Francesco Galli

"DESIGN" IS POWER
THE DARK SIDE

Critical Thinking through
NEGOTIATION, POLITICS and LEADERSHIP

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His critical thinking lie at the interception between **Leadership**, **Power**, **Creative** and cultural industries and **International Networks**, with focus in Asia and South America.

Critical thinking for adaptive leadership must "design" three directions that take into account:

(1) that leadership thinking s not necessarily accessible to all experts

(2) that while practical and professional skills are a necessary ingredient, adaptive leadership thinking capabilities are mainly activated through dedication to an ongoing process of learning and leading

(3) that this implies facing the uncertainty and the dark side of any given system, anticipating, manipulating and abducing rather than reacting to change, anomalies and paradoxes.

Cover image:
Gordian Knot
Myth associated with Alexander the Great, a race of priest-kings allied to the unidentified oracular deity (333 BC).

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Power tends to corrupt, and absolute power corrupts absolutely.
The Lord Acton

STRUCTURE

Agamennon Mask
A gold funeral mask discovered at the ancient Greek site of Mycenae
Mycenaean civilization (1600–1100 BC)

...AN EVOLUTIONARY PERSPECTIVE

Marco Maiocchi
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When do humans start with design activities? To answer to the question, it could be useful to have a very quick look on the history of humans, since the prehistoric age.

At the beginning, many hundreds of thousand years ago, a *homo sapiens* appeared in a central-east part of Africa, spreading overall in the world; he, as many monkeys and other animals do, was able to create tools, using primitive but slowly evolving technologies.

Commerce, as well as wars, put in contact different cultures, making knowledge and technology grow; improved technologies allowed to produce better and finer objects and tools, but the objects by artisans were expensive; more, their quality was strongly related to the knowledge, the experience and the capability of their authors, and unequal also in the production of the same craftsman.

The substitution of muscular force with mechanics improved the production, reducing costs, and widening the quantity of people able to access to goods; later, the production organisation, with assembly lines, increased more and more the quantity of developed goods, reducing more and more the prices.

This new organisation of the work shifted the production knowledge from the heads of the men to the production processes, transforming artisans into workers; the quality of the products went largely dependent on a complete and accurate initial project: *industrial design* started.

It was easy to replicate a similar approach. So, the diffused availability of capitals allowed many companies to compete on the same market segment, producing, more or less, similar goods at the same prices: the competition required then some kind of differentiation.

This happened through the transformation of *industrial design* into *design*, that is the capability of projecting goods affordable, aesthetically pleasant, able to "communicate" emotions to the customers.

But after having filled all the possible customers with any possible objects, it was necessary to convince them to discard the old goods, despite still working, to buy similar goods, but "new": it has been invented the "consumer".

So, while the designer started to increase the technical quality of the objects and to give them a communication capability, able to express the contemporary culture, and to make their beauty perceivable, now the role of design changed; because the need is to make the previous objects outmoded and no more desirable, many designers tend frequently to astound the buyer with effects, no matter about the usefulness of the goods. So, we buy toilet brushes with winking shapes, unlikely squeezers not working but elegant, kitsch table-dwarf in plastic for our balcony, and a second or a third smartphone for taking "smarter" pictures that we will never print nor look a second time, happy just for our *repraesentatio praecox*.

More, while the initial industrial designer was involved just in the industrial production, now designers have spread everywhere, and we see product designers, fashion designers, service designers, emotional designers, communication designers, food designers and so on, with masters and courses feeding all the possible fields, including *when everybody design*.

Victor Papanek is right: most of the design, today, has the goal to induce the customers to buy, with money they haven't, good, they don't need, just to show to others, that don't care, what they possess[1]. This kind of design fulfils the task to build a class of consumer, to make producers richer and richer, not to improve our life. As a matter of fact, our life is worsening: following Jappe and Latouche[2], our society is not a society of abundance, but of frustration,... otherwise we will not consume, and, more, the growth rate of frustration is always bigger than the economic growth. We are influenced to avoid the self-limitation of our needs. The last society of abundance has been the one of the hunters-gatherers of the Paleolithic era, working a couple of hours per day, and spending the rest of their time by dancing, playing, observing the nature and so on.

In our current world, only a minority is allowed to achieve the upper levels of the Maslow's pyramid, and those who are denied the success can only buy the symbols of that: a new sports car, a new smartphone, or a new hair colour. And, presently, design induces us in doing that.

The initial industrial designers positively changed costs and quality of the goods, for the advantage of the customers; the subsequent designers made those goods ergonomic, affordable, aesthetically appreciable, respectful of the environment, for a better satisfaction of the users. Today a large part of design is designing a new society, for the advantage of the rich producer, not for the final user.

What we should desire in not related to design tout-court, but to a *responsible design*.

The goods we buy present at least three components: *technology*, *usefulness* and *aesthetics*, and those are the aspects presently considered by most of the designers.

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1   Victor Papanek, *Design for the real world: Human Ecology and Social Change*, Pantheon Books, NY, 1971.
2   Anselm Jappe, Serge Latouche, *Pour en finir avec l'économie. Décroissance et critique de la valeur*, Libre & solidaire, 2015

But design is not simply a discipline towards production. Following Christopher Alexander, an architect, a designer has a hard task: to project things that will change the world and, at the same time, to project that new world changed by those things[3]. Again, a designer project a new society, also simply designing objects and their way of use; and for this reason responsibility is so important. How many *responsible designers*, how many "masters" could we observe today?

We have still good designers, good design schools and a lot of products with an excellent design, but the most famous designers seem to follow the road of the success in the audience, not in the responsibility of their work. It seems that the goal of the typical today designer is to astonish the user, as a baroque poet, such as Giovan Battista Marino that, in the XVII century wrote: *The purpose of a poet is just wonder/(I speak about excellence, not of clumsy)/if you cannot amaze, use currycomb*[4].

Today, in many cases the name of the designer becomes as the signature of an artist: a product is not valid for its design, but for the name of the designer, no matter how good the result is!

Of course, it seems easy to break the circle, reducing the useless consumption, coping just with the relevant qualities of the objects, avoiding to use the designers as picklocks for influencing the people behaviours; but things are not so simple: our world is based on the economy, on the economic growth, on the GDP's, and we all have a strong pressure in buying anything. More, the local economies are dramatically bound together, in a globalized world, and the natural tendency to welfare seems to impose a continuous GDP growth. The commerce is globalized, the finance is globalized, and the interruption of the circle *produce – earn money - buy – discard ask for new product – produce* can affect our capability to survive in the current world.

But, despite the diffused globalisation, human rights are still local, and, more, the richness generated by consumerism remain in the pockets of few persons: there is no richness distribution at all, and inequalities have always grown.

Maybe we will not be able to change the role of design toward a better responsible behaviour.

At least let us know and understand the *dark side of design*.

For this reason this book is so important: unveiling what *design* is today, we can understand how and how much a designer is fighting in the market arena, measuring his leadership, together with politics and negotiation capabilities. Today design is forging our society, not objects. You must know it, both as an actor of design and as a consumer. Thankyou, Francesco.

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3   Cfr. Christopher Alexander, *Notes on the Synthesis of Form*, Harvard University Press, 196
4   The original text "È del poeta il fin la meraviglia / (parlo de l'eccellente e non del goffo): / chi non sa far stupir, vada alla striglia!" is part of a sonnet sent to a rival poor poet, Gaspare Murtola.

DESIGN
DARK
DESIGN
SIDE
POWER

ANOMALY

Change is the only constant
Heraclitus, circa 500 B.C.E.

"Design" has witnessed a transformation in its validity, scope and methods, passing from being an essentially craft related discipline towards representing a process and system of thinking (Cross, 2001) (Findeli, 2001) (Lawson, 2006). As a consequence, more recently the attention shifted from the process involved in the disciplinary practice, as a mindset and attitude and more recently to the disruptive potential approach that can be activated. Nevertheless many issues that stay at the very foundation of the discipline have been neglected or simply have not been taken into consideration. Perhaps one of the most powerful, and not fully understood, definitions of this power comes from Victor Papanek and states that "design [is] a conscious effort to impose meaningful order"(1985). Interesting enough the definition refers to an authoritarian act of imposing rather than finding a meaningful order. The context in which the meaning of "design" activities evolve will therefore be shown as a stimulus and not a determinant in the thinking process, emphasizing the autonomy of the constructed thought in continuous change according to the circumstances (Maturana, Varela, 1992).

The research starts from the hypothesis that this creative act has a still explored dimension that refers to the power dimension that can be unveiled and maybe exercised through it. This assumption helps us focus on the contrast between the "visible" side of that involves all its conceptual or practical manifestations, and a hidden or "DARK SIDE" that deals with the politics and power play, but that however has a major influence in the actual production process.

The book is structured along the following research questions:

- How to acknowledge, anticipate and negotiate the power flow in the creative industries discipline?
- How to understand the cycle of power activation, manifestation and preservation?
- How to coach and empower an adaptive, leading and learning vision in creative industries education?

The argument is based on the assumption that the act of "change" doesn't have a positive or negative meaning, but it is simply necessary and present in each social and organizational system. In this respect the concept of antifragility, defined by N. Taleb as the capability to embrace randomness and uncertainty generated by the creation, preservation and destruction of power and being capable to navigate rather then oppose them (Taleb, 2012).

The book will unfold in three parts and the concept of power is introduced and studied in three instances: its potential, manifestation and preservation in a cycle immersed within a self-generated, autopoietic system (Varela, 1984). One of the main concerns is to argument the importance of the study of power in creative sectors from a multitude of perspectives, integrating theoretical insights from biology, psychology, sociology, social and political science with organizational and war theories. The research methods are specific to grounded theory in which the hypothesis is supported by a main, "grand" theory that is integrated with, secondary ones, and has been tested in educational training settings.

First part concentrates on the visibility of the power dynamics within a autopoietic system and the discovery through observation of the characteristics and quality of the interactions within the system. The **POWER** is explained in its latent dimension of concealed or underlying patterns of potentials (Rummel, 1979), which await the creation of proper tensions. It is underlined how an important role is played by the figure of active observer, determining the perception of the potentiality and influencing the level of entropy by introducing a factor of disorder. This helps anticipating the emergence of creative leadership role.

Second part introduces the activation of power and the conflict process that plays a role in the passage from the latent mode to its manifestation. In this chapter the role of the leader will be shown as determinant for the activation of power. The different types of leadership will be explained not only in terms of engagement but also in terms of influence, manipulation, and creating perturbation and controversy (Latour, 1988) for the scope of inducing a power flow and provoke its manifestation. This brings forward one of the principles of martial arts that makes use of the force displaced by the opponent to create a momentum in one's own advantage.

Third part tackles the tensions put in movement by the power or more precise the manifestation of such forces in provoking actions. In this part the following questions will be addressed: first how to influence and control the manifestation of power with criticism, second how the critical perception and cynicism (Sloterdijk, 1988) can change the meaning of the power manifestation, and third how to propose new meanings in the state of ambiguity and entropy created as a consequence of the manifestation.

Criticism is shown as an important element to induce conflict, which acts as a balancing element between disruption and destruction. In this circumstance creative leadership can be seen as providing navigation insights rather than tracing clear directions. The main difference between the two concepts stays in the versatility and adaptability of the navigation metaphor that introduces the importance of imagine anomalies and chance seeking (Bardone, 2012) in the leading-learning process.

The conclusion proposes a different meaning of the creative act that as a provocative activity that most of the time induces conflict and creates problems. To support this perspective it will be explained how change provoking processes have to be supported by **empowerment** activities in the research and in **education.** In this concern it is explained how seeing "design" as power is particularly relevant at advanced **coaching** levels (Dreyfus & Dreyfus, 1980).

This allows to draft an unfinished model for **ADAPTIVE LEADERSHIP** (Heifetz & Linsky, 2003) and experiential leading & learning training (Cooksey, 2003). By comparing the different methods in research it is suggested that our theoretical results contribute to an upcoming generation of research methods that focus on learning and leadership.

Finally it is suggested that future work exploring the nature of power flow in the act of "design", can take into consideration the paradoxical contradiction between its **POTENTIALITY** and its **PRESERVATION** of the power. (Agamben, 1995).

