself, or one of its organs, becomes a functional extension of the

apparatus.[77] In this sense, screens and screenic *dispositifs* extend perception, memory, and relationality while also producing situations in which eyes, retinas, hands, skin, gestures, and other bodily functions are operationally recruited by the apparatus. The dividual thus emerges as a subject whose perception, memory, attention, and modes of relation are distributed across organic and inorganic agencies. Screens become active participants in human becoming insofar as they reorganize the relations through which bodily functions are externalized, captured, redirected, and rearticulated within technical environments, shaping not only what we see but how we think, remember, and relate.

Gesture, touch, proxemics as media(-archeology) embodiment

From a mostly specific digital aesthetics, which in this case reflects mostly but not only the realm of Extended Reality, could be interesting to switch also to a more "traditional" analysis of moving images, but still body centred. Indeed, a theory about gesture and cinema as the one developed by Barbara Grespi seems to be helpful. As the Italian film scholar recalls in *Il Cinema come gesto. Incorporare le immagini, pensare il medium*:[78] "Cinema has always been considered an optical and psychic fact, despite Walter Benjamin immediately sensed that the primary destination of moving images was the body, not the mind of the spectator" (Grespi 2017: 15). In this sense, thanks to the German cultural historian, "the body enters, precociously and authoritatively, into film theory" and from this moment on "the notion of corporeality is expanded and enlarged to the technology itself; the bodies in question become two, and it is their relationship that is particularly fruitful […] technology is constantly traced back to the possession of a body" (Grespi 2017: 15). Connecting with other scholars of Merleau-Ponty's

[77] This inverse prosthetic logic anticipates one of the later implications of the dissertation's use of the term "phygital." The recurring issue will return in *Bodies*, where embodied and dividual subjectivity is described through the redistribution of agency across organic and technical components; in *Simulations*, where contemporary immersive and platform-based environments are analyzed as hybrid fields of action; and finally in *Anthropologies*, where the phygital is expanded beyond the material condition of quasi-prosthetic relations and becomes the name of a broader anthropological horizon. In this final sense, "phygital anthropologies" will designate not only the technical entanglement of bodies and devices, but also the plural ways in which images, screens, gestures, infrastructures, environments, rituals, memories, and collective forms of life are increasingly composed across actual and virtual thresholds.

[78] Barbara Grespi, *Il cinema come gesto: Incorporare le immagini, pensare il medium* (Canterano, RM: Aracne, 2017).

phenomenology, Grespi follow the interpretation which argues that technology derives from incorporation as a human condition and subsequently sustains that the main "incarnation" of the film is on the screen.

> Starting from the assumption that the body is 'the general instrument of understanding', the theories of *embodiment* focus on the existence of forms of thought which find the only way of manifesting themselves in it; one of these is the technological thinking, which is formulated starting from the possession and management of 'a living body as, at the same time, objective subject and subjective object: a sentient, sensual and sensible set of material and operational capacities that literally and figuratively gives and draws meaning from/to us and from/to others'.(Grespi 2017: 15-16)

Thus, theories of embodiment are mostly interested in the peculiar bodily experience that a film and all its capabilities produce. However, perhaps it could be possible to change perspective, establishing a functional equivalence between human body and cinema, and imaging also a possibility for the first element to elaborate a thought about the second (Grespi 2017: 16). To confirm this approach, in a coherent development of her analysis[79], Grespi recently suggests how 'the cinema machine is a figure of the body: it includes the user's body in its design as a technical object, taking on formal characteristics that suggest precise modes of use' (Grespi 2019: 17).

In *Figure del corpo*, Barbara Grespi explores the dynamic intersections between visual media aesthetics and corporeality, offering a theoretically rich analysis of how the body and its gestures are constructed, represented, and mediated across different visual regimes. The volume critically engages with a wide spectrum of media forms—especially cinema, but also video art, photography, and digital technologies—to interrogate the epistemological and affective implications of the body as figure and the figures of the body. Grespi situates her inquiry within the broader framework of media archaeology, visual studies, and gestural theory. Central to her argument is the assertion that the body is a pre-given biological entity, but its gestures are both expressive and technical constructs whose visibility is continually negotiated through technological

[79] Ead., *Figure del corpo: Gesto e immagine in movimento* (Sesto San Giovanni, MI: Meltemi, 2019).

apparatuses and aesthetic conventions. The analysis that Grespi carries out concerns the study of cinema as a bodily extension, but also of the body as the main configuration of the medium of cinema.

Through a complex and capillary work, what is clear is a desire to reconfigure the study of visual media starting from and/or returning to the body. In this sense, rather than treating visual media as mere instruments of representation, Grespi foregrounds their role in modulating perception and configuring embodied experience, and vice versa, focusing on faces, hands, postures, gaits. Thus, she remains distinctively attuned to the formal and aesthetic logics through which media shape our experience of the body *and* the visible, making a distinction between these two elements evident only at a theoretical level, and demonstrating how considering them as inseparable is enriching *especially* on a theoretical level. *Figure del corpo* offers a nuanced and extremely diverse interdisciplinary account of the indissoluble relationship between contemporary visual media and the body as a field of existence and activation of them, in a relationship that in turn modifies the way images are incorporated, in ways and spaces that are always new, different, and to be reconsidered. Thus, this approach challenges the static conceptions of corporeality and propose a relational, media-sensitive ontology of the human form, illuminating on the other hand how aesthetic practices articulate the body not only as image, but as a site of knowledge, power, and becoming.

Metodologically situated within the broader tradition of media archaeology, Wanda Strauven's contribution to screen theory in her book *Touchscreen Archaeology: Tracing Histories of Hands-On Media Practices*[80], challenges the dominant understanding of the screen as a passive, visual display surface and instead proposes a historically grounded reconfiguration of the screen as a tactile, interactive, and multifaceted *dispositif*. Her analysis is not limited to digital touchscreens but engages in a genealogical excavation of screen-related practices that predate cinema and anticipate contemporary interactive media. Strauven argues that the history of the screen is marked by non-linear developments, where seemingly "new" technological affordances—such as tactility, interactivity, and multi-sensoriality—can be traced back to pre-cinematic devices and practices, including optical toys, magic lantern shows, peep boxes, and early

[80] Wanda Strauven, *Touchscreen Archaeology: Tracing Histories of Hands-On Media Practices* (Lüneburg: meson press, 2021).

arcade machines. These historical forms already featured aspects of manual manipulation and embodied engagement, thereby contesting the idea that screen-based interaction emerged solely with the advent of digital interfaces. In this sense, her work reveals the screen to be always already tactile, and not exclusively visual, as often presumed in classical screen theory. A central feature of Strauven's analysis is her emphasis on the hands-on nature of early media culture, which she frames through the concept of "playful media." By foregrounding the user's physical engagement with media devices, she positions tactility and kinesthetic participation as constitutive elements of media experience, not secondary effects or options. The contemporary touchscreen, in her view—and immersive media as well, in ours—should be understood not as a rupture but as a variable continuation of a long-standing tradition of interactive and performative media use. This archaeological method has significant implications for how we conceptualize the screen in historical and theoretical terms. Rather than beginning with cinema as the "origin" of screen culture, Strauven invites to look further back, adopting an approach that resists technological determinism and linear progress narratives. She thereby contributes to the reconceptualization of the screen as a historically contingent, sensorially diverse, and operationally complex phenomenon, shaped by shifting practices of perception, embodiment, and cultural technique development. In aligning media history with embodied interaction, Strauven's work resonates with previously reported theories of embodied spectatorship, post-cinematic media interaction, and neurocultural media ecologies. Her reconceptualization of the screen foregrounds its materiality and performativity, moving beyond theories of representation to explore how screens affect, structure, and involve the body across historical epochs. In other words, her archaeological approach reveals the screen not as a static object but as a fluid interface whose functions, meanings, and materialities have evolved through layered historical transformations. Her work significantly expands the conceptual field of screen studies, demonstrating that understanding the screen requires attention to its tactile, interactive, and embodied dimensions, across both analog and digital media regimes. Following this line, it could be easier to imagine how contemporary XR interfaces recapitulate historical practices of manipulation, gesture, and proxemic interaction—traits long present in performance traditions.

Back forward to the theatre

As a closing circle, again Antonin Artaud's *The Theatre and Its Double* could provide us an exemplar theatrical perspective which seems to be directly related with the previous ones we tried to interconnect, anticipating and confirming them. The radical manifesto reimagines the function and form of theatre in modern culture via a critique of Western theatrical tradition and a visionary proposal for a renewed, transformative mode of performance. As previously exposed, at Artaud's project core is to restore theatre to a ritualistic, corporeal, and metaphysical practice, capable of shaking audiences from intellectual complacency and engaging them in profound, affective experience.

For Artaud, theatre should not be the illustration of written drama but a total art form, grounded in gesture, sound, movement, and visual symbolism in favor of an embodied experience—one that operates not through rational discourse but through visceral impact. Thus, is "Theatre of Cruelty" (*Théâtre de la cruauté*) denotes the rigorous, vital force of existence itself—a metaphysical necessity to confront the real, to expose the unconscious, and to disturb the illusions that structure everyday life. The Theatre of Cruelty aims to assault the senses, creating an immersive and overwhelming environment that penetrates the spectator's psyche, bypassing intellectual defenses and awakening dormant energies. Through this "cruelty," theatre becomes an alchemical process of transformation, both for the performer and the audience, which he significantly denotes with the terms "virtual reality" (Artaud 1958: 49).

Even if his idea of theatre draws upon ritual, trance, and myth, reclaiming the sacred and therapeutic dimensions of performance, Artaud's work can be read as a critique of representational aesthetics in favor of an embodied, mental and physical engagement with the performative event. Moving beyond mimesis, theatre does not merely reproduce the world but reveal its inner forces and contradictions through a not intellectual consciousness. The "double" in the title refers to the idea that theatre contains within itself the potential to mirror not the surface of life, but its metaphysical underside. In this sense, the stage becomes a space of ontological experimentation, where language is reconstituted, and presence—rather than representation—is privileged. Artaud's emphasis on embodiment, affect, and the dissolution of the subject-object divide directly connects with media theories we collected, resonating with contemporary discourses on

performative or post-dramatic theatre, immersive media, and dividual plurality, which are particularly amplified in metaverse. His vision of a theatre that goes beyond the intellect and speaks directly to the body and the unconscious prefigures many of the concerns that animate current investigations into performative, neurocultural, and XR studies.

The metaverse and its Double

Despite its marginalization in classic media theory, theatre should be reconsidered as a foundational medium. The performative turn in contemporary aesthetics destabilizes the binary between visual and performing arts. Theatre is not merely a genre but a medium of embodied cognition, social communication, and cultural memory and consciousness. Following this logic, XR can be seen as a continuation of theatrical strategies by other means. It absorbs the body-centric logic of performance, the spatial choreography of stagecraft, and the ritualistic temporality of live action. Yet the underlying logic—of embodied co-presence and influential resonance—remains strikingly similar.

The alphabet, as Havelock argues, fragmented the unified sensory-motor circuits of oral culture, giving rise to a new regime of mental abstraction. Theatre, emerging alongside alphabetic literacy, helped reintegrate fragmented sensory inputs by providing a shared, embodied space for collective sense-making. Thus, the *theatron* functions both as a site of representation and as a cognitive interface—a place where sensory, emotional, and narrative elements melted into organized cultural memory. de Kerckhove follows Havelock and situates the emergence of Greek theatre as a cultural response to this cognitive transformation brought about by literature. The theatre functioned as a prosthetic medium, helping pre-literate societies transition from oral-performative to literate-cognitive forms of memory. In this configuration, theatre acts not merely as entertainment but as an information-processing device. It externalizes thought, stages examples, and choreographs collective meaning. This structural role positions the theatre as an early medium between body and knowledge. In transitioning from participatory ritual to spectatorial drama, Greek theatre facilitated the internalization of social knowledge. This transformation was not merely aesthetic but cognitive: a shift from

external, embodied recall to internalized, abstract thought. Theatre operates as an early platform for processing symbolic information in ways that parallel later media. As such, the theatre becomes the precursor to contemporary screen-based media, which also reorganize perception, interaction, and self-awareness through technological means. Specifically, it anticipates the immersive logic of XR systems, where users are no longer passive observers but embodied participants in dynamic information ecologies.

For Carbone and Lingua, the arche-screen is always related from and to the human body, understood as the "proto-screen." This chiasmic logic also governs XR environments. The immersive screen extends the user's proprioceptive and kinesthetic apparatus, while the user's body becomes one of the operational thresholds through which the apparatus perceives, tracks, and responds. In this respect, XR can be studied through its cinematic and computational genealogies, and also through its structural proximity to theatre. The notion of a "quasi-theatre" describes XR as an immersive environment in which ritual, representation, sensory intensification, and participation converge. This framework can be connected to Carbone and Lingua's concept of the quasi-prosthesis, understood in its precise technical sense. Again, a quasi-prosthesis designates the temporary status assumed by certain bodily organs when they are integrated into digital devices as additional components required for their functioning. XR technologies therefore organize quasi-prosthetic relations in which eyes, retinas, hands, skin, gestures, and other bodily functions are recruited as operative components of the apparatus. In this sense, immersive environments augment perception by redistributing agency across bodies and devices, transforming the user's organs into functional thresholds through which the system perceives, tracks, responds, and acts. Moreover, XR contributes to the reconfiguration of the self as dividual, stressing the porous and interconnected nature of contemporary human-media experience. In immersive environments, the user emerges as a node in a network of perceptual, technical, and symbolic relations. This dividual condition resonates with the notion of quasi-prosthesis insofar as the user's bodily organs and gestures are temporarily integrated into technical devices as operative components. The screenic *dispositif* recruits parts of the body as functional thresholds and distributes agency across organic and inorganic elements.

XR headsets, controllers, sensors, and spatialized sound systems may be described as prosthetic or environmental extensions of perception. The quasi-prosthetic status

belongs, more specifically, to the bodily organs and functions these devices operationally recruit: the eye tracked by the interface, the retina used as a projection surface, the hand transformed into an input surface, or the skin mobilized as a tactile interface. Even Strauven's analysis seems to support the thesis that XR should be understood through the lens of performance rather than visuality. The act of touching, manipulating, and being affected by screenic interfaces brings the user into a participatory relationship with the medium that echoes, again, Fischer-Lichte's performance reciprocal influence: in both cases, indeed, the boundary between actor and spectator gets thinner. This conceptualization disrupts the long-standing divide between visual and performative arts. Strauven underlined the archaeological dimension of this analysis, tracing the tactile and bodily genealogy of screen practices back to pre-digital, hands-on media. Similarly, XR does not simply add visuals to live performance; it redefines the spatial, sensory, and epistemological conditions of representation. The contemporary convergence of digital and performative practices calls for a reassessment of media and theatre history, re-considering from a different point of view all the interconnected anthropological implications. Gallese and Guerra's theory in *The Empathic Scree: Cinema and Neuroscience*[81] provides a neurocognitive basis for understanding the embodied nature of spectatorship. They demonstrate that viewers simulate the observed actions and emotions of on-screen characters through embodied resonance. This affective mirroring has clear parallels with theatrical performance, where actors and spectators co-produce meaning through presence and reciprocity. In XR, the user's gestures are no longer metaphorical: they are structurally embedded in the medium. Gesture is not just perceived but enacted, creating a loop of motor and bodily engagement that recalls the ritualistic foundations of theatre. This is what Barbara Grespi describes as the "figures of the body" a study that underscores the reciprocal influence of the body gestures on moving images development and of visual media on embodied technical and affective expression.

If theatre once operated as a simulation model of perception and cognition, XR can be seen in some sense as its contemporary counterpart. However, XR does not return us to pre-literary embodiment; rather, it introduces a new configuration of embodied, dividual, and technologically mediated, performative feedback loop. The theory of the

[81] Vittorio Gallese and Michele Guerra, *The Empathic Screen: Cinema and Neuroscience*, trans. Frances Anderson (Oxford: Oxford University Press, 2020).

"empathic screen" supports this reorientation. Indeed, it demonstrates that visual media, far from being passive, elicit sensorimotor responses that are deeply tied to embodied cognition. XR, by amplifying the gestural and immersive dimensions of visual experience, extends this phenomenon. It becomes a medium of cognitive performance, one in which memory is not merely stored but enacted through interaction with digital performers and/or environments. The metaverse, often imagined as the zenith of XR evolution, is typically framed within a technological determinism that foregrounds data, networks, and visual simulation. This vision, however, risks effacing the corporeal and performative dimensions of immersion. Reframing the metaverse as a theatrical space—a digital *theatron* but also a performative space—allows us to foreground the dramaturgical, ritual, and embodied aspects of immersive experience. This hybrid genealogy challenges the historical division between visual and performing arts, proposing instead a continuum in which XR operates as a neo-theatrical medium. It stages the self, solicits gestural enactment, and creates augmented spaces of affective and cognitive engagement. In this sense, the metaverse becomes a performative ecology rather than a simply a networked interface, where the arche-screen variation function as a stage where the dividual actor-spectator acts as—again—a *prosumer*.

XR, rather than being just a visual medium descending from cinema and computing, should be situated within the broader history of performance and embodiment mediology. Thus, both theatre and XR could be considered not just art forms but evolving mutual epistemic infrastructures. From this perspective, they offer models for understanding how media environments shape not only what we see but how we live, think, and relate. Drawing on media archaeology, phenomenology, and neurocultural theory, we proposed that XR shares with theatre a common concern for presence, gesture, and relational human bodies. Repositioning XR closer to the theatre evolution not only enriches our understanding of immersive media but also resists the reduction of digital technology to disembodied visuality. Instead, it affirms a conception of media as relational thresholds that stage and transform human experience through embodied, performative interactions, via a hybrid condition as the one of the dividual, in the quasi-theatre of the metaverse. Thus, within this framework, the metaverse may be described as a quasi-theatre: a performative counterpart of reality in which embodied presence, sensory intensification, scenic organization, and ritualized mediation converge. This

quasi-theatrical condition indicates a structural analogy between theatre and XR. Both operate through thresholds, roles, gestures, spatial arrangements, affective addresses, and collective forms of participation. The metaverse thus appears as a digital double of theatricality in an Artaudian sense: a space in which the relational and perceptual structures of screen experience are exposed, intensified, and reorganized. By framing XR not as a mere technological extension of reality, but as its performative counterpart—a space where embodied presence, sensory intensification, and ritualized mediation converge to explore and expose the hidden relational and perceptional structures beneath screen experiences—means to propose a new concept of metaverse, a double of it as the artaudian one for the theatre. This double, metaphysically and anthropologically central in the approach to the reality, and always in dialogue with the ancient and never old ritual of the search for meaning which the performing arts offer, exists in a mutual precession with the ideas of metaverse. Thus, a new perspective between performance and media studies may arise. A condition of existence for both to be explored, that we precisely propose to call *The Metaverse and Its Double*.

Part two: From the Cinema of Attractions to the Metaverse of Attractions: Reenactment, Wonder, and Performativities in the Phygital Era

This second half of the chapter develops a genealogical and theoretical pathway from early twentieth century "attraction" practices in cinema and revolutionary theatre to contemporary platform-based events that mobilize reenactment, wonder, and collective presence across hybrid physical–digital—in one word: *phygital*—environments. Rather than treating the metaverse as a technological novelty, the argument approaches it as an emerging medial regime in which spectacle, direct address, modular event-structures, and the reflexive exhibition of the apparatus reappear as organizing principles of experience. The first half reconstructs, in detail, the theories that make this pathway legible: the "Cinema of Attractions" (Gunning 1986), the "Theatre of Attractions" (Tret'iakov 2006),

remediation (Bolter and Grusin 1999), the spectacle (Debord 2014), the aesthetics of virtual embodiment (Diodato 2012), an anthropology of screens attentive to Christian genealogies and Transparency 2.0 (Carbone and Lingua 2023), reenactment as performance remains (Schneider 2011), liminality and communitas (Turner 1969), and entanglement as the constraint-based ecology of relations (Hodder 2012). Thus, through this heterogeneous pathway, this second half of the chapter develops a genealogical and theoretical trajectory which should make those practices legible. The second half of the chapter turns to a broader case-study sequence through which the framework developed here is tested, specified, and brought into contact with a range of contemporary and hybrid immersive formations. The concluding sections articulate the concept of a "Metaverse of Attractions" as a hypothetical propose: a framework for understanding how contemporary platforms remake attraction logics into a phygital grammar of address, participation, and presence.

From Embodiment to the Metaverse of Attractions

Contemporary discourse on the metaverse often oscillates between promissory futurism and skeptical dismissal. Both positions risk treating the "not yet well-defined" metaverse as either an imminent total environment or a marketing trope without analytical traction. A different approach becomes possible when the metaverse is considered less as a singular technological medium-object than as a developing ecology of practices, protocols, and platform dramaturgies that already structure everyday media experience. From this perspective, the metaverse is not primarily and strictly defined by head-mounted displays, photorealistic graphics, or fully immersive simulations. It is defined by the cultural logic through which networked environments organize attention and presence, coordinate bodies and avatars, and stage events that feel present, real, shared, and consequential.

The central hypothesis of the present inquiry is that a major part of this cultural logic can be described through the reactivation—and transformation—of "attractions" as a media grammar. "Attraction" designates a mode of address that foregrounds the event over the plot, the apparatus over transparent representation, and sensory-affective impact

over narrative absorption. In this sense, attractions are not merely impressive spectacles. They are operators of mediation: they solicit awareness, produce confrontation with the medium, and mobilize participation as a condition of reception (Gunning 1986: 63–66; Tret'iakov 2006: 19–22).

Methodologically, the argument proceeds in three stages. First, it reconstructs the genealogy of attraction as a critical category across early cinema and Soviet avant-garde theatre, including adjacent early twentieth-century reflections on "living cinema" that articulated the convergence of theatrical and cinematic energies. Second, it offers extended expositions of a set of theories that, while originating in different disciplinary fields, converge around problems decisive for contemporary phygital performativity: remediation, spectacle, virtual embodiment, screen anthropology, reenactment, ritual process, entanglement, and philosophical anthropology in general[82]. These theories are presented not as an external toolkit but as conceptual lineages whose internal problems, tensions, and vocabularies motivate the later analyses. Third, the next chapter turns to a broader case-study sequence that explores how attractions operate across contemporary platforms, hybrid environments, and theatrical remediations, thereby giving the preceding framework a more concrete analytical articulation. Only after this pathway is established does the final section propose the concept of a "Metaverse of Attractions." The concept is introduced as a consequence of the preceding work: it synthesizes the genealogical and theoretical findings into an analytical framework for describing an emergent medial regime in which platforms organize experience through modular spectacular events, reflexive displays of affordances, iterative reenactments, and the production of collective presence across screenic thresholds. The ambition is not to provide a fixed definition of the metaverse but to develop a rigorous vocabulary for understanding how contemporary media ecologies reconfigure spectatorship, participation, and presence in ways continuous with—and divergent from—earlier histories of attraction.

[82] See Arnold Gehlen, *L'uomo. La sua natura e il suo posto nel mondo* (Milano and Udine: Mimesis 2010) for an introduction to philosophical anthropology and Amedeo Vigorelli, *L'animale eccentrico: Dall'antropologia filosofica all'etica comunitaria* (Milano: Guerini Studio, 2003) for a recent original relaunch of it.

Genealogies of Attraction: Early Cinema, Revolutionary Theatre, Living Cinema

Attraction becomes a critical category when modern media are approached not only as representational systems but as *dispositifs* that address and organize spectators. The term itself circulates in early twentieth-century debates about modernity, sensation, and mass culture; yet its critical productivity derives from a specific historical constellation: the emergence of cinema as a public collective technology of visibility and the avant-garde's attempt to politicize the sensory and the social. In both cases, attraction names a compositional and experiential principle: the deliberate orchestration of attention through acts of showing, interruption, shock, and direct address.

In this genealogy, early cinema and Soviet avant-garde theatre should not be treated as two separate traditions that later "influence" digital media. They are better understood as laboratories for the problem of modern spectatorship: how a new technical apparatus re-organizes perception; how publics become collective audiences; how sensation becomes (also) pedagogy; and how the event can precede narrative as a central unit of experience. The following subsections reconstruct the foundational attraction theories associated with Tom Gunning and Sergei Tret'iakov while also situating an adjacent, less canonical articulation—Saint-Pol-Roux's hypothesis of "living cinema"—as a symptomatic attempt to imagine the convergence of cinema and theatre at the level of performative address.

Tom Gunning's "Cinema of Attractions" intervenes in film historiography by challenging the retrospective naturalization of narrative cinema as the telos of early film history. In *The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde*[83] The early period (roughly 1895–1906) is described as a phase in which films often operated less as narrative vehicles and more as exhibitionist events. The key claim is that early cinema frequently mobilized a "harnessing of visibility," privileging showing over telling and staging the film image per se as an object of curiosity and display (Gunning 1986: 63–65). The theoretical force of this claim lies in its redefinition of spectatorship.

[83] Tom Gunning, "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde", *Wide Angle* 8, no. 3-4 (1986): 63-70. See also Id., "In Your Face: Physiognomy, Photography, and the Gnostic Mission of Early Film" *Modernism/Modernity*, no. 4.1 (1997): 1–29.

Rather than presuming an absorptive viewer who forgets the medium, Gunning emphasizes a mode of reception grounded in awareness: early films solicit "a highly conscious awareness of the film image" and address the spectator through exhibition, surprise, and the presentation of a novelty that declares itself as such (Gunning 1986: 64–66). The attraction is thus not an "interruption" of narrative; it is an organizing principle that can precede narrative coherence and that can continue to operate alongside narrative forms. Two further points are decisive. First, the attraction is inseparable from the apparatus. Early cinema's power is linked to the visibility of mediation itself: the cinematographic image is not yet a transparent window but an event of technical showing that invites spectators to recognize the medium's operation (Gunning 1986: 66–67). Second, the attraction functions as a relational structure of address. It is not only a spectacle displayed; it is an address that produces a spectator as an addressee, often through direct acknowledgment of the camera, frontal staging, or presentational performance modes inherited from fairground, vaudeville, and popular theatrical traditions (Gunning 1986: 67–69).

Gunning's genealogy also connects early cinema to the historical avant-garde. Early modernists often celebrated cinema's capacity to make images seen rather than to imitate theatre or literature; they were fascinated by the medium's potential as a technology of perception and as an engine of discontinuity (Gunning 1986: 63–64). In this sense, the cinema of attractions becomes not merely a historical periodization but a critical lens: it isolates an exhibitionist and presentational logic that can resurface whenever media systems prioritize sensory display, technical reflexivity, and event-based address over narrative continuity. For the purposes of the present section, the cinema of attractions is treated as a theory of medial address and not as a nostalgic description of a "primitive" phase. The question is therefore how attraction logics mutate when the apparatus is no longer the projector and screen alone but a platform: a programmable environment with user-generated content, real-time co-presence, and algorithmic curation. The case-study chapter returns to this point; but the conceptual groundwork requires first reconstructing other theories that articulate how modern media refashion prior forms, produce spectacle, and organize embodied and dividual subjectivities through screens.

The Soviet avant-garde's attraction discourse emerges in a distinct political and epistemic context: a revolutionary project seeking to reconfigure perception, labor, and collective life. In this environment, theatre is not conceived primarily as representational art but as an apparatus for the production of subjectivity and social relation. The "Theatre of Attractions,"[84] associated with Eisenstein's early writings and developed within Soviet factographic and constructivist cultures, designates a compositional strategy based on montage, interruption, and the deployment of "attractions" as operational units designed to produce specific effects in spectators (Tret'iakov 2006: 19–22). Tret'iakov's articulation is instructive because it foregrounds pedagogy and activation. Attractions are not simply "sensational" moments; they are fragments with a theoretical function, capable of reorganizing the spectator's attention and linking affect to cognition. The theatre of attractions thus aims to dismantle the (only) apparently passive consumption associated with bourgeois theatrical illusion and to replace it with an active reciprocal encounter in which the spectator is confronted with the constructedness of the theatrical apparatus (Tret'iakov 2006: 20–23). A crucial dimension of this approach is the insistence on montage. In attraction theatre, the sequence is not governed by dramatic causality but by the juxtaposition of heterogeneous elements whose collision produces meaning and affect. This principle resonates with the broader Soviet project of montage[85] across cinema, theatre, and visual culture: discontinuity becomes a means of thought. The attraction operates as a unit of force within a larger composition whose goal is not narrative closure but the activation of political subjectivity. Tret'iakov's context also includes factography—the attempt to integrate documentary materials, everyday practices, and social processes into artistic forms. The attraction becomes a method for transforming factual materials into performative events: the theatre does not represent reality from a distance but reorganizes fragments of reality as devices of address. In this sense, the theatre of attractions anticipates later questions about reenactment, mediation, and the staging of the real in medial environments where documentation and performance collapse into each other.

Two implications follow. First, attraction theatre frames spectatorship as participation in a *dispositif*. The spectator is addressed not as a private individual

[84] Sergei Tret'iakov, "Theatre of Attractions", *October* 118 (2006): 19-26.
[85] See Sergei Eisenstein, "Montage of Attractions: For "Enough Stupidity in Every Wiseman" translated by Daniel Gerould, *TDR / The Drama Review*, 18, no. 1, (1974): 77-85.

absorbing a plot but as a situated body within a collective event engineered to produce responses. Second, the attraction is inherently political, not because it delivers a message but because it reorganizes the conditions under which meaning and subjectivity are produced. These implications become crucial for interpreting contemporary platform reenactments and protest simulations, where the "political" is often enacted through the affordances of the medium itself rather than through explicit ideological content.

If Gunning and Tret'iakov provide canonical attraction theories in cinema and theatre, Saint-Pol-Roux's reflections on "cinéma vivant" (living cinema)[86] offer a complementary, less institutional articulation that is nonetheless symptomatically important. Writing in the early twentieth century, Saint-Pol-Roux proposes a vision of cinema not as mechanical reproduction but as a performative force capable of reorganizing theatrical presence. The key intuition is that cinema's novelty lies in its capacity to animate perception and to reconfigure the relation between image, body, and public address. The significance of this hypothesis is twofold. First, it suggests that cinema and theatre are not stable media with fixed boundaries but fields of technique and perceptual address that can mutually transform each other. "Living cinema" names a transitional zone in which the cinematic image is conceptualized and perceived as a dynamic presence rather than as an inert representation. Second, the hypothesis foregrounds the performative dimension of mediation: cinema is not merely watched; it is encountered as an event that acts upon spectators, reorganizing their affective and imaginative capacities.

Although Saint-Pol-Roux's discourse belongs to a different register than Gunning's historiography or Tret'iakov's revolutionary pedagogy, it shares a core preoccupation: the reconfiguration of spectatorship under modern technical conditions. In the context of the present chapter section, "living cinema" functions as a historical symptom of an ongoing question: how does a new technical *dispositif* transform the relations between bodies, images, and publics?[87] This question returns with particular urgency in todays' phygital environments, where the image is no longer confined to the screen but is distributed across platforms, avatars, and networked interactions that reorganize both theatrical and cinematic grammars.

[86] Saint-Pol-Roux. *Cinema vivente*. Translated by Gian Paolo Baiocchi and Michele Canosa (Ferrara: Edizioni del cavaliere azzurro, 1984).
[87] In a clear echo, again, of Benjamin's *Work of Art*.

Media, Screens, Virtuality, Ritual, and Spectacle

Having reconstructed attraction as a genealogy of address, the argument now turns to a set of theories that enable a detailed analysis of contemporary phygital performativity. Through a peculiar attention to its internal tensions and to the way it reframes the relation between media forms and lived experience, this group of theories does not simply support an experimental framework: it articulates issues—mediation, visibility, embodiment, repetition, communality, and constraint—which motivate how the next contemporary case studies could be interpreted.

At the dawn of the new millennium, the Bolter and Grusin's theory of "remediation" presented in the previous chapter begins from an apparently paradoxical claim: new media define themselves not through absolute novelty but through the refashioning of prior media forms. Remediation is described as a "double logic" in which media seek, at once, to erase their own mediation (the desire for immediacy) and to multiply mediations and interfaces (hypermediacy), producing a field where transparency and opacity coexist as competing cultural values (Bolter and Grusin 1999: 1–6). The desire for immediacy is not reducible to a technical goal; it is a cultural aspiration[88]. Remediation theorizes how media repeatedly promise access to "the real"—to presence, authenticity, and unmediated experience—by presenting their interfaces as transparent windows. Yet this promise is never fully realized. Even when mediation is minimized, the medium continues to structure experience. In their emblematic discussion of immersive media fantasies, Bolter and Grusin analyze how technologies promise "you are there" experiences while relying on complex interfaces and aesthetic strategies that manage the user's awareness of mediation (Bolter and Grusin 1999: 1–4). Hypermediacy, in contrast, foregrounds the interface and makes mediation visible. Here the screen becomes a collage of windows, streams, and channels that stage the act of mediation itself. Importantly, Bolter and Grusin argue that immediacy and hypermediacy are not opposites but mutually dependent logics: even the most hypermediated environments often cultivate

[88] Again, the Benjaminian reference seems to be evident, but also a declination of the desire close to Jean-François Lyotard, *Discourse, Figure*. Translated by Antony Hudek and Mary Lydon (Minneapolis and London: University of Minnesota Press, 2011). On this regard, see Carbone 2019: 41-53.

their own brand of immediacy, while immersive designs depend on the strategic control of interface visibility (Bolter and Grusin 1999: 5–15).

Remediation is therefore a theory of historical continuity and cultural desire. It explains why digital environments repeatedly restage older forms—cinema, theatre, television, architecture, performance—while claiming to surpass them. This insight becomes crucial for interpreting the metaverse not as a medium that replaces previous media but as an environment in which multiple media grammars coexist, collide, and are reorganized through platform affordances. The metaverse can thus be approached as an intensified scene of remediation: a space where immediacy promises (presence, immersivity, "life") and hypermediated displays (interfaces, overlays, avatars, chat) are staged in the same experiential frame—not considering headset heavy presence on the head of the user in VR fruition of it. As a guideline, we will try to keep this double logic in mind throughout the theoretical pathway we will proceed on from here to the considered case studies.

Guy Debord and *The Society of the Spectacle*

On an only apparent far level, 1967 Debord's theory of the spectacle offers a political and historical framework for understanding modern visibility as a mode of social organization. The spectacle is not defined as an accumulation of images but as a social relation mediated by images, rooted in commodity forms and the organization of everyday life under capitalism (Debord 2014: 1–15). This formulation is critical because it shifts analysis from representation to relation: images—and so media—matter insofar as they structure how people relate to each other, to themselves, and to history perception.

In *The Society of the Spectacle*[89] Guy Debord proposes a radically expanded notion of mediation, in which images are no longer secondary ornaments of social life but the very form in which social relations are organized. The "spectacle" is not simply mass media, advertising or entertainment; it is the historical mode in which advanced capitalism makes the world appear and, by the same movement, structures how subjects

[89] Guy Debord, *The Society of the Spectacle*. Translated and annotated by Ken Knabb (Berkeley, CA: Bureau of Public Secrets, 2014).

can act within it. “In societies where modern conditions of production prevail,” Debord famously writes, “life is presented as an immense accumulation of spectacles. Everything that was directly lived has receded into a representation.” (Debord 2014: 2) From the opening theses, Debord insists that the spectacle is not a collection of images but a social relation between people mediated by images. What once counted as immediate experience is displaced into a realm of representations that confronts individuals as something separate and untouchable. Images “detached from every aspect of life” coagulate into a separate pseudo-world, an autonomous domain that appears to unify what it in fact fragments. The spectacle is therefore a “concrete inversion of life”: a configuration in which the non-living (commodities, institutions, separate powers) appears to move and speak, while living subjects are immobilized in passive contemplation. Separation is both the origin and result of this process. The more social activity is unified by the spectacle, the more individuals are practically separated from one another and from their own powers. This means that the spectacle cannot be understood as a mere visual surplus produced by modern media technologies. Debord calls it “a worldview that has been actualized,” a way of seeing the world that has become materially effective. News, advertising, politics and entertainment are different sectors of the same apparatus: they organize appearances according to the requirements of the existing mode of production. The spectacle presents itself as an unquestionable reality—its implicit message is: what appears is good; what is good appears. Because it monopolizes the field of appearances, it pre-emptively neutralizes critique: there seems to be no outside from which its images could be challenged. The spectacle is thus “the ruling order’s uninterrupted discourse about itself,” a kind of permanent self-justification in image form. At the heart of this theory lies a reinterpretation of the commodity. Debord explicitly builds on Marx’s analysis of commodity fetishism but emphasizes the way in which the commodity’s logic extends beyond production and exchange to shape perception itself. The spectacle is “the stage at which the commodity has succeeded in totally colonizing social life.” In the spectacle, the world of commodities detaches itself from human activity and confronts its producers as an independent, quasi-natural environment. Social life is reorganized so that relations between people appear primarily as relations between things and images. Debord schematizes this evolution as a shift from being to having, and from having to appearing. In the first phase of capitalist

development, human fulfilment is displaced from what one is to what one possesses: identity and status depend on property, income, objects. In the "present stage," however, even having is subordinated to appearance: the value of possessions lies in their spectacular visibility, their capacity to circulate as signs of prestige. The consumer is thus not so much a user of things as a spectator of images of use, invited to recognize them as desirable and as proof of a certain lifestyle. Debord can therefore describe the spectacle as "capital accumulated to the point that it becomes image": an accumulation of abstract value which, condensed into images, commands everyday life. The loss of qualitative experience follows from this. The commodity form abstracts from concrete qualities in order to make different objects comparable on a single quantitative scale. In an economy where this logic becomes dominant, Debord argues, a "loss of quality" affects every level of life, from built environments to interpersonal relations. The spectacle celebrates novelty and abundance, but the novelties it offers are interchangeable; pseudo-differences between brands, images, lifestyles and "choices" conceal a deepening homogenization. The promise of satisfaction is continually displaced onto new commodities, each one ceremoniously presented as unique but quickly revealed to be as disappointing and standardized as the last. The result is a "new form of poverty within the realm of augmented survival": alongside material deprivation for many, there is a more general impoverishment of meaning and experience. A central dimension of Debord's analysis is the way the spectacle organizes unity and division within appearances. On the surface, the spectacle seems to present a unified social world: a common language of images, shared celebrities, synchronized events. In reality, this apparent unity is founded on fragmentation and separation. Conversely, spectacular divisions—between political parties, national blocs, ideological camps—mask the underlying unity of a single global system of commodity production. The same logic applies at the level of the individual: people are linked only by their one-way relation to the center of the spectacle (television, advertising, centralized media), which brings them together in a state of simultaneous isolation. The spectacle "reunites the separated, but it reunites them only in their separateness." Debord distinguishes between "concentrated" and "diffuse" forms of the spectacle. The concentrated spectacle, associated with bureaucratic or totalitarian regimes, condenses representations of power into a single leader or party. Its imagery centers on the figure of the Head of State, the Party, the Great Helmsman—icons with

which the population is compelled to identify. It relies on direct repression and the monopoly of information: any autonomous choice appears as a threat to the system. The diffuse spectacle, characteristic of advanced consumer capitalism, disperses its power across an enormous range of commodities, lifestyles and media channels. Here, no single image dominates; instead, countless star-objects and celebrities compete for attention, offering different models of success and identity. Yet these apparent alternatives converge in the same injunction to consume: choices between products, styles or opinions are "false choices" that reinforce the underlying structure. Debord also notes hybrid forms and shifts between these two types, suggesting that different regimes participate in a larger division of spectacular labor on a global scale. Within this system, stars play a crucial role. They are "spectacular representations of living human beings," figures who personify accessible roles and forms of success. As specialists of apparent life, they enable spectators to identify with lifestyles they will never fully live; their function is to embody the unattainable unity of power and enjoyment that the spectacle continually promises but never delivers. Their biographies, opinions and gestures are themselves scripted effects of the system, emptied of individual substance. In identifying with stars, spectators displace their own powers and desires onto distant figures, reinforcing their own passivity.

Although the book is often read primarily as a media theory, Debord situates his analysis within a broader critique of capitalist history, and in particular within a certain reading of Marx and Hegel. The spectacle is not an eternal condition; it is the historical form taken by domination in a specific phase of capitalist development. For Debord, the rise of the bourgeoisie brought about a powerful "real movement that abolishes the existing state of things": productive forces shattered traditional hierarchies and exposed social relations as historical and transformable. Hegel's dialectical philosophy, which interprets reality in terms of historical becoming, represents for Debord the high point of bourgeois thought: it realizes that the truth of society lies in its own self-transformation, but still reconciles itself with an existing order. Marx, in Debord's reading, radicalizes this insight by linking the dialectic to class struggle and by identifying the proletariat as the historical subject capable of consciously transforming social relations. The proletariat is defined not simply as an economic category, but as the class whose own liberation would require the abolition of all class rule and the reappropriation of social life by its

participants. Yet Debord is also acutely aware of how this project was betrayed. In the twentieth century, bureaucratic parties and states claimed to represent the proletariat while in fact expropriating its capacity for autonomous action; mass organizations became spectacular representations of the class rather than instruments of its self-emancipation. Thus the "proletariat as subject" is replaced by the proletariat as image, as something spoken for rather than speaking. A large part of the book is devoted to time and history. Debord argues that earlier societies, dominated by cyclical time (agricultural rhythms, liturgical calendars), still maintained some shared symbolic relation to the past and to collective memory. Capitalism, by contrast, introduces a homogeneous, empty, irreversible time: the time of production, innovation and economic growth. Spectacular time is the further transformation of this temporal regime. On one hand, it takes the form of a linear narrative of "progress," in which the existing order presents itself as the rational culmination of history. On the other, it proliferates pseudo-cyclical time: the repetitive cycles of consumption (seasons of fashion, programming schedules, recurring events) that simulate renewal while reproducing the same structure. The spectacle's control of time deepens the dispossession of subjects. Everyday life is colonized by schedules, deadlines, and the planned obsolescence of both objects and experiences. Free time appears as liberation from work, but is in fact organized as an extension of the same logic: leisure is structured around the consumption of spectacular goods and images, leaving no space for genuinely autonomous activity. Debord thus speaks of a "liberation from work" that is neither a transformation of work itself nor a liberation from the world shaped by work. Historical consciousness, understood as the lived awareness that the present could be otherwise, is replaced by a continual present of spectacular circulation, in which the only changes recognized are those already coded by the system (new products, new campaigns, new "events"). The spectacle also has a spatial dimension, explored in Debord's analysis of territorial management and urbanism. Modern city planning, transport infrastructures and housing policies materialize the same logic of separation that governs images. The postwar urban environment—motorway networks, satellite suburbs, functional zoning—isolates individuals in apartments and vehicles while connecting them only through spectacular channels (television, standardized commercial spaces). This spatial reorganization replaces organic urban life (the encounter, the unpredictable dérive) with controlled environments that facilitate both production and consumption. Everyday routes

and routines are synchronized with mass media schedules, reinforcing the spectacle's hold over attention and desire.

In the later argumentation, Debord turns explicitly to culture and ideology. Culture, understood as the cumulative memory of a society (its art, knowledge, critical traditions), is both indispensable for domination and potentially subversive. In spectacular society, culture is at once preserved and destroyed: preserved as a museum of separated works, decontextualized and commodified; destroyed insofar as its living, critical function is neutralized. Avant-garde movements that attempt to challenge bourgeois culture are rapidly "recuperated": their innovations are stripped of radical content and recycled as styles, images and marketable attitudes. The system feeds on negation, turning even dissatisfaction into a product. The culmination of this process is what Debord calls "ideology materialized." In classical terms, ideology was a set of representations that misrecognized social relations, masking exploitation with myths of harmony, nature or divine order. In the society of the spectacle, ideology is no longer confined to discourse; it takes on objective form in the organization of space, time, production and consumption. The spectacle is ideology become reality to such a degree that it no longer appears as ideology. It functions like a secularized religion: the separation once projected into a transcendent realm (the heavens, the afterlife) is now embedded in the immanent world of commodities and images. The spectacle is "the material reconstruction of the religious illusion," a "bad dream" of a society in chains that expresses, in distorted form, its desire for sleep. Yet Debord's analysis is not purely diagnostic. Throughout, he insists that the spectacle is a historical formation, vulnerable to critique and contestation. Because it is rooted in the separation of power and in the autonomization of the economy, it can in principle be overturned by forms of collective praxis that reappropriate both production and representation. The book's most radical propositions point toward a politics of everyday life in which spectators would transform themselves into actors, reclaiming space, time and communication as terrains of struggle rather than accepting them as given. In this sense, the critique of the spectacle is inseparable from the project of a different kind of visual and social culture: one in which images would no longer mediate separation, but would be integrated into practices of shared, conscious, historical self-constitution. In Debord's account, spectacular mediation produces separation. The spectacle consolidates a world in which lived experience is displaced by its

representation, and where social power presents itself as an external reality to be contemplated. Spectacular society thus organizes passivity not by forcing spectators to watch but by shaping the conditions under which experience becomes legible. The spectacle's power lies in its capacity to naturalize a certain organization of time, desire, and community as if it were the only possible reality (Debord 2014: 21–90). Debord also theorizes spectacular time as a reconfiguration of historical temporality. The spectacle replaces lived historical time with a pseudo-cyclical time organized around consumption, events, and images that circulate as commodities. This temporal restructuring becomes especially relevant for contemporary platform cultures, where events—viral clips, live streams, "moments"—organize collective attention in ways that can appear spontaneous but are often deeply entangled with economic and algorithmic infrastructures.

For present purposes, Debord's theory is not mobilized as a totalizing diagnosis but as a way of articulating how contemporary platforms produce visibility and participation under conditions of commodification, surveillance, and algorithmic management. Attractions in platform environments can produce wonder, communal affect, and political expression, but they also operate within spectacular economies that monetize attention and convert events into circulating objects. Debord's framework thus provides a necessary counterpoint to celebratory accounts of participation: it keeps in view how phygital liveness can become a form of organized spectacular time, even when it appears as grassroots or user generated.

Roberto Diodato: Virtual Body, Image-Body, and the Actor-Spectator in Immersive Mediation

Diodato's theory of an *Aesthetics of the Virtual*[90] begins from a deliberately non-metaphorical definition of what counts as "virtual" in the strongest sense. The virtual is not approached as a vague synonym for illusion, unreality, or simulation, nor as a merely technical label for computer-generated imagery. It is treated, instead, as an ontologically specific mode of appearing grounded in the coupling between algorithmic operations and

[90] Roberto Diodato, *Aesthetics of the Virtual*. Translated by Justin L. Harmon. Revised and edited by Silvia Benso (Albany, NY: State University of New York Press, 2012).

embodied users. The guiding intuition is that digital environments do not simply represent bodies and worlds; they generate image-bodies whose sensible reality emerges only through interaction, thereby forcing aesthetics to rearticulate the relation between perception, embodiment, and mediation. Diodato's theory of virtual aesthetics is grounded in a phenomenological problem: how can an experience be simultaneously external and internal, world-like and affective, without reducing the virtual to illusion? The virtual is treated not as a secondary copy of reality but as an experiential field in which embodiment, perception, and affect are reorganized through technological mediation (Diodato 2012: ix–20).

A key move in Diodato's account is the articulation of the "virtual body." Virtual environments do not simply present images to a pre-given body; they reorganize bodily *schemata* by redistributing agency, perception, and spatial orientation. The virtual body is neither identical to the biological body nor separable from it.[91] It is an aesthetic configuration in which bodily intentionality is extended, displaced, and transformed through interface relations (Diodato 2012: 1–20). The virtual therefore concerns not only what is seen but what can be done, felt, and inhabited. In its first and most decisive formulation, the virtual body is "an interactive digital image," defined as the self-phenomenalization of an algorithm in binary format arising in its interaction with a user (Diodato 2012: 1). This definition has several immediate consequences. First, the virtual body is not a stable object that exists prior to experience; it is a relational event whose appearance is co-produced by computational procedures and user action. The digital image here is not understood as a neutral surface upon which a representation is displayed, but as a "function of writing" that in appearing both exposes and conceals the translational project that constitutes it (Diodato 2012: 1). The virtual body therefore stages mediation as a double movement: it gives perceptible form to computational operations while simultaneously masking their technical articulation behind a sensible coherence. Second,

[91] To pursue a suggestive parallel on this point, one might think of what Stoichita says in *A Short History of the Shadow* about the stitching back of Peter Pan: the shadow sewn back onto Peter Pan's feet restores to him a certain substance and concreteness precisely through the double, as an extension of the self. Something similar occurs when, through a headset, we are "stitched" to XR in a relation that is at once embodied and imaginal. Thus, following this line, XR would be a kind of counter-shadow which instead of producing darkness, lives through the light of images, and which, like the shadow, always stands on the verge of doubling without ever fully separating. We are not Peter Pan; we cannot lose it, even if his story tells us something about the human desire to seek the loss of it as well. In the same way, it is an amplifying extension of ourselves, yet, because it remains attached to us, it is never entirely doubled.

Diodato stresses that the digital image—potentially multisensory—is not adequately captured by classical image categories. It is neither primarily an image-of (mimesis) nor essentially a simulacrum, nor can it be framed as an icon in the sense of an original image (Diodato 2012: 1). The virtual body belongs instead to a "multiple system of translation," a genetic-relational form whose identity consists in its capacity to be continually reconstituted across different embodiments (Diodato 2012: 1–2). This is the decisive reason the digital image is redescribed as image-body (*corpo-immagine*): it is materially made of discrete binary sequences, yet it presents itself as sensible and continuous, with a syntax that organizes the coincidence between strings of characters and perceptible qualities (Diodato 2012: 1). Third, because its existence-as-image is interactive, the virtual body cannot be reduced to passive digitized content. Diodato explicitly separates virtual bodies from digital photographs or television-like images that permit only a passive reception and do not allow "retroactive interaction with the structure of the computer memory," that is, an "incision into the matrix" (Diodato 2012: 2). In other words, the robust notion of virtuality is not exhausted by the presence of digital data; it requires the possibility that user action can modify the event of appearing by intervening—directly or indirectly—into the computational organization of the environment. This emphasis on interaction does not entail technological determinism. Diodato repeatedly signals that interactivity has degrees and that the concept of virtual body is itself stratified (Diodato 2012: 2). Yet the point remains: the novelty of virtuality is not "more images," but a different ontological status of the image—an image whose mode of existence is inseparable from a scene of embodied participation.

From the foundational definition, Diodato moves toward concrete forms that bring the concept into focus. Two examples are particularly revealing because they show how the virtual body spans familiar screen-based configurations and more environmental, spatial ones. On one side are avatars—interactive image-objects that function as bodies within digital environments and as mediators of user action. Diodato insists that avatars are not merely visual tokens; they pose a specifically aesthetic and phenomenological problem of qualitative space. The avatar's "sense" of space cannot be understood through homogeneous geometry alone, because human spatial experience is dense, non-uniform, and qualitative; translating such lived spatiality into programmable environments becomes a conceptual as well as technical problem (Diodato 2012: 3). The emphasis on

proxemics is telling: the virtual environment should invent constraints, thresholds, and relational distances that allow avatars to behave "as if" they had bodies, even though, at the level of computational possibility, they could violate bodily limits (passing through objects, instant teleportation, etc.) (Diodato 2012: 3). Virtual embodiment is thus shown to be less a matter of visual realism than of behavioral and spatial dramaturgy—the rule-bound production of a coherent field of action. On the other side are more explicitly environmental virtual bodies, such as "immaterial sculptures" or interactive three-dimensional space-organisms. Here, the virtual body is not simply visible on a screen but emerges as a space-environment mapping an external space through sensors and cameras so that physical changes can modify the virtual field (Diodato 2012: 3–4). This example clarifies a crucial distinction: there is interaction within predefined limits of a databank, and there is interaction capable of shaping programmed matter toward evolving, less predictable states—an axis Diodato links to research trajectories such as evolutionary electronics (Diodato 2012: 4). Virtuality, in other words, does not denote one technical setup; it marks an aesthetic-ontological range whose common feature is the evental constitution of image-bodies through coupled systems.

To consolidate these insights, Diodato proposes a functional characterization of the experience of virtual reality in terms of multimediality and interactivity (Diodato 2012: 4). Multimediality names the "representational wealth" of a mediated environment and is analyzable through amplitude (how many sensory channels are engaged) and profundity (the quality and density of sensorial information) (Diodato 2012: 4). Interactivity designates the user's participation in modifying form and content and can be specified through factors such as velocity (temporal response) and other parameters that regulate the coupling between action and appearing (Diodato 2012: 4). What matters theoretically is not a checklist of features but the claim that these parameters reorganize the very relation between aisthesis and noesis: the virtual body makes palpable an "original and reversible solidarity" between sense and thought because sensorial qualities are produced through computational operations without collapsing into a reduction of the world to number (Diodato 2012: 7). Diodato's second major move is to analyze how the user's body functions within virtual environments and why the virtual can generate experiences of presence that are neither simply real nor simply fictional. A striking conceptual strategy is the comparison with dream experience, not as a metaphor but as a

phenomenological laboratory for understanding immersion and the constitution of reality-effects. In the dream, one is fully immersed in a world that, from within, is maximally real; only from an external standpoint can it be called fictional. Diodato describes dream subjectivity as structurally split: the dreamer is "oneself and at the same time representative of oneself," that is, an avatar (Diodato 2012: 32). This is not a rhetorical flourish. It allows Diodato to define presence as a specific affective-perceptual intensity: the dream produces a "sense of presence," understood as an "intense perceptual quality of otherness or heteroaffectivity" (Diodato 2012: 32). Presence, in this frame, is not a guarantee of ontological actuality; it is an experiential effect generated in the relation between avataric self-representation and the dynamic memory fabric that constitutes the environment. The dream also clarifies the coexistence of presence and incoherence. Dream worlds can feel extraordinarily present even when they are narratively unstable, because coherence is not the primary condition of immersion; rather, immersion arises from the way memory and affect generate a world that resists external verification while maintaining internal force (Diodato 2012: 30–32). This analysis matters for virtual environments because it shows that presence is not a property that "belongs" to reality alone: it can be produced through specific relational structures—structures in which the subject is distributed across action, representation, and environment.

A further step in Diodato's theory is the critique of image concepts grounded in mimesis and reference. He argues that *simulacrum*[92] remains dependent on a mimetic structure where the image is ontologically tethered to something other than itself—always image-of, always defined through resemblance and model (Diodato 2012: 53). This raises the broader philosophical problem: should the image always be approached through origin, parentage, and reference? Should understanding an image always mean tracing it back to a model—nature, idea, divinity, world? (Diodato 2012: 53–54). Diodato reframes this as a historical-theological question because Western image theory is deeply entangled with the logic of the double, truth as conformity, and analogical metaphysics—the very structures that render the image secondary and derivative (Diodato 2012: 54). The virtual image-body disrupts this inheritance by presenting an image whose being is genetic-relational rather than representational: it does not merely stand in for something else; it

[92] Jean Baudrillard, *Simulacra and Simulation*. Translated by Sheila Faria Glaser (Ann Arbor: University of Michigan Press, 1994).

exists as an operative configuration of translations, interactions, and embodied engagements. This is also the deeper sense of Diodato's insistence that electronic pseudo-reality is not a layer interposed between subject and "real reality," but becomes part of the subject's environment and experience—thus constituting "a new reality" rather than an unreal substitute (Diodato 2012: 52). The virtual, on this account, forces a rethinking of the polarity reality/illusion: not the abolition of reality by virtuality, but the discovery of a circular relation in which reality is itself structured through regimes of illusion and mediation (Diodato 2012: 51–52).

The reflections on metaphors of the virtual extends the argument by showing how virtuality compels a rearticulation of basic coordinates—especially space, time, and sociality. Virtual space is first described as a field of qualitative and quantitative individuation related to the ontology of the "objects" that inhabit it, but Diodato then complicates this by arguing that the separation between space and objects is abstract and that space should be understood as event (Diodato 2012: 69). Virtual space, in other words, is not an inert container; it is a dynamic configuration whose meaning is relative to a typology of events and actions. This is why localization metaphors become pervasive: virtual entities—understood as event-bodies—seem to require spatial language to "take shape," to institute themselves as meaningful (Diodato 2012: 69). This evental spatiality also reframes the problem of community. In a discussion of networked collectivities, Diodato notes that virtual community models compel a redefinition of individual and community concepts because online belonging often depends on linguistic roles and identifiers more than on integrated embodied presence (Diodato 2012: 71). The consequence is not simply the dissolution of the subject into anonymity but the emergence of a new form of social individuation: a subject constituted through role, code, and communicational protocols—an individuation that is performative in the strict sense, because it is produced and maintained through participation in a structured environment. Diodato's conceptual clarification of "the virtual" turns on a careful differentiation between the possible and the virtual, following key moves by Pierre Lévy and, behind him, Deleuze. The virtual inherits from scholastic philosophy the sense of virtus (power), but Diodato stresses that virtuality should not be opposed to the real; it is opposed to the actual, since virtuality and actuality are "two different ways of being" (Diodato 2012: 91). The possible, by contrast, is already constituted and awaits realization "without any

change occurring either in its determination or nature," whereas the virtual is a "node of tendencies," a dynamic problematic complex that demands creative actualization (Diodato 2012: 92). The virtual therefore names not a dormant copy of reality but a structured field of tensions, constraints, and projects that animates an entity and contributes to its determination (Diodato 2012: 91).

Within this framework, the virtual body becomes an exemplary site where potentiality and actuality should be thought together without collapsing becoming into pre-scripted selection. Diodato's analysis culminates in the claim that the virtual body stages a distinctive double potentiality: because it exists as interaction and relative determination, it accentuates potentiality as co-principle rather than reducing becoming to the dominance of actuality (Diodato 2012: 100). This provides the ontological basis for why virtual environments can feel simultaneously rule-bound and open-ended: their determinacy is inseparable from a field of tendencies that are only partially preconstituted. The concept of the actor-spectator is Diodato's most direct contribution to performance-oriented media theory. Virtual bodies are described as *metaxu*—intermediary entities between object and event, thing and image—composing a hybrid interactive world that is immersive and corporeally engaging (Diodato 2012: 101). In this regime, the spectator cannot remain a distant observer of a represented world: the user's body mixes with the image-body to the point that one should speak of a "deep hybridization" between actor-spectator and virtual space (Diodato 2012: 101). This shift is illuminated through a comparative analysis of older visual regimes—painting and cinema—where distance remains structurally essential. Even cinema, despite movement and multiple points of view, preserves a spectatorial distance that organizes desire and identification; immersion remains partial because the screen space is not truly inhabited (Diodato 2012: 104). Virtual environments, by contrast, attempt to reorganize distance by staging a perceptual situation in which the subject's action is constitutive of the field of presence. The result is not the disappearance of mediation but its transformation: immersion is produced through complex technical orchestration that can aim at transparency while relying on intensified processes of mediation.

Diodato's final theoretical expansion addresses hypertext not merely as an information structure but as an aesthetic problem. Hypertext is defined as non-sequential writing composed of lexias connected by links that create multilinear pathways, and it

becomes hypermedia when these chunks include nonverbal data (Diodato 2012: 111). What interests Diodato is less the generic claim that hypertext is "nonlinear" than the question of what kinds of experience are produced when navigation becomes constitutive of meaning: disorientation, a sense of freedom, and the emergence of a distinct pleasure tied to the act of linking and traversal (Diodato 2012: 113–114). Hypertextuality thus exemplifies, in another register, the same ontological-aesthetic logic that structures the virtual body: meaning is generated through an interactive pathway rather than delivered as a closed representational content. Across these movements, Diodato's theory constructs a rigorous aesthetic ontology of virtuality: the virtual body is an interactive image-body whose reality consists in staged translation; immersion and presence are relational effects that can be analyzed through avataric structures (including the dream as limit-case); images should be rethought beyond simulacrum and origin; virtual space and community become evental formations; virtuality is a problematic field of tendencies rather than a possible awaiting realization; and the user becomes an actor-spectator through deep hybridization with a mediated environment. Diodato also emphasizes that the virtual is constituted through a peculiar intertwining of world and pathos. Because the virtual environment appears as an external world while simultaneously functioning as an affective apparatus, the user experiences a double structure: the virtual is encountered as an environment and as a modulation of affect. This double structure helps explain why virtual events can produce strong feelings of presence and consequence even when their graphical or physical realism is limited (Diodato 2012: 10–35). In addition, Diodato's analysis of "forms of expression" and the movement "toward the image" clarifies how virtual aesthetics are not reducible to visual representation. Expression in virtual environments is distributed across gestures, interactivity, latency, interface constraints, and programmable behaviors. The image becomes a surface for action and a site where agency is negotiated between user and system (Diodato 2012: 35–70). This framework will be crucial in the case-study chapter, especially for analyzing sandbox reenactments and platform concerts, where embodied participation is shaped by limited animations, avatar skins, and rule-bound possibilities that nonetheless generate affective intensity.