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DISCIPLINE

EVOLVE

BEHIND

POTENTIAL

ANOMALY

SPECULATIONS

Nowadays we are used to think of "design" in terms of the quality and beauty of the tangible or intangible artifacts that are generated by an industrialized system. Being objects, graphic representations, interfaces or services, the main difference between craftsmanship and "design" stays in the replicability and scalability of the proposed solution measured against an existent market and its hierarchical dynamics. This implies an order that on the surface seems to be naturally stirred by the so-called "taste", or a series of trends that reflect the preferences of the overall public; however, looking closer, all the production involves a carefully controlled balance driven by economic, politic and social interests.

This change of perspective puts "design" in a historical perspective in which methodological, political, and theoretical positions co-exist and are intertwined (Dilnot, 1984). While a lot has been written and said about the emergence and evolution of the "design" as a social phenomenon, (Dilnot, 1982) as an agent of social change (Manzini, 2009), as providing a way of thinking and researching (Cross, 2006) and reinforcing the strategies of managing creative groups (Brown, 2009), the telluric movements generated by power are usually less known, tending to detach the discipline from its political dimension. Politics instead, are always present in all the instances of the "design" manifestation, at many different levels, being traditionally hidden by the discourse on form, function, and process. To weight this statement let us think of an instance from the pre-industrial era, even before the appearance and consolidation of the industrial production as a concept.

Throughout the history power and politics have permeated all aspects of the human activities leaving an imprint on the production of cultural artifacts "design" is perhaps the best expression of this socio-political shifts, being essentially born at the dawn of the upper class domination over the esthetic and functional quality of the everyday objects. In this concern, and regarding the birth of the modernity Penny Sparke underlines the raise of the "design" as a democratizing activity:

> As a modern concept, design developed as a direct result of the expansion of the market for consumer goods and the democratization of taste. For centuries, hand-made furnishings, ceramics, glass, metalwork, dress, printed artifacts and carriages had impacted on the lives of members of the upper classes, acting as providers of comfort, as markers of propriety, as the glue of social, family and gender relations and as visible signs of fashion-ableness, taste and social status. As modernity influenced the lives of ever larger numbers of people, however, design – the visual and conceptual component of the mass-produced goods and images that facilitated mass production, made goods attractive to a mass market and helped to give meaning to people's everyday lives – took on the role that, for the social élite, had been performed up until that point by the decorative arts. In both Europe and the USA, industrialization began to create new levels of social mobility and the increased access to goods began to blur traditional class distinctions. (Spark, 2013, p.12)

Spark's understanding of the "design" in the social and political context of the modernity reveals also the mechanisms of power manifested by establishing "design" as an activity, profession and output of the political influences and social struggle. In this sense, the beginning of the arts and crafts movement and than "design" announces the creation and raise of the middle class as an important force in the society. Nevertheless the raise of this discipline has initially been seen as a threat on the freedom of thought and expression being the mere outcome of the industrialization and the steps towards modernity. Placing the evolution of the mass produced objects and the raise of the industrial esthetics in a historical context, it is enough to look at the frictions between the arts and crafts movement and the beginning of the mass produced artifacts to understand the contrasting meanings attributed to the manufacturing of the daily objects. To emphasize the juxtaposition of old and new meanings given to the production of goods at the end of the arts and crafts movement and in the early days of industrial production, Alan Crawford cites the dark view of the British art critic, philosopher and philanthropist from Victorian period, John Ruskin on the advances of industrial revolution and the early days of modernity:

> Men may be beaten, chained, tormented, yoked like cattle, slaughtered like summer flies, and yet remain in one sense, and the best sense, free. [He is thinking of the middle Ages: political tyranny and creative freedom.] But to smother their souls with them [he is thinking of modern factories], to blight and hew into rotting pollards the suckling branches of their human intelligence, to make the flesh and skin which, after the worm's work on it, is to see God, into leathern thongs to yoke machinery with, this is to be slave-masters indeed. (Ruskin, 1892 cited in Crawford, 1997, p.18)

This dim perspective of what was historically speaking an evolution towards the democratization of the manufactured consumer goods and an increase in the quality of life of the middle class shows to what extent power pertains through influencing the behavioral trends of the society.

These considerations encouraged me to look at more specific instances in which power is imposed through different forms of creative industries. The instances chosen share the manifestation of influence power and control and are historically placed from the half of the 18th century to the beginning of the 20th century concentrating on four main figures who designed with power, drastically influencing the social behavior through their artifacts.

The first instance, Thomas Chippendale (1718-1779) is perhaps the first craftsman who envisioned the power of "design" as generating models, that can be replicated outside the original workshop in which they were created. In this sense he is the pioneer of the contemporary creative profession that sees the figure of the designer as a trendsetter and less as a manufacturer of his/her own work.

The second instance is the panopticon scheme ideated by Jeremy Bentham (1748-1832) for the "ideal" prison that enables the surveyors the complete and continuous control of the prisoners' cells. The "design" is essentially a tower within a tower, having the cells disposed circularly and the surveyors' tower placed in the center of the built structure. As it will be explained later, the authority and sense of distributed control was imposed on the inmates simply by inducing the doubt of not knowing when they are watched, and generated a capillary exercise of power and control.

The third instance stays in the controverted persona of the American urban planner and architect Robert Moses (1888-1981), the brain behind the urbanization of the New York City and the construction of the parkway infrastructure in many American cities. Quoting from Robert Caro, one of his lifetime assistants and witness to the political maneuvers of Moses, it will be shown how personal political power was used to manipulate the architectural features of the bridges connecting the city of New York to its Long Island outskirts and beach, controlling in this way the restraint accessibility to a certain part of town.

Finally, and maybe the most notorious instance stays in the lifetime work of Edward Bernays (1891-1995) on the communication methods and propaganda, and the invention of "**spin**" or mass manipulation through communication strategies. By using the power of metaphors and anticipating the social changes, Bernays established the rules for commercial propaganda that became a common feature of all advertisement campaigns. All instances cited above and detailed in the next chapter, show how power is an intrinsic ingredient of "design" that can only emphasize and express it in many different forms, keeping in mind that creative leaders have to be aware of the meaning they give to artifacts; or as Langdon Winner puts it referring to

the power and politics of the artifacts: "What matters is not technology itself, but the social or economic system in which it is embedded." (Winner, 1980)

What is behind the curtains of the creative system? Influence, power and control

Thomas Chippendale and the emergent model of distributed productive knowledge

The year 1754 marks the publishing of the first and arguably one of most influential "design" books. The Gentleman and Cabinet Maker's Director is the first publication to illustrate the details of the craftsmanship with elaborate instructions on the replication of a furniture style.

The book had an impact not only in the practice of a craftsmanship but more important in a way of thinking about a traditionally established process (Craske, 1999). By making visible his craftsmanship secrets, Chippendale was the first to colonize the market with a way of thinking through a communication artifact. Not only, the influence of this type of attitude is even more important in the historical perspective, by being the first commoner to lend his name to a furniture style, since previously all furniture of high craftsmanship bare names of British monarchies such as Tudor or Louis XIV. More than the mere recognition of the contribution to the furniture making, this fact sets up a precedent for the concept of brand identity and how the name can be detached from the physical person and place in which it was created (Bryson, 2010). To give a concrete dimension of the impact in money value, it is enough to think that a Chippendale furniture piece made in 1756 by a low profile furniture maker after the original plates, in Boston Massachusetts, sold in 2007 at Sotheby's New York auction […]. Although Chippendale furniture pieces are nowadays recognized as museum pieces, it is Thomas Chippendale's shift in attitude that needs to be recognized for its truly powerful political value and its influence worldwide.

Keeping in mind the novelty of an approach to manufacture and distribution brought by Chippendale, it would be interesting to make a leap forward in time and think on the amount of information carried on by all the artifacts not from the perspective of the function or form but focusing on the level of ideological MANI-PULATION that is intrinsically imbedded in them. More artifacts in all its forms and shapes enter into the everyday habits of a society, less the users of the artifacts seem to be aware of its different political facets. The aim of the book is to unveil a part of "design" that has less to do with the actual making of design artifacts and more with what kind of powers are present within the design field.

With the help of the notorious instance of Thomas Chippendale, one can distinguish between the innovation of a production and distribution process of a style of furniture and the difficulty to anticipate and understand its political importance in the democratization of a craft and knowledge. Moreover Chippendale himself was blind to the profound implications of what was essentially a different way to do business, and the manner in which to capitalize it. The act of consciously provoke and, most important, assume the consequences of change, requires a flexible, adaptive leadership, the necessary knowledge to recognize the increase in entropy and the wisdom to navigate through it.

Panopticon and the model of controlled power authority designed by Jeremy Bentham

The next instance comes not from a craftsman but from the British philosopher and jurist Jeremy Bentham. Coming from a family of lawyers, Bentham grew-up as the prodigious son of a well established attorney, attending the Queen's College at Oxford when he was only 12 years old. Throughout his life and carrier, he was an outspoken advocate of law reform, criticizing established political doctrines, and the first to produce a utilitarian justification for democracy. He also had much to say of note on subjects as diverse as prison reform, religion, poor relief, international law, and animal welfare. A visionary far ahead of his time, he advocated universal suffrage and the discrimination of homosexuality. (The Bentham Project, University College London). This introduction of the personality of Jeremy Bentham helps to picture the context in which the Panopticon scheme emerged. Interesting to point out that the Panopticon scheme, literally meaning "all-seeing place" in Greek, was used in Russian manufactures to facilitate the skilled crafts-men to supervise large teams of unskilled workers. Bentham became accustomed with the Panopticon organization through his younger brother who worked for Prince Potemkin In brief, the panopticon system gave prison guardians an increased visibility to multiple cells at any time and most important, induced doubt and uncertainty in the surveyed prisoners. The system therefore is based on the power of observation by the only presence of the surveillance artifact and even in the absence of the actual surveyor, transforming the observation from a prison norm to a behavior distributed amongst the prisoners. The plan in this sense manipulates vision, transparency and the access to information in the service of power, allowing for the inmate to be, as Foucault explains "the **object of information**, and never **a subject in communication**." (Foucault, 1995).

It is interesting to remark how the Panopticon scheme of organization in itself was not initially attached to punishment but rather to distributed awareness and bidirectional communication necessary in civilian institutions belonging to education, healthcare or industry systems. The

constriction of the access to communication and the shift from bi-directional interference through communication, to mono-directional information retrieval, injected into the physical structure the power dimension. As Foucault points out:

> By the term 'Panoptism', I have in mind an ensemble of mechanisms brought into play in all the clusters of procedures used by power. Panoptism was a technological invention in the order of power, comparable with the steam engine in the order of production. This invention had the peculiarity of being utilized first of all on a local level, in schools, barracks and hospitals. This was where the experiment of integral surveillance was carried out. People learned how to establish dossiers, systems of marking and classifying, and the integrated accountancy of individual records. Certain of the procedures had of course already been utilized in the economy and taxation. But the permanent surveillance of a group of pupils or patients was a different matter. And, at a certain moment in time, these methods began to become generalized (Foucault, 1980, p.71)

The instance of Panopticon stresses out how the meaning of an otherwise neutral "design" changes radically according to the social and political context in which the structure is immersed. In this sense, will be discussed later the social construction of the meaning attached to the tangible or intangible artifacts, arguing that "designers" cannot afford to be blindfolded to the metaphors and imaginary induced by their creative act. In the same time the manifestation of power and politics in the Panopticon plan helps introduce the next instance, which takes into account the manifestation of power at urban system scale.

Robert Moses and the controlled accessibility model

In the previous section I talked about the way Panopticon prisons allowed full accessibility to information on the daily activities of the prisoners, highlighting the difference between mono and bidirectional interference exchanges. If in the previous case the power dimension was expressed at the scale of an isolated building specifically made for surveillance purposes, in the case of the urbanization plan of New York city (and not only) the individual will and interests were expressed by Robert Moses at a larger scale, influencing the circulation flows and social behavior of masses of people for many generations. A high level policy maker "designer" and architect, Robert Moses was also an agile manipulator who dealt with mayors, political figures and public institutions managing to have almost the complete control over the urban interventions in the New York City from the 1920's to 1970's (Winner, 1980). One of the most famous instances to what extent raised Moses's influence and power is his arguably biased "design" of the bridges from New York City to Long Island was cited in his biography by Robert Caro (1974) and commented later by Langdon Winner:

Anyone who has traveled the highways of America and has become used to the normal height of overpasses may well find something a little odd about some of the bridges over the parkways on Long Island, New York. Many of the overpasses are extraordinarily low, having as little as nine feet of clearance at the curb. [...] It turns out, however, that the two hundred or so low-hanging overpasses on Long Island were deliberately designed to achieve a particular social effect.