Again, Carbone and Lingua: Arche-Screen, Christian Genealogies, and Dividual Subjectivation

As exposed in the first half of the chapter, Carbone and Lingua's anthropology of screens begins from the claim that the screen is not merely a surface for images but a relational interface or threshold that organizes actions, affects, and modes of being-with. The screen is treated as a *dispositif* whose functions include showing and hiding, exposing and protecting, separating and connecting; these functions are not accidents but are rooted in long cultural genealogies (Carbone and Lingua 2023: 17–25). A decisive contribution of this theory is the reconstruction of the "arche-screen"[93] through the genealogy of the veil. The veil is not simply a metaphor. It is a screen form that makes explicit the co-implication of exposure and protection, showing and hiding, as a distribution of the visible and the invisible (Carbone and Lingua 2023: 46). In their reconstruction, the biblical Tabernacle veil functions as a regulator of relations: it protects human sight from an excessive divine presence while also distributing visibility through the images woven into it (Carbone and Lingua 2023: 48–49). So, their demand to analyze contemporary screen cultures genealogically becomes most consequential in the reconstruction of biblical and Christian screen logics. Here, screens are not treated as modern technological novelties but as *dispositifs* whose functions were elaborated through theological, ritual, and political controversies about the visible. By following the veil through biblical Judaism and Christianity toward early modern optical practices, Carbone and Lingua demonstrate that screen culture is deeply entangled with theological problems of mediation and transcendence.

The theory begins from the Tabernacle described in biblical Judaism, where spatial partition is organized by veils that separate the Holy Place from the Holy of Holies. The crucial point is that the veil is not merely a barrier: it mediates a relation to a presence understood as excessive, one that cannot be sustained by direct human eye contact. Protection is therefore not accidental but constitutive; mediation is required to make transcendence accessible without becoming destructive. The veil functions as a relational regulator that weakens direct contact and redistributes visibility into a bearable form

[93] See previous chapter titled *Gazes*.

(Carbone and Lingua 2023: 48–49). At the same time, the Tabernacle veil is described as woven with cherubim, meaning that it contains images even within a culture whose second commandment forbids the production of images. This is a central tension: the prohibition of images coexists with a divine injunction to produce images on the veil itself, implying that the screening *dispositif* already organizes a complex economy of authorized visibility (Carbone and Lingua 2023: 48–49). Christianity intensifies and transforms this screen logic through a decisive theological displacement: the Incarnation is interpreted as a new economy of mediation, in which the veil is no longer only a textile partition but is refigured through the body of Christ. The theory notes that Christian texts interpret the tearing of the Temple veil at the Crucifixion as the sign of a new *economy*, and explicitly recalls the reading (via Hebrews) that the Incarnation replaces the veil of the temple with the veil of Christ's flesh. The flesh remains a veil—thus preserving mediation and the regulation of excess—but it institutes a new distribution of visible/invisible because divinity becomes visible in a body that can be seen (Carbone and Lingua 2023: 49–50). This move is foundational for what Carbone and Lingua call a new *iconomy*: if God manifests in visible form and the Son is "the image of the invisible God," then the legitimacy of images becomes thinkable within a theological structure that had previously been haunted by idolatry (Carbone and Lingua 2023: 50).Within this transformation, the theory gives particular weight to acheiropoietic images—images "not made by human hands"—because they dramatize the screen as mediation between excess and access. The narrative of the Mandylion (Christ's face imprinted on cloth and offered to Abgar) is treated not simply as legend but as a screen paradigm: the brightness of Christ's face cannot be captured directly, so the relation is deflected toward an imprint on a cloth that both shields the excess and enables vision through an image. The veil remains protective, but protection now operates precisely by redirecting sight into a screened image (Carbone and Lingua 2023: 51–52). This structure becomes decisive in icon theory and iconoclastic controversies, because it offers a model of visibility that is neither direct presence nor forbidden representation, but mediated access: the visible as pathway to the invisible, organized through screened imprint and prototype (Carbone and Lingua 2023: 52–53). This configuration becomes a crucial argument within iconoclastic controversies because it indicates that images can be authorized within a system that also fears idolatry. The transition to a specifically Christian screen logic is articulated through the

Incarnation: the Letter to the Hebrews interprets Christ's flesh as a new veil, a mediation that enables a re-distribution of the visible and invisible because God becomes visible in a body (Carbone and Lingua 2023: 50), as also explicitly evoked by the very beginning of the Gospel of John (Jn 1: 14).

This Christian genealogy is not presented as antiquarian background and does not merely add historical and cultural depth. It clarifies contemporary screen culture's ambivalent ethics. Screens promise access while protecting from excess, simultaneously regulating and insulating; they intensify desire for presence while instituting buffers, frames, and thresholds.; they invite exposure while enabling concealment; they cultivate desire for visibility while organizing regimes of surveillance and control, always with the body as the ultimate, ambivalent core of such an epochal cultural changing. This proposal also advanced as a structural explanation for the persistent ambivalence of screen culture: it is treated as a long-duration formation that continues to inform modern configurations of visibility, even where theological contents are secularized into technological and political expectations (Carbone and Lingua 2023: 46–53) and manufacts.[94]

This genealogical work becomes directly contemporary in the critique of the ideology of "Transparency 2.0." Carbone and Lingua analyze the contemporary demand for total exposure not as mere coercion imposed from above but as a social dynamic that appears voluntarily assumed: a "self-generated" imperative to put oneself on display, sustained by participatory pleasures (shares, likes, attention) even when it produces vulnerability and exploitation (Carbone and Lingua 2023: 121–124). The concept of exposure is therefore not treated as the opposite of protection; rather, it is analyzed as a paradoxical desiring machine in which subjects seek the very visibility that renders them governable. The theory's distinctive contribution here is to insist on the dialectical structure of ocular power: transparency that claims to empower horizontal social visibility can invert into vertical forms of surveillance and extraction, where data becomes the currency exchanged for access and where exposure facilitates exploitation by political,

[94] On this regard, close to a ritual and magical charge transferred to objects, technologies, and manufacts see the chapter titled *Anthropologies*, in particular the analysis dedicated to Arthur C. Clarke but also Remo Bodei, *La vita delle cose* (Bari-Roma: Laterza, 2009) and Franco La Cecla, *Surrogati di presenza: Media e vita quotidiana* (Bologna: Bébert Edizioni, 2015). As forerunner of this topic, between the atavistic fear of new technologies and the not automatically better relationship with them of the contemporaneity see also Aby Warburg, *Il rituale del serpente*, translated by Gianni Carchia, *aut aut*, no. 199-200 (1984): 17-39.

economic, and technocratic apparatuses (Carbone and Lingua 2023: 124–126). Importantly, the screen's protective function does not disappear in this regime; it mutates. Surveillance itself is shown to carry a two-faced nature—control and care, proscription and protection—so that even as transparency becomes subjugation, it can also be rationalized through security and health narratives (Carbone and Lingua 2023: 126–127). The pandemic becomes a privileged scene for this ambiguity: continuous monitoring can be framed as protection while also normalizing intensified regimes of visibility. Read through the earlier Christian genealogy, this analysis gains added depth: the desire for exposure and the promise of disintermediation are not simply modern novelties, but contemporary reconfigurations of older screen logics that manage access to "excess"—now secularized as social recognition, political power, or data-driven control. In this sense, "Transparency 2.0" does not abolish the arche-screen; it radicalizes one pole of it (exposure) while transforming the other (protection) into infrastructural and algorithmic management (Carbone and Lingua 2023: 121–127).

When Carbone and Lingua's anthropology is taken as a whole, its relevance for present-day media experience—especially in phygital and metaverse-adjacent environments—becomes structurally clear. First, the arche-screen provides a rigorous framework for analyzing how contemporary environments can expand "screening" beyond discrete devices: surfaces and wearables do not abolish screens; they redistribute the arche-screen functions across ambient interfaces (Carbone and Lingua 2023: 9–10; 18–21). Second, the Christian genealogy clarifies why contemporary cultures of mediated presence are ethically ambivalent: the desire for access and visibility is inseparable from protective buffering, from deflection, and from the management of excess through screened mediation (Carbone and Lingua 2023: 46–53). Third, the analysis of "Transparency 2.0" shows that exposure is not simply imposed but desired, and that protection mutates into infrastructural and algorithmic forms that can both care for and control subjects (Carbone and Lingua 2023: 121–127). Fourth, the dividual condition offers a conceptual anatomy of how users inhabit contemporary environments: through partitioned identities, context-dependent roles, datafied traces, and relational aggregations that are continually recomposed (Carbone and Lingua 2023: 147–154). In short, Carbone and Lingua's theory supplies an integrated account of how screens operate as relational thresholds, why Western screen culture bears deep Christian genealogical

structures of mediated visibility, and how contemporary (multi-)subjectivation becomes dividual under conditions of platform governance and ubiquitous interfaces. These three dimensions form a powerful analytic basis for studying current media practices where presence, participation, spectacle, and reenactment are organized through programmable environments—precisely because the theory does not reduce screens to images, nor subjectivity to isolated individuals, but treats both as historically layered, functionally chiasmic, and politically consequential *dispositifs*.

Some performance studies contaminations

Schneider's theory of reenactment, developed in *Performing Remains: Art and War in Times of Theatrical Reenactment*,[95] challenges a dominant assumption in performance studies: that performance disappears while documentation remains. By "reperforming" an earlier event and by "giving life" a new one within it, Schneider frames performance as a medium of temporal folding rather than of pure vanishing (Schneider 2011: 87–90). Reenactment becomes a privileged practice for thinking about how bodies carry and produce historical time. A central claim is that the live act does not simply precede recording; it can follow, repeat, and remain after that which has been set down. Drama, liturgy, and reenactment all demonstrate that "liveness" can be structured as a repetition of precedent materials, performed again "for the first time" (Schneider 2011: 92–94). This insight destabilizes linear models of time in which an original event is followed by representation. Instead, events and their repetitions are understood as co-constitutive: the repetition is not secondary but actively produces what the event is, socially and politically. Schneider also emphasizes the ethical and political stakes of reenactment, especially in contexts of violence and war. Reenactment is not a neutral replay; it can reopen wounds, redistribute agency, and stage contested memories. The "performance remains" are not residues that simply survive; they are active forces that

[95] Rebecca Schneider, *Performing Remains: Art and War in Times of Theatrical Reenactment* (London and New York: Routledge, 2011). Guided by these assumptions, almost all the art of Milo Rau revolves around the practice of politicized reenactments; see Milo Rau, "New Realism and the Contemporary World: The Re-enactments and Tribunals of the International Institute of Political Murder." *Documenta* 34, no. 2 (2016): 121–137.

continue to circulate and to be negotiated in embodied practices (Schneider 2011: 95–110).

This theory becomes crucial for understanding why contemporary platform reenactments—such as the rapid restaging of political violence—should not be treated only as memes, satire, or trivial entertainment. They can function as practices of temporal folding in which publics negotiate trauma, power, and historical meaning through iterative performance. At the same time, platform reenactment differs from theatrical reenactment because it is shaped by programmable affordances and by the circulation of pre-structured/coded avatar and algorithmic objects.

Always on the side of performance studies, as pioneer of performance anthropology in *The Ritual Process: Structure and Anti-Structure*[96] Victor Turner developed an original theory of the ritual process to offer a particularly functional framework for analyzing events as transformative social structures. Rather than treating ritual as a static tradition, Turner conceptualizes it as a process that reorganizes social relations through phases of separation, liminality, and reaggregation. Liminality names a threshold condition in which ordinary social structures are suspended, and participants encounter a space of ambiguity, potentiality, and transformation (Turner 1977: 94–106). In liminality, roles and hierarchies can be temporarily inverted or dissolved. Turner identifies "communitas" as the intense feeling of social togetherness that can emerge in liminal spaces: a sense of unstructured community that is not identical to the stable structures of everyday life (Turner 1969: 96–130). Communitas is not simply a positive experience; it exists in tension with structure and can be reabsorbed into institutional forms. Yet its emergence helps explain why certain events—pilgrimages, festivals, rites—produce strong affective bonds and reconfigure identities. Turner also connects ritual to social drama: conflicts and crises in a social field can be staged, negotiated, and transformed through performative sequences that resemble ritual structures. This perspective becomes relevant for analyzing how contemporary platform events—concerts, protest simulations, reenactments—can function as ritualized thresholds. They often coordinate dispersed participants in time, create temporary communitas, and stage crises or desires in ways that feel collectively meaningful.

[96] Victor Turner, *The Ritual Process: Structure and Anti-Structure* (Ithaca, NY: Cornell University Press, 1977).

For the purposes of this section, Turner's concepts are not applied mechanically. The question is how liminality and communitas are transformed under platform conditions: when the threshold is mediated by screens; when participation is organized through avatars and interfaces; and when the event is simultaneously a communal experience and a commodity. The next case-study chapter will therefore explore how platform rituals can produce communitas while also remaining entangled with spectacular economies and dividual subjectivation.

Shifting softly to the human-machine interface, Hodder's recent theory of entanglement in *Entangled: An Archaeology of the Relationships between Humans and Things*[97] provides a material and relational lens for analyzing human–thing dependencies. Rather than treating objects as passive instruments, an entanglement describes networks of dependence in which humans depend on things, things depend on humans, and both are caught in chains of constraint that can become increasingly difficult to escape (Hodder 2012: 1–20). Following Hodder not-fully positive perspective, Entanglement is not simply interconnection; it is a condition of constraint. Dependencies generate obligations: to maintain infrastructures, to repair systems, to adapt behaviors to material affordances. Over time, these dependencies can trap agents in "tangles" where agency is distributed and limited by the very relations that enable action (Hodder 2012: 20–40). This framework becomes particularly useful for analyzing platforms as infrastructures: they do not merely host content but shape what can be done, said, and experienced through technical constraints, moderation policies, economic incentives, and algorithmic governance. Applying entanglement to contemporary media does not mean reducing platforms to material objects. It means analyzing the ecology of dependencies that binds users, technologies, institutions, and cultural practices: users depend on platforms for visibility and community; platforms depend on user labor and data; and both depend on infrastructural systems (servers, networks, devices) that constrain experience. The metaverse, as an ecology of platform spaces and practices, can thus be analyzed as an entanglement in which attraction events are produced within and through chains of dependency—technical, economic, and political.

[97] Ian Hodder, *Entangled: An Archaeology of the Relationships between Humans and Things* (Oxford: Wiley-Blackwell, 2012).

Alloa: *The Theatre of the Virtual*

In apparent echo of Artaud virtual reality, and in continuity with merleaupontian scholars already presented, Alloa's "theatre of the virtual"[98] offers a unique conceptual bridge between performance, philosophy, and the analysis of virtuality we are proposing here. Alloa's theory is constructed as a corrective to two recurrent reductions that structure debates on embodiment and performativity: the tendency to treat the body as an instrument that an agent uses (a residual representational model of performance), and the tendency to treat transformation as something that occurs only through actualized practice (a narrowly pragmatic model of bodily change). The chapter opens from a polemical but precise provocation drawn from performance discourse—Schechner's[99] refusal of instrumentality ("Your body is not your 'instrument,' your body is you")—in order to reframe performativity as an epistemic and ontological problem: any account of performance that presumes an operator external to the body misses that action should pass through embodiment as its irreducible medium (Alloa 2014: 147). The stakes, for Alloa, are not merely terminological. They concern how to conceptualize a body that is neither an object manipulated by a subject nor a closed physiological system that predetermines action, but a dynamic field of orientations, tendencies, and expressive possibilities. This reframing helps explain why Merleau-Ponty became a privileged reference in late twentieth-century performance and body art discourse, even though his writings rarely address the performing arts as such. Alloa reconstructs the paradox: Merleau-Ponty is repeatedly mobilized by practitioners and theorists of performance (from body art to dance studies) as the philosopher of embodied expressivity, yet he appears, at first glance, "ill-informed" about the specificities of practices such as dance, and far more engaged with painting, literature, and perception than with theatre or choreography (Alloa 2014: 148). The chapter's guiding question emerges from this tension: if Merleau-Ponty did not theorize the performing arts directly, what can his conceptual resources nevertheless contribute to an account of staging, acting, and performativity—especially when these

[98] Emmanuel Alloa, "The Theatre of the Virtual: How to Stage Potentialities with Merleau-Ponty." In *Encounters in Performance Philosophy*, edited by Laura Cull and Alice Lagaay (London: Palgrave Macmillan, 2014): 147–170.
[99] See Richard Schechner, *Environmental Theater* (New York: Hawthorne Books, 1973), particularly related to the inquiry of the present work, even if strictly focusing on theatre.

practices involve not only the actual body "here," but a body engaged with what is not yet actual, not yet given, but nevertheless operative?

A decisive step in Alloa's argument is the critical staging of two influential objections to merleaupontian embodiment, because these objections illuminate what is at risk when "transformation" is thought only as a matter of either social inscription or bodily training. First, Alloa revisits Butler's critique, according to which Merleau-Ponty risks leaving embodied subjectivity insufficiently determined by social and discursive framings; for Butler[100], Merleau-Ponty underestimates how the body is continuously performed by norms, while at the same time, paradoxically, he overdetermines the body through physiological and behavioral structures (Alloa 2014: 149). Second, Alloa engages Shusterman's somaesthetics, which broadly accepts phenomenological accounts of somatic experience but faults Merleau-Ponty for insufficient openness to transformation: Merleau-Ponty's emphasis on a relatively stable body schema and spontaneous syntheses can appear to leave too little room for deliberate alteration, self-fashioning, and the cultivation of new bodily capacities (Alloa 2014: 149–150). These critiques do not function in Alloa's text as problems to be "refuted" from the outside; rather, they name a limit internal to many accounts of embodiment: transformation is frequently imagined only as social-discursive determination or actual, explicit practice.

Alloa's intervention is to widen the concept of transformation by introducing the "virtual body" as a third term that disrupts this binary. The virtual body designates a domain that is neither a mere description of the present state of things nor a normative prescription of what the body should become through practice. It is, rather, an exploratory space "between" description and prescription: a domain in which possibilities are tested, rehearsed, oriented, and staged without necessarily being actualized in the strict sense (Alloa 2014: 150). This is crucial for performance theory, because theatrical and performative work so often operates precisely in this intermediate register: acting, rehearsal, and staging mobilize capacities that are not reducible to what is currently actual in the performer but are nonetheless not purely imaginary in the sense of a private, consequence-free fantasy. The actor's body is transformed not only by training and execution, but also by the organization of tendencies, orientations, and potential gestures

[100] See Judith Butler, "Sexual Ideology and Phenomenological Description. A Feminist Critique of Merleau-Ponty's Phenomenology of Perception", in *The Thinking Muse*, Jeffner Allen and Marion Iris Young (eds.) (Bloomington: Indiana University Press, 1989): 85-100.

that structure how the body can become. To articulate this intermediate domain with philosophical rigor, Alloa constructs a conceptual genealogy that distinguishes the virtual from the possible and from the actual. He begins by revisiting classical and modern metaphysical distinctions between essence and existence (including the idea, associated with scholastic formulations, that existence "complements" essence) and then emphasizes Kant's decisive claim that existence is not a predicate: the real does not simply add a property to a concept; it changes the ontological status of what is at stake (Alloa 2014: 151). In this frame, the famous example of "100 possible florins" versus "100 real florins" becomes more than a didactic point; it clarifies that the passage from possibility to reality is not a mere enrichment of a concept but an event of actualization that cannot be fully derived from the essence of what is possible (Alloa 2014: 151). The theoretical question thus becomes: how to think becoming without either presupposing that what happens was already possible as a pre-formed set of options, or excluding becoming altogether by treating the actual as a closed field?

Alloa formulates the problem as a critique of two symmetrical reductions. On the one hand, possibilism projects into the past a repertoire of possibilities that only appear to have been there once a reality has been realized; following Bergson, Alloa underscores a "retrograde movement" that reconstructs the conditions of realization after the fact, as though reality had simply selected from a list of pre-existing options (Alloa 2014: 151). On the other hand, actualism abolishes contingency by treating the real as fully determined within the actual, leaving no conceptual space for genuine otherness or becoming (Alloa 2014: 152). Both positions, in Alloa's formulation, fall into what he calls an "ideology of the intrinsic," unable to think contingency except as irrational residue, and unable to think becoming except as the unfolding of what was already contained in identity (Alloa 2014: 152). Against these reductions, the virtual is introduced as a way to conceptualize latency, reserve, and tension—becoming not as the execution of a pre-given possibility, but as differentiation that produces novelty. This shift becomes legible through Alloa's reading of Merleau-Ponty's attention to movement and gesture, particularly the idea that movement is not primarily locomotion ("change of place") but the "internal formulation of a doing"—a bodily breaching toward what it departs from and what it tends toward (Alloa 2014: 153). The significance of this claim for staging is considerable: gesture is not the translation of an inner meaning into an external sign, but

an operation in which meaning is generated in and through the body's directedness. Alloa reinforces this by highlighting Merleau-Ponty's insistence on incompleteness as a structural feature of movement: being-in-movement is never fully closed, never exhausted by the act that actualizes it (Alloa 2014: 153). Staging, in this sense, becomes an art of organizing incompleteness: a practice that holds the body in a dynamic relation to what it is becoming, rather than presenting completed forms as static results.

To make the virtual body more concrete than a metaphor, Alloa mobilizes an experimental and phenomenological motif: the reorganization of bodily orientation when habitual perceptual coordinates are disrupted (for instance, through the inversion of visual input). What matters is not the anecdotal curiosity of perceptual adaptation but the conceptual consequence: bodily space is not merely grounded in proprioception as an internal foundation; it can be reoriented through a "virtual specular image" that reorganizes the field of action. In this process, the lived body is "redoubled" by a virtual body that does not simply supplement the lived body but in a sense precedes it, operating as a primordial orientation toward a task (Alloa 2014: 154). The virtual body, here, is the body's anticipatory structure: the way it projects itself toward action, reconfigures its own coordinates, and finds a new verticality or stability within altered conditions. However, Alloa's argument is not a simple celebration of Merleau-Ponty. A critical inflection occurs when the chapter asks whether Merleau-Ponty truly escapes the philosophical model of a subject who "possesses" the world. Alloa notes that, particularly in Merleau-Ponty's earlier writings, the virtual risks being reduced to a "system of possible actions" oriented around an "I can," leaving intact a subtle priority of an ego that retains its resources within itself (Alloa 2014: 155). If the virtual is merely the set of actions available to an embodied subject, then the theory may relapse either into possibilism (virtual as pre-given options) or into a covert actualism (virtual as what the subject already has in reserve). The question becomes: how to conceive virtuality as a real dimension of being that is not subordinated to an already constituted subject? At this juncture, Alloa turns to Deleuze's conceptualization of dramatization and to organological accounts (such as Ruyer's), in order to model the virtual as a generative process rather than a list of possibilities. What is at stake is the relation between "theme" and "role": a theme exists only in and through its variations, while a role depends on the theme it plays; the virtual is the productive drama through which solutions emerge that were not contained as givens

in the conditions of the problem (Alloa 2014: 156). The theatricality of this model is explicit: life is described in terms of staging, and the world itself can be imagined as a theatre where roles dominate actors rather than actors merely expressing pre-existing roles (Alloa 2014: 156). Yet Alloa also registers a difficulty: even Deleuze's attempt to give consistency to the virtual leaves unresolved tensions, which is precisely why theatre and acting become crucial as empirical-conceptual laboratories for virtuality.

The most distinctive contribution of Alloa's chapter arrives when theatre is positioned not as an external example but as the site where Merleau-Ponty's early phenomenology and late ontology can be "stitched together." Alloa identifies in Merleau-Ponty's lectures on child psychology and pedagogy an unusually precise concept of theatrical "drama": the sense of an actor's acting is never positively given but exists by contrast and is located "in the virtual center of his gestures" (Alloa 2014: 157). This formulation is fundamental because it defines acting as a practice whose meaning is not contained in a representational content prior to performance, nor in an interior intention that would then be expressed; meaning is situated in the virtual center—a dynamic relational field organized by gesture, orientation, and the tension between what is shown and what is withheld. Acting, accordingly, becomes a paradigm for how virtuality operates: it is the site where significance is neither fully actual nor purely absent, but held in suspension as an operative potentiality. Alloa extends this insight by emphasizing theatre's irreducibility to representation, especially once the audience is considered as part of the *dispositif*. Drawing on theatrical descriptions (including Proust's attention to the theatre house), Alloa suggests that the audience cannot be reduced to the invisible logical condition of representation (the "fourth wall"); rather, the theatre house operates as a threshold space that conditions the stage and is itself staged. The audience is distributed spatially and socially in ways that already prefigure performance: the spectators are not outside the event but are implicated as participants in a pre-stage where they are "inevitably already actors" (Alloa 2014: 158). Theatrical space, in this account, is a topology of virtuality: an arrangement that produces potential roles, positions, and acts before any particular action is performed. This threshold model is reinforced by a key merleaupontian claim about expression that Alloa foregrounds: the expressive operation "brings the meaning into being and makes it effective," rather than translating a meaning that would already exist elsewhere (Alloa 2014: 159). The actor's role, like a

musical phrase or a painterly gesture, does not preexist its realization; it becomes what it is only in and through the corporeal-material event of performance. Hence, no aspect of the actor's physis—voice, gait, bodily grain—can be treated as inert matter separate from meaning (Alloa 2014: 159). This is not an aesthetic embellishment; it is an ontological proposition about how sense emerges: staging is a practice in which meaning is generated through the materiality of action, and virtuality is the dimension that allows this generation without presupposing a fully formed content.

Alloa then introduces an exemplary theatrical technology of virtuality: the mask[101]. The mask is not treated merely as a historical curiosity but as a conceptual operator for understanding the "persona" as a medium that can take on form without losing the capacity to take on other forms. The actor becomes a receptacle of "possible figures," not in the weak sense of hypothetical options but in the strong sense of simultaneity: the virtual appearing is the overlap of compossibles in act, a dimensional depth where the actual and the inactual intertwine rather than exclude each other (Alloa 2014: 160). Here virtuality names a mode of presence that is structurally plural: what appears is never simply what is, but what is appearing as the overlap of what could be otherwise within the very act that is taking place. This leads to one of the chapter's most consequential claims: virtuality cannot be relegated to a sanctuary of the imagination. Alloa criticizes the philosophical gesture (associated, in this context, with Sartrean distinctions) that would protect the imagination as a realm "where nothing happens," exempt from efficacy. Such a delimitation would allow enjoyment of fiction precisely because it remains consequence-free—contained within a frame (Alloa 2014: 161). Against this, Alloa argues that to concede the virtual character of any stage is to admit that its delimitation is not purely logical but horizontal and unstable: the stage implies lateral overflow; it "bites at its own edges" (Alloa 2014: 161). Theatrical virtuality thus entails permeability: what happens on stage is not sealed off from the world but is structurally oriented toward spillover, implication, and reconfiguration of relations.

Finally, Alloa's theory expands beyond aesthetics toward political architecture. The stage, as a threshold, becomes a model for how publics are formed and how exclusions are managed. Alloa traces how political space becomes sensible through the genesis of the "spectator's gallery": in ancient assemblies, those excluded from speech

[101] See the chapter titled *Anthropologies*, specifically the analysis proposed by Hans Belting.

could still participate as spectators within a permeable public space; modern parliamentary architecture often abolishes such permeability; revolutionary assemblies reintroduce spectators' galleries, as though political transformation requires a "third" position—simultaneously witness and reservoir of future actors (Alloa 2014: 162). This political motif is not ancillary. It situates the theatre of the virtual as a theory of participation: staging potentialities is inseparable from the distribution of who can appear, who can watch, who can speak, and how spectatorship can become incipient agency.

Taken as a whole, Alloa's theory offers a powerful bridge for analyzing contemporary mediated environments without collapsing them into either simulation or spectacle alone. The theatre of the virtual conceptualizes performativity as the staging of potentialities: a practice that organizes embodiment through orientations, thresholds, and expressive events in which meaning is generated rather than transmitted (Alloa 2014: 147–162). It thereby provides an analytic vocabulary that will be mobilized in the next chapter to read platform environments and phygital performances: not because such environments simply "are theatre," but because they likewise construct *dispositifs* where participants oscillate between spectator and actor, where identities are held in suspension as overlapping roles, and where boundaries of the "stage" are operationally permeable rather than logically sealed. Crucially, the chapter also furnishes a critical warning: the virtual is not an interior fantasy-space but a dimension of efficacy, overflow, and political distribution of participation—precisely the dimension that should be tracked when metaverse practices are interpreted as contemporary regimes of staged potentialities rather than as neutral technological containers. The virtual, in this framework, is not the opposite of the real but the dimension of potentialities that can be actualized through staging. Theatre is described as a privileged site for the exploration of virtuality because it can hold multiple possibilities in suspension and can make potential transformations perceptible. This approach could be relaunched by platform environments, which stage "worlds" of action and identity: avatars, scripts, and rule systems enable participants to inhabit potentialities that are neither purely fictional nor fully actual in the everyday sense.

For the present inquiry, Alloa's framework is valuable insofar as it clarifies that metaverse practices can be understood as staging perceptual, cultural and technological potentialities. However, in an only partial similarity with the theatre, platform

environments stage these potentialities through programmable constraints and algorithmic structures. The theatre of the virtual thus becomes a conceptual anchor that will be especially productive in the case-study sequence, where *OLEANDRA* and *Festen. Il gioco della verità* are approached as two 'reverse' metaverse: a theatrical staging that makes the potentialities and constraints of avataric interaction visible on stage without providing immersive simulation.

If the first movement of this chapter has shown that immersive experience should be rethought through embodiment, theatricality, and the staging of potentiality, the next step will be to ask how these forces are organized at the level of media form. The genealogy of attractions makes it possible to move from embodied presence to the broader phygital grammars through which wonder, address, and participation are structured.

Towards (or backwards?) a Metaverse of Attractions

The preceding analyses make it possible to articulate a concept that synthesizes the genealogy of attraction with the contemporary conditions of platform mediation. The "Metaverse of Attractions" is proposed here not as a retrograde, nostalgic ideal, nor as a claim about a single technological domain, but as a functional analytical framework for describing an emergent medial regime in which attraction grammars organize experience across phygital environments. In this sense, a useful point of departure is to recognize that spectacularization—here intended as a tendence to performativity within attraction culture—often accompanies moments of medial novelty as an atavistic cultural response to perceived technical threat. When a new apparatus appears, cultures repeatedly stage it as *marvel* and *shock*—not only out of curiosity, but also as a way to exorcise the fear that a new medium might displace something "essential" in the human (a fear often narrated, in modernity, through the recurrent colonial trope that capture technologies "steal the soul"[102]). In this sense, XR and "the metaverse" operate today not merely as toolsets but as paradigms of cultural thought: they reorganize imaginaries of presence, personhood, and sociality through the

[102] As recalled also by Michael Taussig in the chapter *Anthropologies*.

same ambivalent mixture of wonder and apprehension that characterized photography and early cinema's emergence—where the apparatus was experienced as both enchantment and disturbance, as a promise of new worlds and a destabilization of the old.[103]

Thus, rather than being icons that "strive to deny themselves and their status as images", as Pinotti suggests[104], immersive experiences may be more productively understood as arche-screenic. Following this line, at most, they are apparatuses which negate themselves, since a first strong impression of reality is very quickly followed by the clear and certain awareness that what we are dealing with are images—even more so when they take the form of three-dimensional digital renderings. This is the crucial point: immersive experiences are less bodily experiences subordinated to images than medial experiences that take place through the body. Their genealogy, as this dissertation attempts to show, should therefore be traced no longer, or not only, to cinema, but also to the performing and ritual arts, which are themselves non-screenic only in appearance but, in the deeper sense, particularly arche-screenic. In this sense, in XR experiences the novelty at stake does not lie in the movement of images as such, since moving images were already central to cinema. The real novelty lies instead in the movement of the apparatus itself, as happens in theatre when the scenography shifts, but above all in the fact that, in XR, this apparatus is set in motion directly through the body of the user, who in turn moves through it more than through the image alone. What emerges, then, are moving arche-screens activated by our own direct bodily experience[105]. The realism of the experience is thus produced more by bodily movement than by the image itself. Otherwise, just as the advent of photography generated technophobic reactions and predictions about the imminent disappearance of painting—predictions quickly disproved, since Impressionism and Expressionism abandoned the pursuit of fidelity—so too the performing arts would long ago have ceased to sustain belief in theatrical practice with the arrival of the first digital reproductions. Evidently, that is not what happened.

[103] See the chapter titled *Anthropologies*.
[104] See the earlier chapter *Bodies*.
[105] This is why gesture studies compared in the chapter titled *Bodies*, and why the theory of theatrical machines will return further in the chapter titled *Simulations*, where such machines clearly appear in XR as medial as well as technical-scenographic.

Definition, Scope and Constitutive Principles

The Metaverse of Attractions designates a regime in which platforms and hybrid environments privilege event-based address over narrative coherence, foreground apparatus exhibition over transparent representation, and mobilize iterative reenactment and synchronized participation as primary modes of producing presence. It describes an ecology of practices—user-generated reenactments, protest simulations, platform mega-events, theatrical remediations—that already operate across games, social platforms, live performance, and screen cultures. This regime is "metaverse" not because it necessarily requires immersive headsets or persistent three-dimensional worlds, but because it involves networked environments in which sociality, identity, and action are mediated through programmable spaces and extended bodies. It is "of attractions" because these environments frequently organize experience through modules of spectacle and address that solicit awareness of mediation, affective intensity, and participatory co-presence. In this sense, the concept generalizes the attraction grammar beyond early cinema and revolutionary theatre while preserving its central features: eventfulness, confrontation with the apparatus, and the production of a spectator-participant through direct address (Gunning 1986: 64–66; Tret'iakov 2006: 19–23). Yet the contemporary scene also adds a decisive twist: the Metaverse of Attractions seems to tend toward opera-totality—a renewed aspiration to a *Gesamtkunstwerk*[106] in which heterogeneous medial logics converge. XR events routinely braid together: the theatrical primacy of real-time performance and co-presence; the cinematic tradition of illusion and effect; the televisual regime of camera selection and live direction; and the infrastructural and aesthetic grammar of videogames (engines, assets, physics, interaction loops). The "totality" at stake is not an achieved synthesis, but an operative tension: a hybrid assemblage that repeatedly *promises* wholeness (immediacy) while *displaying* its seams and limits (hypermediacy).

Seven interrelated principles can be derived from the theoretical pathway developed in this chapter and will be mobilized analytically in the dedicated case-study chapter.

[106] As already and further recalled in the present and following chapter titled *Environments*.

Modular event-structures: the dominant unit of experience is not the continuous plot but the module: a scene, loop, vignette, scheduled event, or template that can be repeated, shared, and recombined. This derives from attraction's precedence over narrative (Gunning 1986: 63–66) and becomes intensified by platform affordances that support remix, templating, and circulation.

Apparatus exhibition and hypermediacy: platforms stage their own affordances as part of the experience. Even when they promise immediacy, they frequently cultivate hypermediacy through interfaces, overlays, chat, visible constraints, and "settings" that become dramaturgical elements (Bolter and Grusin 1999: 5–15). Attraction here becomes, quite literally, the exhibition of the platform itself.

Spectacular technics as a theatre–cinema relay: XR experiences revive, in a new key, an early-cinematic logic of "special effects" and perceptual marvel—recalling how trick films and illusionism made cinema's novelty visible as *transformation*. A comparable "game of dimensionality" emerges when performers are staged in VR as volumetric presences, avatars, or interactive image-bodies: their ontological status oscillates between body and image, actor and effect. At the same time, the regime remains tethered to theatre insofar as real-time performance and the event's temporal centrality continue to function as privileged operators of liveness. What is new is that theatre's liveness is increasingly co-produced by computational procedures and display pipelines—producing a hybrid in which the *Méliès-like* logic of effect and the theatrical logic of co-presence coexist as two poles of the same attraction.

Camera plurality and the televisualization of immersion: a distinctive feature of platform-based and XR events is the multiplication of camera positions—virtual cameras that can be selected, switched, or algorithmically curated. This introduces a televisual grammar inside immersive space: the spectator's relation to the event can become a relation to direction, framing, and broadcast-like choices, even when the environment is navigable. The point is not that XR becomes television, but that the metaverse of attractions often internalizes televisual logics as part of its apparatus exhibition: *the event is not only lived; it is also continuously framed.*

Iterative reenactment as a mode of presence: reenactment functions as a temporal technology: events are re-entered through repetition, producing performance remains that circulate and mutate (Schneider 2011: 92–110). Under platform conditions, repetition

becomes both cultural and technical: the same scene can be rebuilt from a template, restaged through standardized assets, and redistributed at scale—enabling rapid restaging of political events and collective processing through iteration.

Screen thresholds and the ethics of exposure/protection: the metaverse of attractions operates through screens understood as arche-screens: interfaces that regulate relations to excess, distribute visibility and invisibility, and mediate desire for exposure (Carbone and Lingua 2023: 46–52). This highlights why metaverse experiences are often simultaneously intimate and protected, confronting and buffered—why "being there" so often coincides with being filtered, framed, and governed.

Constraint-based platform dramaturgy, entanglement, and minimal stability: attraction events emerge within infrastructures that constrain agency: rules, moderation, monetization, device ecosystems, and geopolitical pressures. Users and platforms are entangled in dependencies that shape what can be performed and how it can circulate (Hodder 2012: 20–40). A crucial implication follows: the Metaverse of Attractions is built upon a support whose stability is frequently minimal. Platforms update, engines change, assets break, permissions shift, and formats become obsolete. This produces a structural resonance between the ephemerality of performance (its evental disappearance) and the ephemerality—indeed the evolutionary fragility—of its digital supports. The medium's "memory" is at once extensive (stored, replicated, networked) and precarious (versioned, deprecated, contingent). Infrastructural change thus becomes a dramaturgical condition: what can appear and endure is inseparable from what the platform can continue to run.

Limits and Critical Stakes

The developed idea of Metaverse of Attractions is not intended to romanticize attractions as inherently emancipatory. The genealogies already show that attractions can serve both avant-garde activation and fairground spectacle[107]. Under contemporary conditions, attractions can facilitate collective processing, solidarity, and experimentation; they can also intensify spectacular capture, accelerate the

[107] See the following chapter titled *Simulations*.

commodification of trauma, and normalize regimes of surveillance. The Metaverse of Attractions therefore requires an explicitly critical analysis attentive to political economy, screen ethics, and infrastructural constraints.

Two critical stakes are particularly salient. First, dividual multi-subjectivation intensifies under platform conditions. Participation is mediated through partitioned identities, data traces, and avataric fragments; this can enable multi-subjectivity playing and anonymity, but it also facilitates capture and governance through metrics and profiling (Carbone and Lingua 2023: 146–150). Second, the genealogy of the screen suggests that contemporary desire for exposure is not merely a modern pathology but part of a longer cultural logic in which mediation promises access while regulating excess—today operationalized as economies of visibility and attention (Carbone and Lingua 2023: 48–52; 107–126). In this light, the metaverse of attractions can be understood as a contemporary reconfiguration of how publics encounter excess—political violence, collective crisis, celebrity spectacle—through mediated thresholds. Attractions become techniques for making excess bearable, shareable, and actionable; but they also become techniques for managing and monetizing excess. The concept thus invites further research on platform rituality, reenactment ethics, and the politics of presence in phygital ecologies.

This second half of the chapter has developed a pathway from early attraction theories in cinema and revolutionary theatre to the contemporary conditions under which platforms organize reenactment, wonder, and collective presence across phygital environments. Rather than beginning with a predetermined concept of the "Metaverse of Attractions," the argument reconstructed attraction as a genealogy of address and then articulated—through extended theoretical expositions—how contemporary media ecologies reorganize mediation, visibility, embodiment, temporality, and community.

The Metaverse of Attractions, proposed here as an analytical consequence, describes an ecology in which modular spectacles, apparatus exhibition, plural camera regimes, iterative reenactments, screen-threshold ethics, synchronized communitas, and infrastructural constraints organize contemporary experience. It is also, increasingly, an ecology shaped by opera-total ambition: the convergence of theatrical liveness, cinematic effect, televisual framing, and game-engine programmability within the same event. What results is not a stable synthesis but a productive friction: immediacy is repeatedly

promised, while mediation is repeatedly displayed; presence is repeatedly staged, while its conditions remain technically and politically governed. This framework also clarifies why the "body" becomes the decisive battleground of contemporary mediation. XR environments intensify the spectator's implication not only because they surround perception, but because they redistribute agency across gestures, interfaces, avatars, and algorithmic constraints. Here a final displacement becomes necessary: in performance theory and practice, the scenic body is always the human body, but not strictly the "natural" human body. On stage, indeed—and, by extension, within any performative *dispositif*—there is no body that is not in some sense *artificial*, because the scenic body is always a body acting a technique: a trained corporeality, an organized presence, a patterned set of gestures, a technologically scaffolded agency. The more technique is pushed, refined, and internalized, the less it appears as "technique" at all. This is not a loss of the body but one of its constitutive paradoxes: the body becomes most "natural" in performance precisely when its artificiality has become invisible.[108] This seems to be one of the starting and finishing lines of this whole chapter. Under metaverse conditions, this paradox is centrally intensified and externalized.

Bodies may appear as avatars, image-bodies, volumetric captures, or data-driven proxies; yet they continue to function scenically insofar as they organize attention, produce address, and activate participation. The Metaverse of Attractions, in this sense, does not replace theatre or cinema; it reconfigures their shared and connective problem—how bodies, images, and audiences are staged, experienced and/or organized—inside programmable environments whose supports are powerful, pervasive, but also limited and fragile. The concept does not resolve the ambivalence of these dynamics; it makes them analyzable. It therefore opens a space for further research on the politics of platform rituality, the ethics of reenacting violence, the techno-aesthetics of liveness, and the transformations of spectatorship and presence in mediated ecologies that increasingly shape both private and public cultural life in a sort of a new shared ritual, like the oldest and always renewed performing arts.

What has emerged so far is that immersion cannot be reduced to intensified seeing, because it takes shape through embodied thresholds, scenic relations, and distributed

[108] On this regard, particularly related seems to be See Helmuth Plessner, *Studi di estesiologia: L'uomo, i sensi, il suono*. Edited by Alessia Ruco (Bologna: CLUEB, 2007): 7-55, 77-90, but also Gehlen 2010.

forms of participation. The argument can therefore widen from the body as the site of mediation to the environment as the relational field in which bodies, images, interfaces, and supports become operative together.

Environments

If the previous chapter has shown that contemporary media experience is organized less by isolated images than by screens, *dispositifs*, arche-screens, and distributed regimes of presence, then the next step will be to shift the focus from mediation as such to the relational fields in which mediation takes hold. In this sense, Jakob von Uexküll's *Umwelt* theory does not mark a digression, but a coherent continuation of the path traced so far. His decisive move is to refuse the idea of a single, homogeneous world equally given to all living beings, and to describe instead a plurality of environments structured by selective relations, perceptual thresholds, and operative couplings. What matters here is not the reaffirmation of a strong subjectivity, but the possibility of thinking existence as always already articulated through relations, positions, and exposures. This is precisely the point at which Uexküll can be fruitfully placed in dialogue with Carbone and Lingua's account of dividuality and, even more, con-dividuality: not as a philosophy of the autonomous subject, but as a way of understanding how living beings are configured within shared yet asymmetrical fields of mediation, action, and meaning. From this perspective, the following chapter will treat environments as dynamic formations in which bodies, technical systems, images, and forms of life are reciprocally organized, rather than as neutral containers surrounding pre-constituted individuals. Uexküll becomes useful here because his notion of *Umwelt* allows one to grasp how a world is never simply "there," but is continuously cut out, inhabited, and modulated through concrete relations. Re-read through the lens of con-dividuality, this theory offers a strong conceptual hinge for the case studies that follow: the question is no longer how a self-contained subject confronts an external world, but how partial, situated, and relational modes of existence emerge within specific environments and through them.

Jakob von Uexküll (1864–1944) is a foundational figure for any inquiry that treats life as the active constitution of meaningful surroundings and not as passive adaptation to a single, homogeneous world. Against the anthropocentric assumption that animals inhabit the same sensorimotor space as humans, Uexküll argues that every living being cuts out its own environment according to its perceptual organization and bodily capacities (von Uexküll 2013: 9). His decisive move is therefore methodological as much

as theoretical: the animal should be approached as a subject, and its environment as the coherent correlate of what it can perceive, select, and do. Yet the term "subject," although it will recur throughout the following reconstruction of his theory, should not be understood here in the strong modern sense of a self-identical, autonomous individual opposed to the world. In Uexküll, the subject is already embedded in a relational world of experience: it emerges only through its coupling with an environment structured by signs, thresholds, and functional relations. Brentari explicitly stresses that Uexküll's greatest strength lies precisely in this relational conception of environment, which turns the transcendental subject into an interpreting subject and environmental experience into a process of translation and interpretation rather than self-enclosed interiority (Brentari 2015: 240). Read from this perspective, Uexküll's vocabulary does not contradict the framework developed earlier around dividuality and con-dividuality, but can be seen as one of its anticipatory conceptual resources. In the previous chapter, Carbone and Lingua's anthropology of screens defines subjectivation as fundamentally relational rather than self-contained: dividuals are unstable and open configurations, while con-dividuality names collective and relational formations that cannot be reduced either to atomized individuals or to mere fragments of data (Carbone and Lingua 2023: 150–153). In this light, Uexküll's "subject" can be understood less as a sovereign center than as a living pole of relations, inseparable from the environment through which it is constituted and within which it acts. His lasting importance, then, lies in having provided a rigorous way to think experience as relationally organized, environmentally distributed, and operatively shaped—a conceptual basis that will be developed through the case studies that follow.

Environments as *Umwelten*

Jakob von Uexküll's environmental thought[109] offers one of the most powerful ways of rethinking life as an organization of relations, thresholds, and meaningful

[109] The following theoretical recognition is based on Jakob von Uexküll, *Ambienti animali e ambienti umani: Una passeggiata in mondi sconosciuti e invisibili*. Edited by Marco Mazzeo (Macerata: Quodlibet, 2013) and Carlo Brentari, *Jakob von Uexküll: The Discovery of the Umwelt between*

orientations. The lasting force of his work lies in the fact that environment, in his lexicon, names neither a neutral container nor a general background equally given to all organisms. It names the specific world that takes shape through the perceptual and operative capacities of a living being. Marco Mazzeo's preface (von Uexküll 2013: 7-33) to the Italian edition *Ambienti animali e ambienti umani* rightly presents this move as one of the decisive gestures of twentieth century thought, because it displaces the anthropocentric assumption that animals and humans inhabit the same sensorimotor world and differ only by degree. Uexküll's pluralization of environments, always in the plural, reorganizes the very field in which biological, philosophical, and later semiotic questions can be asked. This pluralization is not a marginal terminological refinement. It provides the conceptual core of Uexküll's entire project. Each organism lives in a world that is internally coherent because it is structured by the marks that matter for that organism. Uexküll therefore asks the reader to carry out a methodological displacement: instead of beginning from the human observer's world and then distributing its objects across species, one should reconstruct the world proper to each form of life. The well-known image of the soap bubble condenses this operation. Around every creature one may imagine a bubble containing only the cues accessible to it; once one enters that bubble, the supposedly shared surroundings are transformed into a different order of salience, orientation, and action. Familiar space becomes a field of species-specific significance.

The apparatus of the Italian edition particularly emphasizes that the conceptual architecture depends on terminological precision: *Umwelt* should not be conflated with Welt (world in another sense) or with *Umgebung* (surroundings). The concluding note explicitly compares translations of key terms—among them *Umwelt*, *Welt*, *Wirkmal* (operative mark, as follows), and "mood"—precisely because misunderstanding often begins with terminological drift (von Uexküll 2013: 166). Brentari likewise shows that Uexküll repeatedly warned against the mistaken use

Biosemiotics and Theoretical Biology (Dordrecht: Springer, 2015). The latter in turn refers, among other sources, to Jakob von Uexküll, *Studien über den Tonus i. Der biologische Bauplan von* Sipunculus nudus, *Zeitschrift für Biologie* 44 (Munich: R. Oldenbourg Verlag, 1903): 269–344; Id., *Umwelt und Innenwelt der Tiere. 2. vermehrte und verbesserte Auflage*. Berlin: Springer, 1921; Id., *Theoretische Biologie*. 2nd ed. (Berlin: Verlag von Julius Springer, 1928); Id., *A Foray into the Worlds of Animals and Humans, with A Theory of Meaning*. Translated by Joseph D. O'Neil (Minneapolis and London: University of Minnesota Press, 2010).

of *Umwelt* to indicate objective surroundings, insisting that such usage "misses its genuine meaning" (Brentari 2015: 107). Thus, a terminological discipline of this kind safeguards the central philosophical insight. *Umwelt*-theory is neither a subjective psychology of impressions nor a crude biological determinism. It is a theory of living sign-relations in which perception and action co-constitute a bounded world of relevance—spatially and temporally articulated, structured by functional circles, stabilized through paths and territories, and capable of anticipatory formations that exceed present stimuli. Understood in these terms, Uexküll's "walk" through invisible worlds is not an illustrative bestiary; it is a rigorous proposal for thinking life as world-making.

Umwelt as a relational ontology: "as many worlds as there are subjects"

Uexküll's decisive gesture is not to "add" an environment to an already-given animal, but to redefine what a world is once life enters the picture. A world is not a neutral container of objects; it is the phenomenal field that emerges with (and for) a living subject. In one of the most programmatic formulations attributed to his *Theoretische Biologie*, Uexküll states that "there are as many worlds as there are subjects and […] these worlds are phenomenal worlds" (von Uexküll 1928: 61). This is not a rhetorical flourish: it proposes an ontology in which reality is not accessed by organisms as a ready-made inventory but is constituted as *Umwelt*—species-relative, yet fully real as lived experience. The conceptual stakes become clear once "environment" is treated as a semiotic relation rather than a physical aggregate. A key consequence is that between "external reality" and the subject there is a relation "of interpretation or even translation" (Brentari 2015: 3). *Umwelt*, in this sense, is the structured outcome of a continuous translational work: stimuli become perceptive marks, and perceptive marks are integrated into action-oriented meanings. The subject is therefore not simply embedded in an environment; it actively brings forth a meaningful world through species-specific capacities of selection, articulation, and response.

Wirklichkeit and the non-appearance of "objective surroundings"

Uexküll's environmental realism is not the realism of an observer who inventories an external world; it is a realism of efficacy and lived meaningfulness. He argues, in a passage that functions like a methodological axiom, that "the objective realities of the surroundings never appear as such in the environment. They are always transformed into perceptive marks or perceptive images and equipped with an operative tone which only then makes them into real objects" (von Uexküll 2010: 125–126). The result is explicit: "each and every subject lives in a world in which there are only subjective realities and the environments themselves represent only subjective realities" (von Uexküll 2010: 125–126). This formulation is often misread as a slide into relativism; but its ambition is more specific. The "reality" of *Umwelt* is not denied—rather, it is re-specified. As Mazzeo emphasizes (in a note discussed by Brentari), Uexküll's German vocabulary points to a realism grounded in *wirkung*, in acting effectively: *Umwelt* is *Wirklichkeit*, actuality-as-efficacy, not "objective" materiality (Brentari 2015: 153). A world is real insofar as it *does something*: it orients, constrains, motivates, affords, threatens, nourishes. The key point is that "objectivity" is not the default mode of reality; it is at most a specific achievement (and even then, still dependent on a subject's constitution). At the same time, this position contains a well-known tension: if *Umwelt* is a transcendental production of the subject, how can it also be what acts on the subject? Brentari notes the "dangerous circularity" in which "the environment that acts on the subject is born from that very subject's transcendental production activity" (Brentari 2015: 153). Uexküll's own answer, classically, relies on a teleological trust in nature's overall order—an issue that later readers (Lorenz prominently) will challenge, not by rejecting *Umwelt*, but by disputing its guarantee of harmony. This shift is inseparable from Uexküll's explicit reworking of Kant. He does not merely apply Kantian language metaphorically; he claims that biology should extend transcendental philosophy beyond the human case. "The task of biology," Uexküll writes, "is to expand the outcome of Kant's research in two directions: I. to take into account the role of our body too, in particular of our sense organs and central nervous system, and II. to investigate the relationships with the objects of the other subjects (animals)" (von Uexküll 1928: 3). The consequence is a radical pluralization of "conditions of possibility": what counts as an object, a sign, a relevant

difference, or even a stable spatial-temporal articulation, depends on the embodied constitution of the subject that lives in (and through) that world.

In this sense, the notion of *Umwelt* articulates a biology of experience. Uexküll repeatedly treats the organism as a subject, and this term is essential to his vocabulary. Yet the Uexküllian subject is already environmentally constituted. With his work, Brentari shows that the real philosophical weight of Uexküll's project lies in the passage from a merely physiological description of sensory reactions to a theory of living beings as interpreters of their surroundings. In Brentari's reconstruction, Uexküll extends the transcendental problem of constitution beyond the human case and joins it to a semiotic one: organisms create, use, and modify signs, and in doing so they shape a world of meaning rather than a mere aggregate of physical causes. Animal behavior appears as the spontaneous attribution of meaning to an outside world actively interpreted according to the rules of a species.

The functional circle: *Merkwelt*, *Wirkungswelt*, and perception–action as meaning-production

The most influential formalization of *Umwelt* is Uexküll's concept of the functional circle. Uexküll defines it as "a general schema that underlies the relationship between any animal and the world" and as the basis of "the unity that every animal establishes with its world" (von Uexküll 1921: 45). Unity here does not mean the unity of an object "in itself"; it means the unity of a *relation*—the closed loop in which perception and action co-determine one another. This schema immediately entails that every *Umwelt* is populated not by "things" in general, but by *species-relative things*: "The earthworm's world is made up only of earthworm things [Regenwurmdinge], in the dragonfly's world there are only dragonfly things [Libellendinge]" (von Uexküll 1921: 45). What appears as a single, stable object to a human observer is, for Uexküll, the superficial overlay of two different relations to the organism: the same environmental item is simultaneously a source of stimulation and a surface for action. Accordingly, Uexküll partitions the environment into a perceptive world and an operative world: "a perceptive world [Merkwelt], which comprises the stimuli of the things present in the

environment, and an operative world [Wirkungswelt]" (von Uexküll 1921: 45). The aspects that "send out stimuli" become perceptive marks (*Merkmale*) and "perceptive mark carriers" (*Merkmalträger*), while the aspects that offer "grasping surfaces" become "operative carriers" (*Wirkungsträger*) (von Uexküll 1921: 45). The profound implication is that the unity of "the object" is not given as a representational synthesis inside the animal; it is enacted as a behavioral coupling across the circle. The notion of *counter-structure* (*Gegengefüge*) radicalizes this. What we call "the object" is, from the outside, a de facto unity that links perceptive and operative aspects; but the animal does not possess that unity as an object-concept. The mosquito example makes this explicit: the stinger is suited to blood, yet "the mosquito's receptors do not get any signal from our blood; it is the smell of our cutaneous glands that affect them," while blood and glands are connected only by the "counter-structure—the human skin" that remains "utterly out of any perceptual reach" for the mosquito (von Uexküll 1921: 217). Uexküll's point is not cognitive deficiency; it is ecological precision. The animal's world is *selective* not by lack, but by functional articulation. The point becomes clearer once one turns to the formal architecture of the *Umwelt*. Uexküll's mature theory organizes the organism's world through the interplay of *Merkwelt* and *Wirkwelt*: the perceptual world and the operative world. What an organism can perceive belongs to the first; what it can do belongs to the second; together they form a closed unity. This closure does not imply isolation from the real. It indicates that reality is encountered only through a selective articulation of relevant differences. Perceptual marks and operative possibilities are coordinated, and their correlation produces the specific world in which a subject can orient itself. Brentari identifies this structure as the decisive transition in Uexküll's development: the reflex schema loses its centrality, and the functional circle takes its place. The replacement matters, because the reflex is too poor to account for the organized meaningfulness of behaviour. The functional circle, by contrast, allows one to describe the animal as inserted into an ordered totality in which sensory and motor moments belong to the same circuit. The *Umwelt* becomes analytically graspable through Uexküll's model of the *functional circle*, which supplies a "perspicuous" representation of the relation between subject and object (von Uexküll 2013: 49). The functional circle formalizes a fundamental claim: subject and object "fit into" each other, forming an ordered whole; and because any subject is bound to the same object (or to different

objects) through multiple such circles, one can state the first foundational thesis of the theory: all animal subjects, simple or complex, are adapted to their environment with the same perfection—simple animals correspond to simple environments, complex animals to richly articulated ones (von Uexküll 2013: 49).

What makes this model non-trivial is the double articulation of the object. In Uexküll's account (as reconstructed with particular clarity by Brentari), the things present in an environment are characterized by a double relationship to the animal: they send specific stimuli to receptors and they offer "gripping surfaces" to effector organs. This allows one to distinguish a perceptual world (*Merkwelt*) and an operative world (*Wirkungswelt*): stimuli become perceptual marks (*Merkmale*), while the actionable aspects of the same "thing" function as operative carriers (Brentari 2015: 113). Uexküll's terminological refinement is crucial: the animal is aware of perceptual marks, but it does not cognitively "re-perceive" the features that, for it, are operative carriers; only the human observer sees both sides unified in a single object (Brentari 2015: 113). On the side of the object, the two sides—perceptual and operative—are connected by what Uexküll calls a *counter-structure*, namely the object as a de facto unity that is not given as such to the animal's experience. The concept aims precisely to prevent attributing to the animal a full object-understanding of things (Brentari 2015: 113). The Italian edition makes the same point in an explicitly operational register: an object participates in action only insofar as it possesses the properties necessary to support perceptual and operative marks, and these properties should be connected through a counter-structure (von Uexküll 2013: 49). The model is therefore neither representational in the classic sense (the animal does not build a neutral "picture" of an object) nor mechanistic in the sense of reflex theory. Brentari emphasizes that Uexküll does not propose the functional circle as an empty schema valid for every behavior; it is highly differentiable and unfolds as a plurality of primary circles—prey, enemy, reproductive, medium/locomotion, and so on (Brentari 2015: 115). The same plurality is also temporal: the series of functional circles articulates the life cycle, with phases and alternating environments and perceptual worlds (Brentari 2015: 115). The theory of the functional circle also clarifies why Uexküll's biology should be read as a theory of meaning. A stimulus has no independent priority in his mature work. It only exists as a stimulus within a structure capable of selecting it. Brentari emphasizes that one of the great theoretical consequences of the move from

reflex to functional circle is the displacement of the stimulus from the position of cause. The organism's building-plan, its receptors, thresholds, rhythms, and needs, determine what can count as relevant in the first place. The environment therefore emerges as an ordered whole from which stimuli derive their status. This is why Uexküll's thought steadily moves toward a holistic and teleological vocabulary. Behavior unfolds in relation to a plan of organization, and isolated causal fragments become intelligible only within that wider articulation.

Rule, *Bauplan*, and teleological form: why *Umwelt* is never a mere mechanism

Uexküll's functionalism is not behaviorism and not mechanism. Even when he uses machine analogies, he insists on an internal purposiveness of organisms. In the early programmatic framing cited by Brentari, Uexküll states that biology concerns "organization," and organization implies the connection of elements "according to a unitary plan"; therefore, biology should identify "the building-plan" (*Bauplan*) of living beings (von Uexküll 1903: 269). This is not an optional metaphysical gloss: it is what allows the functional circle to be read as a *form* governing relations among receptors and effectors, rather than as a chain of efficient causes. In the mature theoretical formulation, "rule" (Regel) becomes central. Uexküll can write, in a strongly anti-materialist register, that "There exists a non-material order, which alone can give matter its structure—a rule of life" (von Uexküll 1928: 98). The rule is not observable in itself, but in its formative efficacy; it "molds the structure" in accordance with material properties (von Uexküll 1928: 98). Here teleology is not merely explanatory language: the rule "acts on matter and gives it form" (Brentari 2015: 122–123). The "plan" is what underwrites the coherence of *Umwelt* as a stable system of meaning-and-action rather than a fluctuating mosaic of stimuli. This also clarifies why, for Uexküll, semiotic terms ("meaning," "rule," "tone") are not poetic additions to physiology but the very vocabulary needed to describe living organization. Rule is constitutive: it is what makes a circle closed, a sign salient, an action apt. Without it, *Umwelt* dissolves into mere physical impingement.

The tick as a minimal *Umwelt*: meaning as melodic economy of marks

The canonical demonstration is the tick. Uexküll uses it to show how an *Umwelt* can be extremely sparse and yet perfectly articulated. The tick can wait for years; during that time it is "suspended in a sort of empty environment" (von Uexküll 2010: 51). When the relevant element appears—"the smell of butyric acid emitted by a mammal"—the feeding functional circle starts (von Uexküll 2010: 51). In its explicitly semiotic rewriting, Uexküll stages the relation as a strict counterpoint of points and counterpoints: the tick's receptors are "set" for a single smell (butyric acid), a tactile condition (hair), a temperature sign (warmth), and an operative apparatus (stinger/pump), matched to corresponding mammalian properties; this whole coupling is governed by the "common meaning rule" of "recognizing and attacking the prey, taking blood" (von Uexküll 2010: 178). Two aspects are decisive. First, meaning precedes "object richness": Uexküll can say that "in its environment, there is a mammal that is composed of few properties but thoroughly clear [anschaulich]" (von Uexküll 2010: 137). Second, "rule" is not descriptive but causal-teleological: it *organizes* which differences count and excludes the rest as noise. This is why Uexküll repeatedly insists that adding "extra notes" to the melody would not enrich but deform the *Umwelt*: the point is not information maximization, but functional adequacy—an economy of signs that produces a coherent world for a particular form of life. This entire architecture can be observed in exemplary fashion in the famous case of the tick. The tick's world is composed of very few cues, yet these few cues are sufficient to sustain a complete and effective *Umwelt*. Light guides its position. The smell of butyric acid emitted by mammals triggers the fall toward the prey. Heat confirms contact and activates the search for a blood-rich spot. What from a human perspective appears as extreme poverty is in fact extraordinary selectivity. The tick inhabits an exact world; one composed only of what matters for its life-cycle. Uexküll's point is not anecdotal. The tick demonstrates that a world does not become more real by containing more information. It becomes real for a subject insofar as it is articulated by meaningful cues. The animal's world is therefore not a reduced version of ours. It is a rigorously shaped sphere of significance.