[...] According to evidence provided by Robert A. Caro in his biography of Moses, (Caro, 1974) the reasons reflect Moses's social-class bias and racial prejudice. Automobile owning whites of "upper" and "comfortable middle" classes, as he called them, would be free to use the parkways for recreation and commuting. Poor people and blacks who normally used public transit, were kept off the roads because the twelve foot tall busses could not get through the overpasses. One consequence was to limit access of racial minorities and low-income groups to Jones Beach, Moses's widely acclaimed public park. Moses made double sure of this result by vetoing a proposed extension of the Long Island Railroad to Jones Beach. (Winner, 1980, p.124)

It is important to note that the racial bias attributed to the Moses's bridges was amply cited and discussed often in contradictory terms (Joerges, 1999) (Latour, 1988) (Woolgar, 1991). What is noteworthy for our purpose is not necessarily the interpretation of the built artifacts as imposing racial obstacles but the evidence that designed structures bare the potential of political meanings. In this concern Joerges points out the volatility of the meanings attached to artifacts but also their power to influence the public opinion over many years through their expressive quality:

One alternative to control approaches [...] would be to decipher the effect of technical (in particular, building) artifacts primarily via their expressive values. Things induce nothing, but they indicate something. Built spaces are considered as media that tell something to those capable of reading and listening. Like all texts, everyone may read them differently: buildings must and can be read anew all the time. Authorial intentions (that is, designers' purposes) sometimes play a role in this, but usually a peculiarly indeterminate one. In a highly contingent process, many others will decide over and over again which meanings and uses are inscribed into built spaces. (Joergens, 1999, p.18)

This remark helps us introduce the last inspirational "**anomaly**" chosen, that of the inventor of "**spin**", mass manipulation and propaganda, Edward Bernays. The above quote helps us focus on the politics of words and images and the way in which they carry power meanings.

Edward Bernays and the model of mass control through commercial media

Nephew of Sigmund Freud, Bernays was born in Vienna and grew up in New York. He is the recognized leader and advocate of the public relation as a science used to influence masses and is best known as the creator of "spin" or the manipulation of public opining for a specific, commercial or political purpose. As such he was a close observer and researcher of the societal changes that he used as inspiration and trigger to promote the interest of his clients. Some of his most famous campaigns were for Ivory soap a product of Procter & Gamble, Lucky Strike, The American Broadcasting Company, and worked for the Government of the United States during the World War II. Perhaps even more than all the instances cited above, the work and achievements of Edward Bernays comes very close to our argument on the importance to acknowledge the hidden or "dark side" of "design" and its dimension of power. One of the best-known instances of public commercial campaign, and also mass manipulation is perhaps the Lucky Strike case. As Neal Gabler from NY Times recalls:

> Lucky Strike Cigarettes had a problem. Women, an increasingly important market, were not buying Luckies in the expected quantities because, surveys in the 1930's showed, many felt the forest-green package clashed with their wardrobes. The obvious solution would have been to change the color, but George Washington Hill, the president of American Tobacco, adamantly refused, claiming he had already spent millions of dollars to advertise that green package. What to do? "If you won't change the color of the package, change the color of fashion — to green," advised a young public relations man named Edward Bernays. And Bernays systematically set out to make green the fashion color of the 1934 season. Under the auspices of a local charity, Bernays planned a Green Ball and dispatched a well-connected society matron to the Paris couturiers to coax them into providing green gowns for the event. He convinced a leading textile manufacturer to sponsor a Green Fashions Fall luncheon for fashion editors and invited an art historian and a psychologist to expatiate on the significance of green. He organized a Color Fashion Bureau, which disseminated trends to the press, naturally emphasizing the popularity of the color green. Using green paper, he concocted a letter-writing campaign to interior decorators, art-industry groups, department stores and clubwomen describing the sudden "dominance" of green. He induced department stores to feature green dresses and suits in their window displays, and he persuaded the Reinhardt Galleries to hold a "Green Exhibition" of paintings. The result of this six-month flurry: green became the hot new color of fashion. (Gabler, 1995)

Bernays was a perfect master of strategically planning and designing the manipulation of public opinion; however, what is more important from our point of view is the extension of

his perspective and his limitless imagination on the most ingenious ways to accomplish his assignments. He impersonated from this point of view the "éminence grise" of the leadership, a powerful decision maker that operated in the shadow of his commissioners, empowering them and their public to believe without doubt in a ed image of themselves. Ironically, but coming to confirm this hypothesis, in "The Engineering of Consent" he sees himself not as a leader but as a "technician":

> Leaders may be the spokesmen for many different points of view. They may direct the activities of major organized groups such as industry, labor, or units of government. They may compete with one another in battles for public good will; or they may, representing divisions within the larger units, compete among themselves. Such leaders, with the aid of technicians in the field who have specialized in utilizing the channels of communication, have been able to accomplish purposefully and scientifically what we have termed "the engineering of consent." (Bernays, 1947, p.114)

The above mentioned instances of anomalies, have been chosen because bring forward the difference between authority and leadership. An important distinction between authority and leadership stays in the social functions that each dimension plays in the system to which they belong.

As such the case Bentham and Moses's designs reflect the authority which serve five basic social functions:

> 1) **direction**, 2**)** **protection**, 3) **orientation** to **role** and to **place**, 4) **control of conflict**, and 5) **maintenance** of **norms**. (Heifetz, 1995, p.3);

Chippendale and Bernays's instances express power through leadership coming from non-authority positions, in both case setting up the premises and conditions for expanding the core values of the actions taken to achieve the leadership position – even unconsciously as in the Chippendale case. This sets up the premises of the inquiry and announces the final result, in which will be attempt to introduce a theoretical framework that can serve as an envisioning model not only for "designers" but also for professionals active in hybrid scientific, humanistic and art as well as in management, politics, leadership, or other environments that embrace an increased adaptability to change. Rather than a set of guidelines and tools, the present dissertation aims to point out a dimension of "design" that is not necessarily visible, only because not given enough attention and therefore is not yet accepted.

The dark side of "design" in this case refers to the contrast between the overly exposed, fashionable aspects of creative industries and the true power mechanisms that activate and make

possible the advancement and innovation, but also **entropy**, **corruption**, **chaos** and eventually change, in creative environments.

For this reason, we take inspiration and insights from the literature of war strategy and conflict management, looking at the "design" as an self-generated environment and self organized system. This allows putting together a different view lens, made from a variety of notions present in seemingly unrelated fields of studies, and draft empowerment strategies that can be applied primarily the creative environment but also in other disciplinary domains.

Coming from biology, the concept of autopoiesis introduces the capability of the living systems to reproduce and re-organize themselves according to intrinsic dynamics generated inside the system (Maturana 1980). This type of model is used her to explain the creative environment as a self-referential disciplinary system that needs to be experienced from the inside in order to be understood. Much as in the case of the living organisms, an autopoietic system is in a continuous change and receives outside inputs and information. This view is inspired also by the work of Niklas Luhmann, who extends the concept beyond the single unit of a living organism to psychic and social systems (Luhman, 2006, pp. 54-64). The argument will be discussed further on in more detail; for now it is only necessary to hint on the concept in order to acknowledge a more profound dimension of the creative environment, a dimension that is usually given less importance than other more obvious aspects such as process, tools, and outputs.

One of the main issues will be addressed is the creation of a model that combines learning with adaptive leadership enabling empowerment seen as an initiation path into the unspoken rules that guide this type of autopoietic organizations, the application of the learning and leading model, could guide an individual towards a conscious leadership. In order to enter into this territory, metaphorically called the "**dark side of design**" the next step is to briefly remind the reader where "we" are coming from, outlining the contrast between the visible and hidden facets of the educational system.

State of the art of the "visible" creative industries scene.
Evolution as a discipline

A lot has been said about the emergence of the discipline, its beginnings in the flourishing period of the industrial revolution and its development into a self standing discipline and the acceptance of its role and impact in the socio-economical life. In 1936, with his seminal work "Pioneers of

Modern Design", Nikolaus Pevsner was perhaps the first to one of the first to point out the importance of the "design" in the history of the 20th century and the social meaning that acquired, detaching itself from both art and architecture (Pevsner, 1936). Without intending to emphasize on the initial aspects of the emergence of the "design" history as a branch of the discipline, it is interesting to underline the interpretation of the notion of "history" as a link between the man made artifacts and society. As Clive Dilnot explains:

> ...for Pevsner, history elucidates, through the exploration of design, the relation of designed things and design attitudes to society. (Dilnot, 1984, p.7)

Here it is necessary to point out the notion of "**design attitudes**" that anticipates a new perspective not only as a profession and practice, as a science, way of knowing or thinking as it will be mentioned further on.

Even though this announced the importance that the "design" activity will have in the society, it was the raise of the consumerist age in the 50's and 60's that gave its full space in terms of artifact production as well as the right exposure and attention necessary to accumulate a critical mass that generates theoretical knowledge and criticism (Sparks, 1987). In this period revealed itself as a hybrid discipline that fosters, or more precisely embraces, methods from art and sciences therefore constituting a fertile research domain. The 60's mark a close attention first to the definition of the research and second to the type of the research methods to be employed for the observation of the "design" practice. It is important to underline the initial attention given to what Bruce Archer calls the inquiry into "the embodiment of configuration, composition, structure, purpose, value, and meaning man-made things or systems" (Archer, 1981, p.30-47) (Bayazit, 2004).

It is interesting to note the presence of the "system" as a designed entity and the keen concentration on understanding the methods that lead the creation of a definite output. This suggests the metaphor of an artificial environment entirely organized and controlled by the "designers". The same view is shared by Herbert A. Simon in the "The Sciences of Artificial" (1969; 2013) a book still considered one of the milestones of the disciplinary research, meanwhile Bukminster Fuller advocates the validity of rationality and objectivity in the creative and art processes. An important point made in the research, is the need of a distance from what has been made or is in process to be produced. One of the most important debates is what can be considered a research activity in an environment so strongly linked with the actual practice of a discipline and therefore to an experiential knowledge.

To address this issue Nigel Cross introduces the "designerly ways of knowing" (Cross, 2000), marking the shift of the focus towards the cognitive aspects of "design". He argues that disciplinary research can be divided into different categories such as research "in", research "or" and research "through". Although Cross underlines the intangible character of the tacit knowledge as a quality of the creative act, he also presents it as supporting the final product seen as a tangible output and not as an output in itself. It is only the emergence of the service and strategic "design", that the process becomes a central focus of the disciplinary research, an important change of perspective that looks at the overall development of the project and the relation between the knowledge production and reintegration into the productive activities. Regarding this Alain Findeli points out the dependence of the disciplinary research throughout the 1990's as putting an overemphasis upon the material product; and creating "an aesthetics based almost exclusively on material shapes and qualities; a code of ethics originating in a culture of business contracts and agreements; a cosmology restricted to the marketplace; a sense of history conditioned by the concept of material progress; and a sense of time limited to the cycles of fashion and technological innovations or obsolescence." (Findeli, 2001).

This remark, made in 2001, anticipates a different level of consciousness acquired by the creative environment: that of its own entity as a self – referential system that filters the "external" influences through a disciplinary lens, generating a somehow beautified but distorted interpretation of the reality. This stands true also for the claim of the social awareness, and the application of the creative methods to address the organizational issues at institutional and/or community level. Even though the "design" thinking approach has been proven to be an important asset in strategic, multidisciplinary projects (Martin, 2009) (Brown, 2009), it is still generated by the process/output mindset.

This reflection aims to give a brief hint on the state of the art of the disciplinary research, arriving at the present historical moment in which the exploration into the tensions and forces that stir the power mechanisms in the creative system is taking place.

The system has to be seen as the unit of analysis that allows engaging into a larger conversation on the **role of power** (and **power leadership**) as a trigger to unleash creativity and innovation in hybrid organizations and social systems.