Uexküll's best-known example—the tick—should be read not as an anecdote but as a methodological demonstration of how an *Umwelt* is experimentally reconstructible. The tick's life appears radically impoverished from the standpoint of human "objective" richness, yet it is perfectly structured in terms of the marks that matter for its functional circles. In the Italian edition, the tick is introduced as a tiny animal waiting on branches for prey, then dropping on its victim and feeding; the point of the narrative is immediately to shift from descriptive natural history to the analysis of the specific cues that define the tick's world (von Uexküll 2013: 39–43). The reconstruction identifies three decisive signs: the olfactory mark of butyric acid emitted by mammalian sebaceous follicles; the tactile/thermal mark indicating the appropriate (hairless) location; and the final operative mark of piercing and sucking, after which the tick falls, lays eggs, and dies (von Uexküll 2013: 49–50). Two methodological consequences follow. First, the "object" (the mammal) is not given as a mammal in the tick's experience; it is decomposed into a small set of marks that trigger and guide the sequence. Second, the completeness of the tick's *Umwelt* becomes visible only when perceptual and operative marks are both mapped: the wound left by the tick's proboscis is an immediately recognizable operative mark, but only the patient identification of the perceptual role of butyric acid and heat allows a complete picture of tick activity in its environment (von Uexküll 2013: 47–49). Uexküll's broader claim is that every animal "approaches" its object with a kind of two-ended tool: a perceptual end that assigns a perceptual mark, and an operative end that assigns an operative mark; some properties become perceptual-mark carriers, others become operative supports, and because all properties are linked by the object's structure, operative marks can modify the properties that matter perceptually—hence the concise thesis that an operative mark modifies a perceptual mark (von Uexküll 2013: 47–48). This is the core of Uexküll's biosemiotic intuition avant la lettre: meaning is not added to a pre-given world; it is produced in the coupling of organism and counter-structured things through cycles of marking. The environment is, in this strict sense, an order of significance enacted by the subject. The tick also leads directly into Uexküll's theory of time. Waiting for years on a branch before the relevant cue appears, the tick cannot be described through abstract, homogeneous clock time. Its world is organized by a lived temporality in which long stretches of apparent immobility are suspended until the proper sign reactivates the circuit. Time, for Uexküll, belongs to the structure of the subject's

relation to its environment. Brentari underscores how central this claim is for Uexküll's philosophical ambition: biology expands the Kantian question by showing that different subjects inhabit different times. The world of the organism includes its own temporal grain, its own rhythm of moments, its own scale of appearance and response.

Space, time, and the embodied *schemata* of experience

When Uexküll turns to space, he does not treat it as a neutral coordinate system in which living beings are placed. Space is an *Umwelt*-function: it depends on the animal's sensory organization and on the "orientation steps" by which relations between places are constituted in tactile and visual domains (von Uexküll 2013: 67). The argument proceeds by comparing perceptual resolutions. Within a "coarsely grained" visual world, it becomes impossible to perceive the elements of which a spider web is composed; for the fly, the spider's web is literally invisible (von Uexküll 2013: 67). Here invisibility is not a mere lack; it is an environmental fact: a structure can be physically present and yet not exist *as a structure* in the fly's *Umwelt*. Conversely, when one works with a microscope, both eye and hand move with much shorter orientation steps, because the accessible "places" are closer; the scale of space is enacted by the coupling of sensory access and motor articulation (von Uexküll 2013: 67). On this basis, Uexküll criticizes the tacit metaphysics of a single objective world: "All living beings have their own environments, which are not all the same," and what appears as one world is an optical illusion produced by "the spider web of relations" in which the world is suspended (von Uexküll 2013: 55). The claim is not relativism, but plurality grounded in structure: environments differ because the "meaning-carriers" that can pass the receptor thresholds and the operative possibilities afforded by effectors differ. The horizon chapter radicalizes this idea through a notion of environmental boundary. Empirical observations suggest that an object in the surroundings becomes "near" in the environment only at a species-specific threshold distance; for example, a fly does not flee until a hand is about half a meter away, which licenses the hypothesis that its horizon lies there (von Uexküll 2013: 74). Horizon is therefore not the edge of physical space but the boundary of perceptual significance. Uexküll returns here to the soap-bubble image in a more formal way: animals can be

represented as enclosed within bubbles that mark the limits of their visual space; birds, squirrels, meadow-dwellers all move within bubbles that bound what can appear (von Uexküll 2013: 72–74). The bubble metaphor is thus not decorative: it expresses the *Umwelt* as a bounded field of meaningful appearance whose boundaries are produced by the animal's sensory and motor organization. Entering the bubble entails a transformation of the surroundings into a world of marks and relations; exiting it returns one to a different order of relevance (von Uexküll 2013: 38).

Uexküll extends this economy to the very coordinates of experience. Space and time are not universal containers; they are *Umwelt*-functions that emerge only when needed. As he puts it: "Space and time are of no immediate use to the subject. They only become meaningful when numerous perceptive marks (features) should be distinguished… However, such a framework is not needed in simple environments" (von Uexküll 2010: 73). Space-time is therefore a biologically variable "network," a species-specific articulation of rhythms and discriminations. This is where Uexküll's Kantian inheritance becomes productive rather than merely analogical. If sensibility is structured by a priori forms, then biology should ask: what are the *biological* conditions that make such forms possible, and how do they differ across species? The earlier claim that biology should incorporate "sense organs and central nervous system" (von Uexküll 1928: 3) is not a concession to physiology but a deepening of transcendental inquiry: the a priori is embodied and diversified. Space receives an equally radical treatment. Uexküll presents spatiality as a product of embodied orientation. Right and left, above and below, distance and place, become meaningful only in relation to an organism's body-plan and mode of access. The chapter on space in *Ambienti animali e ambienti umani* shows that places, horizons, and spatial differentiations belong to the organization of an *Umwelt* rather than to an abstract geometry given in advance. A fly does not inhabit the same visible world as a human observer. A spider web may fully exist in the surroundings and yet remain absent as an articulated object in the fly's environment. The horizon of the *Umwelt* marks the threshold at which what surrounds the organism begins to appear as near, actionable, or dangerous. Uexküll's bubble metaphor returns here with full force: spatial worlds are bounded fields of salience.

The same transcendental logic governs time. Uexküll's striking thesis is that time is not simply "there," flowing independently of life: without a living subject, time cannot

exist (von Uexküll 2013: 53). This is not a poetic flourish; it is the temporal analogue of *Umwelt*-construction. The subject is the condition of possibility for a lived temporal order. Perceptual time is defined through the concept of "moments." Uexküll proposes an operational measure: when observing a snail's movements, one can register that it completes a sequence of movements in about eighteen "moments," and that each moment lasts about one-eighteenth of a second; this gives a basis for comparing the tempos of different organisms (von Uexküll 2013: 78). The methodological purpose is comparative: different species inhabit different temporalities because their perceptual and operative cycles are articulated at different moment-scales. Cinematographic metaphors become epistemic tools here. The rapid movements of insects appear, for humans, as a blur because our own sequence of moments is too slow; if one films insects in slow motion, their movements become intelligible because they are translated into our temporal grain (von Uexküll 2013: 79). Conversely, the unfolding of organic growth (a flower blooming) is too slow for our moment-scale; time-lapse transforms it into a sequence we can perceive. Such devices do not merely *represent* time; they function as translations between species-specific temporalities. Brentari frames this temporal thesis as part of Uexküll's Kantian inheritance: in Uexküll's own words, "the progress over Kant's philosophy which biology has to offer rests, in my view, on the establishment of the fact that there is a time for subjects, which can be different for different subjects" (Brentari 2015: 122). The *Umwelt* is thus not only spatially plural but temporally plural: each subject's world is articulated by its own time.

Once space and time are understood in this way, the object itself changes status. A thing is never simply present as a self-identical unit. It is distributed across perceptual and operative functions. What the organism perceives in an object and what it can do with it belong to the same structural relation, yet they do not coincide phenomenally. Brentari is particularly precise on this point. He shows that Uexküll's distinction between perceptual marks and operative carriers prevents one from projecting the human observer's full object-concept onto the animal. On the side of the object, the perceptual and operative aspects are connected through what Uexküll calls a counter-structure. The unity of the thing exists within the relation, but it is not available as such to the animal's awareness. In this way Uexküll can describe animal action as meaningfully ordered without attributing to the animal a human-like representation of the object.

A recurring polemical target in Uexküll is the reduction of animal life to stimulus–response mechanisms. The functional circle already undermines reflex theory by insisting on the closure and selectivity of behavior: receptors do not only take in certain stimuli; they block others, and objects can "vanish" from the environment when internal thresholds change (e.g., satiation) (Brentari 2015: 115). In the Italian edition, Uexküll explicitly distinguishes the concept of "plan" from the older concept of instinct. Instinct talk, he argues, was a philosophical artifact introduced because earlier thinkers lacked a genuine analysis of the relations between animal and environment; once the environment is understood as a structure of functional circles, behavior can be explained in terms of plans—i.e., organized couplings between perceptual and operative marks—rather than as mysterious inner drives (von Uexküll 2013: 98–100). The plan is not an external blueprint imposed from outside; it is the internal organization through which the animal and its relevant world cohere. This is also the place where the counter-structure becomes decisive. Because perceptual marks and operative supports are connected through counter-structures that are not perceptually available as such, action can be "blind and automatic" at the operative level while still being effectively integrated into the animal's overall organization (Brentari 2015: 114). Uexküll's teleological vocabulary (building-plan, "*planmäßigkeit*") is meant to secure this integration: counter-structures "belong to the subject's building-plan," ensuring a general correspondence to a plan that includes subjects and objects (Brentari 2015: 114). Even when one does not endorse the metaphysical commitments of this teleology, its conceptual function remains clear: it is designed to explain how meaningful efficacy can arise without presupposing full cognitive representation of objects.

Operative and perceptual images: tones, mood, search, and anticipation

The *Umwelt* is never a neutral perceptual map. Uexküll argues that stimuli are "colored" (*Färbung*) by their insertion into a functional circle: prey is perceived under a feeding tone (*Freßton*), predator under an escape tone, and the *Umwelt* as a whole corresponds to an organismic mood (*Stimmung*) (von Uexküll 2010: 139–140, discussed in Brentari). This is not subjective "projection" in a psychological sense; it is the objective

form of meaning within the animal's world: qualitative character is part of how the world is *given* as relevant. The implication is that what humans call "the same object" can exist under different operative meanings even within one species. Uexküll's example is deliberately mundane: "The seat of a chair is always a signal to sit down, and is never taken for a table surface" by a normal adult; for a child, however, the chair may appear under an additional "climbing tone" (von Uexküll 2010: 117). Meaning is thus neither purely conventional nor purely sensory: it is a structured coupling of perceptive marks and operative possibilities. This analysis becomes even sharper in the notion of the *search tone* and the *search image* (*Suchbild*). Uexküll describes situations in which an organism's whole environment assumes a "search tone," not reducible to a single stimulus but expressing an action-oriented stance toward the world (von Uexküll 2010: 148–149, discussed in Brentari). Brentari's comparison with Lorenz is illuminating: where Lorenz would explain explorative behavior through evolutionary contingency, Uexküll interprets the search tone as a manifestation of the teleological coherence of organism–environment relations (Brentari 2015: 149). Even when one disagrees with the teleological guarantee, the conceptual gain remains: *Umwelt* is dynamic and modulated; it has qualitative "colorings" that belong to lived orientation, not to detached representation. This structure helps explain the role of images and tones in the latter part of *Ambienti animali e ambienti umani*. Perception is always modulated by an operative orientation. Objects appear under tonalities that correspond to needs, actions, expectations, or search dispositions. The chapters on perceptual and operative images, companions, known paths, dwelling, territory, and search-tones all deepen the same insight: an environment is populated by meaningful configurations, not by neutral items. The world carries action-values. A path becomes familiar because repeated movement and marks sediment a stable directional structure. A dwelling is produced by the organism's activity and becomes a center of orientation. A territory is delimited through signs and recurring operations. Companions and predators are distinguished through relational images. The environment acquires consistency through these organized repetitions.

Uexküll extends *Umwelt*-theory beyond immediate stimulus-driven perception by introducing the role of images (*Bilder*) and "search tones." The key move is to show that the environment is not only constituted from without (stimuli) but can be actively reorganized from within through experience, expectation, and affective orientation. In the

account of “search tones,” the same object can take on a different coloring depending on the subject’s operative disposition. A striking example is the “black man from Dar es Salaam” who, when first encountering a ladder, does not perceive it as a tool for climbing but as a senseless obstacle to be removed; what is lacking is not vision but a matching operative schema (von Uexküll 2013: 141–142). The point is general: objects are not neutral givens; they become what they are in a world through the alignment of perceptual marks with operative possibilities. Uexküll’s discussion of toads and “worm-tones” gives an even more elementary version: the toad’s *Umwelt* is dominated by a prey-mark that can be triggered by elongated moving shapes; the same sensory field that a human would parse into many objects is, for the toad, structured by a single dominant relevance (von Uexküll 2013: 140). The “tone” is not an emotion added to perception; it is an operative orientation that filters and organizes the perceptual world. Brentari’s formulation captures the underlying mechanism: objective surroundings never appear “as such” in the environment; they are transformed into perceptive marks or perceptive images and equipped with an operative tone that makes them into real objects, even though no part of that operative tone is present in the stimuli (Brentari 2015: 165). This is one of the most radical consequences of *Umwelt*-theory: reality-for-a-subject is inseparable from a practical-affective modulation. In the chapters on image and search-tone, Uexküll broadens the analysis further and approaches what later readers would call anticipatory or projective structures of experience. A search image can orient the organism before the object is fully perceived. A tone can saturate the environment in advance, preparing the world to receive a certain class of marks. Here Uexküll reaches one of the most suggestive dimensions of his thought. The *Umwelt* includes not only immediate sensory registration but also a structured expectancy. Organisms move in a field already prepared by what they can seek, fear, or use. This is one reason why his descriptions continue to resonate far beyond zoology: they describe life as an active organization of salience.

Operative space: paths, home, territory, and the critique of "neutral" experiments

Uexküll's late analyses insist that *Umwelt* is as much operative as perceptual. Many animals inhabit a world articulated by familiar paths, dwellings, and territories. The familiar path, Uexküll writes, "works like a streak of a more fluid medium in a more viscous one [external reality]" (von Uexküll 2010: 102): it is a subjective "channel" carved into resistance, stabilized by repeated experience and by a complex coordination of perceptive marks and self-produced orientation steps. Home and territory are even more explicit: they are "exclusively subjective products" (von Uexküll 2010: 103). The mole becomes the privileged example: its tunnel system constitutes a sovereign operative space; even when passages are destroyed, it can relocate a trained feeding spot—evidence, for Uexküll, that orientation cannot be reduced to a simple chain of olfactory cues (von Uexküll 2010: 103–104). The polemical target is clear: experimental mazes abstract animals from their *Umwelt* and then mistake the resulting disorientation for cognitive limitation. Uexküll's critique of behaviorists is blunt: they "never saw the problem of the familiar path," never studied the animal's perceptive marks, and never considered that right and left are themselves problems (von Uexküll 2010: 99). The point is methodological and philosophical at once: cognition cannot be detached from the meaningful architecture of the *Umwelt* in which it is enacted. The *Umwelt* is not a collection of objects; it is a topology of meaningful routes, thresholds, and zones. Hence Uexküll's insistence on "known paths," dwelling, and territory as higher-order environmental formations. In the case of the mole, the territorial network is literally produced by activity: a captive mole builds a new network of tunnels, measures it, marks it, and, by repeating its trajectory, transforms unfamiliar space into a familiar path-structure (von Uexküll 2013: 122). The environment here is not found but made: a spatial order emerges through iterative coupling of movement and marking. At the same time, Uexküll stresses that "dwelling" and "territory" do not coincide: a burrow is a place of living, but the territory is the broader operational field demarcated through behavior and marks (von Uexküll 2013: 121). These analyses show why "environment" cannot be reduced to ecological niche in the narrow sense. A territory is not merely the physical area an animal occupies; it is a semiotic and operative configuration: zones are

distinguished through marks, routes become familiar through repetition, and the animal's world acquires a stable structure that can guide action beyond the immediate present.

Free productions, magical environments, and the elasticity of *Umwelt*

One of the most important expansions of Uexküll's later work concerns phenomena that cannot be traced to immediate external stimuli. He notes that "the search image, the tracing of the most familiar path, and the demarcation of the territory" are "exceptions," because they "could be ascribed to no sort of external stimuli but represented free productions of the subject," developed through repeated personal experience (von Uexküll 2010: 119). This formulation is crucial: *Umwelt* is not only triggered by stimuli; it can be *elaborated* by the subject. The most striking case is what Uexküll calls "magical environments," where hallucinatory elements acquire "objective reality" within the *Umwelt*. A paradigmatic human case is the child who, playing with a matchbox and matches, suddenly demands: "Get the witch out of here; I can't stand to see her repulsive face any more!"—and Uexküll concludes that "the evil witch appeared in the flesh in the little girl's environment" (von Uexküll 2010: 119). He generalizes: "fantastic phenomena blend with the sensually given things of their world" (von Uexküll 2010: 120). In animals, he claims, the master's role in the dog's *Umwelt* is "surely grasped magically and not divided into cause and effect" (von Uexküll 2010: 120). The starling case sharpens the theoretical claim: a bird raised without flies suddenly performs flycatching behavior, as if an "imaginary fly" appeared; Uexküll states that the environment was so laden with feeding tone that "even without the appearance of a sensory stimulus, the operative image of flycatching […] forced the appearance of the perceptive image" (von Uexküll 2010: 120–121). Here Uexküll's central axiom becomes explicit: action and environmental correlate are inseparable—there is no action without a world in which that action makes sense. Lorenz will reinterpret this as "vacuum behavior," remaining cautious about subjective hallucination; Uexküll, by contrast, treats the transcendental reality of the magical element as what triggers action (Brentari 2015: 151). This same framework is extended to migration: "the continents bear the inborn path, one visible only to the birds," and unlike familiar paths built from sequential signs, the

inborn path is “immediately given as a magical phenomenon” (von Uexküll 2010: 122). Uexküll even describes such stimuli as sounding “like an inborn melody” and claims the path is “guided by a plan at the highest degree” (von Uexküll 2010: 124). Whether or not one accepts the metaphysics of the plan, the conceptual move is consistent: *Umwelt* can contain realities that are neither reducible to present stimuli nor to reflective rational inference; it includes trans-individual structures of orientation that function as real guides for life.

The discussion of so-called magical environments, for all its dated terminology, develops the same line in an especially striking way. Uexküll becomes interested in cases where behavior seems to outrun present stimuli, as though the environment were charged by an operative image powerful enough to organize action in the absence of immediate perception. The examples can appear speculative, yet the theoretical aim is clear. He wants to show that life cannot be exhausted by the model of a passive response to a present cause. Environmental organization includes inherited paths, anticipatory structures, and forms of internal orientation that retain objective force within the life of the organism. Whether one follows him entirely on these points or not, the conceptual direction remains important: the *Umwelt* is a field of efficacies, not a surface of detached representations. The most provocative extension of the theory appears in the analysis of “magical environments,” where behavior seems to anticipate a future condition that the animal cannot yet perceive. A paradigmatic case is the larva that digs a canal inside peas while they are still tender; the adult beetle later uses that canal to exit once the pea hardens. The larva, however, will only receive the sensory stimulus that triggers exit when it has transformed into the beetle; no perceptual sign indicates the route while it is a larva, and the path appears with the intensity of a “magical” apparition (von Uexküll 2013: 145). Uexküll’s point is not mysticism but the limits of stimulus-based explanation: if one construes behavior only as reaction to present cues, such cases become unintelligible. The solution is to treat the operative organization (plan, image, inherited path) as an environmental determinant: in “innate paths,” action is guided by a plan that is meaningful for the life-cycle as a whole even when it is not grounded in current perception (von Uexküll 2013: 145). The same logic appears in cases where an “imaginary” prey triggers full capture behavior: after repeated failed attempts, a bird may perform the capture sequence in the absence of an actual stimulus, as if it saw an imaginary fly; the

environment is “charged” with the food-tone so strongly that the capture-image activates the corresponding perceptual image and movement series (von Uexküll 2013: 144). Here the *Umwelt* shows its constructive power most clearly: perception can be driven by operative orientation and prior experience, not only by present stimuli. At the broadest level, the theory culminates in a reconceptualization of reality itself. Brentari repeatedly insists that one of Uexküll’s strongest philosophical moves lies in redefining the relation between subject and external reality as a semiotic one, a relation of interpretation or translation. The world surrounding a living being becomes real for it through marks, tones, and operative significance. This is why Brentari can speak of a transcendental biosemiotics. Perception and action are based on internally generated signs outwardly transposed into the world, and these signs produce the species-specific *Umwelt*. What emerges is an ontology in which there are as many phenomenal worlds as there are subjects. This does not fragment reality into arbitrary relativism. It gives reality a relational articulation grounded in the concrete organizations of life.

Human variability without human exceptionalism: the oak and the pluralization of meaning

Uexküll’s environmental theory culminates in a careful balancing act: insisting on continuity between animals and humans while acknowledging a qualitative leap in intra-specific variability. His “favorite example” is the oak. In the forester’s rational world, the oak is “no more than a few cords of wood” established by measurement; no attention is paid to bark resembling a face. In the child’s “magical environment,” the same oak becomes a “dangerous demon” that looks with a wicked face (von Uexküll 2010: 128). Crucially, Uexküll refuses to treat this as a uniquely human privilege; he aligns it with interspecific multiplicity of meaning. The oak can become a “protection tone” for the fox (a roof), a “climbing tone” for the squirrel, and a “carrying tone” for songbirds (von Uexküll 2010: 130). What changes is not the material substrate but the operative-perceptive coupling that makes the oak real *as* something. The oak example therefore condenses Uexküll’s entire ontology: reality is a functionally and semiotically articulated *Wirklichkeit*, plural in its modes, without requiring a hierarchy of “true” vs “illusory”

worlds. Yet the human case forces a further question: humans not only vary individually; they also strive to exceed their own perceptual limits and to reach an allegedly universal truth. Uexküll attempts to describe even scientific disciplines as different "environments," and he offers a provocative irreconcilability: "In the behaviorist's environment of Nature, the body produces the mind, but, in the psychologist's world, the mind produces the body… If one wanted to sum up [Nature's] objective characteristics, only chaos would result" (von Uexküll 2010: 135). This is the extreme consequence of the *Umwelt* principle applied reflexively: even "Nature" becomes an object that changes with the *Umwelt* of the investigator. Brentari notes why this is problematic (verification and the will to objectivity), but the conceptual yield remains: *Umwelt* theory can be turned into an epistemology of situated knowledge, where conflicts are not simply errors but clashes of world-constitutions.

Mazzeo's preface is especially fruitful in showing how far-reaching this move became. He reconstructs Uexküll's intellectual position between biology, philosophy, and a broader twentieth-century debate on animal and human worlds. He also makes explicit the tension internal to Uexküll's legacy. On one side stands the extraordinary fecundity of the notion of *Umwelt* for ethology, ecology, philosophy, literary theory, and semiotics. On the other stands the problematic political transposition of organic and environmental concepts into the language of state, people, and institutional order. Mazzeo does not separate the two dimensions artificially. He shows that the very portability of the concept of environment made such displacements possible. This is one reason why Uexküll should be read with attention both to the richness of his descriptions and to the ideological risks of some of his extrapolations. Mazzeo also highlights a second major issue, one that matters directly for a contemporary use of Uexküll. Human environments, in Uexküll's own account, become more multiple and variable because they coincide less with the species than with individual lives. This formulation is both fertile and unstable. It opens the way to a thinking of human environments as differentiated configurations of experience, while also creating pressure on the distinction between *Umwelt* and Welt that later philosophers, Heidegger above all, tried to sharpen. Mazzeo's pages on Heidegger are illuminating precisely because they show how much the debate on openness, poverty of world, and the human relation to habitat unfolds in the wake of Uexküll rather than outside him. Even where Heidegger objects, Uexküll remains the unavoidable point of

departure. A persistent misreading of Uexküll treats *Umwelt*-theory as if it simply opposed "animal environment" to "human world" in a hierarchical scheme. The materials gathered in this edition allow a more precise view. On the one hand, the editorial framing recalls that, for Uexküll, humans are distinctive insofar as environments proliferate at the level of individuals: unlike the one-to-one relation of species and environment typical in many animal cases, the human case introduces a variability in which the "proper environment" can coincide with the single individual (von Uexküll 2013: 13). On the other hand, this is not meant to re-establish human supremacy, but to underline the continuity of *Umwelt*-logic: difference is a matter of how meaning is structured, not of whether meaning is present. Uexküll's favored illustration is the oak. The same oak can function as radically different meaningful unities depending on the subject: for the owl it is a set of branches; for the fox it is a shelter; for the forester it is timber; for the child it can be enchanted; for a witch it can evoke shapes in the knotted bark (von Uexküll 2013: 136). The oak is thus not an object with one fixed identity; it is a node that enters different functional circles, different perceptual and operative images, different tones. The human case intensifies this variability because language and cultural practices enable stabilizations and reconfigurations of meaning across absent contexts; but the underlying principle remains Uexküllian: meaning is enacted in a subject–world coupling.

Brentari makes explicit how language can enlarge human experience by "fixing" objects beyond their momentary presence and allowing them to have a future and a past; speech makes humans independent from the casual presence of objects (Brentari 2015: 103). Yet even this enlargement does not abolish *Umwelt*-structure; it transforms the range and flexibility of the functional circles through which objects acquire significance. Brentari's monograph deepens this by situating Uexküll across three major phases of development. Early empirical work gives way to increasingly theoretical elaborations, and the later works concentrate the mature vocabulary of environment, functional circle, theoretical biology, and meaning. Brentari's reconstruction results as particularly valuable because it shows continuity where a casual reading might see dispersion. The move from experimental physiology to theoretical biology does not abandon empirical inquiry. It generalizes it into a broader account of living organization. Teleology, subjectivity, sign-processes, and organismic planning gradually converge. Uexküll's work therefore comes into focus as one of the major twentieth-century attempts to think

life as structured semiosis before biosemiotics named itself as such. One of Brentari's most alighting contributions lies in clarifying how Uexküll's Kantian inheritance should be understood. The organism is not described as a passive receiver of a ready-made world. Each subject constitutes its world according to its bodily organization and species-specific capacities. Yet Brentari also prevents this from being reduced to abstract idealism, because he keeps in view the semiotic and biological material through which constitution occurs. Signs, organs, effectors, rhythms, and environmental carriers all belong to the formation of the *Umwelt*. The result is an account in which transcendental constitution, organic embodiment, and sign-use intersect. This intersection explains why Uexküll has mattered simultaneously to philosophers and to theorists of sign processes.

Main Themes

Seen in its full scope, Uexküll's theory offers a coherent account of life as the articulation of multiple worlds. Its central concepts form a tight system: the functional circle, perceptual and operative marks, counter-structure, building-plan, perceptual time, horizon, image, tone, path, territory, companion, magical environment. Brentari's monograph is invaluable because it reveals the conceptual continuity linking all these moments, from the early critique of mechanistic physiology to the mature theory of meaning. Mazzeo's preface is equally important because it situates the environmental turn within a wider twentieth-century field and makes visible both its anti-anthropocentric force and its tensions. Read together, the two books establish *Umwelt* as a major concept for thinking environment as lived significance, action as meaning-production, and reality as plural world-formation. Several theoretical consequences emerge from this reconstruction and remain especially useful for the continuation of the chapter. Environment designates a structured world of relevance. Perception and action form a single chain. Objects acquire significance through marks, tones, and operative possibilities. Space and time are articulated from within the world of the organism. Social bonds, territories, and paths belong to the same environmental logic as perceptual cues. Human environments intensify variability through language, practice, and technical sedimentation, while preserving continuity with the broader architecture of *Umwelt*.

Brentari's contribution is decisive here because he makes fully visible the semiotic and transcendental stakes of this theory, whereas Mazzeo shows how its afterlife extends into the decisive philosophical debates of the twentieth century. These points make Uexküll especially productive for any inquiry concerned with forms of mediation, situated worlds, and relational organizations of life. Uexküll's thought gives conceptual dignity to the plurality of experiential worlds. It describes life through marks, horizons, rhythms, paths, images, and operative dispositions. It gives the environment the status of a real, structured field rather than a neutral backdrop. It shows how one and the same thing can belong to radically different worlds because significance changes with the form of life that encounters it. Brentari's reading confirms the systematic coherence of this theory and clarifies its philosophical reach. Mazzeo's commentary highlights the breadth of its impact and the tensions that accompanied it. Taken together, these books present a theory of environment in which world, meaning, and life are formed together.

The long detour through Uexküll has made one point especially clear: environments do not pre-exist experience as neutral containers waiting to be filled. They take form through relations, through thresholds of access, through patterned orientations, and through the selective organization of what can count as relevant within a given world. The *Umwelt* therefore offers more than a biological model. It provides an analytic framework for rethinking immersive situations as worlds that are constituted from within experience itself, through couplings among bodies, signs, rhythms, objects, and operative possibilities. This is the precise point at which the present chapter can move forward. If the previous chapter approached immersive media from the side of embodiment, gesture, and the reconfiguration of the body, the present one can now shift the emphasis toward environments as the relational and processual formations within which embodied experience becomes structured, shared, and materially sustained. Such a shift does not imply a departure from the earlier analysis of bodies. On the contrary, it extends it. The body had already emerged there as the site in which immersive media become real, as the place where attention, affect, proprioception, and liveness are reorganized through technical coupling. The environment now appears as the larger configuration that gives those embodied processes their field of operation. What comes into view is a world of mediated relations in which bodies never stand alone and never confront an external setting from outside. They inhabit structured milieus that distribute salience, organize

access, channel action, and stabilize forms of being-with. This is also why the chapter on environments follows the chapter on bodies in the dissertation's architecture: the argument moves from media as reconfigurations of embodiment toward media as milieus, as historical and politically charged arrangements of presence, visibility, and action.

Read in this light, Uexküll becomes especially productive for an anthropology of immersive experience. His environments are never external, a priori, independent, indifferent, or singular with respect to those who inhabit them. They emerge through the very relations that bind subjects to worlds, and they are internally differentiated by tones, paths, horizons, operative supports, and forms of co-belonging. This allows the *Umwelt* to be brought into dialogue with a conception of experience in which relational inhabitation matters more than self-enclosed subjectivity. Immersive environments can then be approached as con-dividual formations: configurations in which experience is distributed across bodies, interfaces, props, images, protocols, and shared rhythms of attention. The environment becomes the level at which presence is organized collectively, materially, and differentially. From this perspective, the next step in the chapter consists in isolating four particularly generative traits internal to Uexküll's environmental theory. These traits are drawn from the analysis already developed and are meant to function as bridges toward a series of case studies that will be addressed later: historical *dispositifs* of projection and fairground transmission, contemporary theatrical works that reproduce immersive and metaversal logics on stage, reenactments unfolding across real and virtual domains, and XR performances grounded in the interplay between virtual experience and material props. The aim, at this stage, is to extract from Uexküll four thematic lines capable of reorienting these immersive experiences in a more explicitly environmental, theatrical, and performative key. What matters is the possibility of showing how immersive worlds operate as fields of action, as situated space-times, as regimes of salience and affective intensification, and as hybrid ecologies of bodies, media, and material supports.

As already introduced, the reconstruction of Uexküll's environmental theory makes it possible to isolate four major thematic lines that are especially productive for the discussion that follows. These lines do not stand outside the concept of *Umwelt*; they emerge from its internal architecture. If environment is understood as a structured world of relevance, produced through the articulation of perception, action, rhythm, orientation,

and tone, then the next step consists in observing how different historical and contemporary *dispositifs* organize worlds in comparable ways. The aim of the following sections will not be to apply Uexküll mechanically to heterogeneous materials, but to use his theory as a rigorous conceptual instrument for identifying how specific environments are constituted, how they distribute significance, and how they organize embodied experience. Four themes appear particularly decisive in this respect: the environment as a field of perceptual and affective intensification; the environment as a performative organization of action; the environment as a situated configuration of space and time; and the environment as a hybrid ecology in which technical, material, and bodily elements are inseparably combined.

A first theme concerns the environment as a regime of salience and intensification. Uexküll shows that an environment does not consist in the totality of what is physically present, but in what becomes perceptually and affectively relevant for a living being. Marks, tones, and operative orientations give form to a world by selecting certain elements, charging them with significance, and organizing the subject's attention around them. In this sense, an environment can be described as a selective economy of prominence: it makes certain presences stand out, magnifies some relations, suppresses others, and thereby builds a world that is internally coherent because it is affectively and operatively legible. This theme will prove especially useful for approaching historical immersive *dispositifs* such as the Magic Lantern and the fairground, where knowledge, propaganda, attraction, and wonder are not distributed in a neutral visual field but emerge through carefully orchestrated intensifications of perception. What matters there is not only what is shown, but the way in which an environment makes something appear as urgent, striking, memorable, or collectively shareable. Uexküll's theory helps clarify that such intensification is never secondary: it belongs to the very constitution of a world.

A second theme concerns the environment as a performative field of perception and action. The decisive contribution of the functional circle lies in the fact that perception and operation are inseparable dimensions of a single organization. A world exists for a subject insofar as it can be perceived and acted within; every environment is structured by a practical coupling between what can be marked and what can be done. This makes *Umwelt* theory particularly fertile for the analysis of staged worlds in which the question is not exhausted by representation, but extends to the modes of access, interaction, and

participation that a scene makes possible. Certain contemporary theatrical works seem especially relevant from this point of view, because they bring onto the stage forms of relation, navigation, embodiment, and interaction that strongly resemble those associated with metaversal or immersive environments. Their importance does not lie only in the fact that they thematize digital worlds, but in the way they organize a performative environment in which bodies, gestures, positions, and responses are already distributed according to a logic of situated interaction. Uexküll allows one to describe such scenes not simply as representations of immersion, but as environments in which perception and action are bound together by a specific operational grammar.

A third theme concerns the environment as a situated configuration of space and time. Uexküll's account of horizon, place, orientation, perceptual moments, and organism-specific temporality makes clear that space and time belong to the internal organization of an *Umwelt*. They are articulated from within the world of the subject and according to its scale of access, its thresholds, its rhythms, and its capacities for response. This line becomes particularly productive when dealing with environments in which the relation between "here" and "elsewhere," "now" and "just now," presence and transmission, is constitutively unstable. Certain reenactments in metaversal environments offer a particularly strong terrain for this problem, especially when they restage events that are occurring simultaneously in the real world or have taken place only moments before. In such cases, the issue is not merely one of representation or repetition. What is at stake is the production of a specific environmental temporality, in which immediacy, delay, simultaneity, and mediated co-presence are reorganized into a new field of experience. Uexküll's theory helps bring into focus the fact that these environments do not simply duplicate an event elsewhere; they establish a distinct spatio-temporal world, governed by its own thresholds of relevance, its own structure of presence, and its own mode of access to actuality.

A fourth theme concerns the environment as a hybrid ecology in which technical, material, and bodily components are integrated into a single field of experience. Uexküll repeatedly shows that a world is composed neither of disembodied perception nor of abstract stimuli, but of concrete relations among marks, operative possibilities, paths, supports, and material configurations. Environments are always embodied and operative; they are sustained through the articulation of bodies, objects, routes, and affordances.

This aspect becomes particularly important when considering contemporary immersive practices that insist on the conjunction of virtual environments with material supports and real props. In such cases, the environment is constituted precisely through the interplay of digital construction and physical contact, algorithmic world-building and tactile orientation, mediated image and resistant objecthood. This is particularly evident in work such as that of the Belgian company Crew, where virtual or XR-based performance is accompanied by material scenic objects designed to preserve a perceptibly concrete relation to what is experienced. Uexküll provides a strong conceptual frame here because his theory never isolates perception from the material and operative conditions that make perception meaningful. An environment is always an ecology of couplings, never a purely visual domain.

Taken together, these four themes indicate the direction of the next stage of the chapter. They are not external applications of *Umwelt* theory, but developments of problems already internal to it: the selective intensification of relevance, the unity of perception and action, the situated articulation of space and time, and the ecological intertwining of bodies, technical *dispositifs*, and material supports. Each of the four forthcoming case studies will allow one of these themes to emerge more sharply, while at the same time testing the reach of Uexküll's environmental thought beyond its original biological frame. The point will be to observe how different immersive formations—historical, theatrical, digital, and mixed—construct worlds, organize experience, and distribute meaning as environments in the full Uexküllian sense.

Before the case studies: a wider prehistory of immersive desire

At this point, a brief detour through a small constellation of examples may help clarify more precisely what is at stake in the transition from images conceived as distant objects of contemplation to images that begin to function as environments, situations, or operative fields of experience. Such a detour also helps explain why the case-study sequence that follows moves across a comparatively wide range of simulations, rather than remaining confined to a single medium or artistic form. The choice of starting from some cinematographic suggests that cinema, even if did not "invented" immersivity—nor

can it be considered the primal influence for it, as this dissertation tents to propose—as the modern medium par excellence, in some of its most self-aware moments makes legible a much older human tendency: namely to cross the threshold of the image, to inhabit the medial world, and to discover that what appears there is never only another place, but another arrangement of body, memory, and relation.[110] This tension is especially concentrated in *Solaris* (1972). Andrei Tarkovsky's film presents itself at first as a story about scientific contact with an alien intelligence, yet it soon dislocates that premise. Kris Kelvin reaches the station orbiting the planet Solaris in order to evaluate the strange disturbances affecting its crew, but the farther the narrative moves into outer space, the more insistently it seems to close in around the human psyche. The oceanic planet does not yield knowledge in the ordinary sense; it returns memories, resurrects the dead in embodied form, and compels the station's inhabitants to dwell inside materialized fragments of guilt, grief, and desire. The famous library monologue gives this structure its clearest formulation. The issue, there, is no longer conquest, progress, or even discovery:

> We have no interest in conquering any cosmos. We want to extend the Earth to the borders of the cosmos. We don't know what to do with other worlds. We don't need other worlds. We need a mirror. We struggle for contact, but we'll never find it. We're in the foolish human predicament of striving for a goal that he fears, that he has no need for. Man needs man.[111]

[110] A small reversal of the conventional account of passive moving-image spectatorship may be introduced here. If passivity must be located somewhere, it may be found less in the spectator than in the cinematic screen itself, which remains exposed to the spectator's embodied activity and, in a sense, receives it. This formulation should be read as a speculative extension of Vivian Sobchack's phenomenology rather than as her own wording. Sobchack rejects the reduction of the spectator to a "passive and 'empty' body-object" and insists instead on the spectator's "intentional visual activity" and constant co-production of cinematic signs and meaning. In *Carnal Thoughts*, her reading of Jane Campion's *The Piano* is exemplary in this regard: the film does not merely place an image before the eyes, but solicits a cinesthetic body that feels, anticipates, recoils, and responds before reflective cognition. From this perspective, the cinematic screen may be considered the relatively passive pole of a reversible relation: it offers itself as the material surface through which the film's activity appears, while the spectator's embodied activity completes, rebounds from, and animates the cinematic event. This remains an exceptional interference within the broader genealogy pursued here, but it helps clarify why cinema can function as a threshold toward immersive desire without becoming the primal model of immersivity. See Vivian Sobchack, *The Address of the Eye: A Phenomenology of Film Experience* (Princeton, NJ: Princeton University Press, 1992), 295–296; Vivian Sobchack, "What My Fingers Knew: The Cinesthetic Subject, or Vision in the Flesh." in *Carnal Thoughts: Embodiment and Moving Image Culture* (Berkeley: University of California Press, 2004), 53–84.

[111] Transcription of the author from original English subtitled version.

The speaker argues that humanity has no real need for "other worlds"; what it seeks is a mirror. That line matters because it places the problem of immersion on anthropological ground. The wish to enter another environment is tied to the wish to encounter a transformed version of one's own reality, one's own failures of contact, one's own unresolved humanity. *Solaris* may therefore be read as one of the clearest modern reflections on immersive desire: one travels outward only to discover that mediation intensifies the return to the self, and that the "other world" becomes most powerful precisely when it functions as a performative extension of human interiority.

A related but darker configuration appears in *Soylent Green* (1973). Set in an overcrowded and environmentally ruined New York of 2022, the film revolves around scarcity, exhaustion, and the industrial administration of life. Detective Thorn's investigation into the killing of the wealthy William Simonson gradually uncovers the central horror of the film: Soylent Green, the new food ration on which the masses depend, is manufactured from human remains. Within that dystopian structure, Sol Roth's death becomes especially striking. Sol, who has pieced together the truth and can no longer bear the world he inhabits, chooses assisted death in a state facility. The euthanasia chamber is staged as a total medium: music, projected landscapes, animals, forests, oceans, and color compose a final sensory environment around the dying body. Death is presented through a carefully managed envelope of images. The sequence has often been remembered as unusually affecting, and part of its force comes from its extra-filmic resonance: Edward G. Robinson, who plays Sol, was already gravely ill during production, and this was his final screen role before his death shortly afterward. The scene therefore seems to bind together the death of the character, the last appearance of a major figure of Hollywood's classical age, and a world in which memory itself is industrially staged through immersive media. The chamber offers solace, but it also reveals a terrifying possibility: images can become the final environment through which a society administers the exit from life.

Shortly before, *The Wild One* (1953), provides a third, smaller, but perhaps surprisingly prophetic version of the same problem. The film is usually remembered for Brando beginnings, leather, motorcycles, and juvenile rebellion, and the most suggestive moments take place in the modern bar of the small town. In one of them, the older Jimmy

is confronted by the younger bikers' enthusiasm for screens and spectacle. Asked about television, he answers with abrupt disgust: "Everything these days is pictures. Pictures and a lot of noise. Nobody even knows how to talk. Just grunt at each other."[112] The scene gains force because it stages not simply a quarrel about taste but a conflict between two historical relationships to media. The younger men arrive already inhabited by images: their postures, rhythms, and identities have partly been learned from the cinema, from publicity, from reproducible models of coolness. Jimmy belongs to another order, one in which images still stay "inside" their environment. What disturbs him is not only the spread of screens, but the sense that images are escaping their frame, entering daily life, and beginning to speak through people before people speak to one another. That brief exchange seems almost diagnostic of a much longer history: one generation still imagines media as external representations; another has already started to live inside their behavioral and affective atmospheres—and, apparently, *vice versa*. That scene acquires an even darker weight retrospectively because specifically the elderly Jimmy, the figure who most clearly voices this unease before the younger men's mediated postures, will later die in the chaos unleashed around them. His death is not, strictly speaking, the bikers deliberate act; it occurs when Johnny's riderless motorcycle strikes him fatally, after the vigilante pursuit and a last against-bikers violent act by the crowd. Yet the scene still gives the impression that the one who feared a world in which people no longer speak but merely repeat the ready-made grammar of "pictures and a lotta noise," ends by becoming one of the casualties of that new age where "everything is pictures" and a broader breakdown of dialogue occurs. What kills him is not only violence in the narrow sense, but the inability of the townspeople to understand what stands in front of them—pictures or just maverick youngers?—except through panic, resentment, and escalation. The tragedy therefore seems to crystallize an atmosphere in which media-shaped attitudes, social misunderstanding, and the images out of control converge in lethal form.

A similarly revealing line of reflection opens in Fritz Lang's *The Woman in the Window* (1944) and *Scarlet Street* (1945), two films made one immediately after the other and bound together so tightly by cast, tone, and structure that they can almost be read as a diptych. In both, again Edward G. Robinson, together with Joan Bennett and Dan Duryea, inhabits a world in which the female image becomes the hinge between fantasy

[112] Transcription of the author from original version.

and catastrophe, mental projection and social ruin, desire and death. In *The Woman in the Window*, the image first appears literally as an image—a portrait in a window—and from there draws the protagonist into an oneiric chain of seduction, murder, and disorientation. In *Scarlet Street*, the mechanism turns harsher and more humiliating: erotic fixation, pictorial making, fraud, and self-destruction become inseparable. Taken together, the two films seem to anticipate, in a darker and more sordid key, the logic that will later find perhaps its most concentrated cinematic form in Alfred Hitchcock's *Vertigo* (1958): the inseparability of eros, thanatos, and the labor of producing or pursuing a woman as image. Victor Stoichita's reading of *Vertigo* in *The Pygmalion Effect: From Ovid to Hitchcock*[113] is helpful precisely because it places the transformation of Judy into Madeleine at the far edge of the Pygmalionian fantasy of animation and simulacrum, where the desire to make the image live begins to border on a fully immersive reconstitution of reality itself—both in a strong theatrical sense, by the way. Lang's two films seem to stand earlier along that same trajectory. They suggest that one of the great modern laboratories of immersivity lies in this unstable knot between mental image, embodied desire, feminine figure, and fatal performative projection. Robinson's later presence in *Soylent Green*, as previously proposed, thus carries with it not only the authority of a major actor of Hollywood's classical age, but also the memory of a cinema in which images had already become environments of obsession and doom.

From here, it becomes easier to see how the desire for immersivity may have a far older and broader history than the modern technical lexicon suggests. As the dominant medium of an age, what the cinematic eye vividly exposes, recurs across highly different times and forms, is a drive to turn images into situations, surfaces into thresholds, and media into environments in which bodies should reposition themselves. That history may begin in places where "media" cannot yet be separated from architecture, darkness, gesture, and enclosure.

The painted cave remains exemplary in this respect. Sites such as Lascaux or Chauvet are not simply repositories of early images; they are spatial situations in which the image emerges only through entry, movement, and unstable illumination. One does not confront a picture from the safety of daylight. One goes inside. The blackness of the

[113] Victor I. Stoichita, *The Pygmalion Effect: From Ovid to Hitchcock*, trans. Alison Anderson (Chicago and London: University of Chicago Press, 2008), but also the original analysis of *Vertigo* in Roberto Calasso, *Allucinazioni americane* (Milano: Adelphi, 2021).

cave precedes the painted figure and continues to surround it. The wall is already screen, but also body, shelter, and depth. It may even be worth preserving, as a symbolic hypothesis, the recurrent association between cave and maternal womb. Such an association cannot explain paleolithic image-making, yet it does point toward something historically durable: the relation between media and embodiment may reach much farther back than technological genealogies usually admit. Immersion, in that sense, may begin where images are encountered in a dark interior that is at once spatial, corporeal, and origin-like.

The medieval and early modern book page belongs to the same long history. A page with margins, a page without margins, a page densely occupied by script or image: each of these already functions as a kind of arche-screen. It isolates attention, opens an elsewhere, and institutes a threshold between the reader's immediate surroundings and a secondary environment of narration, argument, or reverie. The codex does not simply preserve text; it trains perception into a bounded surface that can be entered mentally and rhythmically. The page is materially thin and experientially deep. It domesticates the threshold. It miniaturizes the passage into another world. Once this is granted, the novel no longer appears as the simple opposite of immersive media. It begins to look like one of their major antecedents: a device through which one learns to dwell in an organized elsewhere while remaining bodily here.

Greek culture gives this environmental logic both architectural and conceptual density. The *theatron* is first of all a place of seeing, and by extension the public assembled there. It does not initially designate an autonomous aesthetic object. It names a collective body situated in a spatial relation. Theater, in that sense, begins as embodied and collective environment before it becomes genre. The Greek theater in stone remains open to the world behind and around the scene in a way later enclosed spaces will not be. City, sky, landscape, and performance coexist without being sealed off from one another. An anachronistic but perhaps helpful formula would be to call this a proto–augmented reality: the performed action does not abolish the visible world beyond it but temporarily intensifies it and reorients it. Myth, meanwhile, offers a complementary model of instability. Especially in *Le nozze di Cadmo e Armonia*,[114] in Roberto Calasso's account, Greek myth often appears through abrupt metamorphic flashes in which forms are sharply

[114] Id., *Le nozze di Cadmo e Armonia* (Milano: Adelphi, 1991).

present only in the instant of their transformation. Europe on the bull, Io the wandering heifer, Pasiphaë and the wooden cow, Ariadne before the covered labyrinth: the mythic world seems to pulse between epiphany and mutation, between revealed form and imminent substitution. Symptomatically, the Italian author widely described this regime as stereoscopic. Its images do not stabilize perception; they thicken it by making every form appear under the pressure of becoming another. In that sense, myth already proposes a world of thresholds rather than of fixed objects.

The symposium offers another crucial early configuration of immersive experience because it gathers bodies, images, music, speech, erotic tension, and performance into a single lived environment. It is not simply a banquet to which spectacle is later added; it is already a structured situation in which seeing, listening, reclining, drinking, desiring, and speaking are organized as mutually conditioning forms of participation. Xenophon's *Symposium*[115] is especially revealing in this respect. The setting is the house of Callias, where Socrates and the other guests are gathered in honor of Autolycus' victory, yet what gradually emerges is less a sequence of separate entertainments than a dense scenic ecology: a Syracusan impresario brings with him a flute-girl, an acrobatic dancing girl, and a beautiful boy skilled with the cithara and with dance; music, bodily display, risk, wit, philosophical exchange, and eroticized attention begin to circulate through the room as parts of the same event. The performers do not merely appear before passive spectators. Their movements alter the rhythm of thought, redirect conversation, provoke reflection, imitation, laughter, arousal, and judgment. Socrates himself responds not by keeping performance and philosophy apart, but by folding them into one another, commenting on the dancers, on rhythm, on beauty in motion, and even on the possibility of learning through embodied display. By the end of the work, the mimed union of Dionysus and Ariadne produces so strong an effect on the assembled guests that those who are unmarried feel urged toward marriage, while the married are driven back toward their wives. The spectacle has become environment, and the environment has acted on conduct. In this sense the symposium may be understood as an early performative medium in which no rigid border yet exists between social ritual and theatrical event. Images are not fixed objects, but passing incarnations in music,

[115] Xenophon, *Symposium* (London: Macmillan and Co., 1890).

posture, costume, gesture, and role; spectatorship is inseparable from bodily co-presence; thought itself unfolds under the pressure of a sensorially charged setting. What later immersive media will often promise through technical means—the fusion of perception, atmosphere, action, and affect into a single experiential field—is already prefigured here in ritualized social form.[116]

Roman spectacle reworks the same ambition in a more centripetal form. If the Greek scene remains open, the Roman arena closes and contains. This is why the naumachic imagination, and more specifically the possibility of flooding the Colosseum in its early history, remains so suggestive. Water enters the enclosed space; an impossible elsewhere appears inside a bounded machine; the sea is manufactured in the middle of architecture. To this one should add the sonic dimension: rushing water, shouted commands, impact, roar, resonance. Immersivity here is acoustic as much as visual. The result resembles, from a certain angle, an archaic collective virtual reality. A closed environment is fabricated so that a multitude may inhabit, simultaneously, a world that would otherwise remain distant and inaccessible. The Roman arena does not simply host action. It produces another reality inside itself and surrounds it with bodies.

A different path opens in the medieval world, where the relation between reality, the supernatural, and the divine is constitutive rather than exceptional. Daily experience is not yet organized by a strict separation between empirical space and transcendent order. Signs, creatures, hierarchies, and gestures are read within a cosmos in which earthly life remains continuously exposed to invisible forces, celestial models, and theological meaning. In such a framework, vision itself cannot be reduced to a neutral sensory operation. To see is always, at least potentially, to participate in an order that exceeds the merely human. This larger horizon gives falconry a significance that goes well beyond technique, sport, or aristocratic display.

In *De arte venandi cum avibus*[117], Frederick II of Swabia does not simply codify a princely art of hunting; he formulates, with extraordinary precision, a discipline of

[116] Burkhard Fehr, "Entertainers at the *Symposion*: The Akletoi in the Archaic Period", in Oswyn Murray (ed.), The *Symposion* As Entertainment, in Oswyn Murray (ed.), *Sympotica: A Symposium on the Symposion* (Oxford, 1990), (Oxford Academic, 2023).

[117] Frederick II of Swabia. *De arte venandi cum avibus. Edizione e traduzione italiana del ms. lat. 717 della Biblioteca Universitaria di Bologna collazionato con il ms. Pal. lat. 1071 della Biblioteca Apostolica Vaticana*, edited by Anna Laura Trombetti Budriesi. Prefazione di Ortensio Zecchino. 4th ed. Roma-Bari: Laterza, 2002.

perception grounded in the attempt to align the human body with a non-human sensorium. Falconry requires much more than command over an animal. It demands a patient education of attention through which the falconer learns to inhabit, however provisionally and asymmetrically, another regime of vision, altitude, velocity, and orientation. To handle a bird of prey means to recalibrate one's own position in the world according to an aerial intelligence: one learns to anticipate the arc of descent, the circling survey from above, the sudden fixation on prey, the contraction of distance between far and near, earth and sky. What is trained here is therefore not only sight but a whole embodied disposition. The human subject extends itself into the bird's movement, borrows its line of access to space, and experiences the environment as something that can be scanned, selected, and struck from another plane of existence. That elevated view certainly has to do with power. Falconry belongs to territorial control, to aristocratic privilege, to the pleasure of mastering land and prey through an animal intermediary capable of reaching what the human body cannot. Yet, in the medieval horizon, the view from above also carries another resonance. It suggests a temporary approximation to a higher mode of seeing, one that evokes divine vision without ever coinciding with it. The falcon's gaze does not simply dominate territory; it seems to draw the human subject toward a strengthened and elevated perspective, toward a way of grasping the world from above that approaches, symbolically, the theological imagination of superior sight. Falconry may therefore be understood as an exercise in both domination and ascent: an art of control over space, but also a practice of perceptual potentiation through which the human body seeks nearness to an order of vision greater than itself.

The symbolic implications of this are equally important. The recurrent prestige of the hooked or aquiline nose in many iconographic traditions may acquire, in this light, a further layer of meaning.[118] Beyond nobility or severity, it can suggest sagacity, penetration, an elevated or raptorial intelligence—a face marked by the metaphorical trace of the beak, and thus by the idea of a knowledge that sees from above, seizes from afar, and understands through superiority of perspective. Falconry condenses this aspiration into a practice. It stages a fantasy of cognitive ascent in which human beings attempt to participate in an animal mode of world-relation without ceasing to be human.

[118] On this interesting yet minor topic see Giuliana Poli, *Il naso grifano di Dante* (Macerata: ev Casa Editrice, 2023).

This asymmetry matters. The falcon does not become human; the human tries, through discipline, training, and bodily attunement, to approximate the bird's *Umwelt*. In this sense falconry offers a particularly illuminating precedent for later immersive *dispositifs*. It suggests that one of the persistent values of immersive practices lies in their ability to produce forms of non-human apprenticeship that remain specific to human culture: they allow one to become other than oneself temporarily, performatively, and partially, while preserving the very distance that makes that becoming meaningful. Theater often works in a similar way, as do many later immersive media: they do not abolish the subject's body, but place it under the pressure of another mode of presence. Falconry may therefore be read as an early and highly concrete model of immersive transformation, one in which image, movement, embodiment, hierarchy, and knowledge are already tied together in a single performative ecology.

A similarly revealing, though far more troubled, obsessive, and modern key, case may be found in Antonio Ligabue. Born in Zurich in 1899 and dead in Gualtieri in 1965, Ligabue was an autodidact who devoted himself especially to ferocious animals rendered with violent color, an emphasis long tied to the fragility and intensity of his psychic life. As Swiss-born Italian autodidact painter, active above all from the 1930s onward and strongly associated with animal subjects, Ligabue repeatedly returned to beasts of prey, rural animals, self-portraits, and violent encounters between bodies, often with an intensity that made the painted animal seem less observed than undergone. Contemporary accounts and later recollections have often insisted on the mimetic, bodily side of his practice: the animal did not simply stand before him as an external motif, but seemed to require a prior passage through posture, grimace, contraction, roar, or muscular tension. What matters here is less the biographical anecdote than the structure it suggests. Ligabue's painting may be understood as the result of an obsessive oscillation between image and incorporation, between looking at the animal and trying, bodily, to pass through its perceptual and energetic form. In that sense, his work offers a particularly striking variant of immersive desire: the image is produced through a repeated becoming-animal that remains irreducibly human, theatrical, and plastic. His canvases often look almost wide-angle in their pressure toward proximity, as if the pictorial field had to hold not a stable specimen but a charged environment of instinct, fear, aggression, and exposure. One might say that Ligabue stages, through painting, the same problem that

later immersive media will make technically explicit: the effort to enter another life-form perceptually without ever ceasing to inhabit the limits of one's own body. The image is born from that tension, from a circuit in which embodiment, mimicry, and figuration remain inseparable.

From the obsessive corporeality of Ligabue, the argument can move toward another order of construction in which images no longer arise from the painter's bodily mimetic struggle with the animal, but from the coordinated fabrication of spaces, routes, thresholds, and collective perceptual situations. The long history of scenography becomes especially revealing at this point because it shows how the environmental ambition of images can migrate from the individual body of the maker to the large-scale orchestration of architecture, city, ceremony, and public movement. Sara Mamone's *Il teatro nella Firenze medicea*[119] is particularly valuable in this respect, since it makes clear that Medicean spectacular culture cannot be understood as a secondary layer of courtly ornament laid over an already constituted political world. What emerges instead is a dense machinery of experience in which palace, street, temporary architecture, scenic illusion, urban perspective, and ritual display are composed into a single scenic field. The decisive point lies in the fact that the scene does not remain confined within the theater in the narrow sense. It expands outward into the city, while the city itself is reorganized according to scenic logics of access, framing, procession, anticipation, and revelation. Mamone's pages make this especially tangible when they describe the relation between the public, the stage, and the surrounding architecture. The spectators are not simply placed before a representation. Their very presence is filtered and hierarchized, since the space of the hall is left free to "gentiluomini e persone favorite," admitted by direct ducal authorization, while others are excluded; spectatorship is already part of the political *dispositif*, and admiration becomes inseparable from privilege (Mamone 1981: 50). What is then required of the public is not critical distance but assent to display, and indeed identification with it. The audience sees on stage an idealized Florentine piazza, with the palace in the foreground in which they themselves are, at that moment, physically located, while on the opposite side of the hall the real windows open onto an analogous view of the same urban space, with the actual bell tower and dome outside (Mamone 1981: 50). The effect is extraordinarily subtle. Fiction and reality do not cancel one another; they are

[119] Sara Mamone, *Il teatro nella Firenze medicea* (Milano: Ugo Mursia Editore, 1981).

set into correspondence. The stage image folds back onto the city, and the city answers the stage. Representation is therefore spatialized as a lived alignment between scenic projection and architectural presence.

This environmental logic becomes even more striking in the festive itinerary through the city. Mamone describes the completed fountain of Ammannati surrounded by fictive statues more than two meters high representing satyrs carrying baskets of wild fruit; the garlands joining the groups are composed of shells, snails, dolphins, conches, shrimps, and paired marine creatures; around the edge of the basin children and marine monsters alternate in elegant poses, while sophisticated water jeux intensify the whole apparatus (Mamone 1981: 58). The result is not simply decorative abundance. It is a controlled destabilization of ontological borders. The margin separating the real from the fictive becomes increasingly labile, and the mingling of human figures, architectural organisms, and automaton-like inventions abolishes the distance between illusionistic stage and open urban space (Mamone 1981: 58). Water is crucial here, because it introduces movement, reflection, sound, and instability into an already theatricalized city. The city does not merely host the spectacle; it is temporarily transformed into a scenic medium. The culminating movement toward Palazzo Vecchio radicalizes the same principle. The entrance is marked by another sumptuous triumphal arch, dedicated to "Quiete" and "Sicurezza", that seals the ideological itinerary by translating Medici power into a spatial experience of pacification and order (Mamone 1981: 58). Once inside, the guests climb the palace stairs and arrive in the more secret and reserved rooms of honor, where the representation in the "Salone dei Cinquecento" offers an idealized city on stage while the real city can still be glimpsed through the windows. Mamone insists that where reality is present, the fictive city continues to send forth its own idealized version through an endless game of illusionistic recall (Mamone 1981: 58). This point is decisive. The scenic city becomes "more similar to the ideological city than to the real one," and the monuments that appear on stage participate in the very process by which urban representational space is being defined (Mamone 1981: 58). In other words, the theater does not imitate Florence from outside. It contributes to producing Florence as an image, as an ideological environment, and as a lived ceremonial world. A further aspect deserves emphasis here, because it touches directly on the politics of representation that underlies Medicean spectacle and also anticipates one of the structuring logics of what will later

become the *teatro all'italiana*. One of the clearest signs of power lies in the capacity to reproduce exterior environments within interior ones, and conversely to project interior environments outward into the city, as though scenic authority could fold urban space into the palace and unfold the palace back into urban space at will. This reversibility of inside and outside is never neutral. It signals an omnipotent command over the environment itself: the power to create, dismantle, extend, idealize, and recompose spaces according to ceremonial and political needs. In this sense, environment is always conceived in relation to the bodies that will cross it. The city is staged in order to be traversed in a certain way; the palace is opened, prolonged, and scenically externalized in order to regulate access, hierarchy, admiration, and movement. What emerges is not simply a politics of spectacle, but a politics of environmental design, in which space is produced as a function of embodied passage and social differentiation. This is why the Medicean *dispositifs* remain so compelling. They offer a highly sophisticated experiment in environment-making, one in which admiration is managed through sequence, displacement, and perspective, and in which the urban body and the theatrical body begin to converge. The spectator is displaced through thresholds, aligned with privileged viewpoints, and inserted into correspondences between fictive and real space, between built architecture and ephemeral construction, between political ceremony and scenic illusion. Florence itself begins, at least intermittently, to behave like a stage, while the stage takes on the scale and complexity of an inhabited world. Long before any digital vocabulary becomes available, one already finds here the ambition to produce an environment rather than a mere image, and to transform spectatorship into a situated, processual, and spatially orchestrated experience.

Nicola Sabbattini's *Pratica di fabricar scene e machine ne' teatri*[120] belongs fully to this same trajectory because it treats theatrical space as something to be engineered, activated, and transformed rather than merely decorated. The Ravenna edition of 1638 explicitly presents itself as a reprint enlarged by the addition of a second book, while the approbations clarify that the first book had already been printed at Pesaro in 1637 and that the work now circulated in two parts. This bibliographic detail matters because it shows that Sabbattini's treatise was understood from the outset as both practical repertory

[120] Nicola Sabbattini, *Pratica di fabricar scene, e machine ne' teatri* (Ravenna: Pietro de' Paoli e Gio. Battista Giovannelli, 1638).

and expandable technical corpus: a working manual for scenic fabrication, but also a systematic attempt to stabilize and transmit a body of theatrical knowledge. What gives the treatise its broader significance is the conception of scenic experience that underlies it. Already in the opening of the first book, Sabbattini insists that one should choose a sufficiently ample space, with room behind, beside, above, and below the perspectival constructions and scenic arrangements, precisely because the theater has to accommodate the multiplication of machines required for apparitions of heaven, earth, sea, and hell, as well as for distances and visual recessions. Scenic space is therefore conceived from the beginning as a layered technical environment: an articulated volume in which visibility depends on hidden reserves of depth, height, and operative infrastructure. The stage is not a flat support for painted illusion. It is a machinic field whose visible order rests on concealed labor, on spatial surplus, and on the constant possibility of transformation. The structure of the treatise makes this ambition unmistakable. The first book concerns the general ordering of the stage and the perspectival construction of scenes; the second turns explicitly to intermedi and machines, and above all to the disappearance and mutation of scenes. Sabbattini states there that contemporary theatrical practice can scarcely produce anything good unless all or part of the scenes are changed, and he immediately adds that the vanishing or transformation of scenes brings not only pleasure but wonder to the spectators, especially when the operation is carried out with speed and in such a way that almost no one notices it. That formulation is especially revealing. The desired effect lies in a double achievement: the production of marvel and the concealment of the means that produce it. Scenic change should strike the audience and, at the same time, elude perceptual capture. Theater becomes here an art of environmental modulation whose highest success lies in making transformation appear immediate, almost self-generated.

This is why the manual reaches far beyond the status of a technical handbook in the narrow sense. Of course, it is one: it catalogues procedures, mechanisms, and arrangements. Yet what it really codifies is a theory of theatrical efficacy. Clouds, thunder, lightning, infernal apparitions, descending figures, scenic recessions, and the placement of sound-producing forces all belong to a broader attempt to construct a total perceptual situation. Even the audience's relation to the scene is treated architecturally and operationally, because scenic illusion depends on angle, concealment, timing, and controlled diversion of attention. Sabbattini even recommends strategic noises or

distractions during scene changes so that the public gaze is drawn away from the operation itself. The spectator is never imagined as a detached optical subject. Spectatorship is already understood as something to be managed bodily and temporally, through attention, surprise, and the redirection of perception. In this sense, Sabbattini offers one of the clearest early formulations of scenotechnics as environment-making. Sea, inferno, palace, distance, sky, apparition: these are not motifs added to an otherwise stable stage, but conditions that should be fabricated through the coordinated action of perspective, machinery, concealment, light, movement, and acoustic intervention. Illusion is therefore operational before it is optical. The scene appears as a programmable environment whose coherence depends on technical orchestration, and whose success lies in producing a world that temporarily absorbs the spectator into its own logic of transformation. Read from this angle, the manual by Sabbatini helps make visible a long prehistory of immersive desire: a history in which theater repeatedly seeks to become more than a framed image and instead approaches the condition of a controlled, shared, and sensorially enveloping world.

A particularly revealing development within this long history of scenotechnics appears in Alberto Martini's *Tetiteatro*, a project whose very title already condenses several of the tensions at stake here: theater and element, stage and fluidity, form and submersion, spectacle and environment. Martini worked on the *Tetiteatro* in the mid-1920s[121] and the project occupied a recognizable place within his wider imaginative production; indeed, it was substantial enough to leave a coherent visual corpus behind it. The title of Davide Lacagnina's *Il "tetiteatro" di Alberto Martini: scenografie acquatiche per l'opera d'arte totale*[122], is in this sense especially illuminating, because it identifies with precision the two decisive coordinates of the project: the aquatic element and the total ambition. The *Tetiteatro* introduces water as a scenic motif and, more deeply, imagines water as a dramaturgical and environmental principle, that is, as the element

[121] Alberto Martini, *Il Tetiteatro. "Il teatro d'arte sull'acqua."* Text by Emanuele di Castelbarco (Milano: Bottega di Poesia, 1924). Another experimenter of the Italian early 20th Century between set, bodies and participation was Anton Giulio Bragaglia; see Giulia Taddeo, "All'origine del teatro teatrale: Anton Giulio Bragaglia e la scena come corpo vivente." *Danza e ricerca. Laboratorio di studi, scritture, visioni* 14, no. 14 (2022): 71–90.

[122] Davide Lacagnina, "Il 'tetiteatro' di Alberto Martini: scenografie acquatiche per l'opera d'arte totale." Paper presented at *Spazi dell'utopia. Lo spazio della rappresentazione e le sue trasformazioni tra teatro, cinema e arti figurative negli anni Venti e Trenta del Novecento*, Seminario interdisciplinare – Dottorato in Storia delle Arti e dello Spettacolo, Collegio Santa Chiara, Siena, April 22, 2015.

through which theater might recover a more continuous relation between body, spectacle, surrounding space, and sensorial immersion. The recurrence of the aquatic element is itself telling, since some of the most extreme theatrical experiments seem repeatedly to imagine immersivity through water: from the artificial seas staged within the Roman arena to modern scenic utopias such as the Tetiteatro, water returns as a privileged medium for conceiving the passage from representation to environment, and from spectacle to a shared condition of bodily, acoustic, and sensorial exposure. What makes the *Tetiteatro* especially suggestive is that it seems to reactivate, in a modern and utopian key, a much older scenic dream: the desire to transform the stage from a surface of representation into a living medium, a field of unstable relations in which visibility, movement, and material environment can no longer be cleanly separated. Water is crucial precisely because it resists fixity. It reflects, absorbs, distorts, carries, drowns, and reanimates form; it makes the scenic image mobile even before anything moves upon it. For this reason, an aquatic theater can be understood as one of the clearest pre-digital formulations of immersive desire. It proposes a stage that does more than show an elsewhere; it envelops perception in an elemental condition. In such a project, scenography ceases to be an ornamental support for action and becomes instead the very substance through which action is given. Water no longer frames the theatrical event from outside; it reorganizes the theatrical event from within.

This also helps explain why the *Tetiteatro* can be linked, more convincingly than many later technological examples, to the horizon of the *Gesamtkunstwerk*[123]. The "total" dimension lies in more than the accumulation of arts, and in more than the Wagnerian ambition to coordinate music, image, architecture, and gesture. It lies in the attempt to produce a world whose coherence is environmental before it is narrative. A theater on or through water intensifies the sense that spectators are not simply facing a scene but entering a modified relation to matter, sound, light, and bodily orientation. The aquatic element inevitably carries acoustic consequences as well: resonance, dampening, splashing, echo, and the diffuse spreading of sound across a fluid surface. In this respect, the *Tetiteatro* appears as an especially rich threshold-concept. It stands between baroque machine-theater and modern utopia, between scenic engineering and environmental imagination, between the represented sea and the desire to make the theater itself behave

[123] A concept already recalled in the previous chapter titled *Bodies*.

like a sea. If later immersive technologies will often seek totality by miniaturizing the world around a headset or interface, Martini's project seems to pursue the opposite route: the expansion of scenic illusion into a shared, unstable, collective medium rather than its privatization. In that sense, the *Tetiteatro* may be read as one of the most compelling modern attempts to think theater as an environment rather than as a frame.[124]

Robert Edmond Jones, writing in *The Dramatic Imagination*[125] in 1941, gives this tradition one of its clearest modern formulations. Stage design, he writes, should bring the audience into the atmosphere of a theme or thought rather than merely display a setting; elsewhere he insists that the stage setting is "not a background; it is an environment," and that the talking picture opens a new possibility for scenic thought by rendering thought, dream, and subjective life visible. His wager is that theater and moving image could work together to reveal outer and inner worlds simultaneously. That proposal remains unexpectedly fertile for thinking immersive media today. VR, under this aspect, could be described—on certain similitudes—as a theater cut to the measure of the head, a personalized scenotechnics of illusion and environment. Yet the decisive point may not concern images alone. What such *dispositifs* really organize is movement, orientation, and bodily negotiation. Their most ambitious promise is that the technical apparatus might disappear into pure environment. Its most stubborn reality is that it does not fully disappear at all: the visor weighs on the face, the body feels imbalance, nausea can interrupt the world. What tries to negate itself here is the apparatus rather than the image. It wants to vanish into seamless experience and repeatedly fails. The friction remains part of the truth of immersion.

A particularly suggestive theatrical example of images becoming environment, action, and historical presence appears in Rafael Alberti's *Noche de guerra en el Museo del Prado*,[126] written in 1956 but set during November 1936, at the moment when Republican militiamen sought to protect the masterpieces of the Prado during the bombardment of Madrid. The premise is already enough to make the work crucial in the present context: the museum is no longer a silent container of framed images, but a threatened space in which art, war, memory, and collective survival are forced into the

[124] Something similar, for different reasons, to *Teatro Continuo* by Alberto Burri further developed in the next chapter titled *Simulations*, as well as La Scarzuola by the Italian architect Tomaso Buzzi.
[125] Robert Edmond Jones, *The Dramatic Imagination: Reflections and Speculations on the Art of the Theatre* (New York: Duell, Sloan and Pearce, 1941).
[126] Rafael Alberti, *Noche de guerra en el Museo del Prado* (Madrid: Biblioteca Nueva, 2003).

same dramatic field. Alberti's great invention consists in allowing the painted figures themselves to leave their canvases and join the historical crisis unfolding around them. Characters from Velázquez, Goya, Titian, Fra Angelico, and other masters descend into the subsoil of the museum, step into the barricade, and enter into relation with the living defenders of Madrid. The operation is theatrical, political, and media-theoretical at once. It turns the museum into a scene, painting into action, and cultural memory into embodied intervention. The pictures do not merely signify resistance from afar; they become part of the resisting environment. In that sense, the play may be read as a decisive meditation on the permeability of the frame. Images survive by leaving the condition of inert objects and entering a world of voices, gestures, risk, and collective struggle. One of the most striking summaries of the play, preserved in the programmatic material around later stagings, states the matter with unusual precision: the immortal images of the Prado are moved underground under sandbags and improvised protection; then "the celebrated characters leave their canvases, rush to the barricades, and join the militiamen to fight against the fascists." What is staged here is not simply allegory. It is the fantasy—and perhaps the political demand—that images should cease to be contemplative possessions and become historical agents. For the present argument, *Noche de guerra en el Museo del Prado* is especially valuable because it shows that the question of immersivity does not belong only to new technologies or to optical inclusion. It can also arise when an institution of images becomes a performative environment and when images themselves are imagined as crossing their boundary in order to inhabit, with bodies, the same threatened world as their spectators.

In an ideal line of still but alive images, Bill Viola's work seems to sit at a crucial threshold in this history because it remains fully within the domain of the image while constantly pressing the image toward environment. *The Greeting* (1995) was filmed in a single take lasting forty-five seconds and then stretched into roughly ten minutes through extreme slow motion; works such as *Quintet of the Astonished* (2000) and related pieces intensify the same operation by making the smallest shifts in expression, relation, and emotional surface occupy a durational field large enough to be inhabited. One does not simply "look" at these works. One waits inside them. The image slows time to the point where the viewer's own perceptual habits have to be retrained. A figure that seemed still proves to have moved; a relation that seemed fixed becomes unstable; the image ceases

to be merely visible and becomes temporally thick, relationally charged, almost atmospheric. This is one reason Viola matters so much here. His works remain images of extraordinary precision and beauty, yet they also generate environments by reorganizing the tempo and texture of attention itself. The ambiguity is crucial: they remain images, but they ask to be inhabited like worlds.

The same question emerged, more explicitly and more anxiously, in the first examples of Italian literature about media culture, in the later twentieth century. Primo Levi's "Trattamento di quiescenza," from *Storie naturali*[127], imagines the Torec, a device that can record and replay sensations directly through a helmet, bypassing the ordinary senses and supplying visual, auditory, tactile, olfactory, gustatory, and kinaesthetic sequences as an "totale experience." The promise is intoxicating: flying, travelling, fighting, remembering, even temporarily becoming-animal can be selected and inhabited through a tape. Yet Levi's story immediately pushes the fantasy toward unease. The more complete the transfer of experience becomes, the more the subject risks being displaced by prefabricated memories and borrowed sensation. Immersion turns out to be inseparable from substitution. It offers expansion and threatens expropriation in the same gesture.

Television soon stages a lighter-hearted and, for that very reason, more disturbing version of the same process. Tex Avery's *T.V. of Tomorrow* (1953) had already imagined a domestic medium that, as previous ones, would refuse to remain discreetly framed: a device that invades habits, rooms, gestures, and daily routines, turning the household into a site of continuous interface. Three decades later, Dino Risi's *Sesso e volentieri* (1982) returns to that mutation in comic form, but the comedy is edged with something harsher. In the first episode, "Domenica in," a couple making love while zapping across the channels pauses on a television appearance by Giucas Casella. The magician asks viewers to clasp their hands and follow the experiment; a blackout interrupts the release, and the spectators remain literally immobilized, fingers locked above their heads, while the whole domestic and condominium space is reorganized around this absurd televisual capture. The mechanism becomes even more pointed because the immobilization is not immediately reversed: a power outage interrupts the magician's release formula, so that not only the couple but also the residents of the Roman condominium remain literally stuck, hands clasped above their heads, trapped in an absurd state of suspended domestic

[127] Primo Levi, *Storie naturali* (Torino: Einaudi, 1966) 164-184.

life. The comic escalation is crucial, because it turns television into an intrusive medium: the first exhilarant and political oriented zapping montage explicitly declares it as the never-turned-off voyeur in the domestic intimacy the couple, then its pictures exceed the frame and reorganizes an entire micro-social environment. The victims are eventually brought to the Rai headquarters, and once they are finally released, they take revenge on the magician himself. The whole episode pushes toward parody, but it does so by taking seriously a disturbing intuition: the broadcast image does not merely circulate in everyday life; it can seize it, interrupt it, and force bodies into an involuntary performative relation with the medium. *The Wild One* had already sensed that images and their noise were beginning to replace others. *Sesso e volentieri* imagines a later moment in which the image not only speaks instead of people but also arrests them physically in the middle of life. *T.V. of Tomorrow* had treated such interference as comic exaggeration; Risi turns it into a satire of everyday capture.

The cover of Cybotron's *Enter* (1983) condenses the same threshold in a remarkably direct visual form. The album is one of the key early records in the formation of Detroit electro/techno, and the imperative of its title already suggests passage, crossing, entry into another regime. The cover image pushes that logic further by presenting a body split across the boundary of the medium: partly still in flesh, partly already translated into electronic raster, as if the human figure were running into the image with the whole body rather than merely looking at it from outside. The point is not disembodiment. On the contrary, the body remains central. What changes is the condition of its appearance. Threshold, transfer, partial conversion, and incomplete migration become the visual grammar of the image itself. The cover of *Enter* becomes more eloquent the longer one looks at it. Released in 1983, at a formative moment for electro and for the technological imaginary that would feed later techno culture, the album visualizes threshold not as abstract metaphor but as bodily passage and condition. The figure is neither simply outside nor simply inside the medium. He appears as if caught mid-transition, half still materially present, half already translated into an electronic raster, yet with the whole body implicated in the crossing. The image therefore does not suggest a disembodied consciousness slipping into circuitry; it stages a corporeal threshold, a body entering the medium and being reformatted by it without ever ceasing to be bodily. That makes the cover especially suggestive in the present context. It condenses, in a single graphic

gesture, a problem that many later immersive technologies will intensify: how to imagine the human crossing into an image-world with the entire sensorimotor body, and how to represent that crossing as both promise and deformation, empowerment and partial loss of form.

Seen from this angle, examples from cinema, literature, television, music, stagecraft, and much older ritual or theatrical formations begin to resonate with one another without collapsing into sameness. They suggest a broad and uneven history in which images repeatedly cease to function as distant representations and begin to organize environments, relations, thresholds, and bodily dispositions. Sometimes the result is wonder, sometimes pedagogy, sometimes propaganda, sometimes estrangement, mourning, paralysis, or collective excitement. What persists across these variations is the recurring attempt to transform media into worlds and spectators into situated participants. The four case studies that follow belong to that long and discontinuous history. Each of them isolates one particularly telling form of this environmental desire, and each of them will make it possible to observe, from a more focused angle, how bodies, images, and media come together whenever immersion is pursued as a performative mode of world-making. The environmental perspective has shown that immersive experience emerges through hybrid constellations of bodies, media, spatial arrangements, and operative thresholds. The next step will tent to observe how these constellations are reworked in contemporary simulations, where reenactment, event-structure, and platformed presence become especially visible.

Simulations

The previous chapter approached immersive experience from an environmental perspective, showing that an environment is a structured world of relevance, action, orientation, rhythm, and material coupling rather than a neutral container. On that basis, four thematic lines were isolated from Uexküll's theory: the environment as a regime of salience and intensification; the environment as a performative field of perception and action; the environment as a situated configuration of space and time; and the environment as a hybrid ecology of bodies, technical *dispositifs*, and material supports. The present chapter takes the next step by testing those lines through a series of case studies. The aim is less to "apply" the previous theory to contemporary or historical examples than to observe how different immersive formations make those environmental logics visible in concrete ways. What follows, then, is the point at which the dissertation moves most explicitly from conceptual elaboration to analytical verification.

The invention of the observer, the fairground, and the magic lantern: salience, attraction, and the staging of prominence in early visual culture

Crary and the Modern Reconfiguration of the Observer

The first case study develops the theme of the environment as a regime of salience and perceptual intensification. The issue here concerns the way a world is built through selective prominence: how certain elements are made striking, memorable, affectively

charged, or collectively shareable, while others recede into the background, rather than immersion as total enclosure. This thematic line is especially useful for approaching historical *dispositifs* of projection, fairground attraction, and mediated wonder, where what matters exceeds what is shown alone and includes the environmental orchestration through which something is made to appear as urgent, spectacular, or significant.

In *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*[128] Jonathan Crary undertakes not a history of images, but a history of vision as a historically constructed practice. Writing at the end of the twentieth century, in the midst of emergent computer graphics and digital imaging, he deliberately turns back to the nineteenth century in order to understand how modern regimes of visuality were configured. The book's central methodological move is to shift attention away from artworks and styles toward the formation of the observer. Vision is treated not as a natural, timeless faculty, but as something produced and regulated within specific constellations of discourses (philosophy, optics, physiology, psychology), apparatuses (optical devices, viewing machines, institutions), and social relations (industrialization, commodification, urbanization). As Crary puts it, his project is "about vision and its historical construction" (Crary 1990: 1), and he aligns himself explicitly with a Foucauldian perspective: there is "no observing subject prior to this continually shifting field" of practices and techniques (Crary 1990: 6). The observer is an effect and a stake of power/knowledge, not an invariant origin. From this vantage point Crary contests two deeply entrenched narratives. On the one hand, standard art history identifies the "origin" of modern vision with the rupture of Impressionism and Post-Impressionism, reading Manet, Monet and their successors as inaugurating a radically new perceptual regime in the 1870s–1880s. On the other hand, histories of technical media tend to treat photography (and later cinema) as a linear extension of Renaissance perspective, as if "realistic" imaging simply continued a continuous mimetic tradition. Taken together, these accounts produce a bifurcated history: an avant-garde perceptual revolution in painting, and a stable, perspectival "realism" persisting in popular media. Crary proposes instead that the decisive mutation of Western visuality takes place earlier, between roughly 1810 and 1840, when the classical model of the observer collapses and a new, heterogeneous

[128] Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge, MA: MIT Press, 1992).

regime of vision is assembled. Modernist painting and photography are re-situated as symptoms of this transformation, not its cause.

The first part of the study reconstructs the long dominance of the *camera obscura* as a paradigm for vision in the seventeenth and eighteenth centuries. Crary is careful to distinguish the physical phenomenon—a darkened room in which light passing through a small aperture and projects an inverted image—from the historically specific figure of the *camera obscura* as a model of subjectivity and knowledge. For early modern philosophy, from Descartes to Locke, the *camera obscura* offered an exemplary schema of how a knowing subject relates to an external world: a fixed point of observation, a stable opposition of interior and exterior, and a transparent correspondence between representation and reality. It functioned simultaneously as scientific instrument, philosophical metaphor and artistic aid, condensing within itself a certain configuration of truth and vision. In this model, the observer is conceived as a disembodied eye occupying an abstract geometrical point of view; vision is aligned with epistemic certainty, the optical image with evidence. Crary insists, however, that this regime is historically bounded: the camera obscura is not a universal metaphor of perception, but a component of a classical episteme that will be dislodged. The fact that, by the nineteenth and early twentieth centuries, thinkers such as Marx, Bergson and Freud can re-read the *camera obscura* as an image of inversion, illusion or ideology indicates that its earlier status as a site of truth has already been undermined. The break that Crary identifies in the decades around 1820 is articulated through a complex set of philosophical and scientific shifts. One decisive moment is the emergence of subjective vision within the new sciences of physiology and psychology, and the corresponding relocation of vision from a transparent geometrical space to the materiality of the body. Crary pays particular attention to Goethe and his *Theory of Colors* (Crary 1990: 67-74), which takes up some of the same experimental situations as classical optics (darkened rooms, apertures, light beams) but draws very different conclusions. When Goethe studies afterimages—those colored circles that persist on the retina after one looks away from a bright object—he describes them as "physiological" colors, belonging entirely to the activity of the eye rather than to external objects. What matters here is not the correctness of Goethe's color theory, but the conceptual displacement it enacts: the conditions of vision are no longer located outside, in a stable projection of the world, but inside, in the mutable and fallible

processes of the nervous system. Vision thus appears as an active, generative process, contingent upon bodily states and open to experiment.

This reconfiguration is reinforced by "Kant's 'Copernican revolution' (*Debung*)" (Crary 1990: 69) in epistemology, which deprives vision of its privileged access to reality. If objects as appearances should conform to our forms of intuition and categories, then there can be no direct passage from the visible to the true. Crary reports that as Foucault[129] noted in his reading of classical natural history, there had been a period in which knowledge of the world was "nothing more than the nomination of the visible," a "perceptible knowledge" grounded in the apparent identity of seeing and knowing (Crary 1990: 57). After Kant, Crary argues, vision itself becomes something to be known, analyzed and problematized; it becomes an object of discursive and experimental scrutiny. Nineteenth-century physiological optics radicalizes this turn. In the work of figures such as Johannes Peter Müller, perception is described in terms of stimuli affecting a "sensitized surface" (Crary 1990: 92) and specific sensory nerves; what we call a visual object is reconceived as the effect of particular patterns of excitation. The distinction between internal and external sensations is blurred: all experience is distributed along a single immanent field of nerve activity. The observer that emerges from this discourse is no longer guaranteed, stable or transparent, but fragmented, defective, and manipulable. In one word: contemporary.

At the same time, Crary traces a process he calls the "separation of the senses" (Crary 1990: 67-96). Earlier conceptions of vision had often presupposed a close coupling with touch; debates about how the blind learn to see, or about the correspondence between visual and tactile space, had placed emphasis on their interrelation. In the nineteenth century, by contrast, sight is increasingly isolated as a discrete domain, subjected to specialized experiments and instruments. The loss of tactility as a reference point contributes to a more abstract visuality, one in which the eye can be addressed independently of the body's other modes of contact with the world. This abstraction is crucial for later forms of spectacle, commodity display and mass media, but in Crary's narrative it is already operative at the level of laboratory practices and medicalized discourses. This sensory differentiation would therefore become a decisive condition for

[129] See Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences*. Translated by Alan Sheridan (New York: Vintage Books, 1994).

that technical and interpretive line of apparently passive media consumption conventionally associated with the visual, a line that would find one of its most influential culminations in cinema. In this sense, the separation of the senses helps explain how modern spectatorship could increasingly be organized around the eye as a privileged channel of reception.

The second major axis of Crary's work concerns the proliferation of optical devices—stereoscopes, phenakistiscopes, thaumatropes, phantasmagorias and other new media—that become widespread in the nineteenth century. Crary insists that these machines should not be understood as mere precursors of cinema or as neutral technical improvements on earlier visual aids. They are, rather, concrete *techniques of the observer*: arrangements that materialize the new model of subjective, physiological vision and simultaneously train and regulate it. The stereoscope provides a particularly striking example. It produces an impression of depth not by reproducing geometrical perspective, but by presenting each eye with a slightly different image and exploiting the brain's capacity to fuse them. Its "realism" is anti-veridical in the classical sense: it does not mirror an external space but manipulates the body's own binocular mechanisms to fabricate a convincing illusion. Similarly, devices based on the "persistence of vision" generate the perception of continuous movement by rapidly sequencing discrete images, relying on the temporal inertia of retinal impressions. For Crary, such apparatuses demonstrate that nineteenth-century "realism" is inseparable from abstraction. The concreteness of the visual effect depends on a prior isolation and instrumentalization of bodily processes: retinal afterimages, thresholds of attention, temporal integration. At the same time, this very abstraction required an equally strong bodily counterweight, since such devices could only operate by mobilizing concrete physiological mechanisms and regulated corporeal positions and actions. Cary's analysis, however, remained largely tied to optical physiology and did not fully extend to a broader embodied dimension of experience, while it could be precisely here that the dissertation's notion of immersivity would find one of its most fertile historical grounds: in media formations that, even before full technological immersion, already engaged the body more explicitly than a condition of strictly visual experience. Indeed, Crary's focus remains a visual experience which only granted what he calls "unprecedented mobility and exchangeability, abstracted from any founding site or referent" (Crary 1990: 14). The image no longer presupposes a stable

relation to a real object; it becomes something that can be constructed, circulated and consumed independently of any indexical anchoring. This is why Crary aligns optical entertainments with the broader transformations of industrial modernity. The devices immobilize the body in specific postures, fix the eyes at regulated distances, orchestrate sequences of stimuli over time, and solicit a particular kind of concentrated, repetitive looking. They contribute to the formation of an observer whose perception is standardized and disciplined, yet whose fascination is mobilized in the service of commodified leisure. In this sense, the stereoscope or the phenakistiscope are no less "panoptic" than the prison or the factory, even if they operate through pleasure rather than coercion.

The final part of *Techniques of the Observer* re-situates late nineteenth-century artistic and technical developments within this transformed field. Crary reads the emergence of visionary abstraction—in both modernist painting and in new imaging technologies such as photography and chronophotography—not as an autonomous aesthetic revolution but as one dimension of a larger process of social and perceptual rationalization. Drawing on Heidegger's characterization of the nineteenth century as "the most obscure" of the modern age and on Adorno's insistence that art is implicated in the same logic of abstraction that structures capitalist society, he argues that the apparent opposition between artistic experimentation and technological rationality is misleading (Crary 1990: 137-150). Modernist explorations of light, vibration and optical instability are conditioned by the same historical restructuring of vision that underpins the scientific study of perception and the industrialization of image production. At the level of technical media, photography and related practices further detach vision from the human body. Cameras can be placed, moved and operated in ways that no embodied observer could replicate; they record sequences and perspectives independent of any single viewpoint. Yet these apparatuses remain deeply indebted to the nineteenth-century discovery of the observer as a physiological entity. Chronophotographic studies of movement, for example, presuppose a conception of perception as analyzable into discrete instants, just as laboratory experiments had decomposed sensation into measurable elements. Modernist painting, for its part, both exposes and exploits the instability of appearances, presenting vision as a field of flux, contingency and temporal layering rather than as a window onto a stable world. Crary resists any simple division between "resistant" art and "complicit" media; instead, he emphasizes their co-implication within a shared regime of

visuality that renders perception at once a site of control and of potential critical reflection.

From the perspective of visual-culture studies, the importance of Crary's contribution lies in how it reorients the very terms of inquiry. First, it decenters artworks as the primary locus of change: painting, photography and cinema are treated as elements of a wider assemblage that also includes scientific instruments, pedagogical practices, urban spaces, and commodity forms. Second, it historicizes "natural" vision, showing that what counts as seeing—and what counts as a legitimate or truthful image—is always mediated by apparatuses and discourses. There is no transhistorical spectator; there are only historically situated observers. Third, it foregrounds embodiment and power: by tracing the shift from geometrical to physiological optics, Crary demonstrates how the body becomes the central terrain on which visual experience is produced, tested and governed. Finally, it re-periodizes modernity, relocating the crucial break not at the moment of Impressionism or the advent of cinema, but earlier, in the decades in which the *camera obscura* model is displaced and a new, mobile, exchangeable visuality is constituted. For a broader genealogy of visual culture, as the one we are trying to retrace, Crary's study functions as a kind of hinge. It links early modern regimes of optical truth to the emergence of a modern, technologically mediated observer whose perception is at once embodied and abstracted, intensely regulated and permanently open to new techniques of stimulation. Later visual media and environments will continue to reconfigure this figure, but they do so on a terrain that *Techniques of the Observer* helps to map: a terrain in which vision has long ceased to be a neutral window on the world[130] and has become instead a privileged site for the negotiation of knowledge, desire and control.

Salience, Projection, and the Environmental Logic of the Magic Lantern

Read in continuity with the previous chapter, Crary's argument helps historicize the first thematic line by showing how an environment becomes a regime of salience and

[130] For an exhaustive analysis of the passage from window to screen see Carbone 2019: 57-79.

perceptual organization through materially and historically structured forms of visibility, attention, and sensory orientation. If one begins, as Jonathan Crary proposed, from the historical production of the observer rather than from a sequence of inventions, the fairground and the magic lantern immediately acquire a different weight. They cease to appear as picturesque preliminaries to cinema and emerge instead as crucial sites in which vision, attention, bodily orientation, and social spectatorship were reorganized across the long nineteenth century. Crary's argument remains decisive because it relocates visual modernity within a broader transformation of the body and of the conditions of observation. In the opening of *Techniques of the Observer*, he describes his project as a study of "vision and its historical construction," one that traces how, especially between the 1820s and 1830s, a new observer was produced within changing relations among body, power, and knowledge (Crary 1990: 1–3). The camera obscura, in his account, had long served as a dominant model of observation, binding a knowing subject to a stable point of view and to a delimited tableau (Crary 1990: 28–30, 53). The stereoscope shattered that scenic relation. Crary's formulation is deliberately strong: the stereoscope was "inherently obscene," because it destroyed the bourgeois theatre central perspective setup that had organized the camera obscura and replaced it with a regime of extreme proximity, discontinuous depth, and local zones of relief that refused to coalesce into a homogeneous field (Crary 1990: 126–27). The point matters here because it allows the fairground to be read as a historical terrain in which precisely such reorganizations of observation became available to broad publics. The fair environment did not simply host devices. It trained bodies in new distributions of nearness and distance, centrality and distraction, scene and obscenity in the literal sense of what stands outside the classical scenic order.

Parikka's reading of Crary (Parikka 2012: 31-39) sharpens this line in a particularly useful way. What modern mass culture inherits, in his formulation, is not first of all a world of representational images passively contemplated by detached viewers, but a field of attention, movement, and bodily sensation that takes shape across science, popular amusements, capitalist commodification, and the entertainment industry. Parikka, using an expression of Zielinski, explicitly cites Crary's insistence that the "cinematisation of the eye and of perception" occurred across an extensive terrain of toys, spectacles, laboratories, and sensory practices, and he recalls Crary's claim that

fairgrounds, ferris wheels, roller coasters, slides, and loop-the-loops formed the very social terrain on which cinema later implanted itself (Parikka 2012: 43). This observation offers the right point of departure for the present case study. It suggests that the fairground has to be understood as a historical environment of salience: a world built by temporary concentrations of stimuli, attractions, invitations, competitions, and staged novelties in which certain things came powerfully forward while others receded or vanished. In such a space, prominence was not an accidental effect. It was the medium's basic operating principle. Following this path by extending Parikka's suggestion, the fairground may also be read as a kind of precursor to later virtual and immersive social spaces. It was a temporary environment, dense with stimuli, organized as a simulation of the external world while reshaping that world through its own simplifications and specific rules. It offered certain possibilities of agency while keeping other spaces inaccessible, almost as if they were the hidden processors of the embodied experiences unfolding in the accessible areas. Exploration was structured, defined, and only partially free; space was bounded; attractions were continuous; and the strategies through which attention was captured already anticipate, in some significant respects, those of contemporary immersive worlds, which will be discussed later.

The fairground of the nineteenth century accordingly appears less as a miscellaneous accumulation of amusements than as a temporary world with its own rules of visibility and movement. The ERC Starting Grant *Sci-Fair* project[131] has insisted on exactly this point by treating fairs between 1850 and 1914 as centers of international exchange rather than as merely local folk events, and by reconstructing the role itinerant showpeople played in the circulation of information about science, technology, and visual culture across Western Europe. The project's public database makes the same methodological wager in archival form, gathering ephemera, posters, broadsides, photographs, correspondence, journals, newspapers, and objects into a single open-access environment of research. These materials show that fairgrounds condensed commodities, animals, theatres, museums, puppet booths, projection media, mechanical inventions, lectures, songs, and performances into traversable spaces whose temporariness was fully compatible with their social force. The fair was a place where local squares could be

[131] *Science at the Fair: Performing Knowledge and Technology in Western Europe, 1850-1914)* (2021–2026). See https://www.uantwerpen.be/en/projects/science-at-the-fair/, accessed April 15, 2026.

reorganized for a few days into miniature worlds of global trade, exotic display, technical innovation, public pedagogy, and staged wonder. What emerged there was a programmable space of prominence, one in which novelty, urgency, and visibility were continuously manufactured. The surviving fairground ephemera make this exceptionally clear. The posters, leaflets, and printed handbills recovered in Belgian collections, and recently discussed in the essay on "precious fairground ephemera," functioned as much more than advertisement. They prepared a public in advance. Their graphic abundance, their oversized typography, and their obsessive emphasis on uniqueness, dates, themes, and attractions worked to orient bodies before the event itself. The fair was announced as a temporary rupture in ordinary routine, a concentrated site where one could encounter the world under exceptional conditions. The showman's economy depended on precisely this ability to render a forthcoming attraction immediately legible as worth seeing. That is one reason the fair can be described as a social simulation in concentrated form. It assembled machines, bodies, images, and distant worlds into a local environment governed by temporary codes of approach, payment, waiting, and traversal. Its reality was emphatically spatial and collective. One entered it bodily, moved through it bodily, and learned to read its scale and hierarchy through the distribution of lights, posters, barkers, tents, and crowds.

The article *Women at the Wheel: Female Management and Workforce at the Nineteenth-Century Funfair*[132] by Eva Andersen and Nele Wynants on women in the nineteenth-century funfair gives this environment a valuable social thickness. Their research shows that fairground life was structured by family networks, by managerial skill, by advance advertising, by recruitment, by mechanical upkeep, and by constant adaptation to the practical demands of itinerant enterprise (Andersen and Wynants 2024: 119–21, 131–33). Women operated as proprietors, managers, stallholders, and heads of travelling shows, including theatres, museums, puppet booths, and panoramic attractions. The fairground therefore functioned as an organized ecology of labor long before it functioned as a spectacle for visitors. The attraction that appears dazzling to the audience rests on a network of hidden competences: carpentry, transport, driving, electrical maintenance, painting, accounting, childrearing, and crowd management. Such labor is

[132] Eva Andersen, and Nele Wynants. "Women at the Wheel: Female Management and Workforce at the Nineteenth-Century Funfair." *Early Popular Visual Culture* 22, no. 2 (2024): 119–137.

especially relevant in a study centered on salience, because it reveals that prominence on the fairground was always produced. A spectacular object or event stood out because a social apparatus had been assembled around it. Salience was a worked effect.

Within that environment, the magic lantern acquired a force that can no longer be understood by treating it as a precursor to cinema alone. Joe Kember's notion of the lantern as an "open medium"[133] accounts for the medium's extraordinary adaptability without dissolving its specificity. As he notes at the beginning of his 2019 essay, the magic lantern moved from the mid-seventeenth century into the mid-twentieth, appearing in macabre entertainments, science popularization, education, public persuasion, temperance campaigns, suffrage activism, and propaganda, while continuing to function "highly successfully for radically different individuals and institutions across an extraordinarily long period" (Kember 2019: 1–2). The key point lies in the next step of his argument: the basic layout of the apparatus could remain relatively stable while its mode of operation, in combination with different performances, changed profoundly (Kember 2019: 2). Such openness helps explain why the lantern could inhabit fairground theatres, church halls, classrooms, lecture rooms, colonial campaigns, and domestic interiors without losing its identity. Its identity did not reside in one purified essence. It resided in a cluster of relations among light source, slide, projection surface, speaker, manipulation, and gathered spectatorship.

Nele Wynants's work[134] helps specify what that cluster meant in practice. Lantern shows, she argues, were "live, embodied and media-based performances," and their surviving traces only become fully meaningful when one restores the operator, the lecturer, the timing of slide handling, and the liveness of the event to the center of analysis (Wynants 2020: 422–25). Her insistence on the "invisible hands"[135] of the lanternist is particularly valuable because it prevents the history of the medium from flattening into a

[133] Joe Kember, "The Magic Lantern: Open Medium." *Early Popular Visual Culture* 17, no. 1 (2019): 1–8.
[134] See Nele Wynants, ed. Media Archaeology and Intermedial Performance. London: Palgrave Macmillan, 2019; Ead. "Larger than Life: Scientific Theatre between Representation and Enactment." *TDR / The Drama Review* 66, no. 3 (2022): 96–106 and Ead., "Wallenda's Wonderful Performing Dogs: Challenges and Opportunities for a Transnational Circus and Funfair Historiography." *Circus: Arts, Life and Sciences* 3, no. 2 (2024): 49–82. The most recent joint research with Eva Andersen resulted in the publication Ead., and Eva Andersen, eds. *Performing Science, Mediating Knowledge: Science, Showmanship, and the Performance of Authority in the Long Nineteenth Century* (Turnhout: Brepols Publishers, 2026).
[135] Ead., "Invisible Hands in the History of the Magic Lantern: Where Theatre Studies and Media Archaeology Meet." *Early Popular Visual Culture* 18, no. 4 (2020): 422–447.

history of projected pictures alone. The lantern show depended on selection, exchange of slides, manual movement, pace, pauses, rhetorical framing, songs, recitations, and the relation among screen, audience, and apparatus. Vogl-Bienek's comparison, repeated by Wynants, is exact: creative lanternists operated the lantern "in a way similar to playing a musical instrument" (Wynants 2020: 425–26). Once this is granted, the lantern belongs as much to the history of theatre and performance as to the history of visual communication. The operator does not disappear behind the image. The operator animates the conditions under which the image becomes prominent for a gathered public.

Martyn Jolly's introductory chapter in *The Magic Lantern at Work: Witnessing, Persuading, Experiencing and Connecting*[136] pushes the same argument in a broader key. He emphasizes that every lantern show brought together still and animated, photographic and hand-painted slides, songs, formal recitations, informal improvisations, human manipulation, and technical operation "all in an intimately shared domestic or public space" (deCourcy and Jolly 2020: 2). That formulation is worth dwelling on because it identifies the lantern show as a complete event of spectatorship rather than a sequence of projected images. The audience's experience depended on the material slide as object, on the apparatus as a partner in the performance, and on the shared space in which witnessing, persuasion, connection, and experience were distributed (deCourcy and Jolly 2020: 2–3). The visual element was certainly central. The medium's historical force arose from a tighter knot: image, voice, timing, darkness, and collective co-presence worked together to produce a world of prominence. What stood out in the lantern show stood out because the event had been composed that way.

The fairground sharpened all these conditions. There the lantern did not stand alone in some abstract history of projection. It occupied a position amid a dense environment of neighboring attractions, each of which competed for the public's time, money, and curiosity. The *Sci-Fair* project repeatedly underscores this point. Its account of nineteenth-century fairs describes them as spaces where visitors could move from peep shows to panoramas, magic lanterns, puppet theatres, panopticons, stereoscopic displays, zoological attractions, wax museums, and technical spectacles, often in the course of a single visit. The result was a regime of circulation in which every attraction was

[136] Elisa deCourcy, and Martyn Jolly, eds. *The Magic Lantern at Work: Witnessing, Persuading, Experiencing and Connecting* (London and New York: Routledge, 2020).

conditioned by its placement among others. A lantern show next to a panopticon or a panorama did not mean the same thing as a lantern lecture in a temperance hall or a classroom. Prominence was environmental. The medium gained intensity by being placed amid noise, competition, movement, publicity, and neighboring promises of marvel or instruction.

The trajectory of the Courtois and Grandsart-Courtois family theatres offers an especially strong case. The *Sci-Fair* online materials describe their fairground theatre as a site where phantasmagoria, colored animated scenes, picturesque landscapes, topical stories, and later cinematographic projections were woven into one long program of innovation. Jules Grandsart-Courtois used the magic lantern to narrate historical and topical events, selecting themes according to audience taste and bringing both local and international news to cities and towns. In Kortrijk in 1892 he projected the illuminated fountains of the Paris World Fair; in Tournai in 1894 he led the public on a virtual journey to the Chicago Exposition; one month later, in Liège, he showed images of the Antwerp World Fair. The same family also blended projection with dance, notably in the serpentine performances of Jules's daughter Julie, in which lantern-projected flowers, stars, and moonlight transformed the moving body into a "fairy world." The historical lesson here is sharp. At the fair, the lantern did not merely show images; it selected what should count as new, current, dazzling, exemplary, or technically marvelous, and it often did so in combination with live bodies and other stage elements. This is precisely the terrain on which salience operates as an environmental principle.

The fairground's power to organize prominence becomes even clearer when one turns to its rhetoric. The *Sci-Fair* online collection of stories repeatedly preserve formulations that present these media as ways of entering or approaching the world under enhanced conditions. In the panorama story, for example, the Liège showman Spiessens is quoted as saying, "With a curious eye, one can dive into the world," while describing his attraction as an encyclopedia for all classes of spectators. This language deserves close attention. It articulates a popular epistemology in which visual access, novelty, and education converge. The world made available at the fair is selective, intensified, and dramatized. History and modernity appear side by side; legendary battles, technological marvels, historical monuments, and travel scenes are gathered within one accessible environment; documentary ambition and narrative staging overlap. The fair therefore

taught spectators to accept a world presented through a grammar of prominence: one thing at a time enlarged, framed, narrated, advertised, and offered as worth seeing now.

The *mondo nuovo* and related peepshow devices deepen this point by showing that such grammars long predate nineteenth-century fair culture in its fully industrialized form. Massimo Riva's reconstruction[137] is especially illuminating because it links the Venetian *mondo nuovo* to theatricality, to virtual travel, and to the social spectacle of spectatorship itself. The device is technically simple: a box, rollers, a viewing aperture, printed or painted strips, and a lens. Its cultural form is more complex. It miniaturizes the world into a portable theatre.[138] One approaches it from outside, leans forward, and peers into a framed elsewhere whose depth is optically enhanced. The result is at once individual and public. Each spectator looks alone; the act of looking is visible to others and easily becomes part of a surrounding scene. This is why the Tiepolo paintings remain so suggestive: they turn the crowd waiting around the *mondo nuovo* into a spectacle of spectatorship. Riva's reading, which also draws Goldoni into the genealogy, proposes the device as a key node in the prehistory of virtual travel and of what he calls the "great theatre of the world." That proposal seems especially productive here because it shows how novelty and theatrical framing were already inseparable. The new world was an elsewhere one entered through a machine and through a social choreography of viewing. The adjacent case of the camera obscura points in another direction and helps keep the distinctions in view. Crary treats the camera obscura as a historically dominant paradigm through which the relation between perceiver and world was modeled from the late sixteenth to the eighteenth century; it was at once epistemological figure, optical device, scientific instrument, artistic aid, and popular entertainment (Crary 1990: 28–30, 35–36). Riva's discussion of Algarotti complements this by stressing how the camera obscura became an aesthetic-epistemological model, an "artificial eye" that simulated human anatomy and vision while also training painters to produce animated images faithful to nature (Riva 2024: 98–99). Together, these accounts suggest that early modern visual culture repeatedly thought the image as a projection into an interior space. The difference from the *mondo nuovo* is important. The camera obscura turns enclosure into a model of

[137] Massimo Riva, *Giochi d'ombra: Preistoria curiosa della realtà virtuale* (Torino: Einaudi, 2024). Even if this part is based on the Italian edition, the full English version is an open site powered by Stanford University: see *Shadow Plays* https://shadow-plays.supdigital.org/cover/index.html.

[138] A fascinating material and symbolic interplay between proto-immersive media and theatrical forms, although presumably more linked to the old *topos* of memory as "theatre of the mind".

observation; the *mondo nuovo* turns the box into a portable theatre of peeping and social novelty. The distinction matters because it clarifies that early visual culture did not move along a single line. It developed multiple ways of organizing distance, interiority, and public spectatorship.

From there one can move, more carefully, toward panoramas, cosmoramas, dioramas, and stereoscopic attractions. The *Sci-Fair* project has a strong advantage here because it refuses to collapse these forms into a generic mass of "old immersive media." Panoramas, dioramas, cosmoramas, cycloramas, magic lanterns, and wax museums all introduced broad audiences to faraway times, places, heroes, and battles; at the same time, they did so through distinct visual strategies and carefully scripted viewing experiences. The circular panorama organized a surrounding field and a specific vantage point; the hemicycle offered a partial variant; the moving panorama translated environmental experience into visual transit; the diorama coordinated optical transformation with controlled illumination; the cosmorama arranged framed views of the world through lenses and apertures; the panopticon gathered life-sized figures and historical scenes into a semi-documentary walk-through. The common principle lies in the management of prominence. Each device proposed a way of making some portion of the world newly shareable by controlling scale, framing, movement, narration, and sequence.

Crary's discussion of the stereoscope provides a powerful theoretical refinement at this point. As already presented, his insistence that the stereoscope was "inherently obscene" because it destroyed the scenic relation between viewer and object gives a precise historical form to the crisis of central perspective. Stereoscopic vision, in his description, builds the image as a patchwork of local intensities, a choppy and erratic path into depth that never stabilizes into a unified field (Crary 1990: 126–27). That observation proves useful beyond the stereoscope itself. It suggests that nineteenth-century visual culture increasingly moved away from the perspectival model of a single coherent stage and toward aggregates, fragments, local zones, abrupt adjacencies, and close ocular possession. Fairground spectacles helped generalize that transformation. They repeatedly offered images and environments whose attraction depended on enhanced nearness, on tactile visuality, on the sensation that something had come too close, too large, too clear, or too suddenly present. This is one reason the fairground can be read as a social terrain

of obscenity in Crary's literal sense: a place where older scenic orders were being undone in favor of more immediate and more fragmented modes of seeing.

The moving panorama provides perhaps the clearest bridge between these optical forms and the politics of historical immediacy. Riva's discussion of the Garibaldi panorama, which draws on the Brown University—his home institution—digital materials, is particularly valuable because it shows how the medium combined painting, theatre, and illustrated journalism into a single public form. The panorama did not simply show distant places; it turned current events into a traversable sequence, one scene after another, guided by narration and accompanied by music. Riva argues that it sealed the nexus between information and spectacle by incorporating into painted scenes the sketches first circulated in the newly popular illustrated press. Frank Vizetelly's reports for the *Illustrated London News*, for instance, passed from on-the-spot sketch to engraved image to panorama scene (Riva 2024: 283, 430–31). The spectator encountered a temporally modulated account of recent history. Such a medium did not yet transmit events live. It brought them close enough, fast enough, and vividly enough to create an organized sense of contemporaneity. That is why panoramas matter within this case study. They show how fairground and popular visual culture could redistribute prominence at the level of historical time itself. Events became viewable as public sequences before cinema and television, yet through techniques that already reveal the tight bond among information, travel, theatre, and visual attraction.

The fairground's appropriation of panoramas, cosmoramas, stereoscopic attractions, and panopticons therefore deserves to be understood as a coherent operation. It brought the world close through framed selection. It taught broad audiences how to move from view to view, from booth to booth, from one sort of prominence to another. Panopticons, in particular, condensed documentary ambition and staged curiosity by presenting criminals, heroes, monarchs, battle scenes, disasters, and celebrities in enlarged or life-sized form. Wax museums, panoramas, and peep shows belonged to the same economy. The "world on display" was a world already filtered through the fair's logic of wonder, pedagogy, topicality, and commercial competition. There is no contradiction here between knowledge and spectacle. The fairground fused them structurally. A scene or device was worth knowledge because it was worth seeing; it was

worth seeing because it had been arranged to stand out in an environment dense with rival claims.

The educational migrations of the lantern confirm the durability of this logic. Once the lantern entered schools, university auditoriums, and extramural adult education, it reorganized those spaces materially and socially. The volume *Learning with Light and Shadows: Educational Lantern and Film Projection, 1860–1990*[139] is useful less for a generalized claim about pedagogy than for the specific insight that projection transformed the physical conditions of teaching. Teughels's chapter on Antwerp municipal schools shows that lantern projection required projection halls, blackout curtains, screens, projector stands, electricity, and sometimes dedicated rooms; by the 1930s, a hall equipped for still or moving image projection had become a standard part of model school architecture (Teughels and Wils 2022: 145–146, 169). In this setting, knowledge circulated through enlarged images and reorganized rooms. Projection endowed scientific objects, maps, physiological diagrams, and distant places with collective visibility. The classroom became, at least intermittently, a place in which knowledge emerged by being made prominent in shared space. Here again, one sees the deep continuity between fairground attraction and formal instruction. The settings differ radically, yet both are governed by the same principle: a public is assembled, an apparatus darkens or modifies the room, an image gains enlarged authority, and a speaker steers attention through sequence and commentary.

The colonial use of the lantern radicalized the same public force. The study of Belgian missionary propaganda proposed in *Emotions in/out of Place: Sentiment, Performance and the Magic Lantern in Belgian Colonial Charity Campaigns*[140] offers an exact illustration. When the famous image of Nsala looking at the severed hand and foot of his daughter was turned into a lantern slide and projected in lectures on Congo atrocities, John Hobbis Harris expected it to rouse any audience into an "outburst of rage." The crucial point lies in the staging of witnessing. Projection gathered speaker, screen, darkness, and audience into one event, making a distant atrocity present as something that demanded collective acknowledgment. The lantern thereby functioned as a medium of

[139] Nelleke Teughels, and Kaat Wils, eds. *Learning with Light and Shadows: Educational Lantern and Film Projection, 1860–1990* (Turnhout: Brepols Publishers, 2022).
[140] Marte Van Hassel, Karel Vanhaesebrouck, and Nele Wynants. "Emotions in/out of Place: Sentiment, Performance and the Magic Lantern in Belgian Colonial Charity Campaigns." *Emotions: History, Culture, Society* 8, no. 2 (2024): 243–270.

public urgency. It selected one image, magnified it, and directed a room of viewers toward it in common time. The exact political use of that mechanism could vary enormously. Missionary self-fashioning, colonial documentation, denunciation, propaganda, charity campaigns, and imperial display all found ways to exploit it. The structure remains constant: prominence is manufactured by projection, and shared spectatorship becomes the vehicle through which a remote event acquires force.

The problem of simulation appears with particular sharpness when one reaches Belzoni and the facsimile of the tomb of Seti I. Riva's formulation of the exhibition as a "real phantasmagoria" is especially helpful because it captures the hybrid status of the enterprise. Belzoni's installation was archaeological, theatrical, commercial, educational, and deeply implicated in the spectacularization of colonial discovery. The visitor entered a reconstructed Egyptian environment whose truth depended on scale, material arrangement, lighting, and bodily traversal. One was dealing neither with a pure optical illusion nor with a transparent documentary transfer. The installation produced its authority by staging a convincing elsewhere. This matters because it clarifies the long historical career of simulation as both humanistic and technical concept. The fairground, the lantern show, the panorama, and Belzoni's tomb all demonstrate that early visual culture repeatedly worked by fabricating environments that were at once informative and theatrical, reconstructive and spectacular. The vocabulary of simulation arrived much later; the operative problem was already there.

Phantasmagoria[141] offers the most famous concentration of these tendencies. The *Sci-Fair* account of the Courtois-Grandsart tradition foregrounds the continuation of Robertson's spectral heritage in fairground practice, where moving lanterns, darkness, smoke, and animated slides were used to make ghosts and spirits appear before astonished audiences. The importance of phantasmagoria lies in the way it fuses mechanical skill, theatrical arrangement, occult rhetoric, and public management into one spectacle. Marina Warner's larger history in *Phantasmagoria* helps situate this within the longer

[141] On this spectacular variation of magic lantern shows, which pushes further the past blurring boundaries between optical media, theatre, and embodiment, see previously cited publications of Huhtamo and *Sci-Fair* project, as well as Marina Warner, *Phantasmagoria: Spirit Visions, Metaphors, and Media into the Twenty-first Century* (Oxford and New York: Oxford University Press, 2006), *Apparizioni: scritti sulla fantasmagoria*. Edited by Barbara Grespi and Anna Violi (Canterano: Aracne, 2019), and Francesco Casetti, *Schermare le paure: I media tra proiezione e protezione* (Milano: Bompiani, 2023).

nineteenth-century intertwining of spirit discourse and new media. Lantern technology became one of the privileged means for figuring the invisible, and that cultural work cannot be separated from the contemporaneous fascination with psychology, physics, spiritualism, and other worlds. In the fairground context, the technical device and the promise of apparition reinforced one another. Projection acquired force precisely because it was staged as more than projection. It gave a public body the experience of seeing something that seemed to exceed the visible order of ordinary life.

At this point the broader shape of the case begins to come into view. The fairground, the lantern, the *mondo nuovo*, the panorama, the diorama, the cosmorama, the stereoscope, the panopticon, the phantasmagoria, the educational lecture, and the archaeological reconstruction all belong to a long and varied history in which media organized prominence before they organized narrative continuity in the modern cinematic sense. They selected what should count, how it should appear, at what scale, with what verbal framing, in what space, and before what kind of public. Their operation was environmental. It involved architecture, darkness, crowds, movement, song, commentary, posters, and the manual labor of operators and assistants. It also involved thresholds: between inside and outside, here and elsewhere, present and remote, document and spectacle, knowledge and entertainment. Those thresholds were repeatedly activated through bodies. A spectator peered into a box, entered a panorama rotunda, sat before a moving scroll, gathered in a tent, watched a lecturer point to a projected image, or followed a route through a reconstructed tomb. The medium existed as a world to be entered under specific conditions.

From this vantage point, the leap toward twentieth-century multimedia theatre becomes much easier to understand. Laterna Magika appears less as an isolated invention than as an explicit recognition of a structural kinship already active for centuries. The official Josef Svoboda website[142] states that Laterna Magika was first presented at Expo 58 in Brussels through the collaboration of Josef Svoboda and Emil Radok, combining live presenters, musicians, and dancers with pre-recorded film; the same materials explain that Polyekran, Polyvision, and Diapolyekran were developed in exhibition environments and then transferred into theatre. That genealogy is especially revealing here. Exhibition space and theatre remained contiguous. Projection media and live performance continued

[142] See https://www.svoboda-scenograph.cz, accessed April 15, 2026.

to seek one another out. The very name “Laterna Magika” makes this historical memory difficult to ignore. A modern multimedia theatre founded under the name of a pre-cinematic projection medium acknowledges, almost programmatically, that media with a strong visual component had long depended on performance, and that performance traditions had long incorporated projected images into their own scenic logic. Svoboda did not invent that kinship. He made it unmistakably visible under modern technological conditions. This is precisely why Laterna Magika provides the right threshold toward the next case study, where the emphasis will shift from the environment as a regime of prominence and selective intensification to the environment as a performative field of perception and action.

If the previous sections reconstructed a longer history of environments as *dispositifs* of salience, spectacle, and entry, the following analyses bring that history into direct contact with contemporary performance and platform culture. What now comes into view is not a simple application of the framework, but the point at which metaversal logics become legible in situated artistic and cultural practices.

Contemporary theatre and metaversal logics: staging environments as fields of perception and action

The second case study develops a different thematic line drawn from the previous chapter. If the first case study examined the environment as a regime of salience and perceptual intensification, the emphasis now shifts toward the environment as a performative field of perception and action. Hence, here the central question is how a theatrical environment distributes possible actions, positions, choices, and constraints, and how it binds those operations to specific modes of perception. What matters in these contemporary works is the stage’s capacity to function like an operational world: a world in which bodies do not simply appear, but are assigned procedures, trajectories, interfaces, interruptions, permissions, and thresholds. In that sense, these performances are especially useful because they stage, with very different means, something close to the logic of metaversal environments. They bring onto the stage not just digital themes, but

modes of acting and being acted upon that recall platform worlds, avatars, screens, game-space, immersive design, and mixed reality.

A brief excursus helps situate the problem. The theoretical and artistic lineage of multimedia theatre has long insisted that theatre is a privileged site for the convergence of media, bodies, and technical systems. In the introductory pages of *Le arti multimediali digitali: Storia, tecniche, linguaggi, etiche ed estetiche delle arti del nuovo millennio*,[143] Balzola and Monteverdi describe digital multimedia art as the result of technical integration among media and of an aesthetic contamination among expressive forms, an integration that renews older artistic desires for synthetic and interactive environments (Balzola and Monteverdi 2011: 7–9). In *Digital Bodies: Creativity and Technology in the Arts and Humanities*[144] Susan Broadhurst and Sara Price, from a more contemporary angle, similarly argue that digital technologies have altered the conditions of embodiment, interaction, and creativity, generating environments in which technology becomes part of the body's experience of the world and in which multisensory coordination approaches a modern rearticulation of the *Gesamtkunstwerk* (Broadhurst and Price 2017: 2–4). Yet the contemporary works that matter most here do not simply pursue synthesis in the traditional sense. They stage a change in the relation between spectatorship and action. Piotr Woycicki's reflections in *Post-Cinematic Theatre and Performance*[145] are useful on this point because he reads contemporary intermedial practices as deconstructions of dominant cinematic conventions, capable of unsettling perceptual habits and expectations that have become naturalized within screen culture (Woycicki 2014: 2–3, 28–29). Nadja Masura, in turn, in *Digital Theatre: The Making and Meaning of Live Mediated Performance, US & UK 1990–2020*[146] defines digital theatre as live theatre in which digital technology is essential to the primary artistic event and where co-presence, verbal exchange, and limited interactivity remain fundamental conditions (Masura 2020: 10–11). Vincenzo Del Gaudio's account of mixed-reality performance in *Interactive Tools Performance: Blast Theory between Media Theory,*

[143] Andrea Balzola, and Anna Maria Monteverdi. *Le arti multimediali digitali: Storia, tecniche, linguaggi, etiche ed estetiche delle arti del nuovo millennio* (Milano: Garzanti, 2011).
[144] Susan Broadhurst, and Sara Price, eds. *Digital Bodies: Creativity and Technology in the Arts and Humanities* (London: Palgrave Macmillan, 2017).
[145] Piotr Woycicki. *Post-Cinematic Theatre and Performance* (London: Palgrave Macmillan, 2014).
[146] Nadja Masura, *Digital Theatre: The Making and Meaning of Live Mediated Performance, US & UK 1990–2020*. Cham: Palgrave Macmillan, 2020.

Performance Studies and Social Research[147] arrives from another direction and is especially valuable here: he identifies performance space, time, interaction, and performance roles as the four core elements of mixed-reality work, and stresses that such performances place the spectator-user at the center of meaning production through an open form structured by choices and relations rather than by fixed outcomes (Del Gaudio 2021: 81–85). Taken together, these approaches offer a solid conceptual frame for the three works examined below. Each of them turns the stage into a world of operations. Each of them asks what can be perceived, how one can move, who can speak, which body belongs to which role, and what kind of agency remains available inside a mediated environment. This shift can also be described in terms of a broader transformation in spectatorship. Recent theatre scholarship has repeatedly noted that contemporary audiences are shaped by everyday habits of digital interaction, personalization, and multi-layered engagement. One influential formulation describes this movement as a passage from a "society of the spectacle" to a "society of involved spectaction,"[148] in which spectators increasingly expect co-presence, corporeal implication, and forms of participation more closely aligned with their mediated daily lives (Lewis and Bartley 2023: 15). From another angle[149], intermediality has been defined as a process that expands and layers the spatial and temporal framework of the stage event, revising presence, proximity, intimacy, and liveness themselves (Mancewicz 2014: 4). A related claim appears in Nadja Masura's definition of digital theatre, which rests on the coexistence of co-present actors and audiences with digital media used as an essential part of the primary artistic event, rather than as decoration or archival supplement (Masura 2020: 7–10). Read together, these perspectives help clarify why the works discussed here are not simply theatre pieces "about" digital culture. They belong to a theatrical field in which live presence is reorganized through layered mediation, and in which digital forms alter the grammar of action available on stage.