This type of categorization can be found in several literatures; for instance, Horst Rittel in one of the first "design" research conferences in 1972 (Rittel, 1972) points out the emergence of the "systematic methods" following Bruce Archer's book and research on "Systematic Methods for Designers" published in 1965 (Bayazit, 2004). The second generation of research methods brings forward the work of the American psychologist Donald Schön, who inquired into the

development of a tacit knowledge working in the architecture teams (Schön, 1983) as well as the insights from behavioral and organizational sciences in the work of Polaniy (1967) and Nonaka & Takeuchi (1997). While the third generation of the research methods has not yet been formally defined as such, it is also true that the boundaries of disciplinary research have continuously been widened by the extension of the "design" to many adjacent fields – performance research, game theory, ethnography, or visual anthropology to name just a few.

Nevertheless in all research situations nominated so far there is a lack of criticism of the system in which this research is being done. While disciplinary research refers so far to the way "designers" work, the inquiry herein defines the field of "design" not as a discipline, science or mindset but as an environment that fosters within various living entities or systems organized in a self referential manner. In order to better grasp the profound meaning of this perspective, important is to reveal the concept of autopoiesis and the internal and external perturbations and disturbances, that define autonomous living systems capable to maintain their own organizational wholeness, under conditions of continuous or periodic disassembly and rebuilding, creation and decimation, or production and consumption of its own components (Zeleny, 1981). This allows us to dive into the turmoil of the system and propose the metaphor of a battlefield with all its forces at play.

Considering all the above, the third generation of methods changes in terms of scope, shifting from the detailed view of the creative activities to the inquiry into the actual dynamics of the creative act seen as a self reproducing living environment. As such, the reading key is that of a living organism in which creation and destruction are following a natural cycle that allow the evolution of the system **preserving the potential** of its contrasts. If so far the attention has been put on the visible and therefore tangible part of creative act the view of an overall system cannot omit its unseen facet, even more so when it brings a complete and closer to reality perception of the living organism. Following this idea, the next part will show how the creative system has a hidden side that deals with power and disruption, and how these terms started to catch the attention of the practitioners and educators.

The Dark Side of a System. A deeper dimension of politics and power throughout its evolution.

As previously shown in several literatures (Heskett & Giorgetta, 1980), (Pevsner, 2005), (Lawson, 2006), the discipline evolved from craftsmanship to industrialization and serial production becoming what is presently called "industrial design". This transition brought an increased competition that imposed new meanings and added reasons for convincing customers to buy one product instead of

another. The products started to exhibit shapes and styles able to communicate emotions to users; it is what we now call "design". A new era started, the post-industrial phase and post-capitalist: industrial production capability and capitals are, in some way, a commodity.

In the same time, the market globalization, joined with the large diffusion of internet as a communication way as well as a service tool, changed the rules and introduced new challenges. We are now witnessing a common trend, which individuates an unprecedented global crisis. Challenging this view, we can also consider the possibility that we are simply within a paradigmatic change of the behavior of an autopoietic new economy that dismantles itself in order to be renewed. This brings to mind a biological model of destruction and renewal of the living systems as proposed by Maturana and Varela (Maturana & Varela, 1974) in which the moment of crisis is related to change. The attention in our case is on how this passage can be bettered understood and expressed. As a consequence, the role of the "design" in this process is not marginal, and most of the time creates debris rather than innovation, as Victor Papanek recalls it in the words:

> Advertising design, in persuading people to buy things they don't need, with money they don't have, in order to impress others who don't care, is probably the phoniest field in existence today. Industrial design, by concocting the tawdry idiocies hawked by advertisers, comes a close second. (Papanek 1984, p.ix)

This introduces the necessity to weight the disruption of an already corrupted process that most of the time is essentially self-referential, and stands true in particular in the educational systems that are supposed to prepare students for the "real world" challenges.

Moreover, "Design" is a discipline between art and method, claiming creativity, aesthetics and culture, and requiring technical knowledge, the former aspect is over-evaluated in respect to the latter, and formalized aspects are largely far from the educational curricula. As already many years ago Christopher Alexander remarked:

> Logic, like mathematics, is regarded by many designers with suspicion. Much of it is based on various superstitions about the kind of force logic has in telling us what to do. [...] The use of logical structures to represent design problems has an important consequence. It brings with it the loss of innocence. A logical picture is easier to criticize than a vague picture since the assumptions it is based on are brought out into the open. (Alexander, 1964, p.7-8)

The result is an unbalanced attitude of superficial understanding of the rigorous scientific methods and their often-incorrect application. Moreover many those methods, based on sociology end ethnography, risk to discover user needs already expressed by advertising and

marketing, quite unreal, and help to develop new versions of old products; so, the goal of the creativity is denied, and no innovation is done at all. The responsibility of the "designer" toward both customers and society is 'anesthetized', carrying exactly the direction criticized by Papanek. Will be propose a logical perspective on the way the mechanisms of power and authority work within the creative contexts in general and the environment in particular, attempting to disambiguate social interaction behaviors. The purpose of this argument is to first acquire an enhanced awareness on the capillarity of power, second introduce trans-disciplinary theories and show how the understanding of the **complexity** of power mechanisms can only be grasped from different perspectives and third to introduce the need of a leadership and learnership model in the creative education, based on a continuous learning process.

In order to engage into an alternative and antithetic process and leave behind the obsolete mind frames it is necessary to introduce an different paradigm based on acknowledging the games of **power**, **influence** and **corruption**, inherent to any field in which "design" is present. This brings us to the revealing of the disruptive elements as significant for the creative process even beyond the boundaries of the discipline. Making a step forward from merely considering disruption as a trend in the disciplinary research, we can look at the disruptive situations as signaling a turning point in the evolution of a living environment, rather than the end of a changing process. This sets the reference point for the beginning of the inquiry delineating the territory of the hidden dimension in the realm of a ongoing struggle for control, in an unstable system in which internal and external factors can alter the balance of influence and power.

As shown previously, creative and cultural industries research has been so far concerned with the categorization as a discipline with predefined methods and tools, which produced some sort of quantifiable outcomes. What is still missing though, is precisely an overview on how "design" behaves like an uncontrollable living being, or **VIRUS**, that reacts to the inside and outside stimuli in an unpredictable and therefore undisciplined manner that doesn't abide to pre-established rules. In a way we can think of a partially unmarked territory that has to be discovered while explored, and whose exploration can only be partially planned. This analogy is fairly recurrent in the organizational behavior literature; as an instance Lucy Suchman uses the image of the canoeist having to descend a mountain river and rapidly adjust to the situation at hand, in this way introducing the contrast and relation between plans and situated actions (Suchman, 1987). In a concise manner the instance brings forward a realistic view on the way an individual living organism, is constantly put in the position to adapt and most of the time has to brake rules in order to survive.

At organizational scale, John Shook presents the instance from the industry and how the capability to acknowledge and signal problems has changed the corporate culture (Schein, 2004) in one of the largest and worst performing production plants in the US (Shook, 2014). The core issue of the experience described is how to embrace problems as normality rather than fear them as anomaly, and being open to constantly learn from them. Leveraging on the popular saying "It's easier to act your way to a new way of thinking than to think your way to a new way of acting" the author introduces a different relation between acting or behaving and thinking.

In Shook's figure the new model of organization starts from "what we do" and shows how the behavior builds up a new set of values, engaging in a change in attitudes and finally the overall recognition of a shared culture. Although the figure doesn't specify, the author explains how this shift is attained through a learning process, which he considers perhaps the most important achievement of the organizational change.

Interesting to note, Shook's instance talks about the radical shift of a behavior that leads to the creation of a corporate culture, which prevails a distributed leadership, at the operational level, in this case referring to the shared capability to impose a change in the routine, bypassing the "usual" working procedure. This points out a double significant of the "**undisciplined**" act: first being indiscipline, and therefore looking for problems is seen as a virtue, and second it becomes a requirement that comes to support the routine. In other words disruptions provoked by indiscipline are beneficial to the reinterpretation of the system, and therefore welcomed by the community. As it will be shown later, this re-interpretation triggers the substitution of the old meanings with new ones, leading forward the organization. While the above mentioned instance brought forward the advantages of problems in the environment of a large scale enterprise, faced with strict production constraints, the question is why "design", that claims to foster creativity and bring innovation has to be governed by discipline?

Is "design" a discipline? Speculation as indiscipline and disturbance.

The view of "design" as a process gives an important weight to the notion of "tools" that can be used according to specific "methods" and was always kept in high respect, and declined in the most different interpretations. No matter the material, immaterial or so-called "conceptual", "designers" have a deep affective attachment to their instruments and the skill related to their use and adaptation. This keen attachment to the objects mediating the creative process hinders the emergence of lateral possibilities that cannot be anticipated by any method or modeled by the available tools.

DISCIPLINE   IN DISCIPLINE

CULTURE   POWER

TALENTS   LEADERSHIP

PROCESS   DISRUPTION

THINKING

ATTITUDE   ANOMALY
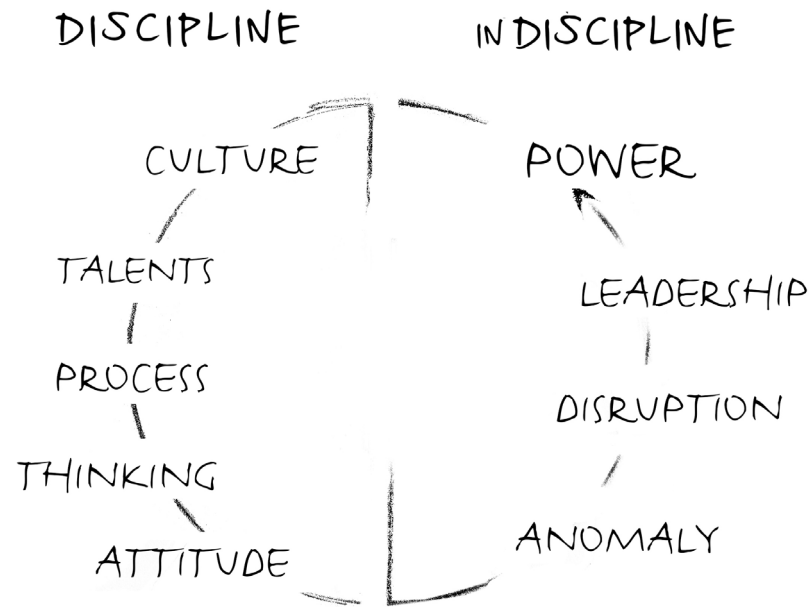
Figure 1. Discipline as indiscipline

Instead, looking at the "design" discipline from the perspective of a living system it is easy to understand how the anomaly is one of its integral parts. Much as in the instance from the industry cited above, the creative system produces problems that are not yet fully understood because of the lack of the awareness and interest in what we can call "design" "**debris**". This stands true firstly for the internal flow of the system that evolved into a self referential one, but also for the consequences of the raise and recognition of the production at a global level.

Rather than continuing to commit to the outdated belief that "design" is a disciplines that, under any circumstances induces provocations, it is necessary to reconsider a shift in the way "design" is looked at and presented to the global market. In this sense we can see the role of disruption as to demystify the importance of the outcome and acknowledge the true nature of innovative processes based on the breakdown of existing rules, by influencing and corrupting, the comfortable but irrelevant ideas and eventually imposing different cultural paradigms.

In this process the role of the creative talent is that of a charismatic, transformative leader (Bass, 1991) that envisions the possibilities of change where others follow the imposed rules.
In this sense the results of the inquiry in the power dimension of "design" are:

1. Indicate the axes in which creative leaders can be empowered to exercise their adaptive capabilities (Heifetz et al., 2009) by learning from incoming circumstances and leading accordingly from within a system;
2. Individuate the dimensions on which the mastery of learning and leading in action cans the achieved. In this sense it will be underlined how learning and leading refer to a contemplative and reflective stance (learning) and a dynamic and active stance (leading);
3. Draft a strategy of implementing learning and leading training into the creative curriculum

One of the main critical thinking objectives, is precisely to indicate how further research can investigate the possibilities of constructing a different theoretical framework to analyze disruption also for its creative value and coach future generations of creative talents as learners and leaders. In this context the emphasis is put on the relation and tensions created in the learning and leading processes and how these tensions shape a new coaching model, that of **adaptive leadership** for creative and cultural industries.