[147] Vincenzo Del Gaudio, "Interactive Tools Performance: Blast Theory between Media Theory, Performance Studies and Social Research." *Comunicazioni sociali*, no. 1 (2021): 79–86.
[148] William W. Lewis, and Sean Bartley, eds. *Experiential Theatres: Praxis-Based Approaches to Training 21st Century Theatre Artists* (New York: Routledge, 2023).
[149] See Aneta Mancewicz, *Intermedial Shakespeares on European Stages* (London: Palgrave Macmillan, 2014).

Festen. Il gioco della verità: the stage as a double operative plane

Festen. Il gioco della verità premiered in absolute Italian first on May 31, 2021 at Teatro Astra in Turin. It was produced by TPE – Teatro Piemonte Europa, Elsinor Centro di Produzione Teatrale, Teatro Stabile del Friuli Venezia Giulia, and Solares Fondazione delle Arti, in collaboration with Il Mulino di Amleto. The production[150] was directed by Marco Lorenzi, with Italian version and adaptation by Lorenzo De Iacovo and Marco Lorenzi from the film *Festen* (1998) by Thomas Vinterberg, Mogens Rukov, and Bo Hr. Hansen; the theatrical adaptation by David Eldridge is also acknowledged in the production credits. Lorenzi's directorial note, published on the company site, explicitly places the performance under the sign of truth, power, and the need to "tear that veil" that prevents spectators from seeing things as they are. The dramaturgical premise remains close to the film's famous structure. A wealthy Danish family gathers to celebrate the sixtieth birthday of the patriarch Helge Klingenfeldt. Christian, the eldest son, is expected to give a speech in honor of his father and in memory of his twin sister Linda, who has recently died by suicide. During the dinner, he reveals that both he and Linda were sexually abused by Helge during childhood, under the complicit silence of their mother. From that point on, the bourgeois ritual of celebration collapses into an escalating field of denial, violence, humiliation, and forced truth. The narrative's strength lies in the fact that revelation does not simply interrupt order from outside; it exposes that order as having always depended on concealment. The stage adaptation retains this dramatic core, yet what makes it especially pertinent here is the scenic system through which it is articulated.

The most striking feature of Lorenzi's production is the continuous coexistence of two visual and operational (both relational) planes. For much of the performance, the proscenium is veiled by a transparent screen on which the actors project, in real time, a live filmed version of the action occurring behind it. The cast repeatedly uses a mobile camera on stage, producing what the company itself described as a "gigantic sequence shot" filmed by the actors throughout the show, so that spectators are placed before a choice between what is physically occurring on stage and the image reworked live by the

[150] See https://www.ilmulinodiamleto.com/it/2020/06/26/festen/, accessed April 15, 2026.

camera's eye. The official production note frames this as an inquiry into truth, manipulation, and spectatorship: what is truth, what do we choose to watch, what do we choose to believe. The stage therefore becomes a field in which perception is immediately tied to decision and orientation. The spectator is never allowed to settle into a single representational plane. This scenic organization matters because it gives theatrical form to a condition that closely resembles platformed or metaversal perception. The audience receives two simultaneous renderings of the same world: one embodied, spatially distributed, partially hidden behind the veil; the other frontally mediated, enlarged, framed, and optically privileged by projection. Neither of the two cancels the other. They coexist in tension, and each one continually reorients the spectator's attention toward the other. The result is not a simple doubling of representation. It is a redistribution of agency within spectatorship itself. The viewer have to choose where to look, whether to privilege the embodied event or its live mediation, whether to read the projection as amplification, distortion, or guide. In this respect, the show can be read less as a theatre piece using video than as a theatre piece constructing an environment in which seeing already means navigating between planes of action. The operational nature of this environment becomes clearer when one notices that the live camera is not a neutral recording tool. It is handled by the performers. It is part of the stage's labor. It becomes one more actor within the event, one more body among the bodies, one more device redistributing proximity, scale, and access. The "reality" of the performance is therefore inseparable from the procedures through which it is cut, framed, and returned to the audience. That condition brings *Festen* close to what Masura would call digital theatre: the digital is neither ornamental nor archival, but essential to the primary artistic event, and the co-presence of spectators and actors remains decisive to the work's meaning (Masura 2020: 10–11). At the same time, Lorenzi's solution radicalizes a point that Woycicki locates in post-cinematic theatre more broadly, namely the deconstruction of dominant viewing conventions and the opening of a more reflective, less naturalized relation to mediation (Woycicki 2014: 2–3, 28–29). This is why the work's relation to its Dogma 95 source is so productive. The original film belongs to a cinematic project that sought to strip away technical excess in favor of immediacy, handheld camerawork, rawness, and a certain claim to unfiltered truth. Lorenzi's production does not merely imitate that language on stage. It turns it into an explicit performative problem. The live camera on stage is not

there to simulate cinema from within theatre. It exposes the labor of mediation and makes spectators oscillate between a filmed present and an embodied present. A dynamic emerges in which the stage behaves almost like a split reality: the projected layer attracts first because it is frontal, bright, enlarged, and already filtered into legibility; the embodied layer regains force because its bodies continue to vibrate beyond the image, just behind it, never fully absorbed by projection. This tension gives the performance its distinctive grammar of action. Truth is staged as a struggle over perceptual access.

In this sense, *Festen* also exemplifies a broader intermedial condition in which live and mediatised elements do not weaken theatrical contact but reconfigure it. Mancewicz has argued that intermedial performance may generate a new kind of intimacy precisely through the simultaneous engagement of spectators with live and virtual performers, producing a sharpened awareness of representation, embodiment, and de/reorientation (Mancewicz 2014: 105–06). That description seems particularly apt here, because Lorenzi's staging does not ask the audience to choose once and for all between the live and the screened. It binds the two together in a fluctuating economy of attention, so that the spectator's very act of watching becomes the site where theatrical presence is negotiated. The company's own spatial use of the stage intensifies this point. The action exploits front, back, sides, and passages behind the screen so that the proscenium no longer functions as a stable threshold between fiction and audience. It becomes a movable interface. Mobile filmic micro-sets are composed within a larger theatrical field, while the nearly empty stage space remains available as a site of exposure, waiting, suspension, and aftermath. Sound contributes decisively here. Because the projection is continuous and because the performance seeks the velocity and immediacy of cinematic flow, sound should provide rhythm, continuity, and transitions in place of conventional montage. The sound design, therefore, does not merely accompany the piece; it underwrites the operational cohesion of its double plane. The veil itself becomes the key scenic object. For much of the show it acts as a permeable threshold rather than as a barrier. It receives the projected image while simultaneously allowing the viewer to perceive bodies through it, so that the live event remains visible as a grain, a pressure, a shadowed extension behind the image. At certain moments the veil collapses or is finally raised, like a curtain, and this reconfigures the entire environment. The point is not exhausted by symbolism, though the symbolism is clear enough. The removal of the veil corresponds to the

exposure of familial truth. More importantly, it alters the modes of action available on stage. Once the veil is definitively gone, the audience is no longer navigating between two planes; it is thrown into a more direct and disquieting co-presence with the actors. The performance shifts from choosing among mediated and embodied signals to sharing a single exposed field. The stage's operational and relational grammar changes in front of the spectator. This shift has a strong political force. Lorenzi's note insists on the community that performs a comedy while one of its members fights to reveal that everyone is actually inside a tragedy. The staging translates that diagnosis into spatial and perceptual terms. The projection plane can be read as the social surface on which things remain arranged, framed, and manageable. The embodied plane behind it carries the pressure of what the family cannot assimilate. The crisis of truth then becomes a crisis of interface. As long as the family's ritual order holds, spectators are structurally invited to inhabit a divided mode of watching. Once that order disintegrates, the division becomes unsustainable. The piece is therefore less concerned with showing "reality" behind appearances than with making spectators traverse the procedures by which appearance is stabilized. In that sense, it stages an environment of operational choices rather than a simple binary of truth and falsehood.

This is where the work begins to resonate with metaversal logics in a particularly interesting way. Platform worlds are rarely experienced as singular unified spaces. They are usually encountered through interfaces, overlays, windows, avatars, frames, chats, signals, and simultaneous visual orders. Presence is therefore distributed across layers, and this is also what *Festen* translates into theatrical form. The production can be understood as a vast and inverted analogue mechanism of Extended Reality: paradoxically, the level that first appears as "real" is the projected one, the plane screened on the veil and immediately offered to the spectators' gaze as primary evidence. The embodied level, which remains behind that screen and on another physical plane, functions instead like a kind of augmented layer, one that restores depth, incompleteness, remainder, and bodily excess to what the projected image seems momentarily to stabilize. When the veil is finally removed, the environment shared by performers and audience changes once again: the mediated double no longer governs perception from the front, and the whole theatrical space is reconfigured as a common, exposed, enveloping environment, almost as if the performance had moved from an XR-like composite regime

into a final, shared form of VR. What matters in this transition is that the show never abandons the body. On the contrary, it makes clear that every layer of mediation remains dependent on bodily presence, bodily orientation, and bodily risk. What *Festen* does is to translate that condition into a theatrical setting without digital immersion in the strict XR sense. It produces a stage on which one should act and perceive across layers, and in which the body remains irreducible even when technically overframed. That is why the piece can be understood as a contemporary theatrical environment shaped by similar issues that structure metaversal experience. For this reason, *Festen. Il gioco della verità* deserves to be read as more than a successful intermedial adaptation of a film. It stages the performative field itself. The screen, the veil, the camera, the actors, the sound, and the audience compose an operational and relational environment in which perception is already bound to action and in which truth appears as a contested mode of orientation. The piece does not merely thematize mediation. It makes mediation the very terrain on which bodies should struggle for presence, authority, and recognition.

OLEANDRA: platform dramaturgy without immersive technology

If *Festen* stages a doubled reality through the live interinvolvement of theatre and camera, *OLEANDRA* pushes the problem in another direction. It debuted in national premiere at Teatro Fontana in Milan on November 8, 2024, produced by Elsinor Centro di Produzione Teatrale. The text and direction are by Caterina Filograno; the cast includes Giulia Mazzarino, Isacco Venturini, Francesca Osso, and Filograno herself. The production grew out of a longer trajectory: the script won the Futuro Passato call for dramaturgy and the FESTIL production prize and was further developed through residencies linked to Villa Manin and La Contrada before reaching Elsinor's production structure. The Elsinor website presentation of the pièce describes the piece as a "surreally plausible future" in which the boundary between what is lived now and what may soon be lived presses the spectator to ask what it means to exist in the time of digital existences.[151] The plot is at once simple and conceptually rich. Tom Lincoln purchases,

[151] See https://www.elsinor.net/produzione/oleandra/, accessed April 15, 2026.

for speculative reasons, a virtual property in the metaverse. In the process of erasing an early twentieth-century villa in order to resell the land, the system fails to remove one oleander bush. What initially appears as a bug or obstacle later becomes an extraordinary asset, because the plant persists. Its persistence gradually reveals a world organized around immaterial property, data storage, digital scarcity, speculative desire, and the strange possibility that memory in the metaverse might be less a human faculty than a property of objects and infrastructures. The official production synopsis already stresses this symbolic and narrative pivot: Oleandra survives while Tom and Mildred despair around the mystery, and perhaps miracle, of its virtual persistence. The script's introductory note is crucial, because it offers a direct window into the dramaturgical imagination guiding the piece. It begins from Project Starline and from the question of memory in the metaverse, then immediately redefines memory as persistence: the capacity of immaterial goods to leave traces within the system and remain economically reliable. From there Filograno imagines a terrain called "Oleandra," a space into which one can enter and from which one can exit as in the main current metaverse worlds. The preface then proposes a remarkably precise scenic consequence: when actors move from one place to another and within Oleandra, they may interrupt gestures halfway, fail to finish lines, condense thoughts into gestures or single words, and replace written sentences with movements that synthesize them. Actions and words within Oleandra will reverberate in "reality." Dialogue and stage directions are treated as suggestions, almost as a *canovaccio* open to alteration (Filograno n.d.: 2–3). That preface is more than preparatory commentary. It is the key to the work's performative logic.

What *OLEANDRA* proposes, then, is not a theatrical representation *of* the metaverse in a decorative or illustrative sense, but a stage reorganized by platform conditions. This is one reason the pièce is so fruitful for the present dissertation. It stages metaversal logic without immersive technologies properly speaking. No headset is needed. No XR device mediates access. The stage, the body, the costume, the light, the gesture, and the script take on the burden of translating platform operations into theatrical behaviour. The result is a theatrical environment whose rules are recognizably derived from digital worlds: lag, login, portal access, clipped interaction, repeated commands, distorted embodiment, avatar-role slippage, and a constant uncertainty over who controls whom. The script's opening scenes already make this clear. Tom's avatar and Agent K

stand in Oleandra discussing a future seaside real-estate development: exclusive beach access, a sea "double the Mediterranean," Albania and Bosnia eliminated, the sun "behind the clouds," the pace of construction defined in speculative temporal terms. Simultaneously, Mildred's domestic complaints cut through the scene from another plane: where are the car keys, this house is chaos, why am I still living with you? The metaverse and the domestic interior are not arranged as discrete worlds one enters sequentially. They coexist in interference. Tom's avataric gestures, affirmations, and "cool" responses overlap with the fleshly tensions of everyday life (Filograno n.d.: 6–9). This overlap is decisive. The stage becomes a field where two worlds operate on one another in real time. The audience is not invited to contemplate a virtual environment from outside. It is asked to navigate a collision between concurrent operational grammars. The same logic structures the scenes with the teenage avatars XYY and XY. They spar, box, insult, switch languages, speak in clipped hybrid slang, and occupy Oleandra even though Tom claims it is a private, encrypted property. Mildred cannot make them leave. They do not answer in ordinary communicative ways. Their verbal exchanges are already platformed speech, driven by fragments, reactive beats, and coded micro-performances of belonging: "che boring," "posto del cuore," "sbloccato," "fun," "gag." In purely dramatic terms, these scenes could be read as comic or absurd intrusions. Their real force lies elsewhere. They show that Oleandra is not simply a place but an ecology of actions and permissions. Other users, stranger avatars, teenage performance styles, and unauthorized presences are part of what this environment makes possible. The platform exceeds the owner's intention. It generates its own forms of inhabitation. A similar point returns, in a more ironic and unsettling way, with Brooke and Ridge. In those scenes, avataric performance becomes explicit role-play. Brooke and Ridge are not psychologically deep characters in the conventional dramatic sense. They are recognizable collective images, borrowed from serialized televisual memory and redeployed within Oleandra. Their dialogue about love, beauty, desiccation, and replacement takes place in parallel with the younger avatars' exchanges, so that melodrama, luxury consumption, platform slang, and digital co-presence occupy the same field. Brooke points to the plant and says she is like it: unable to cry, unable to do anything but observe the wreckage of her existence "like an oleander in a corner." Ridge replies within a logic of pure exchange, beauty, and substitution. The scene clarifies something

essential about the piece: avatars are not secondary masks applied to stable human identities. They are roles inside a performative environment in which identity is already distributed across borrowed images, platform affordances, and contingent operations (Filograno n.d.: 16–18).

This brings the play very close to Del Gaudio's account of mixed-reality performance. His claim that mixed-reality work is structured by performance as space, time, interaction, and roles seems particularly apt here, because *OLEANDRA* is constantly redistributing those four axes (Del Gaudio 2021: 81–85). Space is split and overlaid between domestic and metaversal planes. Time is articulated through sections titled "Passato remoto," "Passato prossimo," and "Presente," which create a rhythm closer to platform layers or save states than to linear realism. Interaction governs access, visibility, dialogue, and movement. Roles multiply, detach from bodies, and return transformed as avatars. At the same time, the piece never leaves behind the stage as a space of co-presence. It remains unmistakably theatrical. That is precisely why it works so well for this case study: it shows how metaversal logics can be translated into a live environment of bodies without forfeiting the singularity of theatre. The scenic language described in reviews and production materials confirms this translation, emphasizing the elaborate costumes by Margherita Platè, their relation to Giuseppe Di Morabito's pieces, and the zapping chromatic field produced by Emanuele Mestriner's lighting—from acid green to pink to incandescent red, yellow, and pale blue. A review identifies an "ethereal and impalpable place" in which possibilities are offered and withdrawn with violent speed. The stage, therefore, behaves as a platformed zone of unstable affordances, a place where color, costume, and light become environment rather than decoration. The avatars faithfully reproduce virtuality on stage, not through technical simulation alone, but through embodied precision and scenic design.

At the same time, the script insists that physical bodies have not disappeared. The other reality is explicitly named as the one made of senses, flesh, union and disintegration of bodies. The metaverse does not replace that realm. It enters into reverberation with it. This is why the piece avoids any simple dualism between virtual and real. Tom's avataric language spills into domestic space. Mildred's practical frustrations puncture the virtual scenes. Platform actions reverberate into material gesture. The stage becomes a zone of transfer rather than contrast. From this angle, *OLEANDRA* can be read as staging a kind

of augmented theatricality: bodies remain physically present, yet their actions are continuously inflected by a second layer of platformed operations. The plant itself provides the sharpest example of how this environment structures action. Oleandra's persistence is first a bug, then a speculative problem, then an ontological puzzle, and finally a source of extraordinary value. Agent K declares that the plant is the only good in the metaverse endowed with total persistence, an "utopia until yesterday"; it leaves traces, ages, withers, and evolves through temporal stages. This possibility generates new rights, new economic relations, and new operations: tolls for entrance, representation by agents, impossibility of expropriation, symbolic prestige, even marriage plans. The environment reorganizes itself around a single persistent object (Filograno n.d.: 33–35). Here the metaverse is not treated as a visual background. It is an operational system in which a change in persistence rewrites property, access, identity, and desire. The stage gives that rewrite a bodily, vocal, and relational form. For that reason, *OLEANDRA* seems especially successful where many "digital" theatre pieces remain merely referential. It does not simply talk about the metaverse. It lets metaversal procedures infiltrate theatrical construction itself. Actions break off. Gestures take over from sentences. Role and avatar slide across one another. Worlds overlap. Language becomes clipped, gamified, repetitive, and operational. Ownership turns into access control. Identity becomes platform-dependent and unstable. The stage behaves like a world of permissions, glitches, portals, and unintended residues. This is what makes the piece centered in the present context. It organizes a performative field in which perception and action are inseparable, and in which the spectator is asked to recognize how platformed life reconfigures what theatre can do with bodies, roles, and space.

Come, Fur(r)ies, Dance!: ritual, hybrid embodiment, and virtual community

Rory Willats's *Come, Fur(r)ies, Dance!* takes the problem one step further. Unlike *Festen*, which translates a film into a split scenic apparatus, and unlike *OLEANDRA*, which stages metaversal logic through postdramatic writing and avataric embodiment, Willats's work approaches virtual community directly and

experimentally. Developed as a series of performance experiments exploring how masculinity is navigated, manipulated, and remade in virtual communities, the work was created within UC Santa Cruz's Digital Arts and New Media / Future Stages Lab. Its 2023 iteration appears to have taken two main forms: a preliminary event titled *Come, Fur(r)ies, Dance!: The Body*, presented on May 16, 2023 at the Theater Arts eXperimental Theater, and the fuller *Come, Fur(r)ies, Dance: Desire and Ritual*, performed on May 26, 27, and 28, 2023 at the same venue. The public abstract further describes the latter as a devised, fifty-minute, postdramatic, multimedia lecture-performance staged across virtual-and meat-space.[152] The project website present the piece almost as a manifesto of hybrid embodiment and gather its conceptual ingredients in a single line: ancient Greek drama, the manosphere, virtual reality, furries, motion-tracking, the British Armed Forces, and the conjuring of Athena "from two-and-a-half thousand years ago to answer for what she's done." The work combines live interviews, dance, puppetry, and shared ritual across digital and "meat space," and "Virtual Furies" take flight in pursuit of answers. The earlier experimental version, *The Body*, is described as using live motion data from three different modalities of pedestrian masculine gesture to generate a new choreography and to explore the flows and possibilities manifest within and between the hybrid body. Even this compact description is enough to make the work central for the present case study. It is perhaps the most explicit of the three performances in treating theatre again as an operational and relational environment rather than a representational frame. One can start with the title itself. "Come, Fur(r)ies, Dance!" invokes command, invitation, collectivity, and ritual before it invokes narrative. The reference to Furies places the work in relation to ancient tragic machinery of vengeance, haunting, and ethical pursuit. The inserted "r(r)" folds furries into Fur(r)ies, linking online subculture, costume, identity play, and animal or hybrid embodiment to a mythic structure of ritual justice. This title already signals that the work will not proceed by illustrating a digital world from the outside. It will construct a zone in which classical, online, corporeal, and virtual codes are made to interact and collide. The body here is never simply the biological body of the performer set against the virtual body of the avatar. It is already split, delegated, displaced, and reassembled across data, ritual action, choreographic score, projected figures, and networked identities. This becomes especially

[152] See https://www.rorywillats.com/design-and-installation/come-furries-dance, accessed April 15, 2026.

clear in the way the performance approaches masculinity. The point is not that men appear on stage as stable male subjects confronting digital alterity from outside. Rather, masculinity is tracked through an unstable circuit in which male users repeatedly inhabit, animate, and project female avatars, often overtly stylized and hypersexualized, and the fact that all the online users of these avatars where veterans constituting a sexy feminine-alike avatar army makes this contrast explicit. The gap between operator and operated figure is therefore never neutral. It exposes a constitutive ambiguity in contemporary virtual environments: the body through which one acts is frequently not the body one appears to have, and the visual form through which agency is exercised may be built out of desire, stereotype, fetishization, or role-play rather than out of any stable continuity with lived embodiment. The return to fleshly performers on stage is crucial precisely because it makes this ambiguity visible again. Bodies in the theatre do not "correct" the avatar from outside; they reactivate the problem by forcing the spectator to confront the discrepancy between embodied presence and virtual performance.

This is why the piece's return to live performance matters so much. In virtual communities, avataric embodiment can encourage a powerful merger between user and representation; at the same time, the very plasticity of the avatar may conceal how socially coded, strategic, or instrumental that representation remains. Jarvis's discussion of avatar embodiment in *Immersive Embodiment: Theatres of Mislocalized Sensation*[153] is especially helpful at this point. He notes that avatars can become phenomenally incorporated and that players may process virtual bodies "as if they were the properties of one's own biological body," while also stressing that such incorporations produce entangled and often unstable identities (Jarvis 2019: 220–21). The performance takes that instability seriously. By bringing bodies back onto the stage—voices, gestures, danced scores, ritualized interactions—it allows the viewer to perceive how mediated identities are built through a tense relation between bodily incorporation and representational displacement. The result is not a denunciation of virtual performance, but a theatre of operational ambiguity: one sees how bodies pass into figures, how figures return to bodies, and how contemporary masculinities are negotiated through precisely that unstable passage.

[153] Liam Jarvis, *Immersive Embodiment: Theatres of Mislocalized Sensation* (Cham: Palgrave Macmillan, 2019).

A further strength of the piece lies in the way it treats the stage as a site where those transfers become legible as action rather than as image alone. Gesture, tracking, choreography, ritual repetition, and vocal relay all matter because they make the audience attend to procedures. The spectator is not simply asked to decode symbols. The spectator is placed before a world in which one body's action may be routed through another figure, one voice may emerge from another mouth, and one social identity may persist only by passing through a technically and culturally coded surrogate. In that sense, the work gives unusual density to the question that haunts the entire present case study: what kind of world is built when perception is always already tied to delegated action? Here the answer takes the form of a theatre in which virtual communities are neither external referents nor total immersive alternatives, but operative grammars that reshape live embodiment from within. The lecture-performance format also matters. It places the work in a lineage where knowledge is itself staged as event. Here, however, lecture does not imply distance or didactic explanation in a conventional sense. The work is devised, postdramatic, multimedia, and spread across digital and material space. That combination suggests a form in which argument, testimony, performance, and mediation do not simply coexist but act upon one another. Knowledge appears as something produced through live negotiation among testimony, choreographic experiment, embodied proxy, and ritual sequence. This is very close to what Del Gaudio calls embodied knowledge in mixed-reality performance, a process in which body, medium, and support coincide sufficiently to make knowledge production inseparable from the event through which it is experienced (Del Gaudio 2021: 81–85). The ritual dimension deserves particular emphasis. The project page explicitly invokes "shared ritual," while a framing of the work speaks of "white masculinity and the ethics of ritual in Virtual Reality." These formulations matter because they displace the usual language of immersion. The question here is not simply how virtual space can absorb the participant. The question concerns what kinds of collective procedures, symbolic repetitions, and embodied obligations are emerging in and around virtual communities. The figure of the Fury proves especially apt for that inquiry. It suggests a pursuit that is ethical, historical, and relational. Something unresolved in contemporary masculinity is summoned to the stage and forced into confrontation through hybrid performance. Theatre is useful here because it gives ritual a body, a tempo, and a visible field of relations. Virtual culture alone might disperse those

relations across screens and avatars; theatrical ritual regathers them into shared time and space. This also helps explain the significance of the work's interest in furries. Furry culture is often reduced in mainstream discourse to costume, eccentricity, or subcultural play. Within the logic of Willats's piece, it becomes a site where masculinity, identity, role-play, anthropomorphism, and community are renegotiated. The furry body is never simply human, never simply animal, never simply avatar. It is a composite social body. That makes it a privileged object for a performance concerned with hybrid embodiment. The Fury and the furry are not arbitrary juxtaposition. They are both figures of transformation, excess, and role-bound alterity. Through them, the work seems to ask what kinds of bodies and relations virtual communities make available, and what kinds of ethical or ritual forms might be required to inhabit those configurations critically. There is, in this respect, another strong resonance with Jarvis's account of immersive embodiment. Jarvis defines many contemporary immersive practices through a paradoxical desire to transport the participant physically into a circumstance beyond the immediate here and now, and he identifies a recurrent promise of feeling more fully with the body of another (Jarvis 2019: 2–8). While *Come, Fur(r)ies, Dance!* is not a VR body-transfer artwork in the narrow sense, it clearly belongs to this wider field of concerns. Its hybrid structure—live interviews in VR, shared ritual, motion-tracked gesture, puppetry, digital/material overlap—suggests that it is less interested in stable identity than in redistributed embodiment. Bodies extend, borrow, host, translate, and displace one another. The performance field becomes a site where one body's signals pass into another body's action. At the same time, the work resists any fantasy of seamless virtual totality insisting on conjunctions rather than substitution: digital and meat space, live interviews and puppetry, motion-tracking and dance, ritual and virtual community. The environment is hybrid from the outset. This makes the piece especially productive for a theatre-based analysis of metaversal forms. It shows that the deepest interest of such environments may not lie in total immersion conceived as disappearance into a world, but in the production of new operative relations among bodies, signals, and roles. One might say that *Come, Fur(r)ies, Dance!* is less concerned with the image of a virtual world than with the techniques through which a body can act in one, against one, or across one. For that reason, the work seems to crystallize the central issue of this second case study with unusual clarity. Theatre proves capable of staging metaversal logic most powerfully when

it stops treating the digital as a theme and starts treating it as a grammar of action. In *Come, Fur(r)ies, Dance!*, that grammar becomes visible in the redistribution of gesture, in the borrowing of voices, in the ritualization of virtual community, in the instability of gender, role and body, and in the effort to understand contemporary masculinity through precisely those operations. The stage becomes a place where one can see how bodies are instructed, rerouted, or multiplied by mediated environments. What is offered is a theatre of digital operational relations, rather than a scenic metaphor for virtuality. Thus, the guiding idea for the treatment of furries, Furies, and masculinities acquires a particular precision. The piece does not present virtual community as a secondary topic, nor does it treat online identities as decorative references to contemporary culture. It stages them as operational and so relational conditions through which bodies learn how to appear, desire, attack, defend, and belong. The hybrid figures that emerge are charged with ritual intensity because they are already more than characters: they are usable bodies, inhabited bodies, delegated bodies. When the work moves between live testimony, choreographed movement, tracked gesture, and digitally mediated figures, it continually asks who is acting, through whom, and at what cost. Masculinity appears here less as a fixed social identity than as a programmable and transferable structure, one that can be displaced into seductive, stylized, or non-conventional feminine forms and then brought back into the theatre for scrutiny in renewed cultural, social and technical modes.

From Arche-Screen to Experienscreen: Toward a theatrical understanding of metaversal experiences

Taken together, these three works delineate a remarkably coherent field. *Festen. Il gioco della verità* constructs a double scenic plane in which perception is already a choice among interfaces and bodies. *OLEANDRA* internalizes platform logics into writing, gesture, role assignment, and scenic design, producing a metaverse without immersive hardware and giving theatrical form to the procedural instability of avatars, portals, glitches, and persistence. *Come, Fur(r)ies, Dance!* moves still further, testing how virtual community, motion-tracking, ritual, and hybrid embodiment can be organized

as a live performance environment. What links them is not a common style. Their techniques differ sharply. One draws on the live camera and the transparent screen; another on postdramatic writing and avataric role confusion; the third on lecture-performance, digital interviews, motion data, dance, and ritual. Their convergence lies elsewhere. Each one organizes a world in which what can be perceived is inseparable from what can be done. Each one gives the spectator access to a stage that behaves like an operational-relational environment. One enters not just a narrative, but a field of permissions, signals, doubled views, broken gestures, role-play, platform speech, tracked movement, and redistributed agency. This is where the Uexküllian problem becomes especially fertile without needing to be restated mechanically. These works are not germane because they "represent" metaverses but because they stage environments structured by actionable perception. They show that contemporary theatre can expose, in concentrated form, the practical grammars through which digital worlds organize bodies and relations. In doing so, they also indicate why theatre remains a particularly powerful medium for this inquiry: it keeps the body in front of us while allowing the body to be layered, split, augmented, and rerouted by media. The metaversal field appears there not as a separate universe but as a set of operative pressures acting on live presence. This direction prepares the next step of the chapter. Once contemporary theatre has shown how a stage can function as a performative environment of perception and action, it should become possible to move toward cases in which virtual platforms do not only serve as models for theatrical form, but become sites where events are spatially and temporally reorganized in their own right. Seen from this angle, the notion of arche-screen introduced and developed in the chapter *Bodies* can now be pushed further. Thus, these works suggest that the proscenium reconfigures one variation of the arche-screenic principle, while the stage itself begins to operate as another variation of the same logic. As a primary threshold through which bodies, projections, interfaces, gestures, sounds, and scenic environments are distributed into experience, and as a further threshold in which these elements are reconfigured in relation to the audience, theatre appears as a second-order, multimodal variation of the arche-screen: a particularly dense form in which arche-screen characteristics could be vividly and strongly perceived.[154] This is

[154] On multimodal variations of the theme see Carbone 2010, especially the notes about the director Jean Renoir and his father, the painter Pierre-Auguste Renoir—where the latter outlined original reflections

already evident in *Festen*, where the transparent veil initially seems to occupy the position of the screen, yet the whole stage progressively reveals itself as the deeper operative surface that organizes what can be seen, withheld, doubled, or exposed. It becomes even clearer in *OLEANDRA*, where no single framed screen governs the event, because the stage as a whole behaves like a platformed environment in which entrances, overlaps, interruptions, and avataric presences are regulated. And it is especially striking in *Come, Fur(r)ies, Dance!*, where tracked motion, ritual actions, vocal displacements, and hybrid embodiments make the stage function as a field of transfer rather than as a site of frontal display. From this perspective, the proscenium can be understood as a kind of second-order threshold, almost an arche-screen squared, since it frames a stage that is already itself operating as an originary screen of embodied mediation. The question of the fourth wall is therefore sharpened rather than dissolved: what faces the audience is never only a visible scene, but a layered threshold in which action, perception, and mediation are continuously reconfigured.[155]

At this point it may be useful to name more precisely the kind of theatrical configuration that such an expanded understanding of the arche-screen allows these works to bring into view. What emerges across *Festen*, *OLEANDRA*, and *Come, Fur(r)ies, Dance!* is not simply intermedial theatre, nor only theatre influenced by digital culture, but a mode of performance in which the screen becomes inseparable from the experience it structures. The term *experienscreen* may be useful here to designate a screen no longer understood as a passive support, framed surface, or visual supplement, but as an operative threshold that organizes relations among bodies, actions, perceptions, and mediated layers. The screen, in such cases, does not simply display; it conditions access, distributes presence, and modulates what can be seen, done, or inhabited within the event. Correspondingly, the term *experigraphy*[156] may designate the concrete experience

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also on performing arts and cinema. Curiously, he involuntarily overturned the following teleologism on the dark movie theatre reporting about the brightly theatre halls.

[155] About this topic Hito Steyerl lyrically suggests the contemporary experience of a fifth wall. See *The Fifth Wall* by Hito Steyerl on the occasion of the relaunch of the digital stage HAU4 in https://www.hebbel-am-ufer.de/en/hau3000/hito-steyerl-the-fifth-wall, accessed April 15, 2026 and https://www.hau4.de/en/, accessed April 15, 2026.

[156] I owe these terminological neologisms to my reading of James Hillman and Silvia Ronchey. *L'ultima immagine* (Milan: Rizzoli, 2021), James Hillman's final book written in collaboration with Silvia Ronchey. As Moreno Montanari emphasizes in his review of the volume on Doppiozero, "Hillman's thesis is that the image, when it is truly such, creates an experience, reshapes our way of seeing things, and extends and transforms the categories with which we habitually organize experience and knowledge in general. For this reason, the image 'can influence the actual vital state of a civilization'" (my

generated through that operative threshold: an experience that is repeatable yet never identical, materially structured yet lived as event, and produced through the mutual implication of screen, body, gesture, scenic environment, and spectatorship. What these contemporary theatrical works make especially clear is that the decisive shift no longer lies in the mere presence of media on stage, but in the production of environments whose operative logic can only be grasped if one gives equal relevance to technical framing and lived bodily experience.

Metaversal reenactments and the situated environment of the almost-simultaneous

The third case study concerns environments in which the decisive transformation lies in the reorganization of time and space around actuality. The problem becomes especially sharp when a public event continues to exist after its occurrence as a world one can still enter, traverse, and share with others. Under these conditions, the metaverse is best understood as a situated environment: it redistributes near and far, here and elsewhere, archive and event, witness and participant. The result is a specific temporal regime in which the "just before," the "while it is happening," and the "already happened" remain experientially adjacent. The event no longer belongs only to the place where it first occurred or to the images that first recorded it. It survives under another environmental logic, one that gives it a second space of access. This is the threshold that makes metaversal reenactments theoretically productive. They do not preserve the event by storing it. They prolong it by worlding it. A useful conceptual starting point lies in recent immersive theory. Anna Caterina Dalmasso, Wanda Strauven, and Simone Venturini describe contemporary immersivity through the "environmentalisation of images,"[157] that is, a historical process in which images increasingly lose the stability of

translation); an echo that, in some respects, anticipates what will be proposed in the following chapter, *Anthropologies*. See https://www.doppiozero.com/lultima-immagine, accessed April 15, 2026.

[157] Anna Caterina Dalmasso, Wanda Strauven, and Simone Venturini, eds. *Archaeologies of the Virtual: Materialities, Senses, Imaginaries*. Special issue of Cinéma & Cie. Film and Media Studies Journal 23, no. 40 (2023).

frontal representation and become part of a "circular, operational, and immersive media environment" (Dalmasso, Strauven, and Venturini 2023: 14–16). Their argument is crucial in this case because metaversal reenactments cannot be considered just as second images of public events. They are worlds in which those events can still be crossed, inhabited, and acted upon. The same essay insists that immersive environments do not abolish framing altogether. The body itself becomes a kind of frame, the pivot of a "reciprocal performative negotiation" with the environment (Dalmasso, Strauven, and Venturini 2023: 11–12). In other words, the event's second life depends on the user's bodily positioning inside it. The recent world becomes accessible again because a body can still be placed within its transformed coordinates. Philippe Bédard in *Virtuality+: The Physical Body in Virtual Reality and the Path toward Augmented Virtuality*[158] gives this line of thought a strong phenomenological inflection. His central point is that virtual reality should not be understood through a simplistic opposition between "virtual" and "real" reality. Every VR experience remains, to some degree, an experience of physical reality; bodies occupy a liminal position along the reality-virtuality continuum, and that liminality should be treated as a resource rather than a defect (Bédard 2023: 61–63). Later in the essay, Bédard emphasizes that the body is best understood as an "important vector toward immersion," and that every experience of virtual reality remains "to some degree an experience of physical reality" (Bédard 2023: 62, 71). This is crucial for the present case study. Metaversal reenactments do not gain force by cancelling the body. They gain force because users remain physically where they are while entering another world through a bodily and situated form of access. The event becomes available again through a body that is still here and yet oriented elsewhere. (Bédard 2023: 70–72).

Gabriella Giannachi's reflections on mixed-reality theatrical environments in *Lost Origin: An "Audience of the Future" Report. Towards a Design Framework for Mixed Reality Theatrical Experiences*[159] and Rebekka Sofie Bohse Meyer's study on VR and Immersive Theatre[160] in *Beyond Virtual Scenography: Double Scenography as a*

[158] Philippe Bédard, "Virtuality+: The Physical Body in Virtual Reality and the Path toward Augmented Virtuality." *Aisthesis* 16, no. 1 (2023): 61–72.
[159] Gabriella Giannachi, "Lost Origin: An 'Audience of the Future' Report. Towards a Design Framework for Mixed Reality Theatrical Experiences." *Body, Space & Technology* 22, no. 1 (2023): 40–64.
[160] For an exhaustive study about the various declination of Immersive Theatre practices see Josephine Machon, *Immersive Theatres: Intimacy and Immediacy in Contemporary Performance* (London: Palgrave Macmillan, 2013).

Dramaturgical Strategy for Immersion in Virtual Reality Theatre[161] offer a particularly apt vocabulary for the temporal and spatial instability of such polymorphic experiences. Giannachi describes immersive mixed-reality experiences as generating "deep spaces" in which audiences "continuously reposition their own presence across different temporalities and spatial configurations" (Giannachi 2023: 44). Later in the same text, she argues that such events may become "convergent and pervasive," so that what happens before and after the central event on multiple platforms may form part of the experience itself (Giannachi 2023: 61–63). Meyer, discussing VR theatre, speaks of "double existence," of the "hypersurface," and of experiences that place participants "simultaneously in past and present," producing "extratemporal" and "extraspatial" forms of catharsis (Meyer 2025: 99–105). These formulations almost seem made for metaversal reenactments. Such reenactments do not install the user in a self-identical present. They place the user in a layered threshold where the event has already happened and still remains enterable. The methodological implications of reenactment itself reinforce this direction. In *Reconstruction, Replication and Re-enactment in the Humanities and Social Sciences*,[162] the editors stress that performative methods raise questions of "truthfulness and accuracy," draw attention to "process and performance," and facilitate communication with broader publics (Dupré et al. 2020: 10). A few pages later, they add that practitioners cannot fully recreate the past, and that the open-endedness of reenactment should be understood as a productive feature rather than a failure (Dupré et al. 2020: 22–24). Leslie Carlyle formulates the point with exemplary clarity in her chapter on historically accurate reconstruction: "it is obviously not possible to recreate the past. However, attempting to is in itself a highly edifying goal," precisely because it allows one to "ask new questions of what has already been discovered" (Carlyle in Dupré et al. 2020: 142–143). This caution is essential here. Metaversal reenactments do not restore original events. Their interest lies in the second world they build around them. That world allows the event to be traversed, repeated, and socially reprocessed under new conditions

[161] Rebekka Sofie Bohse Meyer, "Beyond Virtual Scenography: Double Scenography as a Dramaturgical Strategy for Immersion in Virtual Reality Theatre," in *Theorising and Designing Immersive Environments: Enchanting Spaces*, ed. Ágnes-Karolina Bakk and Péter Kristóf Makai (Cham: Palgrave Macmillan, 2025), 85–106, https://doi.org/10.1007/978-3-031-66067-2_6.
[162] Sven Dupré, Anna Harris, Julia Kursell, Patricia Lulof, and Maartje Stols-Witlox, eds. *Reconstruction, Replication and Re-enactment in the Humanities and Social Sciences*. Amsterdam: Amsterdam University Press, 2020.

of presence. A final conceptual nuance comes from Wanda Strauven's discussion of operative images. In the essay already cited, she and her co-authors connect immersive images to a broader media condition in which images are increasingly tied to hidden operations, tracking, diagrams, and processes rather than functioning simply as representational windows. This observation helps explain why metaversal reenactments differ from ordinary replay. They are not simply second-order records of an event. They are event-worlds folded into operation: worlds that trigger movement, orientation, repetition, clipping, circulation, moderation, and renewed social participation. The event enters a platform environment where images are already acts.

A threshold in immersive practice: from entering bodies to entering events

A preliminary threshold is necessary before turning to the three central cases. A wide range of immersive works from the last decade had already prepared, in artistic form, the cultural expectation that digital environments might provide documentary entry, temporal return, bodily displacement, or shared presence. These works are not themselves the cases under analysis here, and many of them are shaped by clearly artistic rather than vernacular or platform-native ambitions. Yet they repeatedly test the same problems that later become generalized in popular digital worlds: how to re-enter recent violence, how to inhabit another body, how to share time with absent others, how to transform documentation into environment.

Simon Senn's *Be Arielle F.* offers a particularly sharp threshold because it stages what could be called an inverse reenactment. A real performer purchases a digital body scan, inhabits it in VR, and then returns that inhabitation to the stage in the form of a lecture-performance. The performance's Italian critical reception emphasized the ethical, legal, and psychological implications of the re-use of digitized bodies, and described how Senn moved from artistic experimentation to a direct dialogue with the woman whose scanned body he had acquired. What emerges is a bodily reenactment without a prior public event in the usual sense. A body-image becomes a world one may enter. This matters here because it shows that reenactment in virtual environments can already take

the form of occupying another bodily position, not only of reconstructing public events. Pierre Huyghe's *The Third Memory* (2000) provides an equally related threshold from another direction. Even if not a VR product, the film returns to the 1972 Brooklyn bank robbery later fictionalized by Sidney Lumet in *Dog Day Afternoon* (1975) and asks John Wojtowicz to perform his own role again inside a reconstructed setting. In this way, the event passes through at least three temporal layers: the robbery itself, its cinematic fictionalization, and Huyghe's later reconstruction. The event survives by acquiring a second and then a third world. Its afterlife is not archival only; it becomes scenographic and inhabitable. This is precisely the sort of spatio-temporal displacement that will later reappear in metaversal reenactments, though on a more distributed and vernacular scale. A substantial group of recent Venice Immersive[163] official selection of VR/XR works pushes that logic toward documentary trauma and bodily return. Gina Kim's trilogy—*Bloodless* (2017), *Tearless* (2021), and *Comfortless* (2023)—turns the history of U.S. military camptowns in South Korea into immersive environments where users cross between real sites, archival violence, and haunted persistence. The official project descriptions emphasize that *Bloodless* reconstructs the murder of Yun Keum Yi in 1992, that *Tearless* returns to the "Monkey House," where women were forcibly detained and treated, and that *Comfortless*revisits "American Town" through ghostly presences and ruins. These works matter here because they treat historical violence as a world that is still accessible through bodily presence rather than as a distant report alone.[164] *Vajont* (2020) offers another revealing structure. The Biennale's presentation of the work makes clear that the experience places the user on the night of October 9, 1963, a few hours before the disaster. This temporal choice is crucial. One enters the catastrophe through imminence rather than retrospective spectacle. The event has not yet happened in the world of the experience, though it is historically known to the participant. The user therefore occupies a tense of historical suspense, a "not yet" loaded with foreknowledge. *Battle Hymn* (2019), another product shown in Venice Immersive official selection, uses a different but related logic: it gives users an embedded position inside the

[163] See the various years of selection by Venice Immersive: https://www.labiennale.org/en, accessed April 15, 2026. About this new interest for immersive experiences by film festivals see Caroline Klimek, "From Programmer to Curator: How Film Festivals Are Pushing the Boundaries of New Media and Expanded Cinema." *Canadian Journal of Film Studies / Revue canadienne d'études cinématographiques* 27, no. 1 (Spring 2018): 73–87.
[164] See https://www.ginakimfilms.com, accessed April 15, 2026.

routine of military arrest raids, converting repeated violence into a shocking video-based first-person POV experiential structure rather than a distant geopolitical fact. In both cases, the immersive world offers temporal access as much as geographical setting. Other works shift the same problem toward shared embodiment, memory, and mutable world-construction. *Over the Rainbow* explicitly presents itself as an attempt to move Riverbed Theatre Company's live immersive practice into a virtual environment. Hsin-Chien Huang's *Lun Hui (Samsara)* (2021) builds a world of reincarnated passage between bodies and temporal states. Apart from La Biennale selection, *Peaceful Places* by Margherita Landi[165] and Agnese Lanza asks users to imitate the embraces of real couples, transforming bodily memory into a virtual choreography of relation, pushing boundaries between digital product and its performative format way further. In the same explicitly blurred path, Giusy Caruso's S+T+ARTS Prize Honorary Mention[166] *MetaPhase* constructs an XR dialogue between pianist and an avatar to perform a piano duo concerto. Again in the Venice Immersive selection, via an apparent opposite but still very analogue method, Davide Rapp's *Montegelato* (2021) turns hundreds of cinematic appearances of a waterfall into one VR montage-environment, revealing through an inverse operation the crafted nature of immersive video-based environments, while Tender Claws's *The Under Presents*: *Tempest* places immersive theatre inside VR[167], where bodies, theatre forms, and digital immersion intersect. An apparent opposite, traditional stage work such as Sotterraneo's *Overload* belongs to the same horizon, because it tents to trait the event as an overloaded environment of interruptions, branching attention, and media pressure.[168] Across all these cases, immersive practice repeatedly establishes that digital worlds can support return, re-entry, repetition, and layered presence. This threshold matters because the three central cases do not emerge from nowhere. They belong to a broader cultural condition in which digital environments are already expected to offer documentary access, temporal return, bodily displacement, or

[165] Another relevant experimentation between VR and theatre comes from the technical and life partner of Landi, Omar Rashid, who via his company Gold Enterprise experimented as a pioneer of the field collaborating with Italian actor Elio Germano in various projects. See in particular the transposition in an immersive format of the pièce *Così è (se vi pare)* by Luigi Pirandello in *Così è (o mi pare)* (2021). For further analysis of the product see also Francesco Melchiorri, "Così è? Non mi pare. Ovvero: è arrivata la VR." *Birdmen Magazine*, February 6, 2022, https://birdmenmagazine.com/2022/02/06/cosi-e-se-mi-pare-germano-vr/. Accessed April 15, 2026.
[166] See https://ars.electronica.art/starts-prize/en/metaphase/, accessed April 15, 2026.
[167] See https://tenderclaws.com/theunderpresents, accessed April 15, 2026.
[168] See https://www.sotterraneo.net/produzioni-3/overload/, accessed April 15, 2026.

shared eventness. They intensify those expectations by moving them into public platform life.

Hong Kong: protest as a portable, divided, and ultimately overrun world

The Hong Kong protests offer the earliest and, in some respects, the most revealing instance among the three cases because they were already, from the outset, a struggle over space, visibility, mobility, and public presence. The movement began in spring 2019 in response to the proposed extradition bill that would have allowed criminal suspects to be sent to mainland China for trial. After early marches in March and April, the conflict escalated dramatically in June 2019, when mass demonstrations, police repression, and the occupation of urban space turned the city into a sustained field of confrontation. The bill was first suspended and then formally withdrawn in October 2019, yet by that point the protests had already expanded far beyond the original legislative issue, taking shape around broader demands concerning police violence, democratic accountability, and the political autonomy of Hong Kong. The movement continued into 2020, then progressively subsided under the combined pressure of police repression, arrests, the pandemic, and, above all, Beijing's imposition of the National Security Law on 30 June 2020. That law became the legal instrument of a much wider crackdown; Reuters' later reconstruction shows that the protests resulted in more than 10,200 arrests and that the subsequent national-security regime "quietened dissent" in the China-ruled city, reshaping its political landscape in a durable way.[169]

This historical arc matters because the migration of the protests into virtual environments did not happen after their conclusion, as a retrospective memorial exercise. It happened while the movement was still open, unstable, and undecided. Reuters reported in October 2019 that a group of Hong Kong students had developed a VR game meant to let users experience the demonstrations "from the view of a 'frontline protester'." The

[169] See "Timeline: Key Dates in Hong Kong's Anti-Government Protests." *Reuters*, May 30, 2020, https://www.reuters.com/article/world/timeline-key-dates-in-hong-kongs-anti-government-protests-idUSKBN23608O/. Accessed April 15, 2026.

game allowed players to dodge tear gas, duck behind barriers, and run from riot police. Its aim was explicitly pedagogical and experiential: not simply to inform, but to place a user inside the tactical horizon of the event. The protest therefore ceased to be only a scene delivered through journalism and became a traversable environment. This is the first decisive shift. A public conflict is redistributed into another world where the user does not merely see what happened but moves through a second-order version of its space.[170] The spatio-temporal stakes of this move become clearer when read through the theoretical material already assembled in the chapter. In this sense, Gabriella Giannachi's earlier work on electronic civil disobedience reveals some pertinent aspects. Writing about Electronic Disturbance Theater in *The Politics of New Media Theatre: Life*®™,[171] she argues that the internet can become "a dramatic scenario that can facilitate social and political engagement with issues in the off-line world," and she emphasizes its ability not only to reach distant communities but also to create *communitas* and political presence across distance (Giannachi 2007: 20–21). The relevance of that argument to Hong Kong protests is immediate. The VR protest simulation did not simply function as a copy of street conflict. It operated as a digital scenario in which off-line political urgency was reconfigured into another scene of access. The event remained anchored in Hong Kong city and simultaneously became available elsewhere. In this sense, the virtual world did not replace the street. It prolonged the protest's space of appearance by building a second field in which it could still be entered.

At the same time, the Hong Kong protests case also confirms Giannachi's warning about the vulnerability of the "digital citizen." In the same passage, she remarks that, whereas the off-line protester is at least partially protected by legal frameworks governing public assembly and the use of force, the digital citizen is exposed to "informatic annihilation" (Giannachi 2007: 21). This idea becomes strikingly concrete in relation to Hong Kong protests. The movement's virtual afterlives remained subject to platform governance, infrastructure, censorship, and countermobilization. The metaversal space opened a new terrain of action, but it did not guarantee sovereignty over that terrain. It created another world of conflict, not a refuge outside conflict. That point becomes even

[170] See "Hong Kong Students Take Protest to Virtual World." *Reuters*, October 28, 2019, https://www.reuters.com/article/world/hong-kong-students-take-protest-to-virtual-world-idUSKBN1X715V/. Accessed April 15, 2026.
[171] Gabriella Giannachi, *The Politics of New Media Theatre: Life*®™ (London and New York: Routledge, 2007).

sharper once one moves from the VR game to the game-world proxy conflicts that unfolded in late 2019 and early 2020. *Reuters Graphics* reports on *Grand Theft Auto Online* are particularly revealing because they show that the virtualization of the protests did not create a neutral environment shared by generic users. It reproduced, in condensed form, the geopolitical division already structuring the conflict. Hong Kong players began dressing their avatars in the recognizable black clothing, yellow helmets, goggles, and gas masks associated with the movement, and they used those avatars to stage virtual disruptions that echoed the tactics and iconography of the protests in the city. Mainland Chinese players responded by dressing their own avatars as police and countering the Hong Kong players with digital tear gas, water cannons, and organized repression. One report summarized the situation bluntly: after several intense standoffs, the police side "seemed to have defeated the protestors, in part because of sheer numbers."[172] The virtual world therefore reproduced a divided field of national and political alignment. Hong Kong players inhabited the figures of the protesters; mainland Chinese players inhabited the forces of order and suppression.[173] This split matters as it reveals that the metaversal environment was not simply a stage for symbolic replay. It had already become a site of polarized collective presence. The event did not merely survive as a memory-image; it returned as an antagonistic world populated by opposed communities who entered it from different political positions. Nadja Masura's account of telematic performance offers a productive analogy of this kind. In her discussion of ArtGrid, she notes that networked performance can generate "a perceived shared environment," and that such environments create "both community and place through process," producing forms of *communitas* that are at once actual and liminal (Masura 2020: 247–249). The *Grand Theft Auto* (*GTA*)[174] clashes as extension of Hong Kong protests present an inverted and politically charged version of that same insight. The online space does indeed generate community and place

[172] Simon Scarr, Manas Sharma, Marco Hernandez, and Vimvam Tong, "The Contentious Issue of Crowd Counting in Hong Kong," *Reuters Graphics*, June 20, 2019, https://www.reuters.com/graphics/HONGKONG-EXTRADITION-PROTESTS/0100B01101K/. Accessed April 15, 2026. For a recent reportage about the post-protests Hong Kong see Adolfo Arranz, Dea Bankova, Jessie Pang, James Pomfret, and Sudev Kiyada, "Awaiting Justice: How Hong Kong's National Security Crackdown Stifled the City's Democratic Opposition," Reuters, April 3, 2026, https://www.reuters.com/world/asia-pacific/awaiting-justice-impact-hong-kongs-national-security-laws-2026-04-03/. Accessed April 15, 2026.

[173] See Alexandra Ossola, "The Hong Kong Protests Continue in a Video Game Proxy War on Grand Theft Auto." *Quartz*, December 27, 2019, https://qz.com/1776081/how-hong-kong-protestors-continue-to-fight-via-grand-theft-auto. Accessed April 15, 2026.

[174] See https://www.rockstargames.com/it/gta-online, accessed April 15, 2026.

through process, but here the process is conflictual rather than collaborative. Two communities co-produce one digital place precisely by fighting over it. The shared environment is real enough to sustain alignment, enmity, and repetition. Masura's discussion is also useful because she insists that computer-mediated environments create "a new option for 'being there' in the accomplishment of many tasks" and that cyber-place exists through participation, process, and mutual perception rather than through stable territoriality alone (Masura 2020: 252–255). This helps clarify the spatio-temporal logic of Hong Kong protests' virtual afterlives. To enter the VR simulation, to stage protest on an island, or to fight as protester and police avatars inside a multiplayer world all involve distinct ways of being there after displacement from the original site. The event survives not by becoming timeless, but by being repeatedly relocated into new, still-current presents. The protest is no longer only what took place in Admiralty, Mong Kok, or Polytechnic University. It becomes a portable situation that can be entered again under altered technological conditions. If the *GTA* clashes show the conflictual side of this relocation, *Animal Crossing: New Horizons* shows another: the transformation of protest into a slower, domestic, persistent world of symbolic co-presence. Reuters described how Hong Kong players used the game to stage slogans, black-clad gatherings, visual messages, and funeral-like tableaux; Joshua Wong's screenshots turned the island into a miniature protest territory. Reuters later documented that after Wong's intervention the game effectively disappeared from major Chinese grey-market platforms, while players resorted to euphemisms, code words, and intermediaries to continue obtaining it. Here the protest no longer appears through immediate danger or tactical movement, as it did in the VR simulation. It survives through repeatable social display, portable ritual, and small-world persistence. The event is not reenacted as confrontation alone; it is reenacted as public appearance under conditions of distance and quarantine.[175]

The overall historical irony is difficult to miss. In the city, the movement was ultimately repressed, and Hong Kong came under much tighter and more direct political control from Beijing through the National Security Law and the legal-political restructuring that followed. In the online extensions of the protests, something comparable can be observed, though in a different key. The virtual spaces did not remain

[175] See Li, Pei. "Nintendo Game Pulled from Chinese Platforms after Hong Kong Protest." *Reuters*, April 10, 2020, https://www.reuters.com/article/technology/nintendo-game-pulled-from-chinese-platforms-after-hong-kong-protest-idUSKCN21S105/. Accessed April 15, 2026.

asymmetrical strongholds for Hong Kong dissent. They were quickly contested, counter-inhabited, censored, and, in some cases, numerically overwhelmed by mainland Chinese players or by Chinese market controls. The protests did not simply migrate successfully into the metaverse. They entered a second arena in which the same struggle over sovereignty, visibility, and occupation resumed under other conditions. The environmental lesson is especially important: these digital worlds offered another space of presence, but not one outside power. They gave the movement another life, while exposing that life to new forms of opposition and erasure. Seen from this angle, Hong Kong protests becomes a particularly strong example of the present theme. It shows how a public event can survive by taking on another spatial body and another temporal rhythm. The frontline VR simulation intensifies immediacy. *Animal Crossing* extends persistence. *GTA*-style clashes transform the movement into an antagonistic multiplayer present. Across all three, the protest remains current by becoming enterable elsewhere. The event is no longer reducible to the city where it began. It survives as a situated world of delayed presence, a world in which the just-past and the still-unresolved continue to coexist. That is the environmental logic this case study tents to isolate.

Butler, Pennsylvania: The Trump's assassination attempt as a just-past environment

The attempted assassination of Donald Trump on 13 July 2024 in Butler, Pennsylvania, produces a sharper and more abrupt version of the same environmental logic. Reuters established the basic sequence: Trump was speaking at an outdoor rally when shots rang out; a bullet grazed his upper right ear; one attendee was killed and two others wounded; the shooter was killed by Secret Service counter-fire; Trump then rose, bloodied, and mouthed "Fight! Fight! Fight!" as he was escorted away. Reuters also documented the flood of misinformation and conspiracy narratives that followed almost immediately. The political fact was therefore born as a global image-event under

conditions of speed, uncertainty, and intense circulation.[176] To understand why Butler attack moved so quickly into metaversal reenactment, Andrea Rabbito's *Pictorial Trump: Il ruolo politico delle nuove immagini*[177] is a recent exhaustive source. In Ruggero Eugeni's introduction, the book frames Trump as a figure whose political efficacy is inseparable from the transformations of digital and algorithmic pictures. These images circulate at massive speed, under conditions of "attentional crowding" and "epistemic uncertainty," and it is precisely under those conditions that they acquire a new "operational efficiency," a new capacity to orient choices, reactions, and political imaginaries (Eugeni in Rabbito 2025: 7–8). Later in the book, Rabbito argues that Trump has made image-use itself into a paradigm, familiarizing publics with an excessive, aggressive, and transgressive mode of visual communication that has gradually become ordinary (Rabbito 2025: 154–155). In the same volume, the "Trump-turn" is presented as a deep acceleration within the world of pictures, one in which Trump's media strategy and the new status of digital images reinforce one another (Rabbito 2025: 147). These pages are crucial here because Butler attack was never only a political event. It was immediately an event-image, and more precisely an event-image belonging to an already agentive image regime.

W. J. T. Mitchell helps specify one further step in this passage from political image to platform world. In *What Do Pictures Want? The Lives and Loves of Images?*,[178] the question is displaced away from what pictures mean and toward the kind of claim they make upon us. Pictures are approached as "vital signs," as entities to which viewers repeatedly attribute animation, appetite, agency, and a strange sort of social life, even while knowing perfectly well that they are not alive in any literal sense (Mitchell 2005: 6–10). This tension is crucial because, for Mitchell, pictures operate within a durable "double consciousness": they are treated simultaneously with skeptical lucidity and

[176] See Nathan Layne and Soren Larson. "Pop, Pop, Pop, Then a Bloodied Trump Rushed from Election Rally." *Reuters*, July 14, 2024, https://www.reuters.com/world/us/pop-pop-pop-then-bloodied-trump-rushed-election-rally-2024-07-14/. Accessed April 15, 2026.
[177] Andrea Rabbito, *Pictorial Trump: Il ruolo politico delle nuove immagini*. Introduction by Ruggero Eugeni (Sesto San Giovanni, MI: Mimesis Edizioni, 2025).
[178] W. J. T. Mitchell, *What Do Pictures Want? The Lives and Loves of Images* (Chicago: University of Chicago Press, 2005). See also Id., *Iconology: Image, Text, Ideology* (Chicago: University of Chicago Press, 1986); Id., *Cloning Terror: The War of Images, 9/11 to the Present* (Chicago: University of Chicago Press, 2011); Id., *Image Science: Iconology, Visual Culture, and Media Aesthetics* (Chicago: University of Chicago Press, 2015) and Id., *Pictorial Turn: Saggi di cultura visuale* (Milano: Raffaello Cortina Editore, 2017).

practical animism, as if they could persuade, seduce, mislead, or command attention on their own (Mitchell 2005: 8–9). More importantly for the present case, Mitchell insists that the desire of the picture is not identical with the intentions of its maker, the wishes of its beholder, or the explicit message it communicates; pictures function instead as quasi-agents and "go-betweens" in the social field of visuality, and what they ultimately want from us is "an idea of visuality adequate to their ontology" (Mitchell 2005: 46–48). Later in the book, he radicalizes this claim by arguing that the "social construction of the visual field" should also be grasped as the "visual construction of the social field," a psychosocial process in which images do not merely reflect collective reality but actively organize it, "look back" at us, and acquire efficacy precisely because they circulate as intermediate forces between observer and observed (Mitchell 2005: 352). This line of thought is especially productive for Butler. The images of the assassination attempt did not remain stable as documentary traces of a completed event. They condensed a whole political world and simultaneously solicited further acts of entry, repetition, repositioning, and spatial reactivation. Their migration into Fortnite, Minecraft, and Roblox can therefore be understood as the passage from the event-picture to the event-world: from the image as record to the image as operative environment, one that demands to be entered because it has already begun to construct the social field in which it circulates; this helps clarify the event's almost instantaneous migration into gaming platforms. Aftermath reported that, in the days immediately following the shooting, users began recreating the assassination attempt inside Fortnite, Minecraft, and Roblox, with the scenes circulating mainly as clips and reposted fragments. *Wired* described the same trend through the appearance of a Fortnite map titled *Donald Trump vs Assassin*, noting that it was quickly removed but that it emerged in a platform ecosystem already marked by the circulation of extremist and politically violent content. The speed of this translation is the core issue. A public trauma was converted almost at once into a traversable, programmable, and shareable scenario. The event's afterlife was environmental from the outset.[179]

At this point, Wanda Strauven's account of the "screenic image" and of operative images becomes particularly relevant. In *Touchscreen Archaeology: Tracing Histories of*

[179] See Nathan Grayson, "Companies Distance Themselves As Players Recreate Trump Assassination Attempt in Fortnite, Roblox, and Minecraft." *Aftermath*, July 18, 2024, https://aftermath.site/fortnite-roblox-minecraft-steam-trump-assassination-attempt/. Accessed April 15, 2026 and Vittoria Elliott, "Fortnite Has a Political Violence Problem." *Wired*, July 18, 2024. https://www.wired.com/story/fortnite-has-a-political-violence-problem/. Accessed April 15, 2026.