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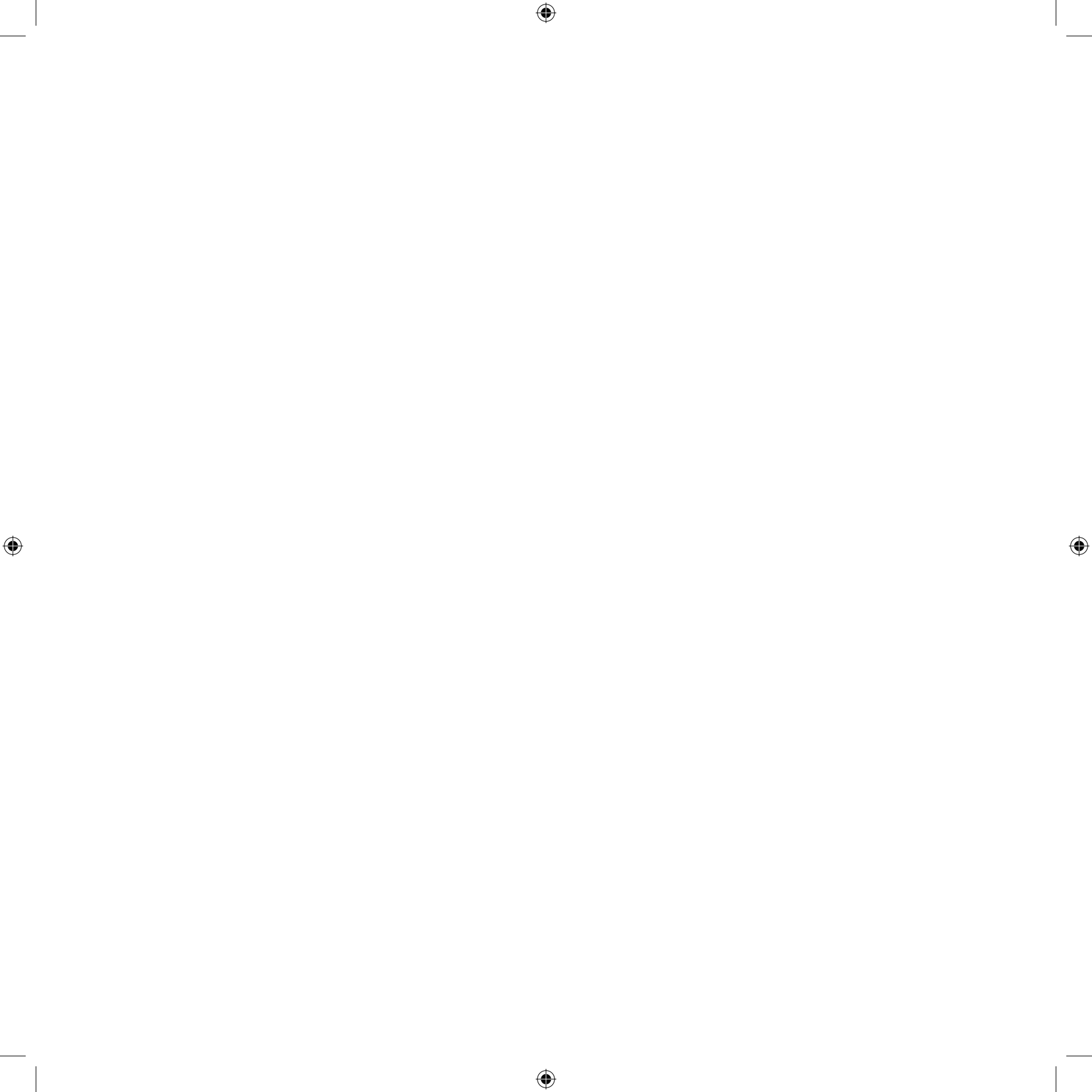
RESEARCH ACTION GROUNDED THEORY METHODS

坤
KŪN
(Earth)

艮
GÈN
(Mountain)

坎
KǍN
(Water)

巽
XÙN
(Wind)

(Thunder)
ZHÈN
震

(Fire)
LÍ
離

(Lake)
DUÌ
兌

(Heaven)
QIÁN
乾

Yi Jing or I Ching
Book of Changes, Mutations, Ancient Chinese Divination Method, Cleromancy, determine by random
Zhou Dynasty (1000–750 BC)

THEORETICAL FRAMEWORK

How to constrain the volatile dimension of power?

All aspects of the everyday life depend and are balanced by the fine-tuning of the power mechanisms. From the manifestation of the atavistic physical or psychological power to the socially filtered intellectual power, the evolution of the human beings depends on the capability to react and negotiate to incoming struggles. This attribute of the human behavior crystallizes in the quality of interferences that occur through communication. Papanek's statement quoted above helps to introduce the undeclared presence of power and politics as a intrinsic feature of the artifacts. This way of looking at objects, structures and systems has been previously investigated, by Langton Winner (1980). Taking the instance of the American architect Robert Moses and his bridges over the parkways on Long Island, New York, Winner recalls the radical (racial) prejudice hidden within the built structures as "*a way of engineering relationships among people*" (pg.123) and imposes a political meaning to the "designed" structure.

These "artifacts" could also be understood in terms of actions that facilitate or impede the access to information and knowledge controlling the ubiquity of power. Before entering the specificity of the creative system, the first step of the research inquiry is to delineate the understanding of power first in philosophical terms as an abstract concept, for then understanding how these insights can be transferred in concrete strategies. In this sense the reference is at the work of Michel Foucault, and his analysis and writings on the **power** and **knowledge** (Foucault, 1980) (Foucault, 1982).

His particular interest in the expression of power and power struggle through communication artifacts constitutes a key point for sustaining the main research question on "design" as power. In this concern we can start by considering his reflections on the ubiquity of the power:

> […] in thinking of the mechanisms of power, I am thinking rather of its capillary forms of existence, the point where power reaches into the very grain of individuals, touches their bodies and inserts itself into their actions and attitudes, their discourses, learning processes and everyday lives. The 18th century invented so to speak a synaptic regime of power, a regime of its exercise within the social body, rather then from above it. (Foucault, 1980).

Pinpointing a particular historical change, Foucault draws attention to a different form of leadership that emerged in the 18th century. While the decline of the coercive power of monarchy has been discussed extensively, what is particularly relevant is how this type of sociological change has also changed the level of the interpretation of the meaning of artifacts. The revolutionary impact of Chippendale's instance, cited in the Introduction has to be inscribed and understood in this sociological context, in which the access to information and distributed awareness implies an increased control and therefore a capillary exercise of power.

Foucault in this sense draws attention not only to the study of the actual political movements and the facts that followed but underlines a different manner of looking at the sociological rifts or ruptures, as he explains:

> The making visible of what was previously unseen can sometimes be the effect of using a magnifying instrument. […] But to make visible the unseen can also mean a change of level, addressing oneself to a layer of material which had hitherto had no pertinence for history and had not been recognized as having any moral, aesthetic, or historical value. (pp. 50-51)

While the fragment above is part of a discussion on his study and work on the power exercised in the prison system through the introduction of the panoptical[1] idea of the built structure of the penitentiary system, what is interesting to remark is the consideration of the ideology and organizational behavior manifested in the built artifact.

As he stresses out, the mere disregard of the importance of this tangible, material level represented by the built structure, was enough to obscure its immense importance as a mechanism of power. Extrapolated from its original context in which Foucault mentioned it, can be also considered the initial metaphor of "the dark side of design" precisely in these terms, as an always present facet of the creative system, that however remains unseen not because is hidden but because is usually disregarded. To sum up, the instances presented above have been chosen because they bring a concrete dimension to the manifestation of power and authority

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1   *Panopticon* from the Greek pan- ('all') and - ὀπτικός ('seeing')

in the creation of artifacts and systems. Starting from the opening of the craftsmen workshop and the creation of a model of distributed knowledge in the case of the Chippendale style, to the consciously but inexplicit controlled accessibility in Robert Moses urban designs, and the explicitly diffused control structure in the Bentham's panoptical idea, the instances show the radical importance of power expressed through artifacts.

In the same time the three instances of leading "**anomalies**" in the act of "design", bring in discussion the power flow preceding and imbedded in the actual production of the artifacts and the way in which educators acquire an important leadership role through the process of negotiating authority in their artifacts.

How to lead with power? The difference between authority and leadership

More important the two instances help introduce the difference between **authority** and **leadership** which is one of the main distinctions that sets apart the concept of adaptive leadership. Arguably one of the most relevant aspects of the authority and leadership for creative talents is the capability of the leader to emerge not only from an authority position but also from a "lower" hierarchical position.

As shown previously, in contrast with the final objective of the authority which is to maintain the equilibrium by providing **direction, protection, orientation**, **conflict control** and **discipline**; the leader instead has to learn from observing the ongoing dynamics at individual, organizational and environmental levels in order to provide guidance to his/her followers, support adaptability, in order to **navigate** in incoming circumstances, empower decision-making, and challenge norms.

With this will be setup both the background and the kernel of reasoning that revolve around the concept of visibility of the **power cycle**.

All the above allow us to move forward and present the domain of military strategy in which the mechanisms of power were visibly exercised and studied. The introduction of concepts such as **tactics**, **strategy**, **latent capabilities**, will and **power manifestation** will therefore be presented and considered first as mentioned in their original theoretical framework of the war theory, and in a second instance in their latter interpretation in the behavior organization and leadership approach. (fig. 2)

Resuming the ideas outlined above, there are several concepts that emerge and will be analyzed later from different scientific perspectives:

- The idea that power pertains through the social systems being present in all the aspects of the social interactions between individuals.
- The fact that power is communicated and exercised from within a given system with the help of designed artifacts.
- The flow and dynamics of power have to be consciously understood and envisioned through coaching for creative talents learning and leadership.

Having seen how artifacts act as instruments of power, the question is how to induce a state of **uncertainty** and doubt in order to provoke change. If previously it was shown how power and control manifests through the act of "design" at capillary levels, next it will be shown how "design" has the power to create conflict and segregate incipient malfunctions from the living social system by creating chaos. To better understand this claim, it is necessary to consider the velocity of change and most important the unpredictability of crisis. In this concern Naseem Taleb uses the term "**antifragility**" (Taleb, 2012) as a way to define the capacity of complex systems to "absorb" and re-interpret the impact of changes transforming it into new energies meaningful for the system. Referring in particular to the economic system and the drastic modifications that occurred in the last decade, he underlines the presence of growing problems somehow hidden by the lack of awareness or simply unidentified in their early stages. The act of seeing challenges as an opportunity of change introduces also the conflicts and frictions coming from questioning the norms and is one of the main elements that a leader is faced to. In this concern Heifetz emphasizes how leaders,

> [...] need to begin to see conflict as a good thing. Of course it's dangerous. It has to be orchestrated properly. It can't get out of hand. We have to learn to regulate the level of disequilibrium in the system so that the level of tension, conflict, and distress does not overwhelm people's learning capacity. But most organizations err on the side of suppressing conflict and maintaining such a low level of disequilibrium that no real learning takes place. (Flower, 1995, p.9)

Acknowledging the signs of change to come through creative intuition, and attentive observation of all the signs coming from a given environment is one of the primary skills that creative leaders unconsciously learn to cultivate. The disruptive approach and strategy can be seen as a way to distribute the shock of major crisis by inducing minor conflict situations. Having seen the shock induced by change in society in general, a disruptive strategy is also based on the politics of the organizational system in which it manifests, and that enable the activation of the innovative change (Pfeffer, 1992). To better explain this type of strategy one can think of the analogy with the telluric movements and the way in which small quakes release the tensions that otherwise

would accumulate in a major earthquake. While as shown before "design" penetrates into the everyday life, it also has the potential power to induce disruption in a mainstream behavior of unquestioned acceptance, favoring an attitude of readiness and openness towards the unknown.

The theory of war introduced as the primary lens to "read" the **creation**, **preservation** and **destruction** (C.P.D.) of power. Secondary theoretical insights, C.P.D. seen from different scientific perspectives: biology, sociology and philosophy.

Among the concepts listed above, perhaps one of the most important is how the power is exercised from within the system and how to read the strategy behind the power manifestation. The war theory in this case can help reveal the vocabulary of the military strategy that enable the control of the army and enforce the image of the leader. In particular in this case, from our perspective, it is interesting to concentrate on the figure of the charismatic leader who has a profound understanding of owns' army material and immaterial resources and how to counter them against the enemies'.