Hands-On Media Practices,[180] she explains that today's images on screens are no longer simply to be looked at; they act as interfaces toward hidden processes, and are "simultaneously linked electronically to the inner processes of the machine" (Strauven 2021: 230–231). Borrowing from Farocki via Distelmeyer, she also recalls that "operative images" are images that belong to action itself rather than merely depicting it (Strauven 2021: 231–233). This conceptual frame sharpens the specificity of the Butler attack reenactments. They are not just images about an event. They are image-worlds tied to processes: building, clipping, sharing, moderating, removing, recirculating. The assassination attempt becomes operational inside the platform ecology. Its force lies in what it does socially and technically as much as in what it shows.

Fortnite gave this process its clearest theatrical form. The platform already possessed a mature event grammar: stage-like focalization, shared crowd orientation, avataric co-presence, large-scale scenic transformation, and a strong history of collective live events. The Butler attack could therefore be translated there with striking speed because the platform already knew how to organize a public around a focal body in a highly legible environment. What survived in the reenactments was not simply Trump's image or the audio of the shooting, but the eventness of the scene itself: podium, spectators, line of sight, attack vector, panic, reaction. The original danger was gone. The public architecture remained. This is why the Fortnite recreations matter. They turned a breaking political trauma into a just-past world. The difference between ordinary replay and platform reenactment becomes clearer if one borrows Piotr Woycicki's vocabulary of trajectories. Drawing on Giannachi and Benford, Woycicki distinguishes between "canonical" trajectories designed in advance and "participant trajectories" that emerge through the user's own movement and perspective (Woycicki 2014: 194–195). Broadcast footage of Butler attack belongs overwhelmingly to the first regime: it guides the viewer through a framed sequence, however chaotic the event itself may be. The gaming reenactments shift the event into the second regime. Even where the scene is schematic, the user enters a world in which movement, point of view, and spatial relation are participant-led. This is not a minor change of format. It is a change in the event's mode of access. The assassination attempt ceases to be only a viewed sequence and becomes a

[180] Wanda Strauven, *Touchscreen Archaeology: Tracing Histories of Hands-On Media Practices*. Lüneburg: meson press, 2021.

world navigated through trajectories. Minecraft reorganized the same event differently. In a block-based building world, the assassination attempt became rougher, diagrammatic, and more architectural. This reduction of visual fidelity is analytically productive. It turns the event into a buildable structure: podium, crowd, shooter line, target body, protective movement. The event is no longer absorbed only as shock. It is learned through reconstruction. In *Reconstruction, Replication and Re-enactment in the Humanities and Social Sciences* the volume's introduction stresses that reenactment is productive because it draws attention to "process and performance" and creates new forms of questioning rather than transparent recovery (Dupré et al. 2020: 10, 23–24). Leslie Carlyle adds that one cannot recreate the past, yet the attempt allows one to ask new questions of what is already known (Carlyle in Dupré et al. 2020: 142–143). Minecraft is exemplary in this regard. Butler attack becomes thinkable as a process of rebuilding. The event enters a slower, constructive temporality. Roblox introduced yet another temporal and political inflection because its worlds exist inside a dense ecology of user creation, publication thresholds, moderation rules, and ephemeral circulation. Aftermath noted that some relevant Trump-related worlds were visible there, while Roblox itself emphasized the distinction between what can be built privately in Studio and what is actually published publicly. This distinction is not incidental. It gives the Butler attack reenactments a particularly unstable temporal status. The event may survive as a build, a removed world, a rumor, a clip, or a partial reconstruction. It flickers between availability and disappearance. Roblox therefore turns the assassination attempt into a socially current but unstable almost-now, a world that is public and not fully public at the same time. Del Gaudio's discussion of Blast Theory and mixed realities helps to clarify again the broader ontological status of this kind of environment. He argues that in mixed reality, online and offline elements do not merely sit side by side; they "produce a continuum," and digital objects coexist with "various other fragments of reality" inside a common experiential field (Del Gaudio 2021: 79–80). He also insists that mixed-reality performance aims to generate "embodied knowledge," knowledge that settles in the body and in a body always traversed by technological grafts and mediated forces (Del Gaudio 2021: 80). As in the present case study, where the reenactments do not create a separate symbolic realm disconnected from the original rally. They create a continuum in which the off-line event and the platform world coexist, interact, and reshape one another. The

assassination attempt becomes knowable again through another bodily and technological regime.

The role of liveness also deserves emphasis. Recalling the Metaverse of Attractions chapter, the distinction between "live" and "recorded" is reconsidered through Philip Auslander and Rebecca Schneider[181], with the important observation that logging into collaborative metaverses is itself called going "live," because what matters is the synchronized interactivity of users. The Butler attack recreations belong to this logic even when they circulate as clips, because they derive their charge from the fact that they are scenes one could enter, rebuild, and inhabit with others almost immediately after the event. Their temporality is therefore neither live in the strict journalistic sense nor simply retrospective. It is a liveness of re-entry, a post-event present sustained by collaborative platforms. This is what makes the Butler attack case so disruptive. The assassination attempt belongs neither to the live present of the rally nor to the stabilized past of historical archive. It survives as a recently elapsed world whose environment can still be entered. The political trauma becomes available under a new logic of access almost before collective memory has had time to settle. In Rabbito's terms, Butler attack arrives in a world already trained by Trump's long pictorial strategy, a world accustomed to images that attack, impose, and intensify. As Strauven suggests, those images are no longer inert records but operative interfaces and processual triggers. Following Del Gaudio's synthesis, the event crosses into a mixed continuum where digital and physical fragments of reality coexist. Under those conditions, the metaversal reenactment is not an eccentric afterthought. It is one of the most revealing forms through which the event continues to exist socially.

Concerts as reenacted liveness: Travis Scott and Ariana Grande in Fortnite

The third case appears more benign, yet it belongs fully to the same structural transformation. The Fortnite events built around Travis Scott and Ariana Grande matter

[181] See the chapter titled *Bodies*.

because they remake one of the most codified forms of contemporary collective experience: the live concert. What is reenacted here is the event-form of liveness itself—gathering, waiting, performer appearance, crowd co-presence, shared rhythm, collective astonishment. Fortnite does not host a concert but builds a second environment for a new experience of it. Travis Scott's *Astronomical*, announced by Fortnite on 20 April 2020 and first performed on 23 April across five scheduled showings, made this especially clear. Epic Games launched it as an "other-worldly experience," while *The Verge* emphasized that the whole island effectively became the stage: players ran across water, encountered Scott at colossal scale, and moved through underwater and cosmic sequences.[182] Reuters later reported 27.7 million unique visitors and more than 45 million total views,[183] while the first show alone reached 12.3 million concurrent players.[184] These numbers matter because they indicate more than popularity. They indicate that the concert had become a platform-native world-event. The spatial logic differs radically from that of a conventional venue. A live concert normally positions the audience before a stage from which the performer appears. *Astronomical* preserves the concert's collective orientation while dissolving the venue into an island-wide environment. The avatar runs, jumps, floats, and is transported through worlds that change song by song. Scale becomes impossible in physical terms. The performer expands into an environmental force. Concertness survives through world-building. Its temporality is equally revealing. The five showings preserve the force of a shared present while redistributing it across time zones and schedules. Repetition reformats liveness without weakening it. Again, Giannachi's description of mixed-reality experiences as "convergent and pervasive" exemplifies this aspect, because *Astronomical* clearly exceeds any one occurrence and survives as a repeatable present (Giannachi 2023: 61–62). What matters is not singularity in the old venue-based sense, but the sustained currentness of a distributed event. Ariana Grande's *Rift Tour*, staged from 6 to 8 August

[182] Andrew Webster, "Travis Scott's First Fortnite Concert Was Surreal and Spectacular," *The Verge*, April 24, 2020, https://www.theverge.com/2020/4/23/21233637/travis-scott-fortnite-concert-astronomical-live-report. Accessed April 15, 2026.
[183] See "Travis Scott's Fortnite Concert Series Draws 27.7M Unique Views," *Reuters*, April 27, 2020, https://www.reuters.com/article/sports/travis-scotts-fortnite-concert-series-draws-277m-unique-views-idUSFLM2PGVN5/. Accessed April 15, 2026.
[184] Diego Barbera, "12 milioni di persone hanno seguito il concerto virtuale di Travis Scott su Fortnite," *Wired Italia*, April 24, 2020, https://www.wired.it/gadget/videogiochi/2020/04/24/concerto-travis-scott-fortnite/. Accessed April 15, 2026.

2021 across five showings, developed the same structure further. Epic Games described it as "a musical journey into magical new realities,"[185] and *The Verge* stressed that the event was woven directly into Fortnite's ongoing mythology.[186] Before Grande appeared, players passed through portals, revisited earlier in-game events, and moved through transformed worlds tied to the platform's own narrative memory.

The concert was therefore not simply inserted into Fortnite. It was composed out of Fortnite's own temporality. Grande entered as star and as in-world force. This is where the reenactment dimension becomes clearest. A live concert traditionally presupposes venue, stage, public, schedule, and bounded duration. Fortnite preserves these coordinates while rewriting them as a programmable environment. The crowd is avataric and mobile. The stage extends to the whole island. The event is repeatable without losing the force of shared currentness. *Astronomical* and *Rift Tour* therefore reenact liveness itself by relocating it into a world-native form. Meyer's notion of "double existence" (Meyer 2025: 99–105) and Jarvis's account of the "translocal" immersant (Jarvis 2019: 88–89) illuminate what happens here as well. Players remain physically where they are while participating in a temporally bounded world-event shared with millions of others. They inhabit a kind of platformed double present: here in the room, there in the concert-world. The event's reality depends precisely on that doubled presence. The concert case also throws retrospective light on the other two. Fortnite had already trained users to inhabit collective event-worlds before it became a site for Trump reenactments. Hong Kong protests had already shown that public struggle could survive by migrating into another world. Travis Scott and Ariana Grande formalized the platform's ability to make eventness itself into an environment. Protest, trauma, and concert differ radically in content. At the level of spatio-temporal organization, they converge around the same operation: a public event is redistributed into a programmable world that preserves collective presence while altering its coordinates.

[185] Epic Games, "Ariana Grande Steps into the Metaverse as the Headliner for Fortnite's Rift Tour," August 1, 2021, https://www.epicgames.com/site/news/ariana-grande-steps-into-the-metaverse-as-the-headliner-for-fortnites-rift-tour. Accessed April 15, 2026.
[186] Andrew Webster, "Ariana Grande's Fortnite Tour Was a Moment Years in the Making," *The Verge*, August 9, 2021, https://www.theverge.com/2021/8/9/22616664/ariana-grande-fortnite-rift-tour-worldbuilding-storytelling. Accessed April 15, 2026.

The event after the event

Hong Kong protests, Butler attack, and the Fortnite-native concerts illuminate three distinct versions of the same environmental transformation. Hong Kong protests shows how an ongoing political struggle can migrate from the street into VR and then into a domestic social simulator without losing its public force. Butler attack shows how rapidly a breaking political trauma can become a platform world. Travis Scott and Ariana Grande concerts show how a familiar event-form can be rewritten as a synthetic, repeatable, traversable present. In each case, the platform gives the event another space and another time. This is what makes these reenactments theoretically productive. They do not simply repeat what occurred elsewhere. They establish a second environment in which the event survives under another logic of access. The user does not occupy the original protest, rally, or concert venue. The user occupies an interval between occurrence and memory, simultaneity and delay, archive and live presence. Giannachi's deep spaces, Meyer's double existence, Bédard's liminal embodiment, Dupré's processual account of reenactment, and Dalmasso, Strauven, and Venturini's environmentalized images all converge on this point: metaversal reenactment turns actuality into a situated world.

A final consequence follows. Platform worlds do not simply simulate public events; they participate in determining how those events continue to exist socially. Protest survives in VR and on islands, the assassination attempt in gaming clips and builds, the concert in scheduled recurrences and island-wide transformations. The metaversal reenactment converts actuality into a collective environment of entry, repetition, and co-presence. It gives users a place inside the event's afterlife. From here, the transition toward the fourth case study becomes clear. The present section has shown how programmable worlds reorganize time, delay, repetition, and proximity. The next step concerns what happens when that environmental logic is no longer approached mainly through temporal thresholds and platformed co-presence, but through the hybrid ecology of bodies, devices, scenic objects, and technical supports that materially sustain immersive experience.

The environment as a technical-material and collective ecology

If the previous case studies made it possible to isolate different dominant traits of immersive environments, the fourth theme turns to what is perhaps their most composite and theoretically productive condition: the environment as a technical-material and collective ecology. Here, the immersive field emerges through the co-functioning of virtual worlds and physical settings. It takes shape through bodies, scenic supports, objects, technical devices, protocols of guidance, sensory cues, and collective forms of coordination. What becomes decisive is not simply the coexistence of these elements, but the fact that they operate together as a single field of experience. The environment becomes the operational weave through which experience is produced, stabilized, disturbed, and shared. This is precisely the point at which the Uexküllian framework developed in the chapter becomes especially useful. If an environment is never the totality of what is there, but a selective and embodied world of marks, paths, orientations, and operative possibilities, then immersive environments appear as more than visual worlds: they should be described as ecologies of coupling. Their reality lies in the ways bodies are oriented, how technical systems distribute access, how material supports confirm or destabilize perception, and how the apparent singularity of experience is in fact sustained by a wider collective and infrastructural arrangement. The environment, in other words, is where the relation between embodiment, mediation, and world-construction becomes materially legible. To explore this last part of the chapter, before moving directly to contemporary theatre-born companies working with hybrid and immersive environments, it is worth recalling that Italian artistic culture had already opened this problem with remarkable clarity in the second half of the twentieth century. The importance of Italian spatial and environmental art here lies in showing how artists working in Italy had already displaced the artwork from isolated objecthood toward situations of bodily traversal, atmospheric modulation, spatial orientation, and collective inhabitation. Space ceased to be a neutral container and became an active condition of the work itself. The spectator no longer faced a bounded image or autonomous object; the spectator entered an operative field.

This broader shift is visible in the Italian trajectories usually associated with "arte spaziale" or "Spazialismo" (spatial art) and "arte ambientale"[187] (environmental art): the move from object to field, from frontal viewing to situated crossing, from static form to perceptual activation, from the gallery as support to the environment as medium. Within that genealogy, works by Lucio Fontana, Gianni Colombo, Pinot Gallizio, Laura Grisi, Fabio Mauri, and the urban interventions surrounding the late 1960s and early 1970s made it increasingly difficult to separate image, installation, architecture, and bodily participation. More importantly, such works reformulated the artwork as an ecology of relations. This is why they remain conceptually applicable for the present chapter. They show that what later appears in mixed reality performance as a technical-material problem had already been anticipated, in another vocabulary, as a problem of environment. Two cases are especially illuminating in this respect because they point in different but convergent directions. Alberto Burri's *Teatro Continuo* (1973), conceived for Parco Sempione in Milan, was neither simply sculpture nor simply architecture, and certainly not a theatre building in the conventional sense. It functioned as an open scenic device, at once stage, threshold, urban platform, and transformable support, with its movable scenic elements establishing a shifting relation between performance, passage, and public occupation. Marinella Pirelli's *Film Ambiente* (1968-69), by contrast, displaced the cinematic *dispositif* from frontal projection toward environmental inhabitation, turning the projected image into something one crossed and physically entered rather than simply watched. Official institutional documentation still presents the former as an open-air stage for public use and the latter as a walkable cinematic structure, which makes clear that both works already belonged to a logic in which environment, not bounded medium-specificity, had become central.[188]

The crucial move, then, is to register what these works make possible conceptually. In Burri, the scenic support becomes architectural and collective; in Pirelli, cinematic projection becomes atmospheric and traversable. One organizes a public

[187] "l'arte crea uno spazio ambientale, nella stessa misura in cui l'ambiente crea l'arte" in Germano Celant, *Ambiente/Arte: Dal futurismo alla body art* (Venezia: Edizioni La Biennale di Venezia, 1977): 5.
[188] See Rica Cerbarano, "Gli italiani che diedero il via all'arte immersiva," *Il Giornale dell'Arte*, February 14, 2024, https://www.ilgiornaledellarte.com/Articolo/Gli-italiani-che-diedero-il-via-allarte-immersiva. Accessed April 15, 2026. For a wide focus on the interconnections between contemporary art and immersive technologies see Elisabetta Modena, *Nelle storie: Arte, cinema e media immersivi* (Roma: Carocci, 2022) and Ead., *Immersioni: La realtà virtuale nelle mani degli artisti* (Monza and Milano: Johan & Levi, 2023).

threshold between city and stage; the other reorganizes the image as a bodily environment. Together, they indicate a line that will become crucial later for phygital environments: the environment as a composite field in which structures, surfaces, moving bodies, light, and action no longer belong to separate regimes. The artwork becomes something that should be crossed, negotiated, and co-produced through use. That is already very close to the contemporary problem of hybrid immersive performance. From here, the transition toward a set of theatre-rooted contemporary practices appears less abrupt than it may initially seem. The three trajectories that matter most here—e¯lektron, Rodrigo García's theatrical universe, and CREW—are all difficult to classify because each of them begins from theatre yet exceeds it, not by abandoning theatricality but by redistributing it across media, interfaces, objects, bodies, and environmental relations. They are not "theatre plus technology" in a superficial sense. Nor are they adequately described as installation, digital art, or XR performance taken separately. Their difficulty of classification is precisely what makes them analytically valuable. They oblige us to think of environment as phygital: not because they all use the same devices, but because they all construct experience through an inseparable interplay of physical and digital, scenic and networked, tactile and mediated, individual and collective.

e¯lektron: the virtual stage as relational environment

The case of e¯lektron[189] makes explicit, in its own self-definition, a point that often remains implicit elsewhere: immersive environments can emerge through the attempt to reinvent conditions of theatrical encounter under transformed medial circumstances. The collective presents itself as a transdisciplinary performing arts initiative devoted to the intersection of art and science and describes its broader project in terms of inventing new spaces of encounter when conventional theatrical co-presence becomes insufficient or impossible. Most significant is the fact that its virtual stage is conceived as an adjustable stage-space designed according to artistic needs and as a shared two-way streaming environment intended to bring performers and audiences together in the same "space" in

[189] See https://elektron.art/, accessed April 15, 2026.

a way that still carries the memory and demand of theatre. This self-positioning already matters theoretically. Gabriella Giannachi argues that the immersive experience sector remains deeply underpinned by theatre and by what Schechner called *Environmental Theatre*,[190] insofar as mixed reality experiences rely on transactions among performers, audiences, environments, and production elements, and treat the environment itself as intrinsic to the experience rather than external to it (Giannachi 2023: 60–61). If that is the case, e¯lektron's practice may be understood as a contemporary reformulation of environmental dramaturgy. Its work asks what kind of environment is needed when performance should unfold across co-present bodies, remote bodies, technical channels, and distributed perceptual fields at once.

Projects such as *Held in Human* and *Memento* make this especially clear. In *Held in Human*, e¯lektron built an environment in which sound, lighting, objects, video installations, cable-like connective infrastructures, online messaging, live camera access, and augmented traces participated in the same experiential field. The official project description is striking in this regard: the work aimed to construct a warm and safe "bubble" while simultaneously foregrounding the hidden connective systems—web space, cables, and mediated channels—that nourish and sustain social relation. The physical visitor could move between roles, becoming experiencer, mediator, witness, and relay for absent others; online participants, in turn, participated as active components whose messages, traces, and interventions entered the work's environmental logic. The environment was built through the traffic between these layers. The same applies, in a somewhat different key, to *Memento*, which the platform itself frames as an attempt to bridge two worlds and as a performance in which physical and digital presences "breathe as one." Particularly telling is the insistence that both visible and virtual audiences are constitutive rather than supplementary. The performance begins from the outset as a hybrid environment in which simultaneous presence across different planes is dramaturgically necessary. What matters is less the technological novelty than the redistribution of theatrical relation itself. The audience is no longer a unitary group occupying a single site; it becomes a plural and layered ecology of co-presence. Benford and Giannachi's concept of an "ecology of interfaces" in describes precisely the kind of structure at work in practices such as these. In their account, mixed reality performance

[190] Richard Schechner, *Environmental Theater*. New York: Hawthorn Books, 1973.

does not rely on a single interface or a single relation to technology. It assembles a diversity of interfaces, each specialized to a different setting, use, or perspective, but all linked into a larger experiential whole. Their key point is that ecology names not harmony but a dynamic interrelation of heterogeneous processes, objects, information flows, and social organization; such ecologies are hybrid, fragmented, distributed, and unstable, and they extend beyond participant-facing devices to include authoring tools, monitoring systems, coordination channels, and replay structures (Benford and Giannachi 2011: 162–164). This description fits e¯lektron closely. The online platform, the streaming infrastructure, the on-site spatial composition, the messaging systems, the augmented layer, and the differentiated roles of visitors all belong to a single ecology. That ecology is also profoundly theatrical. Giannachi's later reformulation of Schechner into seven axioms for mixed reality theatrical experiences is helpful on this point, above all where she insists that the production of technology, environment, and story should evolve concurrently; that digital dramaturgs and orchestrators provide continuity between different elements; and that presence and co-presence remain decisive design factors for the experience as such (Giannachi 2023: 62–63). e¯lektron's works repeatedly confirm this. Their environments are immersive because narrative, space, mediation, and relation are designed to co-evolve. They are phygital because the environment is produced neither by physical installation alone nor by digital networking alone, but by their co-articulation.

In this sense, e¯lektron also helps refine what is meant here by collective ecology. The collective includes the participants and the distributed arrangement through which the work becomes possible: the visible audience, the remote audience, the performers, the interfaces, the technical systems, and the protocols of mediation through which messages, attention, images, and actions circulate. One might say that the "body" of the work is already divided and extended. That extension remains fully within the field of embodiment and, as the volumes edited by Susan Broadhurst and Josephine Machon[191] repeatedly suggests, contemporary technicity demands that embodiment be understood as relationally extended across technical supports, sensory skills, and distributed agencies. Technology is not external to embodiment but enters the very field of sensing and acting

[191] Susan Broadhurst, and Josephine Machon, eds. *Sensualities/Textualities and Technologies: Writings of the Body in 21st Century Performance* (London: Palgrave Macmillan, 2009) and Eaed, eds. *Identity, Performance and Technology: Practices of Empowerment, Embodiment and Technicity* (London: Palgrave Macmillan, 2012).

through which experience becomes meaningful (Bucksbarg and Carter in Broadhurst and Machon 2012: 14–15). e¯lektron's environments make this palpable. Their theatre is still theatre, but theatre now redistributed across a phygital field.

Rodrigo García: the stage as material excess and unstable environment

If e¯lektron approaches the environment through explicit digital and networked hybridization, Rodrigo García[192] offers a different but equally relevant path toward the same problem. Founded in Madrid in 1989, La Carnicería Teatro emerged from experimental theatre and García's work has remained unmistakably theatrical, yet it has long displaced the stage away from dramatic centrality toward scenic environments saturated with objects, food, animals, amplified sound, screens, refuse, plastic materials, and violently juxtaposed sensory intensities. Institutional presentations of his trajectory regularly insist on the uniqueness and physical extremity of this theatre language, and that emphasis is significant. García's theatre never simply represents a world. It constructs hostile and unstable environments that force the spectator into a relation with matter, excess, disgust, consumption, and the breakdown of aesthetic distance. This is why his work matters here even though it is less obviously "digital" than e¯lektron or following CREW. The phygital emerges here in a broader transformation in which stage environments become composite operational fields. García's theatre is already phygital in a strong sense through the way it mashes together bodies, technical amplification, commodity matter, sensory overload, video mediation, and orchestrated exposure in ways that no single medium category can contain. On this regard, Benford and Giannachi in *Performing Mixed Reality*[193] insist that mixed reality performance is structurally hybrid not only spatially but also in terms of interfaces, roles, time structures, and the larger experiential ecology that connects them (Benford and Giannachi 2011: 227–228). Read retroactively, García's theatre suggests that the hybridization at stake in contemporary

[192] See https://rodrigogarcia.es/, accessed April 15, 2026.
[193] Steve Benford and Gabriella Giannachi. *Performing Mixed Reality* (Cambridge, MA: MIT Press, 2011).

immersive environments can also take the form of an environment in which representation, materiality, mediation, and sensory address are inseparable.

Accidens (matar para comer) (2009) remains exemplary in this respect. The work is built around an event that is scandalously simple: a live lobster, a performer, a hook, oil, heat, smoke, cooking, amplification, handling, display. Yet this simplicity is deceptive. The stage becomes an environmental machine in which technical support, animal presence, objecthood, cruelty, domestic ritual, culinary gesture, spectatorship, and endurance are fused into one event. It is no longer useful to distinguish clearly between prop and protagonist, action and apparatus, representation and real act. The environment is what matters, because the performance organizes perception and response through the dense conjunction of all those elements. The audience inhabits, however unwillingly, a space in which these processes unfold materially. The piece therefore demonstrates that a theatrical environment can become immersive without any promise of seamless technological world-building. It becomes immersive through the material intensity of its couplings. Giannachi's formulation that mixed reality theatrical experiences are composed through concurrent relations among technological, physical, and narrative components becomes unexpectedly illuminating even for a case like García's. The decisive point lies in the fact that all production elements speak in their own language and co-function as an environment, while the text ceases to be the fulcrum of the work (Giannachi 2023: 60–62). García's theatre apparently pushes in this direction. Language, image, body, object, food, sound, and live act cease to be subordinate to dramatic representation and become coequal components of a scenically violent ecology.

Seen from another angle, García's work also sharpens the problem of embodiment in contemporary performance. Broadhurst and Machon's volumes repeatedly argues against a rationalist or external conception of technology, proposing instead that the body should be understood through its multiple technical relations to itself and to the world. The striking formulation in the foreword—that the body invents technology even as it absorbs, critiques, and claims it—matters here because García's stage environments are technical not only when they use machines or screens, but whenever bodies are reorganized by procedures, materials, and sensory systems (Schiphorst in Broadhurst and Machon 2012: xi–xiii). In García, the body is never pure interiority. It is exposed to mechanisms of consumption, repetition, pain, appetite, and scenic command. The stage

is therefore not a neutral support but an environment in which technical-material relations become bodily fate. This trajectory expanded further in the wider spaces of *Humain Trop Humain (HTH)* (2014-) as an on-going series of projects, where theatre, exhibition, installation, video, drawing, concert, and curatorial form increasingly coexisted. The importance of this evolution lies in the fact that theatre becomes the unstable organizer of a broader environmental field. It continues to provide timing, exposure, scenic conflict, and bodily address, but now across forms that exceed the stage proper. This is why García belongs in the present section. He shows that the environment as technical-material ecology is not only a question of digital immersion. It is also a question of how theatre mutates when objects, surfaces, amplification, media traces, and sensory coercion enter into one shared world.

CREW: immersive performance as distributed hybrid ecology

CREW[194] offers the clearest and most fully developed articulation of the fourth theme. Founded in Brussels by Eric Joris, the company defines itself as an arts organization working across the boundaries of art, science, and technology and explicitly asks how technology changes us. Its own presentation is already revealing: it presents itself as an arts collective of researchers, performers, technologists, dramaturgs, programmers, writers, musicians, and designers for whom immersive performance has become the privileged site through which this question can be tested. Its history also makes clear how deep its theatrical roots remain: the company emphasizes its foundation in 1990 and recalls the introduction of the first VR headset onto a theatre stage in collaboration with the University of Hasselt in 2003. That genealogy matters because it confirms that the immersive turn here did not replace theatre. It emerged from it. Once again, the difficulty of classification is instructive. CREW's work is theatre, but not only theatre. It is installation, but not only installation. It is XR performance, yet even that label remains insufficient, because what matters is not simply the apparatus of virtuality but the distributed environment through which virtuality is made operable. The

[194] See https://crew.brussels/en/, accessed April 15, 2026.

company's own concise descriptions of its projects point insistently toward questions of disorientation, bodily displacement, borrowed perspective, and altered proprioception: *Crash* as a crash into the labyrinth of one's own head; *EUX* as a mirror image guiding one out of one's own body; *W (Double U)* as a walk into each other's head; *C.A.P.E.* as the possibility of walking with somebody else's body; *C.A.P.E. Tohoku* as an immersive wandering through tsunami debris; *Terra Nova* as the combination of theatre and immersive experience around Scott's Antarctic expedition. In all these cases, the environment functions as an apparatus for redistributing embodiment and agency.

Jenna Ng's discussion about *Crash* in *The Post-Screen Through Virtual Reality, Holograms and Light Projections: Where Screen Boundaries Lie*[195] isolates one of the decisive media-historical features of CREW's work. She treats the Omni-Directional Video system used for *Crash* as an intermediary post-screen variation between older peep media and contemporary VR. The system places the spectator in a head-mounted display showing panoramic video linked to an orientation tracker; the user is thereby "blinkered" into the image, with the edges of the screen falling outside the visual field and becoming forgettable. Ng's point is phenomenological as much as technical. The restricted and proximate field produces a confinement that helps place the viewer bodily "in the image" (Ng 2021: 118–119). This observation is crucial for the present argument because it clarifies that immersive experience in CREW does not begin from a total substitution of reality. It begins from a reorganization of perceptual boundaries. The account becomes more precise once visual engulfment is connected to the wider material and collective ecology that sustains it. Visual engulfment works only within a broader environment of support, anchoring, and continual correction. Steve Benford and Gabriella Giannachi's account of hybrid ecologies could be linked to this analytical proposal since insists that mixed reality performance is built not around one interface but through an ecology of interfaces, each specialized to distinct uses and settings, and linked by interactional trajectories that guide participants across the larger experience. More importantly, they emphasize that this ecology extends beyond the visible participant-facing interfaces to include those used behind the scenes to orchestrate the work: monitoring systems,

[195] Jenna Ng, *The Post-Screen Through Virtual Reality, Holograms and Light Projections: Where Screen Boundaries Lie* (Amsterdam: Amsterdam University Press, 2021).

communication tools, authoring interfaces, coordination mechanisms, and replay structures (Benford and Giannachi 2011: 163–164). Once this is understood, CREW's environments appear in their full complexity. The immersant's headset experience is only one node within a larger, distributed apparatus. Collective ecology becomes fully concrete at this point. In CREW, one spectator's apparently private immersion is sustained by a plurality of roles, many of them partially hidden: guides, performers, technicians, programmers, operators, dramaturgs, and monitoring systems. Benford and Giannachi's later discussion of mixed reality roles is decisive here because they argue that these performances operate through a triangle of performers, spectators, and orchestrators, and that audiences increasingly move toward performance while traditional actors shift into orchestration roles that blur acting and technical operation (Benford and Giannachi 2011: 25; 165–166). In their works, CREW exemplifies this transformation. The "immersant" is not simply a spectator; nor is the guide simply a technician; nor is the performer reducible to a conventional actor. All these roles are redistributed within a dynamic ecology of control, support, framing, and intervention.

The importance of orchestration becomes even clearer when one follows Benford and Giannachi into their more detailed account of how hybrid performances depend on distributed monitoring, backstage communication, and the capacity to respond to deviations, errors, or unexpected participant behavior. They describe orchestration as the work of tracking participants, regulating progress, communicating through walkie-talkies and dedicated interfaces, translating system states into performative reactions, and maintaining the continuity of the experience even under unstable conditions (Benford and Giannachi 2011: 211–213). This framework is not specific to CREW, but CREW makes its relevance strikingly visible. Its immersive environments are never the autonomous output of a device. They are achieved arrangements. They are continually sustained by hidden collective labor. This, in turn, transforms the status of material support. In CREW, the body does not simply enter a virtual image. It is inducted into a world of calibrations, transitions, signals, room-scale constraints, tactile cues, scenic framing, and guided movement. The environment should therefore be understood in the strong sense already suggested by Uexküll: not as a visual domain but as an articulated field of marks, paths, supports, and operative possibilities. The apparent opposition between physical and digital becomes secondary. What matters is their co-functioning. Even the most

technologically mediated perception remains dependent on concrete supports and couplings. Giannachi's reformulation of environmental theatre becomes newly relevant here. Her seven axioms for mixed reality theatrical experiences insist that hybrid environments require the concurrent development of technology, story, and space; that digital dramaturgs and orchestrators maintain continuity across elements; and that presence and co-presence remain decisive design factors for the experience as such (Giannachi 2023: 62–63).

CREW are worldwide recognized through the way they generate an altered presence that remains materially and collectively grounded. Presence here is not the illusion of perfect substitution. It is the situated effect of a technical-material ecology. This also helps explain why the label "phygital" is analytically stronger than narrower categories. Ng's notion of post-screen re-placement is useful at this juncture because it refuses the simplistic model according to which virtuality either replaces reality or fails to do so. Instead, she argues that immersive media produce a third order in which the actual and the virtual are re-placed in relation to one another, generating new experiential configurations rather than simple copies or substitutions (Ng 2021: 136–137). CREW's work can be read in this way. Its environments reorganize reality by re-placing it through images, head-mounted displays, scenic support, orchestration, and embodied movement. The result is a fully phygital configuration in which the actual and the virtual operate together. The work becomes physical and digital at once. It is phygital in the strongest sense: an environment produced through the interdependence of both. What emerges most forcefully from CREW, then, is that immersive environments become aesthetically and cognitively powerful precisely when digital systems are denied the fantasy of autonomy. The work succeeds when virtual imagery, bodily orientation, technical guidance, and material support enter into one operative field. That is why CREW occupies such a privileged place in this section. It offers the clearest demonstration that an immersive environment is a technical-material and collective ecology.

Toward an open environmental comparison

Taken together, e¯lektron, Rodrigo García, and CREW also clarify a broader methodological point. None of them can be defined adequately by a single category. e¯lektron is not simply livestreamed theatre, because the digital stage there is already an environment of distributed co-presence. Rodrigo García is not simply postdramatic theatre, because his work reorganizes scenic reality as a material and sensory ecology that exceeds representation. CREW is not simply XR art, because its immersive force depends on theatrical framing, collective orchestration, and concrete supports. In each case, theatre remains central, but theatre is no longer the name of a stable medium. It becomes a way of organizing hybrid environments. Benford and Giannachi arrive at a comparable conclusion when they observe that the neat analytical distinction among space, time, interfaces, and roles is methodologically useful yet ontologically unstable, because these aspects are not truly separate; they connect to form a larger hybrid performance ecology, and mixed reality performances are better understood through the interweaving of trajectories across those ecologies (Benford and Giannachi 2011: 259–260). This insight is crucial for the present chapter because it also clarifies the status of the four thematic lines derived from Uexküll. They functioned as analytical entrances into a complex field whose cases always exceed any one of them. This is especially visible now. The first theme, concerning salience and perceptual intensification, could easily be applied to CREW's management of embodied attention, to García's sensory overload, or to e¯lektron's distributed structuring of visibility and intimacy. The second theme, concerning performative action-fields, could describe not only theatrical remediations of metaversal logic but also the guided roles and task-based progression of mixed reality environments. The third theme, concerning situated space-time, could be brought to bear on the concurrent here-and-elsewhere of networked theatre as much as on platform reenactments. The fourth theme, developed here, clearly extends across all the previous cases as well. Each case study sharpens one line, but none is exhausted by it. The section therefore ends by keeping the four themes open rather than solidifying them into a classificatory scheme. Their value lies in mobility. They make it possible to place historically distant and formally heterogeneous examples into productive relation without flattening their differences. Spatial art, environmental cinema, experimental theatre,

networked performance, XR staging, platform reenactment, and scenic analog brutality do not collapse into one another. Yet they can now be read through a common problematic: how environments are built as worlds of salience, action, spatio-temporal articulation, and technical-material coupling. From this perspective, what begins to emerge is the necessity of a broader conceptual frame. The cases gathered in this chapter indicate that contemporary immersive culture requires an approach that moves beyond advance divisions between art and media, digital and analogue, theatre and technology, installation and performance. The more productive hypothesis is that many of the formations under discussion are already phygital in structure: they distribute experience across bodies, props, images, infrastructures, protocols, and collective rhythms of attention. Screens often matter within them, stages often anchor them, and virtual worlds may form one of their operative layers. What defines them is their composite environmental condition.

In this sense, the four thematic categories used across the case-study sequence have served their purpose by opening a comparative field. Retroactively, each of the four themes may be recognized in every single case, albeit with different weights and emphases. The point was never to establish a closed order of examples, but to enable communication between very different arts, forms, and situations under a new common perspective. Hence, as the question can no longer be limited to the classification of immersive forms or platformed events, once bodies, environments, screens, reenactments, and technical supports are understood as mutually constitutive, the argument is compelled toward an explicitly anthropological scale. Specifically, that perspective is the one that calls for the inauguration—finally and explicitly—of one or more Phygital Anthropologies: modes of analysis able to think together media, performance, embodiment, infrastructure, relation, and world-building without reducing one to the other. The concluding chapter will return to this necessity. What the present section has shown is that such anthropologies become thinkable only once immersive environments are understood as embodied, technical-material, and collective ecologies.

Anthropologies

The trajectory of this dissertation can be understood as a progressive displacement of the problem of immersion. What begins, in *Gazes*, as a question about the genealogy of virtuality and the visible gradually becomes, across the following chapters, a much broader inquiry into bodies, environments, simulations, and finally the anthropological conditions of mediated reality. The movement is not additive but transformative. Each chapter does not simply add another topic to the previous one; it redefines the level at which the initial question has to be posed. For this reason, the thesis should not be read as a sequence of autonomous sections, but as a continuous re-scaling of the same problem: how to understand immersive media once they are no longer reduced to visualization alone.

Gazes functions as the state-of-the-art chapter, but already in a displaced sense. It does not reconstruct the emergence of XR by beginning from computational graphics, digital interfaces, or neuroscientific accounts of perception. Instead, it opens with Artaud's use of the phrase "virtual reality" in relation to theatre, and this opening is methodologically decisive. Artaud's theatre is presented not as a frame for looking but as a space of forces, a "metaphysics-in-action" in which gestures, lights, sounds, and symbols act directly upon bodies. From the beginning, then, the thesis suggests that the contemporary problem of XR may have been posed in the wrong epistemic key when treated exclusively through optics and representation. What Artaud makes visible is another origin: one in which virtuality names an operative layer of reality staged through embodied and ritualized means. On that basis, *Gazes* reconstructs a genealogy of the visible that moves through the formation of visual culture as a field—Warburg, Riegl, Panofsky, Benjamin, McLuhan, Agamben, Foucault, Debord—while already insisting that immersive media should be read as problems of staging, embodied perception, and operative mediation rather than as a mere incremental upgrade of visualization. The function of *Bodies* is to radicalize this first displacement. If *Gazes* shows that immersion cannot be fully understood through a purely visual genealogy, *Bodies* demonstrates that the real center of the problem lies in embodiment. The body is no longer treated as the receiver of images, but as the place where immersive mediation becomes effective. This

is the point at which the thesis more openly repositions XR closer to theatre and performance than to a history of detached spectatorship. Theatre matters here because it offers a privileged framework for thinking presence, gesture, reciprocity, and the organization of relational bodies. In this sense, XR is not interpreted as the transcendence of the body by digital images, but as a technical intensification of bodily involvement, sensory reorientation, and staged participation. The body becomes the site where the thesis can move beyond both imagocentrism and technological determinism. The problem of immersion is no longer what the eye sees, but how bodies are recalibrated, how presence is produced, and how relation is enacted. This line would later find one of its clearest anthropological formulations in Csordas's insistence that the body is the existential ground of culture, and by the broader thesis argument that immersive experience should be approached through embodied participation before it is stabilized as representation.

From there, *Environments* performs the next necessary widening. Once embodiment has been restored to the center, the thesis can no longer treat immersion as if it took place inside neutral or self-contained spaces. The question becomes environmental. This is why the chapter introduces Uexküll, but also why it cannot simply remain within a biologically or phenomenologically naïve notion of *Umwelt*. The point is not that immersive media create "worlds" in a generic sense. The point is that they organize hybrid ecologies in which bodies, interfaces, props, infrastructures, sensory cues, and social relations belong to the same experiential field. In this respect, the trajectory of the dissertation is already moving beyond the image-body dyad toward a thicker ecology of relation. The environment is not what surrounds a body from outside; it is what emerges through patterned interactions among bodies, media, spaces, and protocols. This widening is fully coherent with the thesis's later formulations of the metaverse as a "developing ecology of practices, protocols, and platform dramaturgies," and with the insistence, already visible in materials surrounding the case studies, that phygital works are constituted by collective, infrastructural, and interface-based ecologies rather than by isolated devices.

The function of *Simulations* is then to test and synthesize the previous theoretical displacements through case studies. What had been reconstructed at the genealogical, bodily, and environmental levels is here brought to bear on contemporary platformed and

phygital practices. The function of *Simulations* is to test and synthesize, through case studies, the theoretical pathway developed in the previous chapters, and especially in the second half of Bodies. It brings that framework to bear on specific contemporary cases, including reenacted political violence in sandbox platforms, protest simulations under surveillance, in-game mega-events, and theatrical works such as *OLEANDRA* and *Festen. Il gioco della verità*. The chapter culminates in giving empirical traction to the "Metaverse of Attractions" as an analytical framework for describing an emergent medial regime in which attractions are remade into a phygital grammar of address, participation, and presence. This is a decisive step in the overall trajectory, because it shows that the previous chapters were not only theoretical preparations. They were the conditions for recognizing that contemporary platforms already operate as staged, participatory, reenactive, and embodied environments.

The movement from *Gazes* to *Simulations*, then, is best understood as a gradual undoing of a series of entrenched dualisms. In *Gazes*, the thesis contests the reduction of immersion to visualization. In *Bodies*, it contests the separation of image from embodied presence. In *Environments*, it contests the idea that mediation takes place in neutral space. In *Simulations*, it contests the interpretation of contemporary immersive practices as mere representations or derivative copies. By the time the case studies are reached, the conceptual field has already been reconfigured: XR and adjacent phenomena are now readable as hybrid ecologies of bodies, interfaces, rituals, reenactments, and operative thresholds. The metaverse itself appears less as a singular technology and more as a cultural logic organizing attention, presence, coordination, and shared events across programmable environments.

It is at this point that the necessary transition to *Anthropologies* becomes more evident. The previous chapters do not simply accumulate references that may then be summarized in a conclusion. They force a change in scale. Once immersive media are understood as involving bodies, ritualized thresholds, sensory plurality, environmental ecologies, platform dramaturgies, and mimetic or reenactive operations, the disciplinary frame of media theory in the narrow sense becomes insufficient. The question is no longer only where XR belongs within the history of images, nor only how it relates to theatre, nor only how it reorganizes environments. The question becomes anthropological in the strongest sense: what kind of relation among bodies, media, supports, rites, environments,

and collective forms is being disclosed here? The final chapter therefore emerges as a necessary consequence of the dissertation's own movement. It is not an external broadening of the topic, but the level at which the whole trajectory becomes fully intelligible.

Seen in retrospect, then, the dissertation follows a very precise line. It begins by displacing the origin of virtuality from computation to theatre; it then restores the body as the central site of immersive efficacy; it widens embodiment into hybrid environments; it tests these premises in contemporary simulations and platform events; and only then does it reach the threshold where anthropological reformulation becomes possible. In this sense, the trajectory of the thesis is not from theory to application, nor from history to present. It is from a critique of visual reductionism toward an increasingly thick account of mediated human reality. What *Anthropologies* seeks to do, then, is to render that thickness explicit and to develop it more fully. At that point, however, a decisive consequence follows. If immersive media are no longer reducible to visualization, if bodies are not secondary receivers of images but constitutive sites of mediated experience, if environments are not neutral containers but relational ecologies, and if simulations are not mere copies but performative reconfigurations of presence and collective attention, then the problem can no longer remain confined within media theory in the narrow sense. The dissertation itself has already displaced the metaverse away from the fantasy of a self-sufficient digital world and toward the definition of a quasi-theatre of embodied, performative, and technically scaffolded relations. For this reason, the final chapter cannot simply summarize previous arguments. It should identify the broader horizon that those arguments have made thinkable. That horizon is anthropological. Not because "anthropology" would offer a final master-language capable of resolving every question raised by immersive media, but because the thesis has gradually shown that what is at stake in XR is not only the history of images, nor only the evolution of digital interfaces, nor even only the transformation of theatricality. What is at stake is a much larger and still insufficiently explored relation among bodies, images, technical supports, ritual forms, environments, social coordination, and symbolic operations. The metaverse, taken seriously, is not just a technological object: it is an unusually explicit laboratory in which this relation becomes visible. It intensifies, condenses, and externalizes processes that are much older than itself. In this sense, the dissertation's final move is not away

from media theory but through media theory, not because anthropology would replace media theory, but because the object of inquiry has revealed itself to be broader than any other single disciplinary frame. Thus, it concerns the entanglement of bodies, images, rites, screens, environments, supports, and collective forms of life, toward a plural field that may be called, more properly, phygital anthropologies.

A decisive bridge toward this shift is one more time provided by Mauro Carbone and Graziano Lingua. Their proposal of an anthropology of screens is crucial precisely because it radicalizes an intuition already prepared in Carbone's *Philosophy-Screens* and his later anthropology of screens: namely, that the screen should no longer be conceived as a simple surface displaying images, nor as a neutral technical support or simple interfaces mediating autonomous subjects, but as a relational threshold that participates in the organization of perception, action, protection, and exposure between embodied beings and social worlds. In this sense, the arche-screen is not a primitive device or a historical origin but a transhistorical principle made legible through variable historical configurations. In Carbone's earlier work, the move from a philosophy-cinema to a philosophy-screens had already signaled that the question of the visible could not remain tied to a single apparatus or to a single historical regime. The cinematic and post-cinematic screen no longer simply frame representation; they prepare increasingly enveloping, audiovisual, and potentially tactile experiences, while prosthetic technologies reshape perceiving, moving, and acting. This trajectory is philosophically indebted not only to Merleau-Ponty but also to the French debate around the figural, desire, and cinematic *dispositifs*, especially in Lyotard. Yet Lyotard remains here an interlocutor of the transition rather than a contributor to anthropology in the strict sense: what matters in the present context is that Carbone uses this genealogy to rethink screens as constitutive surfaces of embodied vision, not as external objects standing before a sovereign observer. This is precisely where Carbone and Lingua's proposal becomes decisive. This framework gives conceptual legitimacy to the transition that the dissertation itself demands. Once screens are understood in this practical-environmental and bodily sense, the metaverse can no longer be treated as a specialized subfield of digital visuality. It becomes one historically intensified case of a much older anthropological logic of mediated exposure, protection, threshold, and embodied world-relation. The shift from the trajectory of the thesis to the chapter on *Anthropologies* is therefore not an external

broadening of scope. It is the point at which the dissertation becomes fully equal to the implications of its own argument. Carbone and Lingua bring this movement to an explicitly anthropological threshold arguing that screens are "apparatuses of action," that their transhistorical structure is organized by the intertwined pairs showing/hiding and exposing/protecting, and that the body itself should be thought as a proto-screen from which technical screen functions have progressively been externalized. Moreover, the dominant imagocentric understanding of screens should be displaced by a practical-environmental one. This structure matters greatly for the present thesis because it insists that screens address not vision alone but the whole sensorium, and that their functioning is rooted in the body itself, understood as proto-screen. The body is at once visible and seeing, exposed and protecting, positive and negative screen. Screens are therefore not external additions to bodily life but technical redistributions of functions already sedimented in embodiment. The metaverse enters this horizon not as a break with the history of screens but as one of its latest and most intensified formations: a multimodal, participatory, operational, and relational threshold in which bodies, machines, and environments interact within shared interfaces. This anthropological threshold is also where the relation between screen and theatre becomes especially fertile. Carbone and Lingua's etymological and conceptual reflections on arche-screen make newly visible something the thesis has repeatedly suggested: that the screen and the stage are not two alien lineages accidentally converging in contemporary immersive culture, but historically entangled formations. From this point of view, the theatrical threshold is already a screened threshold, just as the screen is never purely visual but already scenic, environmental, and relational. The quasi-theatre of the metaverse named earlier in the dissertation can now be understood with greater precision: it is a relational ecology in which screen functions, scenic functions, and bodily functions are folded into one another.

The entrance into the anthropologies in the strong sense should therefore begin from this realization: the metaverse and related immersive environments are not simply new media objects awaiting classification, but contemporary condensations of much older anthropological problems. They reactivate questions of image and body, life and substitute presence, memory and visual belief, sense and sensorium, ritual passage and mimetic efficacy, collective experimentation and technical exteriorization. This could be

considered the reason why the next chapter should commence from those thinkers who most forcefully allow us to understand how bodies, images, and worlds have always already been tied together before modern knowledge separated them into distinct domains. It is at this point that the chapter passes to Belting, Plessner, Csordas, Taussig, Durand, Graeber and Wengrow, and Favero: not as a digression away from the thesis, but as the necessary deepening of what the thesis has already shown.

Anthropologies in the Strong Sense: Image, Memory, Embodiment, Mimesis, and the Making of Worlds

The first major anthropological constellation that allows this broader field to emerge is undoubtedly Hans Belting's. His anthropology of images remains foundational because it decisively refuses both a purely art-historical account of images and a purely mentalist one. Images do not exist only on walls or screens; nor do they reside only in the mind. They live in the continuous back-and-forth between mental and material images, between endogenous and exogenous representation, between body, medium, and picture. Belting's well-known triad—picture, medium, body—matters here not as a classificatory schema but as a method for escaping rigid dualisms. The body is not one support among others. It is the living medium through which images are desired, remembered, animated, and received. Conversely, technical and material supports do not merely "contain" images but make certain forms of embodiment possible. This has immediate consequences for the thesis. XR does not replace the body with the image; rather, it makes explicit that bodies have always been implicated in the life of images, and that images have always required bodily activation to become efficacious. What immersive environments technicalize is not an unprecedented dematerialization, but an older anthropological reciprocity between internal images, externalized supports, and living bodies.

In this sense, Hans Belting results as disruptive because he links the history of images to death, memory, ritual animation, and substitute presence. In *Likeness and*

Presence: A History of the Image before the Era of Art[196] and in the chapters of *An Anthropology of Images: Picture, Medium, Body*[197] devoted to image and death, the image appears not first of all as representation but as a response to absence. Ancient funerary figures, skull statues, mummies, portraits, and animated effigies are not reducible to aesthetic objects; they are media through which the dead are embodied, remembered, and made socially operative. The Egyptian mouth-opening ritual is exemplary in this regard: what turns the statue into an image-medium is not its fabrication alone, but the ritual animation that qualifies it for embodiment. The image thus arises at the intersection of body, rite, absence, and technical or crafted support. This insight is vital for the present dissertation because it relocates mediation within a ritual-performative matrix. Long before digital immersion, images were already operative bodies-on-loan, thresholds of re-presencing, sites where life and death were negotiated through material supports and collective acts. It is precisely here that Belting's reflections on the mask become crucial for the present chapter. The mask is perhaps the most illuminating anthropological object for understanding both the avatar and the screen. Belting describes it as an epochal invention because it gives the paradox of the image its clearest expression: the making visible of an absence, the replacement of dissolution with substitute presence, the concealment of anonymous death behind another face, and the possibility that this face be animated by the living. The mask conceals and exposes at the same time; it blocks and reveals; it stages life and death in a single surface. This is exactly why, in the terms of the present thesis, the mask may be called profoundly archi-screenic. It condenses the logic that Carbone and Lingua attribute to the screen itself: showing and hiding, exposing and protecting. It also bears, with unusual clarity, the reversibilities the user had rightly emphasized from the outset: life and death, positive and negative, laughter and fear, good and evil. The contemporary avatar inherits this ambiguity. It is neither a transparent self nor a simple disguise. Like the mask, it is a threshold object through which identity becomes mediated, distributed, role-bound, and operative[198]. Belting's remark on *persona*—mask and role at once—confirms how close this history is

[196] Hans Belting, *Likeness and Presence: A History of the Image before the Era of Art*. Translated by Edmund Jephcott. Chicago and London: University of Chicago Press, 1994.
[197] Id., *An Anthropology of Images: Picture, Medium, Body. Translated* by Thomas Dunlap (Princeton and Oxford: Princeton University Press, 2014).
[198] In this sense, it may be worth extending the discussion to the possible overlaps between headsets and glasses, and the mask from a symbolic and objectual point of view.

to theatricality and, by extension, to metaversal subjectivation. Belting's wider corpus also strengthens this movement in two additional ways. First, *Florence and Baghdad: Renaissance Art and Arab Science*[199]— as we will be seen—destabilizes any cultural-centric narrative of Western visuality by showing that perspective, often treated as the quintessential Western pictorial form, is inseparable from Arab science and a more complex intercultural history of vision. This matters for the thesis because it prevents the genealogy of immersive media from being imprisoned within a purely internal development of the West. Second, *The Invisible Masterpiece*[200] shows that the modern artwork itself is a historical myth tied to institutions, criticism, aura, and the ideology of the autonomous work. That history helps explain why the starting opposition between visual arts, performing arts, and technologies is itself historically produced rather than natural. Once this modern partition loses its self-evidence, the thesis can more credibly move toward anthropologies that begin not from the autonomy of art forms but from the entanglement of embodiment, support, ritual, and world-making.

Belting's anthropology of images becomes even more productive when placed in dialogue with those anthropological traditions that do not only ask where images live, but under which conditions they act, become memorable, and acquire the force of belief within shared ritual spaces. Carlo Severi pushes this anthropological line in a decisive direction by showing that images do not simply embody presences or preserve memory but can also become active within ritual space as what he calls "object-persons." In *L'oggetto-persona. Rito, memoria, immagine*[201], Severi asks under what conditions an inanimate object can, within social memory, act, speak, answer a gaze, or even take revenge, and he responds by linking image, rite, memory, and belief within a single comparative framework. What matters here is that the animated object is not conceived as a simple substitute or mirror of a human person; it functions rather like a crystal, that is, as a plural and composite image made of partial, incomplete, and sometimes antagonistic identities. This move is crucial for the present dissertation, because it offers a precise anthropological vocabulary for understanding how mediated figures acquire agency. Avatars, ritual props, substitute bodies, scenic objects, and immersive presences

[199] Id., *Florence and Baghdad: Renaissance Art and Arab Science* (Cambridge, MA: Belknap Press of Harvard University Press, 2011).
[200] Id., *The Invisible Masterpiece*. Translated by Helen Atkins. London: Reaktion Books, 2001.
[201] Carlo Severi, *L'oggetto-persona: Rito, memoria, imagine* (Torino: Einaudi, 2018).

should not be read only as representations, but as relational condensations that become operative within specific spaces of thought, belief, and action. Severi's emphasis on visual belief underlines how the image acts not because it is mistaken for life in a naïve way, but because ritual and narrative create a shared space in which memory and agency become inseparable. In this sense, his work strengthens the central argument of the thesis by showing that the efficacy of images is inseparable from the ritual-performative environments in which they are activated. It also opens a crucial path for the final theoretical proposal, because it suggests that mediation itself may have emerged not first as detached representation, but within those spaces where objects, images, voices, and bodies entered into durable relations of belief, substitution, and presence.

If Belting gives the chapter an anthropology of images, Plessner provides an anthropology of the human condition in which body, mediation, artificiality, and the senses become inseparable. If Severi clarifies how images become active within ritual spaces of memory and belief, Plessner helps explain how such efficacy remains inseparable from the sensorial and embodied structure of human world-relation itself. His importance for the present dissertation is difficult to overstate. Excentric positionality allows us to think the human not as a stable subject confronting an objective world, but as a being condemned to mediate itself, to live both as body and in relation to its body, to inhabit at once an outer world, an inner world, and a shared social world[202]. Plessner's law of natural artificiality is decisive here: because human beings should act and perform in order to live, they should fashion themselves through artifice, technique, language, and culture. Human equilibrium is never simply given; it should be produced. This resonates directly with the thesis's repeated insistence that XR and immersive environments are not accidental supplements to an otherwise complete subject, but intensifications of a condition in which technical mediation has always been constitutive of human world-relation. Plessner's second great relevance lies in mediated immediacy. Human beings experience the world directly, yet this directness is always already culturally formed and mediated. There is no immediate access that has not passed through forms, links, and institutions, even when those mediations remain unnoticed. This thesis, translated into the field of immersive media, has powerful consequences. It means that the apparent

[202] Particularly significant for the present dissertation is the fact that, in order to articulate these concepts, Plessner explicitly draws on the metaphor of the actor (Plessner 2007: 78-90).

immediacy of VR, AR, and platform environments should not be opposed to a supposedly non-mediated bodily reality. Rather, immersive media render spectacularly evident the structure of mediated immediacy itself. The user feels immediate presence in a technically mediated situation because human immediacy has never been anything else. Immersion, in this sense, does not abolish mediation; it intensifies and redistributes it. Plessner's anthropology thus prevents both naïve realism and simplistic constructivism. It allows immersive presence to be grasped as a humanly intelligible exaggeration of a more fundamental anthropological condition. No less important is Plessner's work on the unity of the senses and on what he calls an aesthesiology[203] of spirit. Here the present dissertation finds one of its strongest supports against ocularcentrism. The point is not merely that the senses cooperate empirically, but that sensuousness and symbolic formation belong to one another. The unity of the human person is not built above the senses as if spirituality or culture began where embodiment ends; rather, the interrelations among symbolic forms and bodily organization demand a critique of the senses capable of moving from spiritual meaning down to sensible matter and back again his is precisely the kind of framework required by a thesis that seeks to clarify why XR may not be adequately confined to the history of visuality alone. Immersive media solicit sight, hearing, proprioception, tactile expectation, movement, orientation, and affective modulation in one intertwined field. To understand them anthropologically means to recover the senses as a structured plurality rather than as isolated channels. Plessner, in other words, gives this dissertation a true anthropology of the sensorium.

Jasper van Buuren's reading of Plessner clarifies the role of boundary and positionality. In living beings, the boundary is "real": it belongs to the being itself and defines its relation to the surrounding field. Human beings are therefore boundary-realizing bodies, not minds floating above inert matter. This clarification is important for the argument of *Environments* in particular. Once immersive media are treated as environmental and not just representational, their significance lies in the ways they reorganize surrounding fields, thresholds, and relations between organism and milieu. The human body is not simply placed in an environment; it realizes and negotiates its

[203] Plessner 2007. For a theoretical bridge between senses, art, and imagination see Silvana Borutti, *Filosofia dei sensi: Estetica del pensiero tra filosofia, arte e letteratura* (Milano: Raffaello Cortina Editore, 2006).

boundary with it, continuously exceeding them.[204] XR intensifies this negotiation by technical means. It modifies what counts as near or far, inside or outside, safe or exposed, actionable or unreachable. Van Buuren's mediation between Plessner and Merleau-Ponty therefore helps consolidate the thesis's movement from body to environment without abandoning anthropological concreteness.

If Plessner gives a philosophical anthropology of embodiment and the senses, Thomas J. Csordas turns embodiment into an anthropological paradigm and thereby offers one of the most direct bridges to the concerns of the present thesis. In *Body/Meaning/Healing*,[205] embodiment is not the name of a theme among others but of the existential ground of culture and self. The decisive move here is methodological as much as theoretical: instead of treating the body as objectified support for symbols, Csordas proposes beginning from embodied experience as the condition from which meaning arises. This is deeply consonant with the architecture of the dissertation. Again and again, immersive experience has been analyzed not as an image-content contemplated by a subject, but as a mode of bodily participation in which spatiality, affect, memory, orientation, and relation are enacted. The experience of XR is intelligible only if one starts from embodiment rather than from representation. This becomes even more explicit in Csordas's reflections on virtual reality. His distinction between cyberspace and VR is highly relevant: cyberspace is an intersubjective medium socially constituted through communication, while virtual reality is subjective sensory presence constituted through interaction between individual user and technology. Most importantly, he describes VR as an aesthetic tool, a cybernetic enhancement of dramatic and performative techniques, and locates its fullest form where networked sociality and full sensory-bodily engagement intersect. One could scarcely imagine a more useful formulation for the thesis's final chapter. It confirms from an anthropological perspective what the dissertation has argued from media theory and performance studies: VR is not merely a visual or computational device but an intensification of dramatic, performative, and bodily techniques of world-making. Csordas, Thomas J.

[204] See already exposed Carbone's reading of Merleau-Ponty in the earlier chapter *Bodies*.
[205] Thomas J. Csordas, *Body/Meaning/Healing* (New York: Palgrave Macmillan, 2002). See also Id., "Somatic Modes of Attention." *Cultural Anthropology* 8, no. 2 (1993): 135–156, Id., "Incorporazione e fenomenologia culturale." *Antropologia*, no. 3 (2003): 19–42, and Id., ed. *Embodiment and Experience: The Existential Ground of Culture and Self*. Cambridge: Cambridge University Press, 1994.

Michael Taussig carries this line in a different direction by reactivating the mimetic faculty. His importance for the present conclusion lies in his refusal to reduce mimesis to bad copying. In *Mimesis and Alterity*,[206] mimesis is sensuous knowledge, sympathetic magic, becoming-other, contact through likeness. The safe world of subjects and objects is upended; imitation blurs with contact; image and body re-enter one another. This has major implications for *Simulations*. The chapter's case studies already suggested that reenactment, platform simulation, and immersive reconstruction do not operate simply as derivative copies of a prior reality. Taussig provides the anthropological vocabulary to say why. What is at stake in these cases is not representation after the fact, but mimetic efficacy: a copy that touches, a likeness that acts, a technical form that absorbs and redistributes the power of what it stages. The metaverse of attractions is therefore not only a spectacular regime; it is also a mimetic one. Taussig's analysis is also fruitful for this dissertation because he places mimesis inside colonial and postcolonial histories of alterity. The camera becomes a mimetically capacious machine; the dancing body and the image enter relations of "contactual" excess; "second contact" destabilizes the polarity between us and them. This matters for the political and epistemological stakes of the thesis. The history of immersive media cannot be narrated as a neutral technical progression. It belongs to histories of wonder, capture, fear, projection, and colonial asymmetry. Earlier in the dissertation, the reappearance of the trope that technical capture "steals the soul"[207] was used as a way to think the ambivalent cultural reception of new media. Taussig gives this intuition far greater anthropological depth. He shows that technical mimesis is never innocent: it can enchant and expropriate, translate and dominate, expose and undo the boundaries that colonial modernity sought to stabilize.

Gilbert Durand introduces another necessary inflection. His anthropology of the imaginary[208] does not begin from isolated images but from the deep structuring schemas through which symbolic contents organize themselves across myths, arts, narratives, and civilizations. The value of Durand for the present chapter is not that he offers a ready-made taxonomy to be applied to immersive media. It is rather that he reminds us that the imaginary is structured, rhythmic, topological, and deeply anthropological. In his work,

[206] Michael Taussig, *Mimesis and Alterity: A Particular History of the Senses* (Abingdon, Oxon, and New York: Routledge, 2018).
[207] As briefly reminded also in the final part of the earlier chapter *Bodies*.
[208] Gilbert Durand, *Le strutture antropologiche dell'immaginario: Introduzione all'archetipologia generale*. Translated by Ettore Catalano (Bari: Dedalo Libri, 1972).

the primacy of figurative space over purely discursive explanation becomes central; images belong to a profound rhetoric that cannot be reduced to surface content. This is particularly important after Taussig. If Taussig insists on sensuous contact and mimetic force, Durand helps show that such force does not occur in a symbolic void. It is organized by recurrent schemas, archetypal tensions, and patterns through which cultures spatialize meaning. XR, from this perspective, can be seen as a contemporary field in which imaginaries are not merely visualized but environmentalized.

At this stage, a decisive shift becomes possible. The research no longer points only toward an anthropology of images, an anthropology of memory and visual belief, an anthropology of the body, an anthropology of the senses, or an anthropology of mimesis. It suggests that immersive media force us to think these dimensions together. This is why the plural in phygital anthropologies is not ornamental. No single anthropology is enough. Belting reveals the image as the traffic among body, medium, absence, and substitute presence. Plessner reveals the human as naturally artificial, sensorially unified, and excentrically mediated. Csordas reveals embodiment as the ground from which meaning emerges and in which VR becomes legible as performative sensory presence. Taussig reveals mimesis as sensuous contact, magical efficacy, and unstable alterity. Durand reveals the imaginary as structured and anthropologically deep rather than merely subjective or decorative. Taken together, these authors make it possible to understand why the dissertation's initial comparison between XR and theatre has expanded into something larger. The issue is no longer simply that immersive media are closer to performance than to detached spectatorship. The issue is that the relation among image, body, medium, rite, environment, and technical support may itself have to be thought anthropologically from the start. This also clarifies why several of the other texts assembled for this chapter, even when they do not belong strictly to anthropology, remain indispensable. As explained in later sections of this final chapter, Régis Debray's mediology insists that every new technique retroacts on the human, reshaping the subject as much as it extends it, and that image, gaze, transmission, and death belong to one historical process. André Leroi-Gourhan read by Bernard Stiegler show that technics is neither external instrument nor late addition, but a third memory, an exosomatic and organized inorganic dimension through which human life exteriorizes and transforms itself. Their work strongly supports the thesis's broader wager: that immersive media are

not anomalies within human history but intensified episodes of a much longer co-development of body, memory, support, and world. At the same time, the negative or oblique interlocutors also become clearer in function. Anders offers a critical philosophical anthropology that warns against the human tendency to remake itself in the image and likeness of its gadgets. Michel Foucault, again, remains crucial as a philosopher of apparatuses and heterotopias, helpful for thinking spaces that are both real and intangible, placed and widely diffused. Morin is applicable here as sociologist of technical images and mass culture, an early analyst of the way media generate a new culture of everyday life. Clarke, finally, stands less for theory than for futurological imagination: the promissory discourse through which technological futures present themselves as boundaries of the possible. None of these figures can ground phygital anthropologies by themselves. Yet each helps delineate the field against which such anthropologies should define themselves: not as naïve celebration of novelty, not as simple media sociology, not as pure critique of apparatuses, and not as futurist prophecy. For now, one interim conclusion can be stated. The dissertation began by asking whether immersive media might be better understood through theatre than through a merely visual genealogy. It is now possible to say that this question was necessary but not sufficient. It was necessary because it broke the hegemony of a disembodied conception of XR and restored presence, gesture, sensorium, and ritualized relation to the center of the analysis. But it was not sufficient because, once those dimensions are restored, the distinction between theatre, image, medium, device, and environment itself begins to appear historically secondary. The more fundamental problem concerns the anthropological matrix in which these dimensions co-emerge and are later differentiated. That matrix is precisely what the next sections should continue to elaborate under the name of phygital anthropologies.

If the first group of authors made it possible to identify the anthropological threshold of the dissertation—Belting through images, Plessner through the human as naturally artificial and sensorially structured, Csordas through embodiment, Taussig through mimesis, Durand through the deep organization of the imaginary—the next movement has to widen that threshold into a more explicitly historical and political horizon. This is where David Graeber, David Wengrow, and Paolo Favero become decisive. They do not simply add further case material to the argument already made.

They transform its scale. Through them, the problem ceases to be only how images, bodies, and media relate; it becomes how worlds are collectively composed, how social arrangements remain experimentally open, and how contemporary digital habitats reactivate much older anthropological dynamics of passage, ritualization, presence, and environmental participation. In this sense, the second half of the anthropological constellation does not abandon the inquiry into immersive media; it re-situates it within a broader account of human plasticity, social invention, and world-making.

Graeber and Wengrow matter here above all because they dismantle the temporal and political rigidity that has so often structured modern accounts of technics, media, and civilization. Their central wager is that the search for single origins—of inequality, the state, domination, or the supposedly necessary forms of complexity—is usually the wrong question. The historical and archaeological record instead reveals repeated alternations among social forms, seasonal reorganizations of authority, ritual redistributions of coercion, and a striking degree of political self-consciousness. The examples they mobilize are highly revealing: among Inuit groups, norms of authority could be challenged or suspended in winter gatherings; among Kwakiutl groups, coercive powers could be granted to ritual performers only during specific ceremonial times; in other societies, monthly or seasonal alternations reorganized gendered authority and ritual order. Their point is not anecdotal. It is that there is "no single pattern," and that what is most consistent is precisely "the very fact of alteration" and the awareness of different social possibilities. This is why they ask not where inequality began, but "how did we get stuck?" and how we came to forget that many apparently fixed forms may once have been temporary, theatrical, or experimental. This question resonates strongly with the whole architecture of the present dissertation. The metaverse is frequently narrated, in current discourse, either as the inevitable next stage of social and technological evolution or as the deceptive fantasy of platform capitalism. What Graeber and Wengrow allow one to contest is the determinist structure shared by both positions. If human beings have repeatedly assembled and dismantled hierarchies, alternated between modes of organization, and invested ritual and festive life with temporary redistributions of power, then there is no reason to assume that immersive environments possess a single historical destiny inscribed in their technical form. They are not, in advance, either emancipation or capture. They are fields of experiment. More precisely, they are fields in which

architectures, protocols, permissions, and collective imaginaries interact with the anthropological capacity to move among forms. Their importance for this thesis is therefore double: they help provincialize technological futurism, and they also make newly intelligible the thesis's insistence on platform dramaturgies, participation, and ritualized presence. The metaverse becomes thinkable not as a fixed "future world" but as a changing arrangement whose anthropological meaning depends on how forms of life, power, and embodied relation are composed within it.

David Graeber's earlier *Fragments of an Anarchist Anthropology*[209] sharpens this opening in a particularly useful way. There he insists that the basic principles of anarchism—self-organization, voluntary association, mutual aid, and the rejection of structural violence and domination—should not be treated as late inventions, but as forms of human behavior "around about as long as humanity." He also argues that anthropology has an affinity with this horizon precisely because it has long studied actually existing self-governing communities, non-market economies, and the broad range of human possibilities that state-centered political thought tends to ignore. Just as importantly, Graeber proposes that ethnography itself can become a non-vanguardist model of critical practice: one observes what people are already doing, teases out the latent logics of their action, and offers those possibilities back as contributions rather than prescriptions. That methodological orientation is deeply relevant to the present thesis. It suggests that a phygital anthropology should not arrive with a prefabricated theory of immersive media and then force contemporary practices to conform to it. It should instead read immersive environments as already existing laboratories of social invention, conflict, play, and refusal. This point is reinforced by the posthumous framing of Graeber's work in *The Dawn of Everything: A New History of Humanity*,[210] written with David Wengrow, where he is described as an anthropologist who turned the same interpretive apparatus once directed toward Madagascar or Indigenous societies onto his own world: bureaucracy, finance, labor, debt, and the absurdities of industrialized Euro-American life. The crucial point in that portrait is not only that he broadened anthropology's objects, but that he repeatedly insisted that industrialized civilization is only one way of doing things among

[209] David Graeber, *Fragments of an Anarchist Anthropology* (Chicago: Prickly Paradigm Press, 2004). See also Id., *The Ultimate Hidden Truth of the World . . .: Essays*. Edited and introduced by Nika Dubrovsky. Foreword by Rebecca Solnit (New York: Farrar, Straus and Giroux, 2024).
[210] Id. and David Wengrow. *The Dawn of Everything: A New History of Humanity* (New York: Farrar, Straus and Giroux, 2021).

many, and that linear narratives of decline from innocence or ascent from barbarism obscure a far more experimental and open-ended human history. This has direct relevance to any final chapter on the metaverse. A phygital anthropology worthy of the name cannot be content with analyzing exotic others or archaic rituals while leaving digital platforms to sociology or business studies. It should be able to turn anthropology back onto the present itself, onto the everyday apparatuses through which bureaucracy, media capture, digital labor, and new collectivities are made to appear normal. Graeber's extension of anthropology toward the ordinary mechanisms of contemporary power is therefore not a digression from the thesis's focus. It is one of the strongest justifications for why the metaverse belongs inside an anthropological, and not merely technological, horizon.

Once this Graeberian-Wengrowian opening is in place, Paolo Favero theories result particularly useful because he translates many of these broader anthropological stakes into the specific terrain of digital and immersive images. His decisive move is already visible in the title *The Present Image: Visible Stories in a Digital Habitat*:[211] the object of inquiry is not "digital images" as such, but images in a digital habitat. This distinction is fundamental. It prevents the analysis from being trapped in the false novelty of the digital, and it insists that contemporary images belong to a larger ecology in which analog and digital, old and new, visual and tactile, historical memory and present experimentation coexist. Favero explicitly states that "present images" should not be reduced to the digital; they name images that speak from this conjunction of the present, and they allow one to recover older, marginalized ways of relating to images that hegemonic geometric perspective had obscured. For him, present images are therefore also terrains of counter-hegemony. At the same time, the term "present" indicates presence itself: reciprocity, relationality, tactility, and a sense of being-in-the-world rather than detached representation. Images, in this account, are not mere encodings or subordinates of narrative; they are co-actants in the lived world. Favero is extraordinarily close, here, to the movement of the present dissertation. The thesis has argued throughout that XR and the metaverse should not be treated as systems for displaying better images, but as performative ecologies of embodied participation. Favero provides a directly anthropological articulation of that same move. He describes immersive image-spaces not

[211] Paolo S. H. Favero, *The Present Image: Visible Stories in a Digital Habitat* (Cham: Palgrave Macmillan, 2018).

as totalizing frameless experiences, but as entries into a different kind of environment: “a curved and dynamic space” that changes according to modes of engagement and demands a different “bodily spacing.” The decisive consequence is that the viewer’s position is internal to the image rather than external to it. One no longer controls the image from an exterior point, as under the regime of geometric perspective; instead, one inhabits a world whose front/back, before/after, and narrative control are destabilized. This formulation is crucial because it allows the present thesis to sharpen one of its own core claims: what immersive media undo is not representation as such, but the sovereign positionality of the perspectival observer. The body does not merely look at an image-world; it finds itself already within it, in a field of uncertain thresholds and distributed attention. Favero’s most productive contribution to the present conclusion, however, lies in his explicit use of rites of passage and liminality. He proposes that entry into an immersive environment can be understood as a ritual performance in the anthropological sense, one that reorients the gaze by bringing together body, emotion, and mind. Drawing on Van Gennep and Turner, he describes this entry as a sequence of separation, liminality, and reaggregation. What matters most is the middle phase, the condition of being “betwixt and between,” where old distinctions should be suspended and subjects are asked to dwell in the subjunctive mode, “as if” things were as they are now given. Favero emphasizes that this liminal moment is charged, dangerous, and potentially transformative; in immersive images, it can suspend the distinction between reality and fiction and open a passage from the known to the unknown and back again with altered understanding. He even suggests that this is why VR works especially well for experiences of trauma, exceptionality, and enlightenment. The resonance with the present dissertation is unmistakable. What the thesis has repeatedly called ritualized mediation, threshold, and metaversal reenactment receives here a fully anthropological formulation. Immersive space is not simply entered; it is ritually crossed. Favero’s argument goes still further, and this is perhaps where it most forcefully supports the concluding proposal of phygital anthropologies. He writes that new immersive images offer an opportunity to “close the gap between observer and observed (and between the self and the world)” that Renaissance perspective and its modern descendants had secured. This is not, for him, a naïve return to premodern fusion. It is a reconfiguration of the very relation between body, image, and world inside contemporary technical conditions. Later in the book he extends the claim by suggesting

that current technologies, precisely in their tendency to close the gap between image and body, may also help close the gap between self and world, defamiliarizing ordinary perception and opening the possibility of "a possible new world." Here the political stakes of present images become most apparent. Digital and immersive technologies certainly threaten new forms of capture, surveillance, and bodily incorporation into data regimes; Favero says so with complete clarity. Yet they may simultaneously reopen a more porous, tactically subversive, and anti-Cartesian relation to the world. This ambivalence is precisely what the present thesis has insisted on under the name of phygitality. From this perspective, Favero also becomes the most direct bridge between the anthropologies discussed so far and the mediological, screen-theoretical, and technical-anthropological authors that should follow. Belting's account of the image as a body-medium relation, Plessner's account of mediated immediacy, Csordas's embodiment, Taussig's sensuous mimesis, and Graeber/Wengrow's insistence on social experimentation all converge in Favero's digital habitat. Present images are neither merely aesthetic surfaces nor simply technological artifacts; they are lived environments, political thresholds, and co-actants of the present. They are also, crucially, places where old dualisms lose their force: digital versus analog, model versus copy, observer versus observed, self versus world, past versus future. Thus, Favero occupies a structurally relevant position within this chapter, since his work marks one of the clearest points at which anthropological inquiry and digital environments concretely converge. Within the overall architecture of the chapter, he brings the strong anthropological block to completion at a decisive theoretical juncture for the thesis: namely, at the point where immersive media cease to appear as an eccentric anomaly and become legible as historically grounded, embodied, world-forming environments.

At this point, the logic of the chapter becomes clearer. Belting had shown that images live only in the traffic among body, medium, and picture, and that masks, funerary doubles, and portraits arise where presence and absence, life and death, are ritually negotiated. Plessner had shown that the human is a boundary-realizing, excentrically positioned being that should achieve immediacy through mediation and equilibrium through artifice. Csordas had shifted anthropology from symbolic readings of the body to embodiment as existential ground, even describing virtual reality as an aesthetic tool that enhances dramatic and performative techniques. Taussig had revealed that mimesis is not

dead copying but sensuous knowledge, sympathetic magic, and the bodily power of the copy to affect the original. Durand had reminded us that imaginaries possess a deep, anthropological morphology irreducible to surface content. Graeber and Wengrow then reopened human history as a field of plural forms, ritual alternations, and social experimentation, while Graeber's broader work extended anthropology into the critique of contemporary institutions and bureaucratic capture. Favero, finally, brought all of this into the digital habitat, where images become present, immersive, liminal, and politically ambivalent world-thresholds. Read together, these authors do not yield one anthropology. They yield a dense and necessary plurality of anthropological approaches adequate to phygital existence. This also points to the need for a further step in the chapter. Once the anthropological field has been opened in this strong sense, one should still account for the mediological and screen-based transformations through which these anthropological constants are detached, externalized, technically redistributed, and historically reconfigured. Thus, the move from Belting and Plessner to Carbone, Lingua, and Debray is not a departure from anthropology but its historical and mediological articulation. Likewise, the move toward Leroi-Gourhan, Stiegler, Ferraris, van Buuren, Morton, and Campagna will not replace embodiment with technique; it will show more forcefully why technics, memory, environment, and symbolic world-construction belong to the same anthropological problem. What has been completed here is therefore the second major block of the chapter: the entrance into anthropologies in the strong sense. What follows should now show how these anthropologies are prolonged, complicated, and redistributed by screens, mediations, and technical ecologies.

Mediological and Screen-Based Rearticulations: Carbone, Carbone–Lingua, Debray

If the first anthropological block of this chapter established that immersive media have to be thought through bodies, images, senses, embodiment, mimesis, and social experimentation, the next step should now expose how those anthropological structures are historically redistributed through media, screens, and regimes of visibility. This is the

precise role of the mediological and screen-based nucleus formed by Mauro Carbone, Graziano Lingua, and Régis Debray. None of these authors replaces anthropology with a merely historical account of devices; nor do they return the argument to an imagocentric narrative in which technology would simply refine the transmission of visual contents. On the contrary, what they make available is a genealogy of mediation itself: a way of understanding how anthropological constants—presence and absence, concealment and revelation, embodiment and prosthesis, ritual access and regulated distance—become historically articulated in specific image-regimes, screen formations, and technical environments. This is why the move from Belting, Plessner, Csordas, Taussig, Durand, Graeber, Wengrow, and Favero toward Carbone, Lingua, and Debray is not a digression. It is the necessary historical and medial deepening of the anthropological threshold already reached.

Mauro Carbone's *Philosophy-Screens* provides the first decisive articulation of this passage. What is at stake in that book is not simply a philosophy "about" screens, still less a descriptive philosophy of digital devices. Carbone's wager is more radical: the mutations produced by the proliferation of screens force philosophy to rethink its own conceptual instruments. In the preface, he insists that philosophy has always had an ambiguous relation to screens. On the one hand, it traditionally identified itself with a struggle against them, associating them with illusion, deception, and the obstacle that prevents truth; on the other hand, philosophy has always needed some kind of screen in order to make visible the very truths it seeks to think. This ambiguity already appears, for him, in Plato's cave, where what is usually treated as a single screen is in fact a doubled configuration—one screen showing, another concealing—whose complementarity anticipates the later notion of the arche-screen. Carbone's point is therefore not that screens are a late technical accident. It is that philosophy has always been bound to them more intimately than it wished to admit, and that the contemporary mutation of screens simply makes this constitutive relation impossible to ignore. This first move matters enormously for the present dissertation, because it immediately supports one of its deepest intuitions: that immersive media should not be treated as a purely recent technological novelty whose conceptual meaning can be captured by the language of software, simulation, or visual enhancement alone. Carbone's insistence on the long and diverse cultural history of screens, and on the fact that our screen experiences modify

ways of perceiving, desiring, knowing, and thinking, gives this thesis a much firmer ground for resisting digital presentism. XR and metaversal environments are not simply "new media" in the banal sense. They are one highly intensified and contemporary chapter in a much longer history of screened existence. The question is therefore not whether they abolish older forms of mediation, but how they re-elaborate and radicalize structures already sedimented in philosophical, visual, and anthropological life. Carbone's second crucial move is the passage from what Deleuze once called a "philosophy-cinema" to what Carbone names "philosophy-screens." This is not a rhetorical expansion of cinema studies. It names a change in philosophical scale. At the end of the book, Carbone argues that the critique of the notion of concept developed in twentieth-century French thought points toward a philosophy capable of taking into account the ontological and logical novelties implied by screens. The conceptual logic shaped by the Albertian window and by the model of a substantialized individual confronting a foreign world is no longer enough. The present proliferation of screens coincides with the proliferation of images and with a sensible logic that exceeds the reductive logic of concepts. Here Carbone explicitly links the new task of philosophy to the sensible relation with the world, that is, to the domain in whose name aesthetics was founded. This matters greatly for *The Metaverse and Its Double*, because the thesis has repeatedly insisted that XR cannot be grasped if one continues to model reality on the paradigm of a detached observer facing a framed world. Carbone confirms that the regime of screens destabilizes precisely that ontology. This is also why Lyotard, though not part of the anthropologies in the strict sense, remains essential in the background of this step. Carbone's book includes an entire chapter on Lyotard, the screen, and a cinema named desire, and this is not accidental. The Lyotardian figural had already broken with the reduction of visibility to discursive order and had already explored the screen as a place where desire, thickness, and visual force exceed conceptual mastery. For the purposes of this chapter, Lyotard's importance lies precisely here: he is not introduced as an anthropologist of immersive media, but as one of the philosophical sources that make it possible to move beyond the neutral notion of the screen as display and toward a thicker idea of screened existence as affective, sensual, and ontologically destabilizing. In other words, Carbone's philosophy-screens inherits from the philosophy-cinema debate and from Lyotard's figural a suspicion toward any model of mediation reduced to transparent

representation. This is directly continuous with the thesis's own passage from detached visuality to theatrical, performative, and environmental immersion. Carbone's account becomes still more relevant where he discusses the present multiplication of screens and the difficulty of "finding an exit" from them. He argues that today's screens, unlike older cinematic or televisual experiences that remained more clearly circumscribed in time and space, multiply around and among us to the point that one can no longer rely on the metaphysical distinction between an inside and an outside, between the screen-world and the real world. He is careful, however, not to say that reality has disappeared. On the contrary, his point is that reality has never existed as the first and last term, separately opposed to the images through which we continually face it. Reality and images are and have always been in a relation of mutual reference. This is perhaps one of the most useful formulations available for the final architecture of this dissertation. It resonates directly with the thesis's insistence that XR is not a substitute for reality but one of its doubles, and that the metaverse becomes intelligible only when reality itself is rethought as always already mediated, affectively structured, and technologically approached. Carbone and Graziano Lingua's *Toward an Anthropology of Screens* radicalizes all of this by turning the screen from an ontological-philosophical problem into an explicitly anthropological one. As widely exposed in this and previous chapters, their central claim is that screens were never merely surfaces for display or interfaces standing before autonomous subjects. They have always been relational thresholds between embodied beings and their social worlds. This shift is decisive for the present chapter, because it gives a name and a structure to something this dissertation has been pursuing from the beginning: the need to understand mediation not as an external layer added to bodies and environments, but as a mode of organizing relations, distances, protections, exposures, and accesses. Carbone and Lingua's contribution is to formalize this intuition by means of the arche-screen, whose foundational structure is given not by a single function of visibility, but by the co-implicated pairs showing/hiding and exposing/protecting.

This double pair is fundamental for the thesis, because it allows immersive media to be thought beyond the imagocentric paradigm. A screen does not simply make something visible. It regulates conditions of visibility, filters intensity, protects from excess, exposes to relation, and distributes access asymmetrically. This explains why Carbone and Lingua insist that screens are "apparatuses of action" and why they describe

our current situation not simply as a culture of images but as one in which screens reveal themselves as "real operational thresholds," irreducible to the paradigm of representation alone. Such a formulation is exceptionally useful for the metaversal and phygital horizon of this dissertation. Headsets, wearables, ambient surfaces, shared interfaces, augmented overlays, and haptic or optical thresholds do not abolish the screen; they redistribute its functions across new environments. The metaverse, from this point of view, is not the disappearance of the screen into total immersion. It is the expansion of screening into an environmental condition. Equally decisive is Carbone and Lingua's claim that the body itself is the proto-screen. This proposition brings their book into direct continuity with the anthropological authors treated in the previous section. If Belting had argued that the body is the locus of images and Plessner had shown that the human lives through excentric mediation, Carbone and Lingua now insist that the body is not just one user of screens but the original matrix from which screening functions become intelligible. In their etymological and phenomenological reconstruction, skin appears both as negative screen and positive screen: it stops what hits it, protecting what lies behind, yet it can also display forms, colors, and inscriptions on its own surface. This double functionality of skin grounds the body as proto-screen and reveals that exposure and protection, showing and hiding, are not secondary additions to screened life but anthropological conditions rooted in embodiment itself. For the purposes of this thesis, the consequence is clear: immersive media do not impose alien functions on the body from outside. They technicalize and redistribute operations that corporeality already performs. This bodily grounding also clarifies why the theatrical dimension of the dissertation remains central even within the screen-based nucleus. Carbone and Lingua draw attention to etymological constellations linking skin, film, veil, skene, and shadow. The *skēnē* is not only the theatrical backdrop but belongs to a broader family of terms in which casing, shadowing, covering, and showing remain entangled. This aspect is extraordinarily fruitful for *The Metaverse and Its Double*, because it grounds the quasi-theatre of the metaverse and the relation between stage and screen in a much older anthropological and technical history, rather than being a metaphor arbitrarily overlaid on digital culture. Again: the scenic threshold is already screenic; the screen is already scenic. The detachment of skin from body, of shadow from object, of veil from space, and of staging from ritual is precisely the kind of technical-anthropological process the thesis is trying to reconstruct on a longer scale. Carbone and

Lingua's genealogical work on the veil is particularly applicable here, and it is no accident that the present work had already devoted careful attention to it. The veil is not merely a symbol. It is a screen form in which the co-implication of concealment and access, protection and exposure, becomes explicit. In the Jewish Tabernacle, the veil separates the Holy Place from the Holy of Holies, protecting human sight from excessive divine presence while also redistributing what may appear and under what conditions. Even more revealingly, the veil itself contains images, which means that prohibition and authorization of visibility are already interwoven within the screening *dispositif*. Christianity intensifies and transforms this economy by refiguring the veil through the flesh of Christ: mediation is not abolished, but displaced into incarnation, into a visible body that remains at once revelatory and screening. Whether or not one wishes to take the theological content as normatively binding, the mediological importance of this genealogy is immense. It shows that screens do not begin as neutral technical surfaces. They begin as regulators of access to excess—ritual, ontological, political, and affective excess. This is a point of extraordinary relevance for immersive media, which also promise intensified access while continually regulating, buffering, and redistributing it.

This is precisely where Régis Debray enters with full force. If Carbone and Lingua provide the operative logic of the screen, Debray provides the long historical metabolism through which image-regimes, media of transmission, and ways of accrediting the real become historically organized. The value of *Vie et mort de l'image: une histoire du regard en Occident*[212] for this chapter lies not simply in its famous tripartition of logosphere, graphosphere, and videosphere, although that tripartition remains emblematic. Its deeper importance is mediological: Debray insists that one cannot understand images by isolating them as visual contents. Images belong to a broader process in which technical supports, institutions, beliefs, ways of seeing, and social forms are knotted together. In the Italian presentation of the book, this is formulated with great clarity: Debray's mediology deliberately unites what the West had separated—spiritual and material, subject and object, being and appearing, artisticity and technology—and reconstructs the history of the image as a history of the gaze in the West, from idol to artwork to digital simulation. In this sense, what he proposes is a mediological history of the image

[212] Régis Debray, *Vita e morte dell'immagine: Una storia dello sguardo in Occidente*. Translated by Andrea Pinotti (Milano: Il Castoro, 1999).

understood not as a mere sequence of styles, masterpieces, or iconographies, but as a long transformation of Western "conditions of visibility"—the social, technical, institutional, and spiritual arrangements that make certain images possible, credible, efficacious, and desirable at different moments. The guiding wager is that images are never simply "there": they operate inside regimes of belief and transmission, and their power depends less on what they show than on *how* they circulate, where they are placed, who is authorized to produce and handle them, and what kinds of bodies and communities they presuppose. In this sense Debray aims to identify "a priori" structures of the Western eye—those historically situated "naiveties" that determine what counts as obvious, reasonable, or scandalous in visual experience at different moments—while acknowledging the methodological risk of spanning epochs and disciplines and the inevitable partiality of any grand genealogy of the gaze. The most radical move is to anchor the origin of the image in funerary practices and the management of death. Debray insists that "the birth of the image is strictly connected to death" (Debray 2010: 20): archaic images emerge from tombs not as decorative surplus but as a refusal of nothingness, an attempt to prolong life by stabilizing a presence where the body is vanishing. The earliest visual marks—glifs, incisions, ochre traces, masks, sarcophagi eyes, necropolis paintings—appear within an economy of survival in which the visible figure functions as a protective substitute and a controlled continuation of the deceased. In this perspective, an image is not first an "object for contemplation" but a *device* that domesticates terror, negotiates absence, and materializes a relation between the living and the dead. This is why Debray can claim, provocatively, that the more a society removes death from social life, the less "alive" its images become, and the less vital the need for images feels (Debray 2010: 20). From this funerary matrix, the argument develops a dense anthropology of the "double," where representation and transfiguration originally coincide. The image is a second body—an "hyper-body," public and irradiating—that can outlive biological decay and take over social functions (honor, authority, continuity). Debray recalls rituals in which the effigy is not treated as fiction but as the operative body of the dead: in Roman imperial *funus imaginarium* the mannequin is *the corpse* in ceremonial terms, enabling a political-theological passage from mortality to divinization; similarly, in French royal funerals the wax effigy presides over court life while the new king must remain invisible, because sovereignty is managed through the visible

permanence of the double (Debray 2010: 22–23). This genealogy leads to an arresting semiological inversion: the sign is not born from neutral meaning-making but from mortuary marking—"the sign with which one recognizes a burial precedes and founds the sign of resemblance" (Debray 2010: 22). In other words, Western semiotics has an archaeological substratum of stone, mask, and corpse: under words, there are tomb markers. Because the image is born as a double that acts, it is initially tied to presence rather than to viewing. Debray's reconstruction of the long era in which images are invested with sacred or magical efficacy emphasizes that visual power is not primarily optical; it is spatial, ritual, and proxemic. The image works through nearness, contact, placement, and consecration; it can "do" things without being looked at, and the decisive criterion is not aesthetic perception but potency. Debray shows how late antiquity and early Christianity inherit and transform this logic: what changes is not simply the *existence* of sacred images, but the theological language used to legitimate them and the conflicts that erupt when images become the battleground of competing conceptions of mediation. Iconoclasm is thus not a marginal episode but an index of the violence that inhabits the theology of the image: breaking an idol is never just "correcting a mistake," but attacking an embodied, libidinal, and political investment in the visible. The settlement of the Byzantine controversy at the Second Council of Nicaea (787) is read as a decisive articulation of Christian visual legitimacy: venerating images is framed as compatible with orthodoxy because "the homage rendered to the icon goes to the prototype," and refusing that homage risks denying the Incarnation (Debray 2010: 70). Here the image is defended not as autonomous art but as a doctrinal consequence of the Word made flesh. At the core of Debray's synthesis lies a tripartite model of image-existence that tracks the transformation of Western mediation: presence, representation, simulation. He condenses this in a formula that is both anthropological and diagnostic: images pass through three "modes of being" as intermediaries with three encompassing horizons—first the supernatural, then nature, then the virtual—and each mode carries a dominant affect (fear, love, interest) and a distinct organization of belief and social life. A key consequence is that a "history of images" cannot be reduced to iconographic themes or stylistic innovation; it must be written as a history of *worlds*—of institutions, techniques, and authorities that define what an image is allowed to be. Debray makes the stakes explicit with the aphorism "Tell me what you see, and I will tell you why you live

and how you think" (Debray 2010: 190). He also reframes classical semiotics through Peirce's triad (index, icon, symbol), while warning that historical realities are messier than conceptual typologies: an Orthodox icon can behave "indexically" as an amulet; ancient statuary often leans toward the physical logic of imprint and body; modern abstraction can signal a drift toward symbolic codification. Still, the triad helps Debray distinguish: the index fascinates and calls to touch; the icon gives pleasure and supports art; the symbol demands distance and codes, functioning sociologically as affiliation and status.

This mediological framework is sharpened by an equally important epistemological claim about interpretation. Against any naïve empiricism, Debray insists there is no "degree zero" of looking: every viewing is already structured by narrative, expectation, and cultural scripts. Even the most "factual" television reportage is not simply seen but read through a dramatic scenario assembled by the spectator, often implicitly (Debray 2010: 52). Yet, against an over-linguistic reduction, he also argues that images are not language: they have no syntax or grammar in the way verbal statements do; they are not straightforwardly true or false, and their force lies in suggestion and affective adhesion rather than propositional argument. The image's "infancy" (in-fans, not speaking) is precisely its power, an amphibious element that laps at the shores of the verbal without fully belonging to it. The shift from sacred presence to aesthetic representation is then described as a transformation of the *position of the subject* in the visual field. Debray contrasts an earlier gaze "without subject," in which the image takes initiative and irradiates the viewer, with a later regime in which the human becomes the organizing center of visibility. He crystallizes this turning point through the invention of linear perspective and the Renaissance reorganization of space: "We have seen, with the idol, what a gaze without subject could be… the era of art puts a subject behind the gaze: man… this revolution has a name: Euclidean perspective" (Debray 2010: 205). Perspective is not treated as a neutral technique but as an optical-metaphysical revolution that installs an egocentric, monocular viewpoint and aligns the visible with mathematical intelligibility. Debray describes this as a profound "marriage of the eye and mathematical logic" that "preceded" Western scientific and political revolutions (Debray 2010: 207): the new space of representation unifies the world, destroys older heterogeneous and qualitative universes, and fosters a laicized field where artists, styles, and profane

collections become thinkable outside strict theological tutelage. Even when acknowledging Panofsky's thesis of perspective as "symbolic form," Debray emphasizes its civilizational efficacy: it reorganizes attention from obsessive detail toward a homogeneous system, and it recodes the world as an intelligible stage where man becomes actor and director of the scenic cube. This reconfiguration of the gaze is inseparable from material and institutional changes: authorship, property, collection, critique, and museumification. Debray reads the rise of the private collection among humanists and the later invention of the public museum as a long "aestheticization" of images, with a clear arc "between the appearance of the private collection… and the creation of the public Museum" (Debray 2010: 202–203). The museum emerges as a permanent, open, collective space that stabilizes the artwork as an object of disinterested viewing and national heritage; it also retroactively produces a discourse of justification—histories of artists and styles, philosophical aesthetics, and forms of expertise that normalize what counts as art. In the same movement, the iconoclastic impulses of the Reformation are interpreted in relation to the Gutenberg revolution: the passage from idol to artwork parallels the passage from manuscript to print, and the Calvinist iconoclastic wave follows the new dominance of the textual and reproducible (Debray 2010: 202). Here Debray's mediology is explicit: transformations in the support and circulation of the word restructure the legitimacy and function of images.

Vie et mort de l'image then traces how mechanical reproduction reopens the question of the image's ontology by inserting automatism into the production of the visible. Debray insists that photography is not simply "another multiplier" after engraving and lithography; it is the intrusion of an impersonal process into what had been artisanal illustration: "light replaces the artist's hand" (Debray 2010: 234). This is why 18 August 1839, when Arago presents Daguerre's invention as a scientific tool, is "not a date but a turning point" (Debray 2010: 234): the photographic procedure is already a *technology*—a reproducible system and a social apparatus—rather than a technique embedded in the individual craft of the maker. Debray stages the cultural shock of this event with Delaroche's famous exclamation "From today painting is dead" (Debray 2010: 234), not as a literal prophecy but as a symptom: photography displaces the ground on which painting's social function had been built, forcing painting to renegotiate its relation to resemblance, imagination, and spirit. To articulate this displacement, Debray

differentiates the ontological "orders" of fixed images: painting remains closer to the icon (constructed resemblance, coded representation), while photography belongs to the index (imprint, contiguity, physical trace). The photographic image is described as a "compromise between creation and reproduction," an imprint deposited "blindly" by light on photosensitive material; the "pencil of light" has no intention or code (Debray 2010: 238). Yet this very "infirmity" becomes a new source of power once large-scale reproduction (halftone, press, telephoto transmission) integrates photography into mass circulation: the photograph can retain its identity across copies in a way aenaissance reproduction could not (a printed statue is no longer a statue, but a reproduced photograph remains itself). Debray ties this to a shift in aura: photography can "re-enchant" the event through the scoop, producing a modern marvelous no longer based on the never-seen (mythic) but on the "never again" instant—an irrecusable gesture, a face glimpsed at the limit, a sensational document. The audiovisual age radicalizes these transformations by changing not only production but the *consistency* of images in time and space. Debray draws a sharp mediological distinction between cinema and television: cinema, though industrial, remains oriented toward projection and staged viewing—an "island" of attention requiring voluntary spectatorship—whereas television is fundamentally diffusion, a "flow" that produces consumers rather than spectators and sells audiences to advertisers (Debray 2010: 269). This difference is not merely aesthetic; it is anthropological. Debray suggests that cinema inherits genealogies from theatrical arts (*metteurs en scène*, catartic distance), while television belongs to telecommunications and domestic immediacy; the shift from big to small screen modifies the densities of looking, the rhythms of attention, and the forms of belief attached to the image. Television banalizes the image through constant availability and, paradoxically, forces cinema to intensify the extraordinary to justify itself—just as photography earlier freed painting from the duty of resemblance by taking over documentary tasks. Within this audiovisual regime, Debray locates a crucial mutation in the relation between image and event: the progressive suppression of distance. Whereas cinema preserves a temporal gap (recorded trace), live television tends to abolish it, so that "the news is the event, the image is the thing, the map is the territory" (Debray 2010: 247). This is not only the abolition of physical distance through telepresence; it is the erosion of symbolic distance within images themselves—the internal spacing that once allowed images to be recognized as

representations rather than coincident with reality. Debray even hints that the vilified notion of "spectacle" might one day deserve rehabilitation, because the disappearance of spectacle as *distance* produces a new, more pervasive fusion of image and world that is harder to criticize precisely because it is less staged.

The culminating threshold is the passage from analog to digital, described in deliberately catastrophic terms as a rupture comparable "in principle" to the atomic bomb in armaments or genetic manipulation in biology (Debray 2010: 247). With digitization, the image becomes information: an algorithmic matrix of numbers modifiable indefinitely. This creates a convergence of domains—sound, text, image—under binary coding, reunifying engineer, writer, technician, and artist as "Pythagoreans" and connecting the "islet" of fine arts to the general circulation of software (Debray 2010: 247). Debray interprets this as "the victory of language over things and of the brain over the eye" (Debray 2010: 247): the world's flesh is mathematized, and the image is no longer primarily a copy of a prior object. In a striking reversal, computer-assisted image production can make the *product* imitate the image: "the 're-' of representation falls away" (Debray 2010: 248), because what is represented is no longer a second presentation of an antecedent reality, but a model that reality must conform to in order to exist as engineered artifact (architecture visualization, simulators, virtual prototypes). In this sense, "simulation abolishes the simulacrum" (Debray 2010: 247): the millennial curse that tied images to illusion and imitation is overturned when images become operational models rather than deceptive reflections. Debray is attentive to the embodied and perceptual consequences of this inversion. Digital visuality is not just a new kind of picture; it reorganizes action, space, and bodily involvement through interactive *dispositifs*—sensors, data gloves, head-mounted displays—allowing a body to move in an immaterial space animated by digital simulation (Debray 2010: 248). The paradox is that such a space can be explored and manipulated without corresponding physical reality: Image and Reality become "indiscernible" in a new way, not because the image deceives the eye, but because it becomes a practical environment for training, control, and production. Debray's famous line—"Images now know they are being watched" (Debray 2010: 248)—captures the shift from passive representation to responsive systems that integrate user behavior, feedback, and real-time data. The technical apparatus rises

"upstream" of culture: machines are no longer only for diffusion and storage but for fabrication, shaping the horizon of what can be imagined and made.

Yet the book's title—life and death of the image—finds its most nuanced meaning in Debray's refusal to equate proliferation with vitality. The digital grants a "fabulous freedom" of variation (infinite colors, smooth gradations), but Debray warns that such freedom is "paid for with the loss of desire" (Debray 2010: 252): when resistance and weight are erased, everything becomes easy and fast, but also potentially indifferent, because the image no longer bears the friction of the world's material inertia. He also stresses the limits of simulation: the computer readily conquers the mineral (metals, plastics), struggles with the vegetal and animal, and fails most tellingly with the human—especially with what he treats as inseparable: eyes, voice, gaze, and embodied singularity. The problem is not "the soul" in an abstract sense, but the body as the condition of gaze; without eyes there is no durable presence. Debray culminates in an almost ethical anthropology of the face: the human visage resists being reduced to repeatable algorithmic pattern, and for this reason "the human face is sacred… as the image of nothing else, of no other possible image" (Debray 2010: 252). Here the mediological history returns to its opening intuition: images live where they bind bodies, mortality, and belief; they die when they become pure, frictionless circulation—when vision can proceed without gaze, and presence is replaced by operational visibility.

That mediological ambition is clearly linked with what the final chapter of this dissertation evokes. Debray is especially stimulating here because he relocates the image between visible and invisible, life and death, memory and substitution. The Italian introduction insists on precisely this point: the *imago* in antiquity is the funerary mask, and images function as mediations between life and death, the visible and the invisible. The image is not mere repetition of things, but a place and time in which sense is manifested and in which absence is made present by substitution. This is strikingly close both to Belting's anthropology of the image and to the larger hypothesis of the present dissertation. If images are originally bound to death, memory, and the stabilization of absence, then the history of media cannot be narrated as a simple technical refinement of representation. It belongs from the outset to ritualized, anthropological, and symbolic operations through which communities manage distance, loss, presence, and access. Debray is therefore not merely a historian of visual regimes. He is one of the strongest

mediological witnesses that the image is always mediation, and that mediation is never merely visual. The tripartition logosphere–graphosphere–videosphere then gives this argument its macro-historical scale. In the logosphere, what is truly real is absent; the visible is suspect, and legitimacy belongs above all to word, transcendence, and the unseen. In the graphosphere, built on print, the visible regains dignity, but only as something ordered, measured, and disciplined by discourse, method, and abstract rationality. In the videosphere, by contrast, the image acquires overwhelming accrediting force: a photograph becomes more credible than a figure, video more persuasive than discourse, and the criterion of trust shifts toward the visible itself. Debray's point is not simply that societies like images more and more. It is that each mediasphere produces its own criteria for deciding what counts as real and what does not. This is why his work remains crucial for the metaversal horizon of the thesis. The metaverse is not merely one more "technology of images"; it belongs to a transformation in the very accreditation of the real. It intensifies a condition in which presence, proof, social legitimacy, and political persuasiveness are increasingly tied to visibility, display, and experiential access. Yet Debray is just as valuable because he does not celebrate this visible turn. On the contrary, his critique of the videosphere is one of the major reasons he remains necessary in this chapter. He warns that a society governed by the logic of WYSIWYG ("what you see is what you get") tends to flatten the future onto the present visualizable, to collapse the play of possibilities into what can be shown, and to produce a kind of "terrorism of evidence" in which one is wrong simply because one has nothing to display. In that same context he argues that the struggle for imagination becomes a struggle against the "all in image." This warning is highly pertinent to the contemporary discourse around immersive media, where experiential plausibility and sensory intensity are often taken as self-legitimating values. Debray helps restore a critical distance: the expansion of screened and image-based access may enrich presence and intensify participation, but it may also impoverish imagination, narrow political judgment, and subordinate public reasoning to what is audiovisually demonstrable. It is central to take this risk into account for the final equilibrium of this thesis. His analysis of the political economy of the videosphere is equally relevant. Debray argues that when the essential life of politics unfolds on the small screen, the "electronic agora" is no longer that of Athens but of Carthage. Writing had historically underwritten forms of equality before the law because the written norm

could be inspected, interpreted, and contested by citizens. Image-sound, by contrast, may be more immediately accessible, but it is also more capital-intensive and more easily absorbed into marketing, target segmentation, and oligarchic persuasion. The result is not simply more communication, but a shrinking of civic space into economic space and a transformation of persuasion into a purchasable procedure. For the present dissertation, which is deeply invested in the political ambivalence of metaversal environments, Debray's point is essential. The shift toward immersive and audiovisual participation cannot be read only through phenomenology and performance; it also has to be read through economies of scale, persuasion, infrastructural power, and the unequal ownership of means of visibility. This is precisely why Debray should stand beside Carbone and Lingua rather than be replaced by them. He brings mediology's institutional and political dimension into the anthropological horizon.

Seen together, then, Carbone, Lingua, and Debray form a coherent but internally differentiated nucleus. Carbone shows that contemporary screens force philosophy to move beyond the model of the Albertian window and the subject confronting an external world, toward a thought adequate to proliferating, relational, ontologically unsettling screen conditions. Carbone and Lingua radicalize this by treating screens as relational thresholds and apparatuses of action structured by the co-implicated pairs showing/hiding and exposing/protecting, grounded in the body as proto-screen and historically sedimented in genealogies of veil, skin, and scenic mediation. Debray, in turn, provides the mediological longue durée in which images, supports, institutions, and ways of accrediting reality move from logosphere to graphosphere to videosphere, all the while preserving the deeper fact that the image mediates between visible and invisible, life and death, presence and substitution. Together they make it possible to say that immersive media are not only anthropologically significant because they engage bodies and senses. They are also mediologically decisive because they redistribute the historical conditions under which reality becomes visible, credible, inhabitable, and politically governable. Without this mediological and screen-based step, the anthropologies of the previous section would risk remaining too transhistorical, while the political and technical reconfigurations analyzed in the thesis would risk appearing merely contemporary. Carbone, Lingua, and Debray hold these levels together. They show that the anthropological constants of embodiment, threshold, ritual access, and regulated distance

are never given outside historical mediaspheres and technical forms. At the same time, they show that those media forms cannot be understood apart from bodily, symbolic, and anthropological conditions. The metaverse, from this standpoint, is neither simply a technological future nor simply a reactivation of archaic ritual. It is a historically specific redistribution of much older anthropological and screenic functions, one that intensifies visibility, participation, exposure, protection, and accreditation of the real across phygital environments.

Technical-Anthropological and Environmental Rearticulations: Leroi-Gourhan by Stiegler, Ferraris, van Buuren, Morton, Campagna

If the previous section showed that the anthropological structures brought to light by this dissertation are never given outside media, screens, and regimes of transmission, the following passage should now move further still. It should account for the technical, environmental, and ontological conditions under which bodies, images, memories, and worlds become exteriorized, organized, and transformed. This is why the chapter now turns to the technical-anthropological nucleus composed of Leroi-Gourhan and Stiegler, Maurizio Ferraris, Jasper van Buuren, Timothy Morton, and Federico Campagna. What unites these figures is not a common school or a single theoretical vocabulary. It is, rather, a shared refusal of the old humanist partition according to which the human would first be given as a self-identical subject and only later supplemented by tools, documents, infrastructures, or environments. Across very different idioms, all of them insist that what we call the human is inseparable from prosthesis, technical memory, world-organization, and forms of reality that exceed the scale of immediate perception. In the context of this dissertation, they provide the conceptual bridge from anthropology to phygitality properly understood: not as the simple juxtaposition of physical and digital, but as the historical and ontological co-constitution of bodies, supports, environments, and symbolic operations.

Bernard Stiegler's synthesis of Leroi-Gourhan is the natural starting point, because it redefines technics not as external instrument but as a constitutive dimension of life and memory. In a compelling article[213], Stiegler presents Leroi-Gourhan's great question as the question of memory itself. Because Leroi-Gourhan links technics to the history of life, memory becomes inseparable from the history of programs—cosmic, genetic, socio-ethnic, and cybernetic—and technics appears as a support of gestural and mental processes, hence of culture. This leads to the decisive claim that the technical support of memory is not merely a means for transmitting already constituted knowledge, but "constitutes the very possibility" of the elaboration of knowledge. At the same time, Stiegler emphasizes Leroi-Gourhan's thesis that technical objects follow phyla of transformation and obey morphogenetic tendencies that cut across different cultures, making possible a general theory of technical evolution. From this point of view, technics is neither accidental nor secondary. It is a constitutive stratum of human becoming. This matters enormously for the present dissertation, because it gives the strongest possible technical-anthropological formulation of something the thesis has been approaching from Artaud, theatre, embodiment, and immersive environments. XR is not significant because a pre-existing human body suddenly encounters an optional digital prosthesis. It is significant because human being has always already unfolded through exteriorization, memory supports, and organized technical supplements. If, as Stiegler puts it, technics is a "third form of memory," then immersive platforms, spatial computing systems, and metaversal environments are not aberrant departures from the human condition. They are intensifications of an exosomatic logic that has accompanied hominization from the beginning. The dissertation's insistence that immersive media should be repositioned closer to theatre than to pure visualization is therefore not at odds with a technical-anthropological account. On the contrary, theatre itself can now be re-read as one historically dense site of technical exteriorization: of gesture, role, costume, scenography, vocalization, rhythm, and ritual memory. XR does not enter a non-technical sphere of performance from outside; it radicalizes a technical logic that performance had always embodied. Stiegler's further move is equally relevant. Once technics becomes mnemotechnics, once memory is industrialized and generalized, all the traditional frames

[213] Bernard Stiegler, "Leroi-Gourhan: l'inorganico organizzato." Translated by Giacomo Gilmozzi. *Lo Sguardo*, no. 36 (2023): 287–294.

through which identity, sociality, aesthetics, politics, and even vitality were understood begin to explode. He therefore speaks of the need for a thought of technics capable of recognizing a "third kingdom" alongside inert and organic beings: the kingdom of organized inorganic beings. This notion is especially fertile for the metaversal horizon of the thesis. Avatars, databases, platforms, algorithmic agents, training corpora, immersive architectures, and sensor-equipped environments are not simply dead tools waiting for sovereign use. Nor are they organisms. They belong to that third zone of organized inorganic entities through which memory, gesture, behavior, and relation are stored, repeated, and transformed. A phygital anthropology, then, cannot stop at the body or at the image. It should also reckon with these organized inorganics through which human life is exteriorized and reconfigured.

This technical-anthropological line receives an important echo in Ferraris, though Ferraris shifts the emphasis from memory in the Stieglerian sense to registration, documental production, and documediality. *Documanità: Filosofia del mondo nuovo*[214] ("dochumanity") begins by naming our present as a "new world" and even a "new humanity," while insisting that humanity is not a once-and-for-all given essence but a project. He describes the current epoch as marked by a "documedial revolution," that is, by the intersection of documentality and mediality under conditions of general digital recording. What becomes decisive, for him, is not only the automation of production but the fact that the web produces, archives, compares, and profiles acts of humanity on an unprecedented scale. Human life now continuously leaves documents of itself, and these documents become constitutive of social reality, value, and organization. The web, in this sense, is not merely a communication medium. It is a global recording environment. For the purposes of the dissertation, Ferraris matters because he allows phygitality to be thought not only phenomenologically but documentally. XR and metaversal environments are immersive worlds, but they are also engines of capture. They do not simply surround the body with images and sounds; they register trajectories, gestures, preferences, pauses, gaze behaviors, contacts, transactions, and innumerable micro-acts that can be archived and capitalized. Ferraris's famous reversal is therefore crucial: when we think we are merely consuming, navigating, or interacting, we are also producing documents. Indeed, he explicitly proposes the passage from *produmanità* to *documanità*:

[214] Maurizio Ferraris, *Documanità: Filosofia del mondo nuovo* (Bari-Roma: Laterza, 2021).

from an industrial humanity defined by productive labor to a humanity whose crucial function increasingly lies in generating documents about itself. This is profoundly illuminating for the thesis's account of immersive platforms. The metaverse is not only a theatre of attractions; it is also a document-producing ecology in which embodied actions become recordable value. Following his line, Ferraris resists both nostalgic anti-technology and simplistic techno-utopianism. He insists that the documedial revolution is inseparable from automation and from a radical transformation of labor, but he also argues that the human remains indispensable precisely because machines do not consume, enjoy, desire, or prescribe ends in the human way. In a web without humans, he suggests, the whole apparatus would lose its point. This allows the present chapter to avoid a false dilemma. On the one hand, immersive systems cannot be reduced to neutral tools at the disposal of users. On the other, they cannot be understood as autonomous worlds detached from organic and social life. They derive their value, direction, and legitimacy from mortal, consuming, desiring beings whose acts they register and profile. Ferraris therefore makes explicit something that had remained implicit in the previous sections: the phygital is not only a sensory or symbolic hybrid but also a socio-technical circuit linking embodied life, recording infrastructures, and value extraction.

If Stiegler and Ferraris help us think exteriorization and registration, Jasper van Buuren helps keep the argument anchored in the body's relation to world and reality. His very title, *Body and Reality: An Examination of the Relationships between the Body Proper, Physical Reality, and the Phenomenal World Starting from Plessner and Merleau-Ponty*[215], explicitly resonates with this chapter. Van Buuren's problem is not only the mind-body relation in the abstract. It is the relation among body proper, phenomenal world, and physical reality, approached through philosophical anthropology and phenomenology rather than reductive materialism. This is crucial for the final chapter, because immersive media are precisely one of the domains where these three terms become unstable: the body proper is technologically solicited, the phenomenal world is reconfigured, and physical infrastructures continue to underwrite the whole experience even when users describe it as "virtual." Van Buuren's importance for the present thesis lies first of all in his insistence that scientific and prescientific perspectives

[215] Jasper van Buuren, *Body and Reality: An Examination of the Relationships between the Body Proper, Physical Reality, and the Phenomenal World Starting from Plessner and Merleau-Ponty* (Bielefeld: transcript Verlag, 2018).

are not interchangeable without remainder. In the introduction, he asks what relationship holds between the scientific view of human beings and the view we have of ourselves before adopting a scientific perspective, and he explicitly criticizes the tacit shifts by which ordinary human action is redescribed as if the brain, rather than the person, were the agent. This is highly relevant to immersive discourse, where one is often tempted either to naturalize experience in neuroscientific terms or to dissolve it into software and data. Van Buuren reminds us that the prescientific, lived truth of embodied world-relation cannot be canceled by explanatory models without loss. This is one of the reasons the thesis has insisted so strongly on phenomenology, theatre, and embodiment. Immersive environments may depend on physical systems and neural conditions, but they are not exhausted by them. Their anthropological significance lies in how they are lived, navigated, endured, and made meaningful by embodied persons. At the same time, Van Buuren's table of contents alone makes visible why he is so useful as a hinge figure: chapters on Merleau-Ponty's embodied subject, Plessner's eccentric positionality, the body proper as object of the phenomenal world, physical systems as perceptual gestalts, the body proper as object of physical reality, and perceptual illusions culminate in a study of how ontology and epistemology have to be repositioned within philosophy. In the context of the present dissertation, this provides a powerful conceptual support for refusing both naïve realism and digital idealism. XR is neither a disembodied fiction nor a brute physical fact. It is a reorganization of the phenomenal field grounded in technical and physical systems, but accessible only through embodied, positional beings. Van Buuren therefore consolidates the bridge between Plessner's anthropology and the more explicitly technical authors of this section. He keeps the body at the center precisely where talk of infrastructures, screens, and data risks displacing it.

From an apparently distant but pluggable starting point, Timothy Morton introduces yet another enlargement of scale, one that particularly works if the chapter is to do justice to the environmental turn already initiated in *Environments*. In *Hyperobjects: Philosophy and Ecology after the End of the World*,[216] Morton famously defines hyperobjects as things massively distributed in time and space relative to humans. They are viscous, nonlocal, temporally undulating, phased, and interobjective. They are not

[216] Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis and London: University of Minnesota Press, 2013).

simply large objects, nor mere collections or systems, but real entities whose scale and mode of existence challenge anthropocentric habits of thought. Morton's argument that hyperobjects "end the possibility of transcendental leaps" is deeply relevant to this dissertation, because it aligns with the thesis's sustained attack on the fantasy of the sovereign observer. Immersive media already disturb that observer-position by relocating the subject inside environments; hyperobjects generalize the disturbance by showing that our ecological and technical worlds exceed any stable outside position from which they could be surveyed in full. This matters for the metaversal question in at least two ways. First, Morton helps deepen the environmental argument beyond Uexküll. The environment is not only the lived milieu of a body or a species; it is also increasingly populated by entities whose scale, temporality, and distributive structure overflow the local and the perceptual. Data infrastructures, climate systems, resource extractions, planetary supply chains, and persistent digital ecologies are all closer to hyperobjects than to stage props. A metaverse, considered anthropologically, is never just the visible environment users encounter. It is underwritten by nonlocal infrastructures, energy demands, server ecologies, mineral extractions, and temporally layered technical systems that no individual immersion can perceive in totality. Morton thus forces the chapter to take seriously the asymmetry between local manifestation and distributed object. The environment is no longer just what surrounds us sensibly; it is also what exceeds our scale while sticking to us. Second, Morton's *Realist Magic* is relevant because it prevents environmental thinking from collapsing into flat systemism. There he argues that things are intrinsically withdrawn, irreducible to their perception, relations, or uses, and that causality occurs in an aesthetic dimension of traces and footprints. Objects are "encrypted"; causality is a mysterious, illusion-like play in front of withdrawn objects; appearance is not the enemy of reality but the space in which reality becomes effective without being exhausted. This is strikingly close to several concerns of the thesis. It resonates with the importance of theatrical illusion, with Taussig's rehabilitation of mimesis, with Belting's masks and substitute presences, and even with the performative efficacy of reenactment in *Simulations*. Most importantly, it gives the chapter a way to speak of technical and environmental realities without collapsing them into either total transparency or total construction. A metaversal object, an avatar, a platform world, or an ecological infrastructure is never fully present as what it is; yet its effects are real.

Morton's realism of withdrawal therefore supports the thesis's recurring idea that the double is not the opposite of the real, but one of its modes of appearance. Morton also matters because he reintroduces "magic" on an ontological level without falling into romanticism. In *Realist Magic*, the uncanny efficacy of objects belongs to the very structure of causality. In *Hyperobjects*, ecological reality makes human hypocrisy, weakness, and fragility newly visible. Read together, these books help the present dissertation move beyond the simple opposition between rational technology and irrational rite. What appears instead is a world in which technical systems, ecological entities, and withdrawn objects all possess a certain uncanny agency that cannot be mastered by transparency. This is directly useful for a thesis moving toward phygital anthropologies. It suggests that the ritual and the technical are not alien orders later forced into contact, but two modes of negotiating opacity, efficacy, and relation in worlds where total access is never possible.

Federico Campagna's *Technic and Magic: The Reconstruction of Reality*[217] brings this convergence to its most explicit and programmatic form. The very structure of the book makes it uniquely appropriate for this chapter: "Technic's world," "Technic's cosmogony," then "Magic's cosmogony" and "Magic's world," followed by chapters on "No outside," "Crisis of action, crisis of imagination," "Outside within," "Secret," "Initiation," and "As if." Campagna's claim is not merely that modernity forgot magic. It is that technic and magic are alternative world-making cosmologies, different ways of constructing reality itself. The importance of this for the present dissertation is enormous. The question is no longer whether technology influences ritual or whether ritual survives inside technological culture as residue. The stronger possibility is that both are competing or overlapping cosmologies through which reality is structured, inhabited, and made actionable. Campagna's book frames the contemporary condition as one of crisis not only of institutions but of imagination. In the introduction, he writes from within a historical moment marked by resurgent fascism, environmental devastation, and capitalist biopolitics, and describes a situation in which the range of the possible has dramatically shrunk, so that our ability to act differently or even imagine otherwise seems blocked. This diagnosis is extraordinarily relevant to discourse on immersive media, which often

[217] Federico Campagna, *Technic and Magic: The Reconstruction of Reality* (London: Bloomsbury Academic, 2018).

oscillates between euphoric futurism and exhausted cynicism. Campagna refuses both. He seeks not a manual for triumph but a passage hidden within the battlefield, and Morton, in the preface, underscores this by describing the book as a search for keys to futurality rather than a rearrangement of cynical theory. For the present chapter, this means that phygital anthropologies should not merely describe the present configuration of bodies and platforms. They should ask whether different realities, different forms of presence, relation, and worlding, remain thinkable at all. This is also why Campagna's opposition between technic and magic becomes so fertile for the final movement of the thesis. "Technic's world" is marked by measure, unit, abstraction, information, and a condition of "no outside." "Magic's world," by contrast, moves through person, symbol, meaning, paradox, secret, initiation, and the crucial subjunctive of "as if." In another context this polarity might remain too schematic, but within the architecture of *The Metaverse and Its Double* it becomes a powerful heuristic. The thesis has been arguing throughout that immersive environments combine programmable space with ritualized threshold, calculation with wonder, platform protocol with participatory illusion. Campagna now makes it possible to see that this combination is not accidental. Metaversal environments are among the clearest contemporary places where technic and magic overlap: quantified infrastructures support symbolic initiation; data capture underwrites "as if" worlds; no-outside architectures coexist with the promise of passage into another reality.