In this respect, the reference to one of the most respected works on the philosophy and practice of war: The Art of War by Sun Tzu (2010). According to SunTzu the art of war is governed by five important principles, and their observance marking the difference between victory and defeat, life and deaf, freedom and slavery. They are:

-The MORAL LAW causes the people to be in complete accord with their ruler, so that they will follow him regardless of their lives, undismayed by any danger.
- HEAVEN signifies night and day, cold and heat, times and seasons.
- EARTH comprises distances, great and small; danger and security; open ground and narrow passes; the chances of life and death.
- The COMMANDER stands for the virtues of wisdom, sincerely, benevolence, courage and strictness.
- By METHOD AND DISCIPLINE are to be understood the marshaling of the army in its proper subdivisions, the graduations of rank among the officers, the maintenance of roads by which supplies may reach the army, and the control of military expenditure. (Sun Tzu, 2010)

The Commander (DUX) or General in this case has the complete responsibility for judging the right strategy his army should take, from within the army system, as a practical soldier, his judgment being pushed by the actions on the battlefield. The strategy in this sense can be seen as an overall plan to be re-interpreted through tactics according to the circumstances.

Here arises the question of awareness and concealment. The art of concealment and deception stays at the heart of any strategic movement geared towards the exercise of power. Early on

was encountered the paradox of visibility and concealment in the panopticon scheme, in which the guardians' movements and intentions to observe a particular cell were concealed by the central tower, inducing in this way a state of constant doubt and uncertainty. The same strategy is outlined at behavioral level in the art of war:

> […]Hence, when able to attack, we must seem unable; when using our forces, we must seem inactive; when we are near, we must make the enemy believe we are far away; when far away, we must make him believe we are near.
> […] Hold out baits to entice the enemy. Feign disorder, and crush him. (Su Tzu, 2010, pg. 38)

This delineates two axes on which the power is revealed and exercised. The plans and strategic considerations are balanced by the tactics established according to incoming circumstances on the battlefield, in the same way in which awareness and certainty about the resources at hand lead to decisions that have to be concealed by inducing doubt in order to gain advantage (fig. 2).

Can be considered the plans, actions, and certainty and doubt the parameters that determine the zone in which power is exercised. This allows us to move on and consider the factors that actuate the power mechanisms. Leaving aside for now the military ground, everyday life gives us endless occasions to verify the relevance and validity of the art of war principles. This is to say that power is not necessary related to war but pertains all the aspects of our life.

The parameters drafted above help us delineating two different levels: a level of latency in which the strategy is planned but also concealed and a level of manifestation in which the awareness of the incoming situations transforms plans in actions. The trigger that pushes the events from potentiality and latency to the manifestation of power stays in the actuation of a conflict situation. Later it will be argued that the creation, preservation and destruction of power, influence the state of a social system inducing change, and transformation. As we can see the key concepts emerged early on from the writings of Foucault on power and knowledge reappear in the insights from SunTzu.

Power in this case is acquired through knowledge and gains a moral dimension. The wise general becomes the impersonation of the charismatic leader, whom empowers his soldiers, giving them full responsibility of their actions on the battlefield. The observation in this case, becomes a state of mind, the entire army being trained to relay on each individual piece of information gathered by analyzing the "**state of the battle**". The self-referential system of the war zone gains a temporal dimension in which awareness and readiness for action have a major relevance. Again the close attention to the surrounding environment and all the physical and natural elements (see heaven and earth) help anticipate and plan the following military strategy.

Figure 2. The exercise of power

The analogies drafted above constitute the starting point for the research inquiry based on grounded theory methods. In this sense we present the insights gathered by following a research path that has as a purpose to generate a situated theory about power seen as a social phenomenon. These considerations will help us move towards a more intricate discussion, on how creative acts can be seen as a social environment led by, and that generates power. This type of reasoning comes to complete the discipline research scene that so far concentrated on the process and outcomes of the practice, without showing the power mechanisms that stay in the shadow of any human activity, moreover considering this dimension as a refusal and debris of the so called "creative activity" and not as its main driver.

One of the main points is that "design" unconsciously manipulates the communication message imbedded in artifacts. The raises of awareness on how to purposefully create and control power narratives constitute an added value to the professional competencies and apply it to other disciplines.

Revealing the importance of power, it will conclude by drafting new methods of empowerment and leadership that can be tested and implemented both in academic realm and in the industry and its inherent politics.

Grounded theory methods to speculate "Design" as Power

The study of power mechanisms in the "design" environment started from the initial intuition supported by informal personal observations, that although creative system fosters important power struggles in its realm, the social phenomena that reinforce power are somehow hidden. For this purpose the research started from an analysis of the existing research methodologies preferred by creative leaders, with a particular attention on the way the focus of the research shifted from the outcome of the creative process, to the process itself. In this sense, as shown before the research aims to establish a different perspective in which a new generation of creative leadership research methods can evolve.

Based on the inquiry and analysis of data from several scientific theories, the methods specific to the grounded theory methodology have been employed with the purpose to generate a situated theory about "design" seen as a social phenomenon through which power is manifested. The area of study is based in the "design" environment experienced as a social system rather than a discipline or science, and therefore deals with the observation of the social interactions within system. This type of research, from within the system requires a double role of the researcher as a participant and observer.

While the concept of grounded theory is based precisely on the discovery and enunciation of new theoretical insights (Glaser & Strauss, 1967), in order to avoid (as much as possible) the subjectivity coming from the first hand experiences, the research inquiry is based on three main pillars:

1. The definition of the creative act as an autopoietic system that encounters perturbations
2. The initial inquiry into the phenomenological study of the power and knowledge in institutional settings (Foucault, 1980)
3. The core concepts of war theory as explained in the seminal work of Su Tzu (2010).

The "speculation" is guided by concepts specific to war theory, de-contextualized contrasted and compared with the insights from phenomenology and re-proposed in the through the organizational behavior study of the "design" environment.

The type of data gathered in the research process can be divided in several categories:

- Abstract concepts and theoretical insights from literature search
- Conversations with researchers of the above mentioned fields, exploring the position and argument supported here.
- Experiential knowledge gathered in field research in the managerial and academic setting.

An important element of the research is the use of visual narrative interpretations as a coding instrument. Here the reference is to an important phase in the grounded theory application: the writing and coding of the recurrent patterns found in the data analysis. In order to adjust the grounded theory insights to the specific disciplinary language the research uses visualization of the main concepts to encode and illustrate the transformation of the theoretic concepts into practical insights to decipher and interpret the manifestation of power through "design".

More than mere visualizations, the representations have been employed throughout the research process to engage conversations with international researchers and leading academics. This was done both in formal settings such as in conferences and public debates as well as in informal conversations with groups of peers, academic mentors and industry experts. Several advantages have been identified in the use of visual representations as triggers for purposeful conversations: the abstract representations allowed a subjective stance of the researcher on fairly sensitive issues of the manifestation of conflict and power.

The immediacy of the visual representation engaged the audience in creative debates, acting as mediating artifacts for possible contrasting views.

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CREATE
PRESERVE
DESTROY
PROVOKE
UNKNOW

Lord Shiva
"The Destroyer" in the Hindu trinity that includes Brahma and Vishnu.
India, Ashoka Dynasty

SINGULARITY 1

1. The context. Power and the creation, preservation and destruction (C.P.D.) of the self referential systems

Living systems are cognitive systems, and living as a process is a process of cognition.
Maturana and Varela 1980, p. 13

1.1 Transformation and renewal. The self-creation and destruction of the systems

Perhaps one of the best ways to describe the concept of an autopoietic organization is in antithesis with the input-output techno-centered model very much present in what it was previously described as the second generation research methods which approached systems in terms of closed, and external driven black boxes. In one of the earliest attempts to present the autopoietic organization paradigm outside biology, Milan Zeleny outlines how this paradigm, while adequate for understanding the mechanical devices, "...has been intellectually dissatisfying, misleading and inhibitive of the recognition of those organizational features that make [...] systems living or social." (Zeleny, 1981, p.3).

These considerations bring forward the focus of the research, delineating the living quality of social systems. As such looking at the social groups sharing the same behavior and activities as autopoietic units that display an intrinsic self-standing and evolving internal dynamic that generate an autonomous quality. As Varela remarks:

As long as an autopoietic system exists, its organization is invariant, if the network of production of components which define the organization is disrupted, the unity disintegrates. Thus an autopoietic system has a domain in which it can compensate for perturbations through the realization of its autopoiesis, and in this domain it remains a unity. In contradistinction, mechanistic systems whose organization is such that they do not produce the components and processes which realize them as unities and hence, mechanistic systems in which the product of their operation is different from themselves, we call allopoietic. (Varela, Maturana & Uribe, 1975; 1981, emphasis added).

What happens when these principles apply to a social system? Before attempting to answer this question we need to look closer into the description of the components and interferences of the system. While it is not necessarily easy to translate an essentially abstract paradigm into an understandable and easy to explain representation, braking down its components, one can think of the organization of the water molecules and how, given necessary conditions and determinant states they can take the structure of a snowflake. In this case we are presented with a autonomous unity. The space is "the domain of all possible relations and interferences of a collection of elements that the properties of these elements define"(Maturana, 1981, p. 16).

The interference describes the interplay between two units and the alteration of their determinant state in accordance to the overall environment in which they are embedded. One of the features of the autopoietic systems is that the interferences might alter the state and structure of the unit but not its organization and identity.
At this point it is important to underline that starting from the initial description of the interferences in a living biological unit, the study of the interferences in autopoietic social systems becomes much more complex. One of the reasons for this is the fluidity of the interpersonal relations that give the quality of the interferences, the speed of reaction to the surrounding influences and the power play that stays behind it.

An even further interpretation of the autopoietic paradigm is its application to the creative systems. In order to explain the creative process, outside the psychological or sociological framework, Takeshi Iba proposes the interpretation of the creative systems as autopoietic systems in which discoveries are synthesis of three selections: idea, association and consequences. To sustain this argument he points out the difference between the "self-organization" based on structural formation and "autopoiesis" based on system formation (Iba, 2009, pg.623).
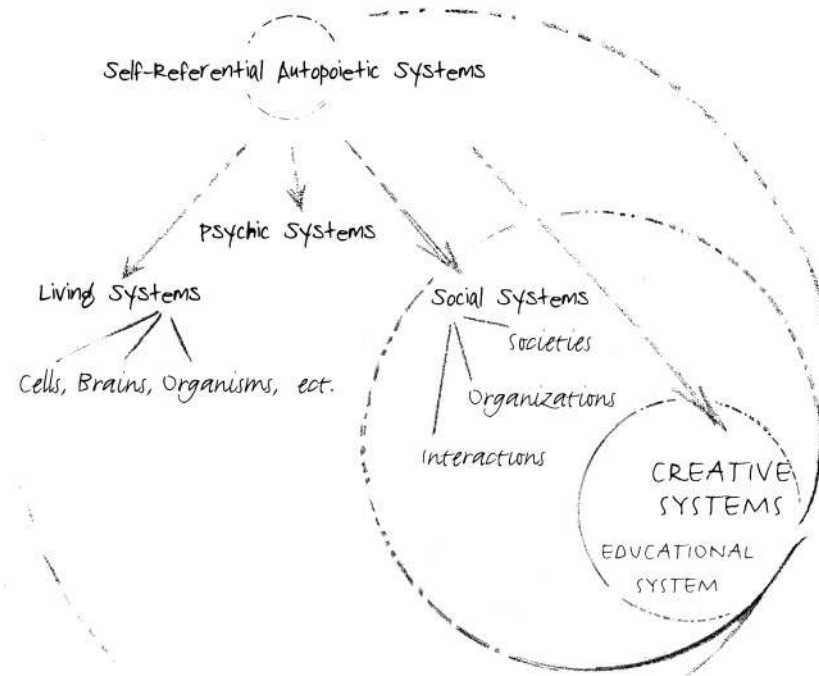
Figure 3. Creative educational system as an autopoietic system. Modified from Iba (2009)