At this point, the coherence of the whole technical-anthropological nucleus can be stated more clearly. Leroi-Gourhan as read by Stiegler show that technics is constitutive memory and organized exteriorization; Ferraris shows that digital environments generalize recording and convert embodied acts into documents and value; van Buuren keeps the phenomenal body and physical reality in productive tension, preventing reductionism; Morton expands the environmental horizon to withdrawn objects and hyperobjects whose scale destabilizes anthropocentric worldhood; Campagna reveals that reality itself is contested between technical and magical cosmologies, between measure and symbol, no outside and outside within. Each of these authors extends the anthropological field rather than replacing it. They force the thesis to admit that bodies and rituals alone are not enough; one should also think infrastructures, documents, nonlocal ecologies, ontological opacity, and competing world-formats. And yet, far from

diluting the dissertation's original wager, this section actually strengthens it. The more deeply one thinks technics, environment, and documentality, the less persuasive becomes the old separation between performing arts, visual arts, and technologies. For what this section reveals is that mediation has never been merely representational, and technics has never been merely instrumental. Technical supports remember; screens regulate access; documents produce social reality; hyperobjects reconfigure scale; magical cosmologies structure possibility; environments exceed local appearance. Under these conditions, theatre itself can no longer be treated as a bounded art form opposed to media. It appears, rather, as one historical condensation of broader anthropological and technical operations: staging, thresholding, doubling, collective address, regulated exposure, and embodied relation. XR and the metaverse belong to that broader field. They do not simply "use" performance; they reactivate, under conditions of technical exteriorization and environmental complexity, a much older nexus among bodies, supports, worlds, and rituals.

Conceptual Interlocutors and Background Frameworks: Lyotard, Foucault, Anders, Morin, Clarke

At this stage of the chapter, the analytical intent may require a further widening of the field. The anthropologies in the strong sense and the mediological and technical-anthropological nuclei have already shown that immersive media should be understood through bodies, images, ritualized thresholds, screens, environments, technical memory, documents, and competing reality-systems. Yet such a reconstruction would still remain incomplete if it did not also include the broader pressure field of thinkers who are not, strictly speaking, anthropologists of immersion, but who decisively shape the conceptual space in which phygital anthropologies become necessary. This is the role of Lyotard, Foucault, Anders, Morin, and Clarke. They belong to different disciplines and traditions, and the chapter should preserve that difference: Lyotard is approached here as a philosophical interlocutor on figurality, discourse, and the limits of systematization; Foucault as a thinker of heterotopia, apparatuses, and the spatial organization of

experience; Morin as a sociologist of mass culture and technical images; and Clarke as a crucial figure for the futurological and quasi-magical imagination of technics. Their importance lies precisely in the specificity of these positions, through which they widen the conceptual horizon of the chapter without dissolving into the anthropological field proper. They enlarge the field by making visible its unresolved tensions: between figurality and discourse, space and heterogeneity, human inadequacy and technological acceleration, technical images and everyday culture, science-fictional projection and magical appearance.

Jean-François Lyotard widely resonates here because he radicalizes the instability of the visible. As Carbone's reading makes clear,[218] *Discourse, Figure* opens with what the French philosopher calls "the bias of the figural," and the point of this move is to insist that the visible is irreducible to discursive order. The figural does not simply designate recognizable image-forms; it names opacity, disordering, phantom, hallucination, and above all a bond between vision and desire that exceeds the phenomenological reduction of vision to a purely perceptual domain. Carbone stresses that, for Lyotard, what is at work in the figural is not perception but desire, and that the figural introduces an "illegal mobility" into linguistic order, deconstructing not only discourse but the figure itself as stable recognizable form. This background is extremely important for the present dissertation because it prevents any easy treatment of immersive media as more intense perception. XR does not only give "more world" or "better access" to a visible field. It also mobilizes desire, projection, phantasmatic investment, disorientation, and opacity. That is one reason the thesis has repeatedly insisted that the virtual is not simply a technical category but a performative and symbolic one. Lyotard supplies a philosophical vocabulary for the non-transparent, desirous, and potentially hallucinatory surplus that accompanies immersive images. Lyotard also matters because he provides, from the side of philosophy, a limit to any fantasy of total control. In *The Postmodern Condition: A Report on Knowledge*,[219] his discussion of Laplace's demon and of the impossibility of complete definition is not a minor epistemological aside. It directly attacks the idea that exact knowledge of a system would yield perfect control over it. He argues that such an ideal remains theoretically conceivable but practically

[218] See the earlier chapter *Bodies*.
[219] Jean-François Lyotard, *The Postmodern Condition: A Report on Knowledge*. Translated by Geoff Bennington and Brian Massumi (Minneapolis: University of Minnesota Press, 1984).

impossible, and that attempts at total control are inconsistent because they lower the performance of the very systems they claim to optimize. For the present chapter, this is highly relevant to digital and immersive environments, which are often imagined as spaces of perfect calculability, total mapping, frictionless feedback, or predictive mastery. Lyotard reminds us that systems become opaque precisely where their control ambitions intensify. This supports one of the strongest underlying claims of the thesis: metaversal environments are not total worlds under complete technical governance, even when they present themselves as such. Their promise of seamless presentification and programmability remains crossed by chaos, disorder, excess, unpredictability, and the structural impossibility of complete measure.

If Lyotard introduces a figural and epistemic instability, Michel Foucault introduces spatial and dispositive heterogeneity. The dissertation has already used the Foucauldian concept of the apparatus to show that immersive systems are not limited to devices but belong to heterogeneous ensembles of discourses, institutions, regulations, architectures, and practices. In the present work, this point was stated clearly: immersive media have to be read as embedded in broader economies of power and knowledge, and not as merely sensory or technical occurrences. That Foucauldian line remains essential here. But in the present section, Foucault matters above all through his theory of heterotopia. In *Of Other Spaces: Utopias and Heterotopias*,[220] he defines heterotopias as "absolutely other" places, real sites that stand in a complex relation of reflection, inversion, contestation, or compensation with the ordinary spaces in which we live. He also proposes the mirror as the paradigmatic mixed form between utopia and heterotopia: a virtual unreal space opens behind the glass, yet the mirror exists materially and returns the bystander to the place they actually occupy. This formulation is immensely useful for the present dissertation, because it offers one of the clearest philosophical models for understanding immersive environments as simultaneously real and unreal, materially situated and virtually displacing, body-anchored and elsewhere-directed. Foucault's other crucial contribution lies in the fact that heterotopias are not all alike and do not function identically across time. He insists that every culture produces heterotopias, but that their forms vary, and he distinguishes crisis heterotopias from heterotopias of deviation. He

[220] Michel Foucault, "Of Other Spaces." Translated by Jay Miskowiec. *Diacritics* 16, no. 1 (Spring 1986): 22–27. Originally published as "Des espaces autres" in *Architecture / Mouvement / Continuité* 5 (October 1984): 46–49.

also notes that the same heterotopia can function very differently according to a society's historical synchrony and adds that heterotopias have the power to juxtapose several incompatible spaces within one real place. In this context, he explicitly names theatre and cinema: theatre stages a succession of alien places within the frame of the stage, while cinema constitutes a rectangular room at the back of which a three-dimensional space is projected on a two-dimensional screen. These formulations are extraordinarily applicable for this chapter. They show that scenic and screen-based heterotopias already belong to a longer history of "other spaces" in which bodies enter sites that are both materially real and spatially displaced. Immersive media do not invent this structure ex nihilo; they radicalize it by making the participant more thoroughly internal to the heterotopian arrangement. XR may therefore be read as an intensified heterotopic condition: not a pure escape from the world, but a real place that temporarily rearticulates one's relation to ordinary space, time, norm, and presence. Belting's use of Foucault confirms this relevance from within anthropology itself. In *An Anthropology of Images*, Belting explicitly invokes Foucault's heterotopias to describe the "virtual reality of images" as a technologically created realm different from and outside our world, and he connects this to cemeteries, gardens, museums, tourism, photography, and the larger interplay between place and image. The point here is not that virtuality is simply unreal. It is that images create counter-sites which re-establish the reality of familiar places by contrast while also opening alternative spaces of memory, loss, desire, and projection. This supports the dissertation's broader claim that metaversal space should not be reduced either to simulation or to fiction. It is better grasped as a heterotopian arrangement: a real technical and social site that folds alternative places, times, and relational possibilities into the lived present. The metaverse becomes legible, then, not as the abolition of reality but as a particular way of producing "other spaces" under platform conditions.

Günther Anders enters this field from another angle entirely, and for that reason enriches it. He is not here because he would offer an anthropology of immersion in any direct sense, but because his negative anthropology of technology names one of the decisive pathologies that phygital anthropologies should confront. Babette Babich's deep analysis of Anders[221] shows why. Anders insists that in technologically saturated

[221] Babette Babich, *Günther Anders' Philosophy of Technology: From Phenomenology to Critical Theory* (London: Bloomsbury Academic, 2022).

modernity we increasingly measure ourselves against our gadgets; we project ourselves "in the image and likeness" of the instruments we make, aspire to the status of the tool, and orient ourselves in the world through devices in ways that affect our eyes, minds, and world without our even noticing it. This is extraordinarily pertinent to the present dissertation. The metaverse is so often described as a liberating extension of agency, a richer environment for embodied participation, or a deepening of presence. Anders forces a more troubling question: what happens when technical systems become not only tools of human expression but standards against which the human begins to judge itself inadequate? What happens when embodiment is calibrated against machinic regularity, optimization, seamlessness, and computational order? Anders matters just as much because his negativity is not simple pessimism. Babich presents him as difficult to categorize precisely because his writings traverse anthropology, power, violence, situation, media, radio, television, and American postwar society; and she notes that his work may be read as an explicitly negative philosophical anthropology. The "negative" here is decisive. Anders refuses to define the human through plenitude, progress, or mastery. Instead, he foregrounds mutilation, shame, prosthesis, technological acceleration, and the unthinkability of what we ourselves produce. In one of the most striking passages of the study, technology appears as the engine of our ambition and as a signifier of the future that at the same time "shames us" by comparison, making us dream of a posthuman condition because we feel inadequate before the orderly power of tools and systems. This is a major background pressure on the final chapter. Without Anders, a theory of phygital anthropologies might too easily drift toward reconciliation: body and technics, ritual and platform, image and environment all smoothly reintegrated. Anders reminds us that technological worlds can also intensify self-alienation and comparative shame, and that our very fascination with immersive futures may partly arise from this Promethean wound. The relevance of Anders becomes even clearer in relation to images of the transhuman. Babich's discussion of prosthesis,[222] Lang's *Metropolis*, the robot ideal, and the cinematic morphing from human to machine shows that technical modernity has long staged the dream and nightmare of becoming-tool. Anders's "fragments" of mutilated soldiers, who already know that their prosthetic extensions are

[222] See also Ead., *Günther Anders' Philosophy of Technology: From Phenomenology to Critical Theory* (London: Bloomsbury Academic, 2022).

part of themselves, make visible a far darker genealogy of the extended human than the cheerful rhetoric of augmentation usually allows. Read against immersive media, this becomes an indispensable caution. The contemporary language of avatar, extension, augmentation, and embodied interface can too easily forget histories of violence, disability, dependency, and the unequal distribution of prosthetic necessity. A phygital anthropology that includes Anders will not abandon embodiment, but it will refuse to romanticize technological extension as such. It will remember that the relation between human and prosthesis is at once empowering, painful, comparative, and historically burdened.

Edgar Morin, by contrast, is not a philosopher of negativity but a sociologist of *the spirit of the time*—perfectly defined with the title of one of his most famous books. In the Italian edition *Lo spirito del tempo*,[223] Morin is presented as a still-productive analyst of the role of technical images in everyday life and of the capacity of mass media to determine a new culture. Andrea Rabbito emphasizes that Morin not only captured the spirit of the 1960s but also anticipated lines of research that later became central to visual culture studies, especially the focus on the centrality of images in daily life. The introduction further notes Morin's early hybridization of filmology, anthropology, and media studies, and insists that his attention to technical images—cinema, photography, television—already opened paths that remain useful in the age of digital media. This is crucial for the present dissertation because it situates immersive environments within a wider sociology of mediated everyday life. The metaverse is not just an exceptional or avant-garde medium. It is also part of the ongoing mutation of ordinary culture through technical images. Morin is particularly useful because he avoids both elitist disdain and naïve democratist enthusiasm toward mass media. In the preface of the 2006 Italian edition, he recalls that the debate around cinema, comics, periodicals, and television was already polarized in the late 1950s between those who despised mass culture as narcotizing distraction and those who saw it as democratizing uplift. Morin's own position arose from a more intimate immersion in mass culture and from a desire to understand its fascination rather than simply denounce it. That stance is highly relevant to the metaversal horizon of this dissertation. One of the risks in writing about XR is to remain trapped between promissory marketing and moral panic. Morin offers a third

[223] Edgar Morin, *Lo spirito del tempo* (Milano: Meltemi, 2017).

posture: one attentive to fascination, desire, repetition, stardom, technical images, and the everyday reorganization of sensibility, without thereby abandoning critical analysis. Phygital anthropologies require precisely this kind of posture if they are to remain adequate to the ordinary, popular, platformed dimensions of immersive culture and not only to its avant-garde or artistic instances.

Arthur C. Clarke finally completes this pressure field from the side of futurological imagination, exemplarily expressed by his famous "Third Law".[224] His *Profiles of the Future: An Inquiry into the Limits of the Possible*[225] unmistakably belongs to a mode of thought that surveys "the limits of the possible," extrapolates lines of technological development, and repeatedly places scientific and technological transformation at the threshold where it exceeds ordinary imagination. The book frames itself as an inquiry into the boundaries of possible futures, presents a timetable of coming transformations, and repeatedly moves through scenarios—planetary engineering, galactic-scale manipulation, invisibility, extreme abundance, radical communications—whose speculative energy lies precisely in their oscillation between technical plausibility and wonder. This is the real importance of Clarke for the present dissertation: he gives explicit cultural form to the idea that sufficiently advanced technics crosses the threshold of ordinary intelligibility and appears as magic. Clarke's importance, then, is not that he provides a philosophy of immersion. It is that he captures the promissory and quasi-magical rhetoric through which modern technological futures are culturally staged. In his pages, phenomena once reserved for occultism or fantasy—planetary engineering, transmutation, invisibility, prodigies that once "smacked of magic"—are steadily retranslated into the language of scientific possibility, even when they remain remote. This movement particularly resonates with the analytical proposal of this thesis. Contemporary discourse on XR and the metaverse often works precisely in a Clarkean register: it presents technical developments as astonishing enough to count as magical from within common experience, while at the same time insisting that they are not fantasy but the next realistic frontier of the possible. Clarke therefore supplies the chapter with an essential cultural hinge between technics and magic, one that should then be read critically through Campagna, Anders, and the anthropologies already discussed. He gives

[224] "Any sufficiently advanced technology is indistinguishable from magic".
[225] Arthur C. Clarke, *Profiles of the Future: An Inquiry into the Limits of the Possible* (New York: Bantam Books, 1972).

us not the solution but the rhetorical and imaginative atmosphere in which the problem appears.

Seen together, these five background interlocutors complete something the previous sections could not complete by themselves. Lyotard makes visible the figural, desirous, and disordering excess that prevents immersive images from being reduced to better perception. Foucault provides the heterotopian and dispositive logic through which immersive environments can be grasped as real-and-other sites of spatial and social rearticulation. Anders names the negative anthropology of technological shame and self-measurement against gadgets, reminding us that prosthesis and immersion can also intensify inadequacy and alienation. Morin situates technical images within the ordinary life of mass culture, helping to keep metaversal phenomena connected to everyday mediated sensibility rather than treating them as purely exceptional. Clarke, finally, condenses the promissory threshold where advanced technics appears magical and where the future is culturally staged as wonder. None of these authors is, in this chapter, an anthropology proper. But all of them are indispensable to the full ecology of concepts required by phygital anthropologies.

Returning to the History of Looking: Cousins, Belting's *Florence and Baghdad*, Debray, and the Closure of the Circle with *Gazes*

At this point in the chapter, after the strong anthropologies, after the mediological and screen-based nucleus, and after the broader pressure field of figurality, heterotopia, negative anthropology, mass-culture sociology, and futurological imagination, the argument has to return explicitly to where the dissertation began: *Gazes*. This return is not a backward step. It is the moment in which the whole path of the thesis becomes legible as a circle that does not simply close on itself but thickens. The dissertation started by asking how immersive media might be repositioned within a genealogy of the visible, and it did so by refusing to begin from computing alone. Instead, it began from Artaud's "virtual reality of the theater," that is, from a performative and ritualized notion of

virtuality that was immediately more than optical. From there, the thesis moved through the formation of visual culture as a field and through a series of authors who destabilized the neutrality of sight and the self-evidence of the visible. The point of this final return is therefore not to dissolve the anthropological expansion back into a "history of images." It is to show that the original problem of the gaze was already the place where anthropology, mediology, performance, technics, and environment were waiting to emerge. What looked at first like a state-of-the-art chapter on visuality was already, in embryo, a chapter on phygital anthropologies.

This is why Mark Cousins becomes especially applicable here. His *The Story of Looking*[226] does not offer a specialist genealogy of immersive media; its value is broader and more strategic. It presents the history of looking as a long, cumulative, unstable, and technologically transformed history that stretches from fire, contact, landscape, and cities to photography, cinema, television, Skype, surveillance, virtual reality, and augmented reality. Even the table of contents is revealing in this regard: after chapters on the beginnings of vision, the growth of the self, the city, science, empire, and the "overload" of modernity, Cousins ends with a chapter on "the everywhere" of the twenty-first century, explicitly including Skype, surveillance, VR, and AR. The structure of the book itself therefore confirms one of the key wagers of *Gazes*: immersive media do not arrive from nowhere, and they cannot be grasped only by examining contemporary interfaces. They belong to a much longer mutation of the visible. Yet Cousins's book is equally important because it resists any simple linear triumphalism. His history of looking is not the tale of progressive visual mastery. It is a history of fragmentation, overload, multiplication, trauma, proximity, distance, and technological alteration. Looking is never stable. It is always historically remade. This becomes most explicit precisely where Cousins reaches XR. In the sections on virtual and augmented reality, he notes that VR eliminates the frame provided by windows, paintings, and film, thereby generating a strong sense of immersion and spatial sublimity, while AR overlays a fictional world on the real one without replacing it. The latter, he writes, allows one "to see double," or rather to see two things at once. That formulation is of obvious importance for the title and overall argument of the dissertation. The metaverse is not simply another world replacing this one; it is a doubling condition, a coexistence of parallel or overlaid orders

[226] Mark Cousins, *The Story of Looking* (Edinburgh: Canongate Books, 2017).

of visibility, action, and attention. Cousins also insists that in VR the user largely controls the angle of vision, unlike theatre or cinema, and that AR "fits into" the surrounding environment instead of substituting for it. This is highly relevant to the thesis because it helps clarify a distinction that the entire dissertation has been laboring to elaborate: immersive media are not only about stronger images but about reconfigured relations among body, field, frame, and environment. When Cousins says that AR allows double vision and that VR reforms nearly every spatial experience discussed in his long history of looking, he is effectively naming the point at which the genealogy of vision itself reaches a threshold where it should become something more than a history of vision, i.e. a history of environment, embodiment, and overlap. In this sense, Cousins explicitly resonates with this analytical proposal because he refuses apocalyptic conclusions. In the same pages, after noting that digital seeing involves perceiving many things that "do not really exist," he insists that this fact is not in itself apocalyptic and that vision survives every storm. This is a subtle but important counterweight within the chapter. It prevents the final return to *Gazes* from becoming nostalgic, as if the advent of XR and AR had simply destroyed a once-pure relation to reality. The dissertation has also tried to avoid that temptation. Its point has not been that immersive media ruin the real by overlaying it with fiction, but that they intensify a much older condition in which reality and mediation are reciprocally implicated. Cousins gives a long-history version of the same thought: the forms of looking change radically, sometimes disturbingly, but sight does not thereby cease. Rather, it mutates, splits, and survives. This is why his work could be placed at the point where the anthropology of phygitality should reconnect with the original question of visuality without collapsing back into simple visual history.

If Cousins broadens the history of looking into a long and mutable human story, another focus on Hans Belting's *Florence and Baghdad: Renaissance Art and Arab Science*[227] performs a more precise but equally stimulating operation: it provincializes the Western history of the gaze from within. This is vital for the final architecture of the dissertation. *Gazes* necessarily began with a largely Western genealogy—Artaud, Warburg, Riegl, Panofsky, Benjamin, McLuhan, Agamben, Foucault, Debord—not because the thesis endorsed Western self-enclosure, but because it had to map the

[227] Hans Belting, *Florence and Baghdad: Renaissance Art and Arab Science* (Cambridge, MA: Belknap Press of Harvard University Press, 2011).

dominant conceptual path by which immersive media are usually understood. Yet a chapter called *Anthropologies* cannot leave that genealogy untouched. It should ask what the Western history of looking has excluded, naturalized, or misrecognized in narrating itself, following the example of Belting. In the introduction, he explains that his research on the history of seeing was originally limited to Western culture, and that the title *Florence and Baghdad* names a deliberate displacement: "Florence" for Renaissance perspective, "Baghdad" for Arab science, which profoundly affected the Renaissance. He explicitly argues that perspective art is based on a visual theory of Arab origin and that the word *perspectiva* belonged first to scientific visual theory before entering Renaissance art. This is not a minor correction. In some way it could changes the genealogy of the gaze itself. For the purposes of the dissertation, this intervention has at least three major consequences. First, it breaks the self-sufficiency of the Western narrative according to which perspective would arise from an internal development of European rationality and artistic innovation. If the mathematical and optical theory underlying perspective has Arab roots, then the genealogy of Western visuality is already intercultural and translational. Second, it reveals that what appears in art history as a purely pictorial achievement was inseparable from scientific and epistemological debates about light, rays, geometry, and perception. Third, it reminds us that the gaze is not simply a natural given which different cultures happen to depict differently. It is historically constructed through specific theories, architectures, conventions, and symbolic forms. All three consequences are crucial for *The Metaverse and Its Double*. The metaverse, too, is often narrated as the latest internal unfolding of Western media and computing culture. Belting's decentering move warns against this provincialism. It suggests that even the most canonical regimes of vision were already products of exchange, transfer, translation, and uneven appropriation. A phygital anthropology should therefore resist any narrow civilizational story of immersive media. Belting's book becomes effectively fruitful here because it does not stop at the claim that Arab science influenced the Renaissance.[228] It develops what he calls *Blickwechsel*, a shifting of focus or an exchange of glances between cultures. This is not simply comparative method in the superficial sense. It is a

[228] To deepen an original connection between Arab culture, art and media studies see Laura U. Marks, *Enfoldment and Infinity: An Islamic Genealogy of New Media Art* (Cambridge, MA: MIT Press, 2010) and Ead., "From Haptic to Optical, Performance to Figuration: A History of Representation at the Bottom of a Bowl." In *Islam and the Politics of Culture in Europe: Memory, Aesthetics, Art*, edited by Frank Peter, Sarah Dornhof, and Elena Arigita, 237–264. Bielefeld: transcript Verlag, 2014.

way of showing that "the gaze" is never singular and never innocent. Different visual cultures organize distance, image legitimacy, abstraction, ornament, bodily relation, and pictorial presence differently. The table of contents alone makes clear how ambitious this is: the critique of seeing in Islam, Alhazen's measurement of light, the Arab invention of the camera obscura, the transition from a theory of vision to a theory of pictures, Brunelleschi's measurement of the gaze, and finally the comparison of gaze in different cultures. For the concluding chapter, this matters because it helps prevent the concept of gaze from hardening into a universal anthropological constant. The point is not to deny that human beings look. It is to insist that the organization of looking is historically and culturally plural. That pluralization is one of the key conditions for moving from *Gazes* to *Anthropologies*. There is another reason Belting could re-enter here. In *Florence and Baghdad*, perspective is tied not only to geometry but also to theatre. One of the chapters is explicitly titled "Brunelleschi Measures the Gaze: Mathematical Perspective and Theater," and later sections refer to the architecture of the gaze, prospects on the stage, and the horizon as view through a window. This is extraordinarily important for the overall logic of the dissertation, because it loops back directly to one of its central claims: the relation between visual regimes and theatricality is not secondary or accidental. Even within the history of perspective, theatre is already there—not simply as an art influenced by perspective, but as one of the places where the gaze is architecturally, spatially, and socially organized. This confirms something the thesis has been arguing from the opposite direction. XR may need to be re-situated closer to theatre than to detached visuality; but theatre itself was always already implicated in the historical construction of visual space. The relation is reciprocal, not unilateral. This is why the final chapter cannot oppose performance and vision as separate genealogies. Belting's Florence shows that even the supposedly pure Western eye was already architectural, scenic, and staged. Belting's most penetrating contribution to this final return, however, lies in his treatment of the gaze as something culturally produced through pictures. In one crucial passage, he argues that the social practice of looking and the making of pictures enter into an "alliance," especially under the perspective model. Faces in paintings seem to exchange glances with us; portraits animate themselves only because viewers project their own present onto them; and the whole construction of the painting organizes not only bodies but also gazes according to the geometry of visual rays. In another striking

formulation, he speaks of a "theater of the gaze," kept going by Western society through continually renewed conventions. This expression could not be more relevant for *The Metaverse and Its Double*. It confirms from within visual history what the dissertation has been arguing from the side of performance and media theory: the gaze is not simply a passive optical act but a staged relation, a socially maintained fiction, a reciprocal choreography of seeing and being seen. Once this is granted, the passage from perspective painting to cinema, television, live transmission, avatars, and immersive environments no longer appears as a move from stable reality to unstable simulation. It appears as a series of transformations within a longer theatre of the gaze.

This point is decisive for reconnecting the entire anthropological expansion of the chapter to *Gazes*. The beginning of the dissertation had already argued that XR should not be understood merely as an upgrade in visualization, but as a set of problems concerning staging, embodied perception, operative media, and the redistribution of agency among bodies, sounds, lights, and symbols. Belting now makes clear that even the canonical history of the gaze contains this theatricality at its core. The social life of the gaze was never purely optical. It was animated by portraits, conventions, bodily projections, masks of life, stage-like proscenia, and viewer participation. On a similar level, Carlo Severi adds an important corrective here, since his analysis of primitivism shows that the modern intensification of the image was never merely optical, but depended on specific operations of gaze, affect, and spatial simplification. This is crucial for the present dissertation, because it confirms that the history of looking cannot be reconstructed as a purely internal evolution of visual forms: it should also include the asymmetrical operations through which intensity, alterity, and image-agency were projected onto non-Western objects and then reabsorbed into modern visual culture. In other words, the return to the history of looking no longer weakens the anthropological thesis; it reinforces it. The visual itself turns out to have been performative, relational, and quasi-theatrical all along.

Debray's re-entry at this point is equally essential, but for a different reason. If Belting pluralizes and decenters the gaze, and Severi problematizes it, Debray historicizes its large regimes. The title *Vie et mort de l'image* already announces why he belongs to this section: it is not only a history of the image but "a history of the gaze in the West." In the Italian framing of the book, this is strongly underlined: Debray reconstructs a

history of the image that is at once a history of Western seeing, and he does so by means of mediology, a perspective that deliberately unites what the West had separated—spiritual and material, subject and object, artisticity and technology. Thus, as a circle this theoretical move helps the dissertation to return from anthropology to the original state-of-the-art without narrowing the field again. Debray does not let us speak of gaze as if it were independent of institutions, technical supports, beliefs, and political orders. Nor does he let us speak of image as if it were self-sufficient. The gaze is always historically mediated. Debray is particularly useful for the final architecture of the dissertation because he insists on something the whole thesis has been circling since its opening with Artaud: each image-regime reorganizes not only what is seen but what counts as real. In the videosphere, he writes, the current state of the gaze retrieves many properties of the first image-regime; the visible becomes increasingly self-sufficient; and our current image fetishism resembles the remote age of idols more than the age of art. The modern or postmodern condition, in other words, is not simply linear progress beyond archaic belief. It is also a return, or better a reactivation, of earlier structures under new technical conditions. This point is extremely important for a thesis that began by arguing for a "different origin" of virtual reality and immersivity. Debray gives a mediological version of the same intuition: what appears most new often reactivates something very old. The videosphere is not just the end of previous media histories; it is also the re-emergence of archaic immediacy inside omnipresent technical mediation. This is where Debray could be used for linking *Gazes* to *Anthropologies*. If the current regime of images revives archaic traits, then the move from visual culture toward phygital anthropologies is not a betrayal of the history of looking; it is its logical completion. The thesis has repeatedly suggested that immersive media intensify ritual, threshold, attraction, wonder, embodied co-presence, and a certain return of magical or quasi-sacral structures under digital conditions. Debray's account of the videosphere supports this claim, though without nostalgia. He does not say that we have returned to idols in a pure form. He says that our current omnipresent mediations reactivate archaic phenomenologies of images. That means the latest technical images can only be understood if one is willing to think simultaneously about the very old and the very new. This is the temporal logic of the entire dissertation. Artaud's "virtual reality," ritual and theatre, screen and veil, portrait

and mask, XR and the metaverse: all are connected by returns, reactivations, and redistributions rather than by simple progress or rupture.

This return of the archaic also clarifies why the thesis has insisted so much on the notion of the double. Cousins's double seeing in AR, Belting's exchange of glances and masks of life, Debray's reactivation of archaic image-functions in the videosphere, and Artaud's theatre as the metaphysical double of reality all converge on one central intuition: immersive media do not simply replace one world with another. They produce doubles, overlays, reflections, re-stagings, and heterotopic counterparts. The metaverse is therefore not a second world in the trivial sense, nor merely a derivative imitation of the first. It is a historically specific mode of doubling reality, one that belongs simultaneously to the history of the gaze and to the anthropology of screening, ritual, memory, and technical exteriorization. That is why the title of the dissertation remains so exact. The metaverse is not intelligible without its double, and the double is not a decorative metaphor but a fundamental anthropological and mediological category. The return to *Gazes* also makes visible one final and decisive point. The first chapter of the dissertation had begun with a critique of any hasty march through "visual culture" as if it were a settled territory, and had instead proposed a return to the points where the visible is continually made and unmade, where image-practices implicate bodies, apparatuses, and forms of attention. With the help of Cousins, Belting, and Debray, we can now see that this was already a proto-anthropological move. To ask how the visible is made and unmade is already to leave behind the naïve history of images as mere objects. It is already to ask about bodies, practices, institutions, scenographies, technologies, and environments. What *Anthropologies* has done is not to abandon *Gazes*, but to disclose its deeper stakes. The history of looking was never only a history of vision. It was always the threshold where embodiment, technical mediation, symbolic power, social organization, and ritualized access intersected. Phygital anthropologies do not supersede that history; they reveal its latent breadth. For this reason, the whole circle can now be restated in a stronger form. *Gazes* showed that the genealogy of immersive media could not begin with software or optics alone and had to be reopened from theatre, ritual, and visual culture. *Bodies*showed that XR had to be understood through presence, gesture, embodiment, and performative feedback. *Environments*showed that immersive experience takes place within hybrid ecologies rather than neutral

spaces. *Simulations* showed that contemporary cases of reenactment, protest, platform spectacle, and theatrical remediation are all better understood as participatory and mimetic world-events than as mere representations. The anthropological sections of this conclusion then widened the field further through image, senses, embodiment, mimesis, social experimentation, digital habitat, screens, mediology, technics, documentality, ecology, and magical realism. Now, by returning to the history of looking with Cousins, Belting, and Debray, the chapter demonstrates that this widening was not arbitrary. It was demanded by the original problem itself. The visible, once taken seriously, always exceeds itself. It always leads beyond the eye, beyond the frame, beyond the artwork, beyond the medium in the narrow sense, and toward the broader anthropological field in which the human and its worlds are staged, doubled, and transformed.

Toward Phygital Anthropologies

As a consequent following, the chapter reaches the point at which all the previous strands could be gathered into an explicit theoretical proposal. Up to this stage, the dissertation has moved through a long sequence of displacements. It began by questioning the dominant genealogy of immersive media as if they were merely the newest stage in the technical refinement of vision. It then relocated XR closer to theatre and performance, not in order to deny its visual dimension, but to reveal that presence, gesture, embodiment, ritualized mediation, and scenic organization are constitutive of immersive experience. It next widened the problem through environments, simulations, anthropologies of images and senses, mimesis, social experimentation, screens, mediology, technical memory, documentality, ecology, and magical cosmologies. The task now is to state what all of this amounts to. The result is not one unified theory capable of dissolving every difference into a single vocabulary. It is a plural field that the title of the dissertation already announces with precision: phygital anthropologies. That plural is not stylistic. It is the exact form required by the object itself. The metaverse and its doubles cannot be thought through one anthropological lens alone, because what they expose is the convergence of several irreducible dimensions of human world-making. To call these anthropologies "phygital" does not mean adopting a fashionable label for the mixture of physical and

digital. Within the architecture of this dissertation, the term has a far more demanding meaning. It names a historical and experiential condition in which the "actual" and the "virtual," the material and the immaterial, the visible and the audible, the manual and the mechanically or computationally produced, no longer appear as neatly separable realms but as mutually constitutive dimensions of lived environments. Favero formulates this with particular clarity when he describes contemporary images as born from a "mash" in which actual and virtual, material and immaterial, visible and audible "meet and merge," giving birth to things and practices that are at once new and old. The phygital is therefore not simply a technological fusion. It is a condition of anthropological re-entanglement in which old dualisms become unstable and in which embodied life increasingly unfolds across interfaces, data traces, screens, projections, spaces, and technical supports that can no longer be sorted into separate ontological boxes.

This ontological condition could be considered as the reason why the dissertation's concept of the metaverse had already to be displaced away from the fantasy of a singular future object. In the chapter on the "Metaverse of Attractions," the metaverse was defined less as a fully immersive total environment than as a "developing ecology of practices, protocols, and platform dramaturgies" through which networked environments organize attention, presence, identity, and collective action. The same chapter proposed the "Metaverse of Attractions" as a phygital grammar of address, participation, and presence. Those formulations are essential now, because they clarify that phygital anthropologies do not arise from an abstract desire to widen media studies. They arise because the metaverse itself, once stripped of promissory rhetoric, is already an ecology of embodied protocols and staged relations, not simply a piece of software. If that is the case, then the relevant question is no longer what "the" metaverse is as a bounded medium-object. The relevant question becomes: what anthropological dimensions are being intensified, redistributed, and made explicit in these phygital ecologies?

A first answer suggests that phygital anthropologies should include an anthropology of images. Belting and Favero have made clear why. Images are not detachable visual contents floating free of bodies and supports. They are constitutive parts of the lived world; they live only in the relation among picture, medium, and body; and their presence always involves a productive ambiguity between material support and imaginative animation. Belting's reminder that the image is never present in the same

way as its medium, and that it requires the act of animation through which imagination draws it from the medium, remains decisive here. If immersive environments matter today, it is not because they have finally made images "real." It is because they intensify the very ambiguity of image-presence that was always already there: the crossing of absence and presence, medium and animation, support and bodily projection.

A second derived answer seems to propose how anthropologies of images would therefore begin from the proposition that images are not secondary decorations of life. They are one of the primary ways in which human beings inhabit worlds, bridge distances, negotiate death, and organize presence. But such an anthropology of images sounds insufficient if it remains separated from an anthropology of screens. Carbone and Lingua force a decisive correction here. Screens are not simply the media through which images appear; they are relational thresholds that structure showing and hiding, exposing and protecting, and they mediate our bodily relation with the environment. The arche-screen is transhistorical, but it is never outside history; its variations continually reconfigure the principle itself. Most importantly, the body is the proto-screen. This changes the entire logic of the dissertation's title. "The metaverse and its double" can no longer mean only that immersive media duplicate or counterpart reality. It also means that the screenic condition of the metaverse is doubled at its root by the body itself. Phygital anthropologies could therefore include a screen-anthropology in which technical screens are understood as redistributions of bodily functions rather than as alien overlays imposed on a natural body from outside.

A third dimension reveals an anthropology of embodiment and the senses. This follows from Plessner and Csordas, and it is also directly demanded by the thesis. The metaverse was repeatedly described in the dissertation as a quasi-theatre of presence, sensory intensification, and ritualized mediation. That formulation is already anthropological in embryo, because it shifts the emphasis from image-content to embodied relation. Phygital anthropologies should therefore begin from the fact that immersive systems reorganize the human sensorium rather than merely extending visuality. They modulate the eye-hand relation, proprioception, hearing, tactility, orientation, distance, and the ways in which the body experiences itself as both acting and undergoing. If the human is naturally artificial and if cultural experience takes place through embodied positionality, then immersive media cannot be read as optional

supplements to an already complete subject. They are more properly understood as intensified redistributions of an excentrically mediated bodily condition. This is why the phygital does not designate a new substance. It designates a new visibility of an old anthropological fact: that bodies are always technically, symbolically, and environmentally composed.

A fourth dimension appear as an anthropology of ritual passage and mimesis. Favero's use of rites of passage and liminality, together with Taussig's account of mimesis as sensuous contact and becoming-other, makes this unavoidable. Entry into an immersive environment is not simply a matter of receiving stimuli from a device. It is a threshold act in which one abandons certain stabilized positions, enters a liminal condition, and have to learn to inhabit the subjunctive "as if." At the same time, immersive simulations and reenactments do not simply copy reality; they activate its mimetic afterlife. They allow copies to touch originals, allow trauma or wonder to circulate through repeated forms, and allow bodily participation to become a mode of knowing. A phygital anthropology attentive to this dimension would treat platform events, avatars, reenactments, and immersive worlds not as poor substitutes for reality, but as ritual-mimetic operations through which worlds are tested, repeated, suspended, and transformed. That is one reason the category of attraction proved so fertile in the thesis: attractions do not simply show; they solicit and re-stage.

A fifth dimension would imply an anthropology of technics, memory, and exteriorization. This is where Stiegler, Leroi-Gourhan, and Ferraris appear emblematic. The phygital cannot be understood if the technical support remains external to the anthropological account. Human life is constitutively exosomatic: it exteriorizes gesture, memory, and knowledge into organized inorganic supports. In contemporary conditions, this exteriorization increasingly takes the form of recording, registration, and the production of documents about embodied action itself. Ferraris's documanity sharpens this point by showing that in the current technical regime human acts are incessantly turned into documents and that those documents become socially productive. Phygital anthropologies should therefore include not only bodies and images but traces, archives, logs, profiles, databases, and the infrastructural capture of action. The metaverse is not only a stage of presence. It is also a recording ecology in which presence leaves value-

bearing residues. Its anthropology is therefore inseparable from a theory of technical memory and documedial extraction.

A sixth dimension would indicate an anthropology of environments and scales. The earlier chapter on *Environments* had already prepared this move by critically mobilizing Uexküll. But the final chapter enlarges it through Morton and the screen theorists. Environments are not only perceptual surroundings tailored to an organism. They are also distributed technical and ecological formations that exceed local manifestation. Hyperobjects, infrastructures, persistent platforms, global networks, and extractive chains all remind us that the environment of immersive media is never only the one given to the senses in the moment of use. A phygital anthropology has to be able to think the local and the nonlocal together: the body in the headset and the planetary server farm; the tactile interface and the mineral supply chain; the immediate feeling of presence and the distributed technical systems that sustain it. Once this is admitted, the phygital appears not as a fashionable hybrid zone but as the ordinary condition in which intimate embodied experience is knotted to nonlocal environmental and infrastructural scales.

A seventh dimension advances an anthropology of social experimentation and collective form. Graeber and Wengrow make this dimension unavoidable. The metaverse should not be thought only as an experience or as a medium; it is also a laboratory of institutional and collective possibilities. Human societies have repeatedly moved between forms, redistributed authority, ritualized power, and experimented with temporary political arrangements. This historical plasticity means that platform environments cannot be interpreted as if their social meaning were already fixed by their technical design. Their anthropological significance depends on what forms of association, coordination, hierarchy, conflict, and improvisation they enable or constrain. Phygital anthropologies should therefore be political anthropologies as well. They should ask how embodied technical environments organize collectives, how they rehearse new forms of belonging or capture, and how they embed users in dependencies that shape what can be performed and what can endure. The thesis had already framed the “Metaverse of Attractions” in terms of protocols and platform dramaturgies; the plural anthropology now explains why that was necessary. One cannot isolate the image from the protocol, nor the ritual from the platform, nor the user from the infrastructural and social entanglement in which participation occurs.

These dimensions show why the plural should be maintained. To speak of a phygital anthropology would imply that there is one privileged access to the human in digital-physical environments. But the preceding chapters have shown the opposite. What the metaverse and analogous immersive environments advocate is the necessity of moving across several anthropological scales at once: the image, the body, the screen, the rite, the trace, the infrastructure, the environment, the collective, and the imaginary. These are not interchangeable perspectives. Nor can one be reduced to the others without loss. The image is not reducible to the document; the screen is not reducible to the body; the environment is not reducible to the interface; the ritual threshold is not reducible to the platform protocol; the social experiment is not reducible to the sensory event. The phygital names precisely this irreducible intertwining. It marks the point where the old academic partitions between visual studies, performance studies, media theory, anthropology, sociology, and philosophy appear insufficient to fully understand the object.

This is also where the title *The Metaverse and Its Double* acquires its strongest theoretical meaning. In the thesis, the double was already described as "metaphysically and anthropologically central," and the metaverse itself was redefined as the performative counterpart of reality, a space in which embodied presence, sensory intensification, and ritualized mediation converge. The double is therefore not a decorative metaphor. It names the structural fact that mediation does not merely represent reality from outside; it doubles it by staging its latent potentials, hidden relations, and alternate actualizations. In this sense, phygital anthropologies are anthropologies of doubling. They study the ways in which worlds are mirrored, overlaid, displaced, re-enacted, externalized, and inhabited as both here and elsewhere, actual and potential, bodily and technical. The double is not the opposite of the real. It is one of the real's most fundamental modes of anthropological articulation.

There is, however, one final and indispensable clarification. To propose phygital anthropologies is not to celebrate all contemporary technical convergences as emancipatory. The thesis itself had already warned against romanticizing attractions. It emphasized infrastructural fragility, platform constraint, surveillance, monetization, dividual fragmentation, and the capacity of spectacular forms to manage and commodify excess. Carbone and Lingua remind us that screens both expose and protect; Debray that

visibility can become a politics of evidence and a market of persuasion; Anders that the human may experience itself as shamed by its own technical extensions; Favero that the closure of the gap between body and image can be both subversive and capturable. A series of phygital anthropologies worthy of the name should keep this ambivalence central. It cannot be a philosophy of reconciliation in which body and technique finally harmonize utopianly. It should remain attentive to conflict, asymmetry, capture, extraction, and vulnerability, even while recognizing that new worlds of perception and association may emerge from these same conditions.

What this section has therefore made possible is a stronger restatement of the entire dissertation. The research did begin by asking whether immersive media are closer to the performing arts than to strictly visual genealogies. But the path of the thesis has shown that even this formulation is transitional. The deeper issue is not only where XR belongs within existing disciplines or artistic lineages. The deeper issue is that immersive media expose the insufficiency of those separations themselves. They show that bodies, images, rites, screens, apparatuses, documents, and environments have long developed together, even if modern knowledge later distributed them into separate fields. Phygital anthropologies name the attempt to think that long co-development again, now under conditions where it has become newly visible.

Final Reversal: If Media Were Born Within Ritual-Performative Environments

The final step of this final chapter can now be approached as the point at which several of the dissertation's preceding lines begin to converge. reverse the initial research question without abandoning it. The thesis began by asking whether immersive technologies and experiences might be understood more fruitfully through the performing arts than through strictly visual genealogies. Across the preceding chapters, that question received an increasingly strong answer. XR and adjacent immersive environments do indeed share with theatre a fundamental concern for embodied presence, gesture, scenic organization, affective address, sensory intensification, and ritualized mediation. The

metaverse, when freed from technological determinism, appeared less as a self-sufficient digital universe than as a quasi-theatre: a performative ecology in which bodies, screens, protocols, and attractions stage relations rather than merely display images. The concept of the "Metaverse of Attractions" condensed this result by identifying a phygital grammar of address, participation, and presence. At that point, however, the original question had already begun to change. Once one grants that immersive media are not merely visual and that theatre is not merely one art among others, the real issue is no longer where XR should be classified. The real issue becomes whether the modern distinctions among visual arts, performing arts, and media technologies were ever primary in the first place. This is the point at which the dissertation's concluding reversal becomes possible. The question is no longer only whether XR is closer to performance than to visuality. It is whether media themselves may have first emerged within ritual-performative environments and only later detached, specialized, and spread as apparently autonomous visual, technical, or communicational forms. This reversal should be stated carefully. It is not being proposed as a fully demonstrated historical theorem. The dissertation has not offered, nor could it offer within its scope, a comprehensive archaeology of all media from prehistoric ritual onward. But it has assembled, or at least attempted to assemble, enough conceptual and historical evidence to make the hypothesis not only thinkable but pressing. Once the visible is re-situated within bodies, rites, thresholds, screens, memories, technical supports, and collective forms, the very opposition between "media" and "ritual-performance" begins to look like a late abstraction superimposed upon a more originary entanglement.

Artaud already announced this possibility in the inaugural gesture of *Gazes*. His "virtual reality of the theater" did not name simulation in the modern technological sense. It named an operative layer of reality in which gestures, lights, sounds, symbols, and bodily forces act directly upon participants. Theatre, for Artaud, is not a frame for contemplation but a laboratory of transformations, an alchemical and ritual field where the real is re-staged in order to expose and intensify it.[229] The dissertation began there because Artaud made possible a different origin for virtuality and immersivity: not in calculation or optic enhancement, but in the performative organization of bodies and

[229] The verse "Cinema, heir of alchemy, last of an erotic science" (Morrison 1971: 87) from *The Lords: Notes on Vision* by Jim Morrison could be considered an echo of this idea. It is telling to notice its perfect permeability with the whole theoretical proposal of the present work.

symbols. The final reversal now reveals the deeper stakes of that beginning. Artaud was not only a useful precursor to immersive media. He was one of the figures who made visible that mediation may have been performative from the start—that is, bound to acts, rites, sensory assault, and collective trance before it became stabilized into the regime of picture, frame, and transmission.

Belting's anthropology of images, again, provides one of the strongest supports for this reversal. The image, in his account, does not arise first as aesthetic representation but at the intersection of body, medium, memory, and death. The funerary image is not "art" in the later sense. It is a ritual answer to absence, a substitute body, a medium of re-presencing. Likewise, the mask does not merely conceal; it produces a face, stages a person, and negotiates the border between life and death, absence and presence, human and other-than-human. If images thus originate in rites of embodiment and substitution, then mediation could be considered not first a matter of optical representation but a matter of making effective what is absent, regulating contact with forces that exceed ordinary life, and supplying bodies-on-loan where no living body can remain. That is already a ritual-performative environment, and not a merely visual one. The later history of pictures, portraits, and screens does not abolish that origin; it redistributes it.

Carlo Severi makes this final reversal even more plausible by showing that the image becomes effective not first as detached representation, but within ritual spaces of memory, belief, and action. His "object-person" does not function as a simple substitute for a human being; it acts as a plural and composite figure, "more like a crystal than a mirror," acquiring agency within a shared space of thought structured by narrative, ritual, and visual belief. This is highly consequential for the argument advanced here: if images and objects become alive, memorable, and operative within such ritual-performative environments, then the later emergence of media as apparently autonomous visual or technical forms may be understood less as an absolute beginning than as a historical detachment from older spaces in which memory, belief, presence, and action were still inseparable.

Carbone and Lingua push the same conclusion from the side of screens. The arche-screen is not a recent device but a transhistorical principle, continually reconfigured by its historical variations. It is structured by the inseparable pairs showing/hiding and exposing/protecting, and it is rooted in the body as proto-screen. This matters because it

means that screening functions do not begin with cinema or television. Nor do they begin with neutral interfaces. They arise from anthropological operations already present in skin, shadow, veil, hand, shelter, and scenic partition. A screen protects by covering in front, but in doing so it also selects and reveals. It regulates access to excess. It creates a threshold. This is especially clear in Carbone's etymological and historical account of the screen, where phantasmagoria, shadow theatre, and Plato's cave already show the ambiguity of concealing and showing. Once this is granted, the history of media no longer begins with representation alone. It begins with the ritual and scenic management of visibility, distance, and force. Media, in this sense, are later technical elaborations of a much older screenic and performative condition.

Debray's mediology confirms this by insisting that the image always mediates between visible and invisible, life and death, presence and substitution, and by reconstructing the long passage from logosphere to graphosphere to videosphere. The importance of Debray for the final reversal lies not only in his periodization, but in his refusal to detach images from the institutions, beliefs, supports, and social mechanisms that make them operative. If the videosphere reactivates archaic traits under contemporary technical conditions, then the latest digital and immersive environments cannot be understood as the simple triumph of new images over old rituals. They are rather the contemporary reorganization of older image-functions within new technical infrastructures. The path from idol to art to digital simulation is not one of pure secularization or progressive rationalization. It is also a path of repeated redistributions of sacrality, authority, charisma, and presentification. The media history of the West, read mediologically, thus points back toward ritual rather than away from it.

Plessner and Csordas make the reversal even more compelling because they show that the human is never simply a spectator confronting already constituted forms. The human is excentrically positioned, naturally artificial, and sensorially plural; culture arises from embodiment rather than descending upon it from above. Csordas's insistence that the body should be treated as the existential ground of culture, and his suggestion that virtual reality acts as a cybernetic enhancement of dramatic and performative techniques, both support the idea that mediation belongs to embodied practice before it becomes objectified as medium. If human beings make sense of the world through embodied thresholds, and if ritual and drama are among the primary cultural techniques

for organizing that embodied sense-making, then it becomes increasingly plausible that what later count as "media" first circulated within environments where bodily participation, sensory reorientation, and collective enactment were already primary.

Taussig and Favero lead to the same conclusion from different directions. Taussig shows that images are never merely visual likenesses; they are contactual, sensuous, and often effective because body and image interpenetrate. The move "into the interior of images" and the conversion of the eye into a means of contact indicate that mimetic efficacy is not born with digital interactivity. It is an old anthropological capacity. Favero, for his part, explicitly interprets immersive environments through rites of passage, liminality, and the closure of the gap between observer and observed, self and world. If entering an immersive environment resembles ritual transition and if the power of images lies not in detached viewing but in bodily placement within them, then the old anthropological field of rite, initiation, atmosphere, and world-threshold appears not as a secondary metaphor for media use, but as one of its most archaic conditions. The virtual does not first appear when a machine simulates a world. It appears when a community develops techniques for entering another order of presence without leaving this one behind.

Graeber and Wengrow broaden this final reversal by reminding us that ritual is never only symbolic. It is institutional, spatial, temporal, and political. Their examples of seasonal alternation, ritual redistribution of authority, and social movement between forms show that ceremonial and performative arrangements have long been among the major means by which human groups experiment with collective order. If media are later differentiated out of ritual-performative environments, then this differentiation would not concern images alone. It would concern the detachment of techniques for organizing attention, synchronizing bodies, redistributing authority, regulating access, and staging common worlds. In other words, the emergence of media would be inseparable from the emergence of collective techniques of coordination and variation. Modern platforms, with their protocols, permissions, audience metrics, synchronized events, and spectacular thresholds, may then be seen as late and technical descendants of these older operations rather than absolute novelties.

The technical-anthropological authors make the same reversal thinkable on yet another level. Stiegler's Leroi-Gourhan shows that technics is constitutive memory and

that the technical support of memory conditions the elaboration of knowledge itself. Ferraris adds that contemporary technical environments turn embodied acts into documents and convert presence into recordable traces. Campagna, finally, radicalizes the issue by proposing that technic and magic are not simply different techniques but competing reality-making cosmologies. This is especially important. If magic is not the primitive shadow of science but an alternative world-making force, and if technic is itself a cosmogonic regime rather than a neutral set of means, then the distinction between "ritual" and "media technology" becomes even less stable. Both are modes of reconstructing reality; both are ways of organizing what can appear, what can be done, and how presence can be restored or transformed. The metaverse, under this light, is not only an immersive interface. It is a contemporary site where technic and magic overlap: programmable constraint and symbolic initiation, data capture and wonder, serialization and "as if." That overlap suggests that the ritual-performative and the technical were never simply successive historical stages. They are deeply entangled modes of world-production.

This is also where Clarke's famous third law becomes newly meaningful. In futurist discourse, the threshold at which advanced technics appears magical is often treated as a rhetorical curiosity or a sign of technological sophistication. But from the perspective of this dissertation, that law can be re-read more deeply. It names not only the ignorance of the observer before technical complexity, but the structural proximity between technological and ritual-magic regimes of appearance. *Profiles of the Future* is an inquiry into "the limits of the possible," a survey of frontiers where ordinary categories fail and the future appears as wonder, impossibility, or fabulous transformation. What later condensed into the third law therefore belongs to a much broader cultural logic: advanced technics reactivates the anthropological atmosphere of magic because both concern thresholds of reality, access to hidden powers, and the reorganization of the possible. Clarke's law does not prove that technology is secretly magic; it reveals that modernity has never ceased to imagine its most advanced media through a magical horizon. This is why his place in the chapter is not ornamental. He crystallizes, in a formula, the cultural symptom of the very entanglement the dissertation has been reconstructing historically and anthropologically.

If all these lines are taken together, a final reversal can now be stated more precisely. Media may have been born, not as autonomous channels for the transmission of images or information, but within ritual-performative environments whose primary functions were to regulate the relation between bodies and invisibles, presence and absence, life and death, self and world, group and threshold, danger and protection, memory and embodiment. In such environments, masks, veils, shadows, chants, gestures, scenic partitions, bodily disciplines, and substitute images would not yet be separated into "art," "religion," "communication," and "technology." They would belong to one broad field of anthropological operations. Only later—through long processes of social differentiation, institutional specialization, technical refinement, and epistemic partition—would some of these operations detach and stabilize as what modernity calls media, others as performing arts, others as visual arts, others as religious rites, others as communicational devices. The hypothesis, then, is not that media and ritual or performative once happened to meet. It is that their separation is historical, and their entanglement older.

This hypothesis also explains why the earliest chapters of the thesis, while framed as a re-reading of visual culture, were always already moving beyond visual culture. Warburg, Riegl, Panofsky, Benjamin, McLuhan, Agamben, Foucault, Debord: none of these figures was simply being assembled to produce another history of images. They were needed because each, in different ways, destabilized the neutrality of sight and pointed beyond the image-object toward pathos, distance, symbolic form, social unconscious, environmental mediation, apparatus, or spectacle. The path from *Gazes* to *Anthropologies* was therefore not a departure from the original research. It was its unfolding. Once the gaze is no longer naïvely optical, once the image is no longer a self-sufficient object, once the screen is no longer a neutral surface, and once technics is no longer merely instrumental, the anthropological field necessarily opens. And once that field opens, the initial question about XR and performance can be reversed into the stronger hypothesis about the ritual-performative birth of media themselves.

At this point, the title of the dissertation can be understood in its full force. *The Metaverse and Its Double* does not simply name the coexistence of a platform world and an external real world. It names the persistence of doubling as a primary anthropological logic. Theatre is the double of reality not because it copies it, but because it stages its

hidden structures. The metaverse becomes a double not because it substitutes for reality, but because it intensifies and re-externalizes one of reality's oldest conditions: its dependence on mediated, ritualized, embodied, and technical re-staging. The double is therefore both anthropological and metaphysical. It belongs to the human need to produce second bodies, second spaces, second times, second selves, and second worlds through which the first may be exposed, transformed, protected, remembered, or contested. Once this is understood, the metaverse no longer appears as the futuristic exception to human history. It appears as one of the latest and most explicit crystallizations of a very old dynamic.

The final claim of the chapter can thus be formulated in the plural and without triumphalism. What this dissertation calls phygital anthropologies are the converging lines of inquiry required to think the co-development of bodies, screens, images, rites, technical supports, environments, social forms, and reality-constructions under contemporary conditions. Their necessity arises because immersive media make visible something that was long obscured by the partitions of modern knowledge: that the human has never related to reality except through embodied, mediated, and collectively organized thresholds; that technics and symbolization have always been entwined; that the sensory and the social cannot be fully separated; and that the real itself is not accessed once and for all, but continually reconstructed through doubles, screens, rituals, and operative simulations. The metaverse is decisive, then, not because it ushers in an unprecedented posthuman future, but because it compels us to see again what was always already there. It is less the end of a history than the place where many long histories become simultaneously legible.

What began, then, as a question about XR and the performing arts ends as a question about media and human condition itself. Thus, a final question remains as a genuine research program, the one this conclusions' chapter intentionally leaves open. The following question suggests that the next task is no longer simply to classify emerging technologies, but to rethink at the root the history of mediation, the genealogy of what we call "reality", and the anthropological conditions under which worlds are made present, doubled, and shared:

> *What if media were born within ritual-performative environments, and only later exited them by becoming autonomous, specialized, and diffuse?*

Traces

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C.A.P.E. Tohoku. Created by CREW. Immersive performance. 2011.

Come, Fur(r)ies, Dance: Desire and Ritual. Directed by Rory Willats. Devised hybrid lecture-performance. Theater Arts eXperimental Theater, Santa Cruz, May 26–28, 2023.

Come, Fur(r)ies, Dance: The Body. Directed by Rory Willats, choreography by Kat Hickey. Performance experiment. Theater Arts eXperimental Theater, Santa Cruz, May 16, 2023.

Crash. Created by CREW. Immersive performance. 2004.

EUX. Concept and direction by Eric Joris. Immersive performance. CREW, 2008.

Festen. Il gioco della verità. Directed by Marco Lorenzi. Il Mulino di Amleto / TPE – Teatro Piemonte Europa / Elsinor / Teatro Stabile del Friuli Venezia Giulia / Solares Fondazione delle Arti. First performance, Teatro Astra, Turin, May 31, 2021.

Held in Human. By Taavet Jansen and Liis Vares. Interactive hybrid installation/performance. EKA Gallery and online platform, Tallinn, 2023.

Memento. By Tambet Tuisk and Taavet Jansen. Hybrid performance. e¯lektron, 2023.

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Over the Rainbow. Directed by Craig Quintero. Riverbed Theatre Company. Venice Immersive, 2023.

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Terra Nova. Concept and direction by Eric Joris and Stef De Paepe. Immersive live-art performance. CREW, 2011.

The Under Presents: Tempest. Written by Samantha Gorman. Live interactive VR theatrical experience. Tender Claws, 2020.

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Filmography

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Bloodless. Directed by Gina Kim. 2017.

Comfortless. Directed by Gina Kim. 2023.

Così è (o mi pare) (2021). Directed by Elio Germano. 2021.

Dog Day Afternoon. Directed by Sidney Lumet. 1975.

Festen. Directed by Thomas Vinterberg. 1998.

Lun Hui (Samsara). Directed by Hsin-Chien Huang. 2021.

Montegelato. Directed by Davide Rapp. 2021.

Sesso e volentieri. Directed by Dino Risi. 1982.

Solaris. Directed by Andrei Tarkovsky. 1972.

Soylent Green. Directed by Richard Fleischer. 1973.

T.V. of Tomorrow. Directed by Tex Avery. 1953.

Tearless. Directed by Gina Kim. 2021.

The Matrix. Directed by Lana and Lilly Wachowski. 1999.

The Wild One. Directed by László Benedek. 1953.

The Woman in the Window. Directed by Fritz Lang. 1944.

Scarlet Street. Directed by Fritz Lang. 1945.

Vajont. Directed by Iolanda Di Bonaventura. 2020.

Vertigo. Directed by Alfred Hitchcock. 1958.

Works of Art

CARNE y ARENA (Virtually Present, Physically Invisible). Alejandro G. Iñárritu. Virtual reality installation. 2017.

Film Ambiente. Marinella Pirelli. Environmental film installation. 1968–69.

Humain Trop Humain (HTH) Rodrigo Garcia. Transmedia performance project. 2014-on going.

MetaPhase. Giusy Caruso and LWT3. XR performance project. 2023.

Peaceful Places. Margherita Landi and Agnese Lanza. VR project. 2021.

Quintet of the Astonished. Bill Viola. Video installation. 2000.

Teatro Continuo. Alberto Burri. Public artwork / scenic device. 1973.

The Greeting. Bill Viola. Video installation. 1995.

The Third Memory. Pierre Huyghe. Video installation / film. 2000.

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