These considerations help us approach the definition of the "creative act" as an autopoietic system based on the synthesis of idea, activity and output. In this case we can consider the functional system as a closed operational one, open for interferences with other functional systems; in the case of coupled social autopoietic systems, this brings forward a symbiosis of communication codes. Extrapolating this model, the creative community can be envisioned as having an autopoietic organization, in which refusal and debris have to be acknowledged as central cultural values of the creative and innovative activities. The above mentioned concepts help us introduce the figure of observer and the explanation of the system in its wholeness. Interesting to note that Maturana doesn't attribute to the observer an active role in the interferences with the system. In contrast, from our perspective, the observer has a determinant role in the interference with the social system observed, and in certain circumstances becomes part of the system (fig. 4).
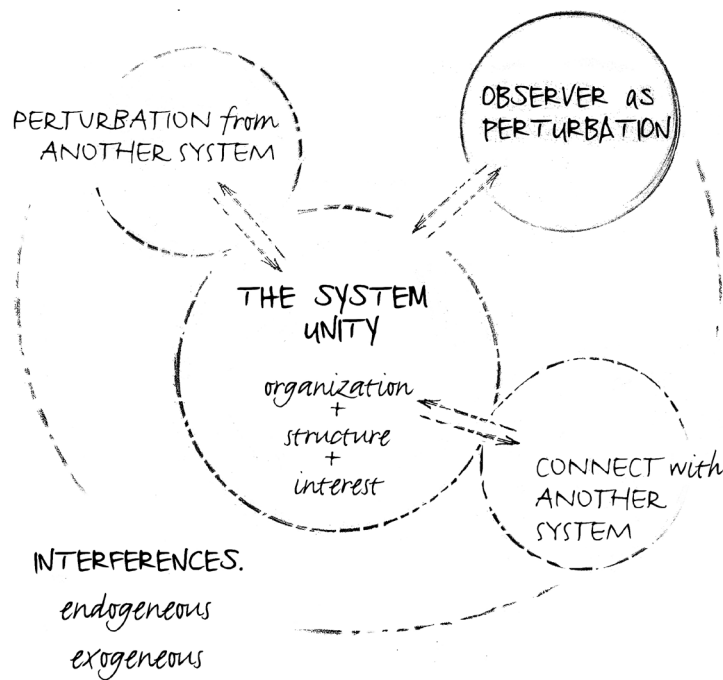
Figure 4. Domains of Relations and Interferences

If a social system is considered as the unit of analysis, then the presence of the observer enlarges the space for relations and interactions, in the same way the perturbation from other systems does. In this sense two different categories of interactions can be delineated as such: inside the autopoietic unity or endogenous and between the unity and the other external factors or exogenous.

Previously in this chapter it was shown how the concept of autopoiesis is relevant and has been used as a way to understand the social systems. In this respect one of the most significant theory of social autopoiesis was advanced by Luhmann who rather then attempting to use the model as proposed by Maturana, gave it an abstract interpretation for then translating relevant components in sociological terms and concepts. As such he explains the most important concepts of the theory without however attempting to assimilate the core concept of a living system, strictly related to biology.

[I]f we abstract from life and define autopoiesis as a general form of system building using self-referential closure, we would have to admit that there are non-living autopoietic systems, different modes of autopoietic reproduction, and general principles of autopoietic organization which materialize as life, but also in other modes of circularity and self-reproduction. In other words, if we find non living autopoietic systems in our world, then and only then will we need a truly general theory of autopoiesis which carefully avoids references which hold true only for living systems. (Luhmann 1986b, p. 172) (Seidl, 2004)

Moreover bringing the paradigm of autopoiesis into the realm of social sciences Luhmann indicates the components of the system in terms of elements that exchange information using communication codes. This brings us to the definition of the systems with an autopoietic organization according to the nature and semantics, of its communication language.

For example, the code of the legal system is legal/illegal; the code of the economic system is payment/non-payment; the code of the system of science is truth/untruth; the code of the political system is power/non-power. Each of these systems communicates about itself and its environment according to its specific code: for example, for the legal system something is either legal or illegal, or has no relevance at all; for the economic system something is either a payment or a non-payment, or has no relevance to it: that is to say, whether something is legal or illegal is irrelevant to the economic system. (Seidl, 2004 p.36-37)

Here we arrive at another important node in the paradigm of the social autopoiesis that helps us link the theory with the our main argument.

Firstly, if we consider the functional system as a closed operational one, open for interferences with other functional systems, in the case of coupled social autopoietic systems, this brings forward a hierarchy of communication codes. In this case the functional system of "design" or "act" is innovation/non-innovation is coupled with the **power / non-power**, or the code of political system.

Secondly this underlines the presence of the observer and its role in determining the reference system and primary one, and therefore also a secondary functional system. Thirdly it is important to stress out the ubiquitous presence of the political system that we can picture as grafted on almost any social environments. (fig. 5).

Having defined the nature of the relation between "design" and political functional systems, the next step is to investigate the nature and quality of interferences between the coupled systems. Following Luhmann's theory, "these societal functions are exclusively served by the respective

function system: only the legal system can provide justice (legality), while the economic or scientific system cannot; only the economic system can produce payments; only the scientific system can produce truth", this perspective doesn't include the coexistence of several coupled systems and more important the alteration of the communication codes accordingly.

Thinking of the concrete instance of "design" and politics the presence of power can influence the innovation to the point of destroying it completely, making the communication code meaningless. For this reason, the functioning system of politics, controls the creation, preservation and destruction of the very meaning of transformation.
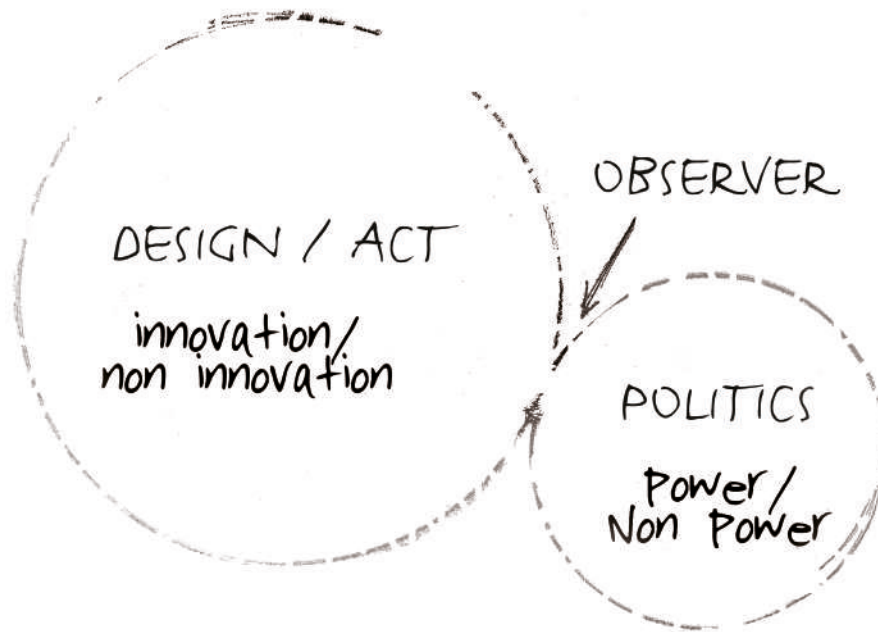

Figure 5. Binomial system and Boundary zone

1.2 An overview on the power dynamics within the binomial systems. Understanding the situations, creating awareness.

Before entering into the core of the endogenous interferences within the two-coupled systems, it is necessary to review the main ideas discussed in the previous chapter. In the first place it was shown how the paradigm of autopoiesis and autopoietic systems has "migrated" to the social sciences and more important to organizational studies. The theory of autopoietic social systems advanced by Niklas Luhmann, helps understand the paradigm in a genuinely trans disciplinary perspective, in which the main ideas presented originally by Maturana & Varela in the field of biology are abstracted from their living organism reference.

This facilitated the explanation of an essentially closed operational system that is open to interferences with other autopoietic systems and the environment in which they are embedded, fostering in this way two types of interferences: exogenous, and endogenous.

Also it was shown how a series of exogenous interferences may trigger the coupling with other systems creating in this way a border zone that contains elements from both systems. More over unlike the living organisms in which the reproduction and "masturbation" within the system is an exchange of chemical substances, in the case of the social systems the elements are reproducing and therefore renew the system through communication. At this point the question the next chapter aims to address is what happens in the particular case of the grafting of a political system to the creative system? The way to look for answers is by looking closer at the inner "live" of a binomial social system at the endogenous interferences and the power struggle at its core (fig. 5).

Perhaps the best way to visualize the abstract insights is to mention a paragon. The social structure of many mammals (and not only) presents unbelievable resemblance to the human one. In particular, among the big apes, many studies have been carried on baboons (Sapolsky, 2004). The baboons spend few hours per day for finding food, having then a lot of time for ruling, beating, grooming, making sex, bother each other. They are organized into groups of 5 to more that 200 individuals, typically 50, strongly hierarchical.

A male leader (A) is ruling the group, after he got the power through violence; he gets respect from any member through behaving as aggressive, crying, beating, biting. He is able to understand whether or not a young member is for sure her/his son, and only in this case he takes care of her/him; he accepts carefully attention and grooming by his partner (B), but he is in any case dominant; the female B is largely respected by all the components, and she benefits from her social position; a lower level of competitors, male or female, try to substitute the á male (by the way, B is often provoking fights, to be free of having sex with other interesting but not "dangerous"

males), and the same females, for substituting the dominant B. A further level of supporters knows that they have no chance to compete; finally a group of outcast (possibly for physical problems) concludes the hierarchy. A rule: any level is ill treated by any individual of any higher level. Baboons show high exposure to stress: stressors are mainly the trial to compete and the defense from competitors, while the activities reducing the stress are to be object of grooming, and aggressions and ill-treatments of lower level individuals non competitors (Sapolsky, 2004) (Maiocchi et al., 2011).

The paragon quoted before helps us grasp the true dimension of the graft phenomenon in the real situations and how important is the attention on the true but difficult to identify, if not hidden, influence of politics even in a relatively "benign" context such as the creative environment. If the previous instance showed the internal moves and interferences in a contended territory, it also suggested the importance of the active observer who acquired the capability and wisdom to analyze the social interactions using the most appropriate metaphors. An adequate analogy is that of a battlefield in which more intricate interactions take place. The main purposes of this are first to demonstrate how power communication codes have a tremendous importance in any autopoietic system, second to underline the role of the observer as shifting from witness to adaptive participant, eventually becoming a viral disturbance to the system.

1.3 Observing the power dynamics. The changing role of the observer from passive witness to activator, and viral, provoking agent

Having said that I will introduce the power dynamics as intended in the literature concerning power and war literature. One of the essential fascinating writings is coming from ancient China in the shape of the Sun Tzu and the art of war. Still a reference oeuvre for organizational behaviorists, corporate strategists and political figures alike, the writings of Sun Tzu have at core the political figure of a general, his dedication to the sovereign and the victory but first and foremost stresses out the relation between the general and his army of soldiers. As such the "wise general" doesn't think or act as an individual but becomes the mind of the people he leads being responsible for their lives as much as for the victory.

Drawing from this insight, we can speculate that the role in the context of the autopoietic social systems, the observer gains a different dimension, that allows her/him to have the threefold perspective of outside, inside and the tensions created by the interferences between coupled systems and disturbance agents. Much as the general weights the strategies of war, confronting his own army with the enemy's the observer has the ability to interact in the system,

this intervention being relevant in particular in the boundary **zone of interpretation**. Rather than a neutral space, the boundary zone within a "**membrane**" that becomes a contended territory in which the communication codes have multiple meanings, as we have actually seen in the previously quoted instance, a conflict zone in which communication triggers action. At this point we propose a closer look at the complexity of conflict and what this implies in terms power balance. For this purpose it is necessary to consider the conflict as a process that as Rumell writes, can be divided in five main phases:

> ... The first is the transformation of sociocultural (conflict) space into opposing interests. The second involves the will's choice to manifest opposing interests and a consequent situation of uncertainty. The third is the resulting balancing of powers, which may be manifested as conflict behavior. The fourth is the balance of powers, the structure of expectations. And the final phase is the disruption of expectations by some trigger event that renews the cycle: disruption creates uncertainty calling for balancing and the creation of a new structure of expectations. (Rummel, 1976)

This sets up two different levels of endogenous interferences: a level of latency, in which individuals (in our case) co-exist without having contrasting meanings, values, norms, or interests and hence the social exchanges are superficial, and a level of manifestation in which the conflict manifests. In a simple representation, the motives of conflict can be placed in the latency level and seen as premises for creating a situation of uncertainty (fig. 6) and the passage towards the manifestation level.

Interesting to remark the potentially growing conflicts are always present in any social system, their manifestation can be seen as a sign that individuals within groups, or societies have reached a level of awareness about each other and therefore social interactions occur through communication. From this perspective conflict does not have a negative connotation but is shown as an inherent component of information exchange. As it will be discussed in a following chapter, the thorough understanding of the conflict process applied to the creative environment helps to demystify the general view in which groups have to necessarily reach a consensus in order to generate innovative ideas.

Having said that, in real world people share the same space or even work together without necessary engaging into an overt conflict on daily basis, and there are several reasons for this. First of all there is little awareness on the individual differences because of the minimal contact, the lack of communication providing little basis for opposing attitudes to be transformed into opposing interests. In the second stance, although there might be a certain level of acquaintance with opposing perspectives and attitudes, there is little will to transform them

into opposing interests. Finally, superficial social interaction occurring through communication could stimulate opposing interests and still the will may have no reason to actualize this opposition (Rummel, 1976). To summarize, as shown in fig. 6 the subphases of the latent conflict phase can be divided as such:
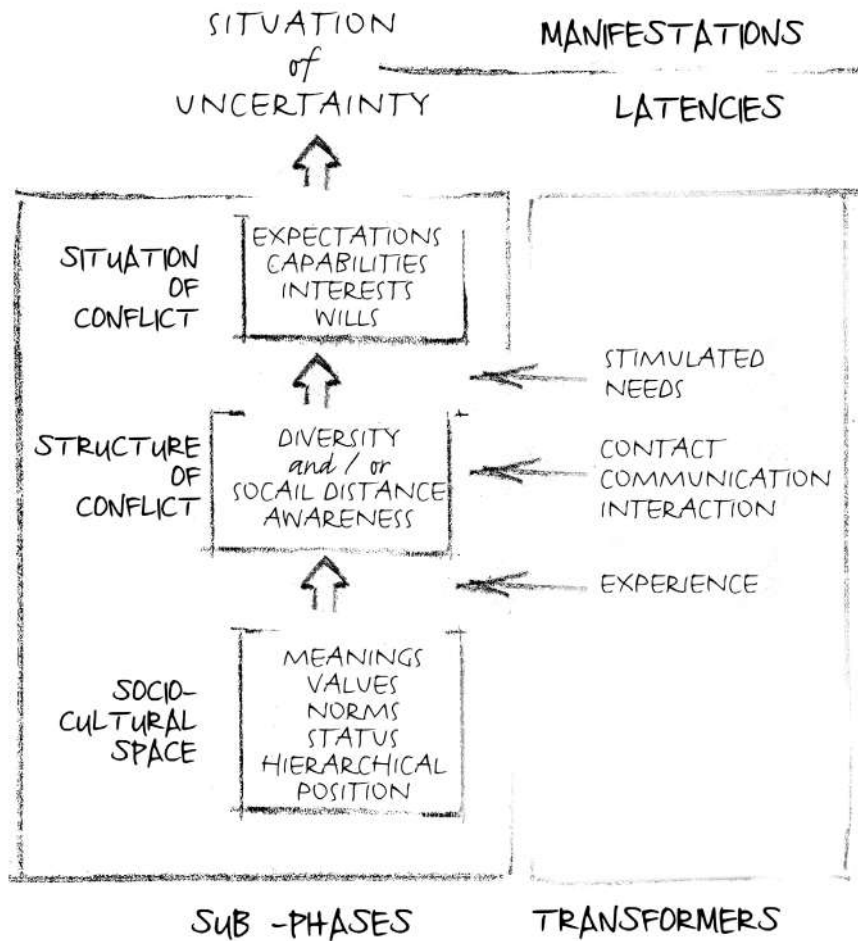

Figure 6. Latent Conflict. Modified from Rummel (1976)

A. the definition of a socio-cultural space in which different values, meanings, norms, status or hierarchical positions coexist, and the role dispositions are outlined.
B. the potential conflict situation is structured by acknowledging the differences, creating awareness about the cultural differences, being ethnic or cognitive (Page, 2008) and/or social distances (Hofstede, 1997). The passage from the definition of the social space towards the clustering of "interest groups" takes place according to the acquired personal experiences as well as the increase in communication exchanges among the different individuals or groups.
C. once the structure of conflict formed through awareness, the opposing attitudes generated through clustering are activated and become opposing interests. This leads to the transformation of the structure of conflict into the conflict situation in which the opposing parties are mutually weighting their capabilities, and forces. Through this process the opposing interests are turned into vectors of power directed towards the opposing party.

We have though the potentiality of the conflict delineated into a socio-cultural space, the actualization of the opposing dispositions into opposing attitudes, the **energizing** of the **opposing attitudes** into **opposing interests**, and finally the will preparation for the manifestation of conflict (fig. 6).

2. Engaging the latent potentialities

2.1 Activating the manifestation of power by embracing uncertainty

So far we have seen how a conflict builds-up and the intricacies of the preliminary phases that lead to the construction of a conflict situation there where latent potentialities exist. For the close analysis of the different subphases and the factors that transform potentiality into actuality, there are some aspects particularly relevant for sustaining our argument – that "design" and power systems could be looked at and studied as a binomial functional system. We already have shown how the particularity of the autopoietic social systems is the presence of communication and communication codes in the endogenous and exogenous interferences. The previous chapter though, showed the precise moment when communication gains full power, and advances the conflict into its activation phase. It is easy to understand how the raise of awareness on the differences takes place through communication and how the fine power balance that weights capabilities, interests and wills can be manipulated by constructing a purposeful through verbal, written, visual, or even a sensorial narrative. As Rummel notes, power manifests in all daily activities,

> (...) Passing a drive-in, the smell of hamburger may trigger our will into deciding to buy (exchange power) one, as does seeing a useful item on sale in a department store. A naive criticism of our work may trigger our will into deciding to write a short essay on the whole subject (intellectual power). An especially bad cough from one's friend may trigger our will into inducing (altruistic power) him to see a doctor.(Rummel, 1976)

So far we have navigated into a fairly theoretical ground, presenting power as an abstract concept somehow dislocated from the environment in which it manifests. The quote above not only brings us on firm ground but also underlines how a conscious behavior may radically change the perception of a situation helping the raise of awareness on the different choices we make without even thinking. Taking note of opposing interests in our social environment helps to create the necessary premises and the pressure that pushes towards the actual confrontation on two conditions. The occurrence of an event or occasion that provides a trigger and the decision to manifest a contrast with what is perceived as an opposing party.

2.2 Rhetoric and metaphor. Searching for imagination domains where influence can be activated

The balancing of power and the gauging of the power manifestation depends, as shown in the figure "the balancing of powers" on a triangle of three main elements such as the interests, wills and capabilities of the opposing parties. What this means in real situations is that the negotiation of these three elements or factors that give the dynamic of the power manifestation confronts different imaginary horizons, and perspectives and translates into the capability of the opponents to envision and anticipate each others' interests wills and capabilities. Here it is important to stress out the presence of more levels of visibility and ambiguity that has to be tackled in order to attain a relatively stable socially constructed situation. To be more clear about the meaning of the "socially constructed events" Shotter makes reference to the way people need and construct "organized settings" of enabling / constraints "into" which they direct their future actions (2002).

It is necessary to understand that this vision comes from the study of conversation and dialog and a deep inquiry into language and speech forms. I brought into discussion this (apparently) ephemeron dimension of verbal language in order to pinpoint the potentiality of the creation and expression of an imaginary domain or territory of action as a way to influence the power balance. In this context, being aware of the metaphors that can both reveal and conceal the interests, wills and capabilities is one of the key factors that allows a control of a situation. Rather than imposing authority through persuasion (as shown in fig. 21) in this case we introduce a more subtle action of

influencing by attaining to a partially shared imaginary. In this concern, Shotter refers to what lays between real and factual and the nonexistent and fictitious drafting two categories of partially real: *the imaginary* and *the imagined.* As he explains:

> [...] the organized settings people create between themselves give rise both to felt tendencies that cannot be wholly grasped in mental representations, but that these tendencies can nonetheless be thought about as imaginary entities. They have a degree of real existence due to their 'subsistence' in people's social practices, and to that extent are able (like fictitious entities) to exert a *real influence* upon the structure of people's activities. (Shotter, 2002, pg. 80)

These considerations allow introducing the notion of metaphor as an instrument of navigation and control within an imagination space. As Lakoff explains "the essence of metaphor is understanding and experiencing one kind of thing in terms of another" (Lakoff & Johnson, 2008 pg. 5), moreover in social settings, metaphors allow participants in a conversation as much as the opponents in an argument to shape and reach a common sense (sensus comunis) or temporary situations in an activity flow that induce a shared meaning and affective value and feelings (Shotter, 2002, pg.54). In this sense each metaphor carries on a wealth of imaginary entities that shape the everyday actions. In Lakoff's words:

> Metaphors have entailments through which they highlight and make coherent certain aspects of our experience. A given metaphor may be the only way to highlight and coherently organize exactly those aspects of our experience. Metaphors may create realities (emphasis added) for us, especially social realities. A metaphor may thus be a guide for future action. Such actions will, of course fill the metaphor. This will, in turn, reinforce the power of the metaphor to make experience coherent. (Lakoff & Johnson, 2008 pg.132).

This chapter was aimed to underline several important points: first I have shown a close-up view on the factors that are at the core of the **power balance.** (fig. 7)

They were the interests wills and capabilities in a situation of uncertainty; this triangle determines a space that can determine the territory of action in which a partially shared imaginary can emerge. In this case, quoting from Shotter, I introduced the concept of imaginary entities, which can be seen as unstructured mental representations. The role of the metaphors in this case is to give shape and meaning and to the imaginary entities, directing them towards a line of action, and influencing their scope and motivation. Arrived at this point the next step is to show the importance of a consciously "designed" strategy that takes into account the social nature of the rhetoric, enabling the construction of narratives that support the **manifestation of power**.
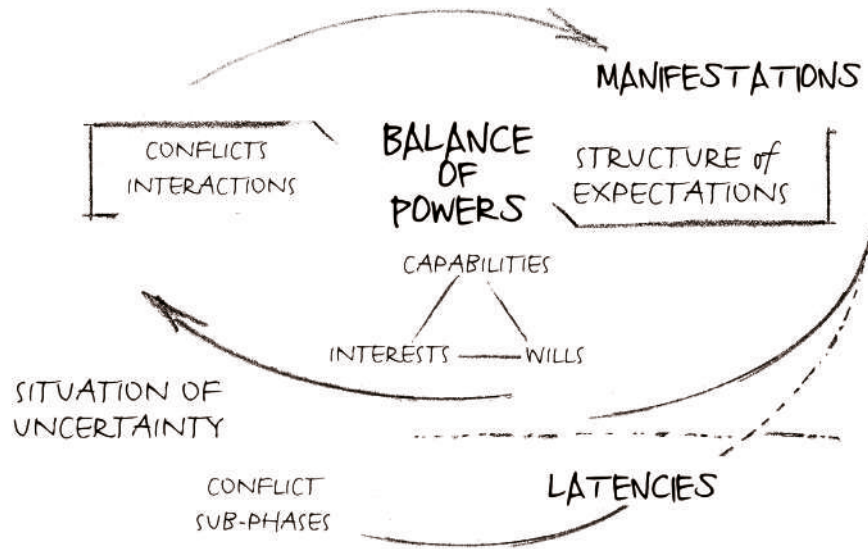
Figure 7. The balancing of Power

2.3 Rhetoric and Narrative Metaphor

When a person utters a word whose word is it? For a word is territory shared by both addresser and addressee, by speaker and his interlocutor. The immediate social situation and the broader social milieu wholly determine – and determine from within, so to speak – the structure of an utterance.
Volosinov, 1973, p. 86

The preceding chapter was concerned with the delineation of a general background in which power manifests. This helped anticipating the role of the metaphors in influencing the direction of an argument but also introducing rhetoric, or the art of persuasion not as a stylistic exercise of skillfully arranging the superficial form of the discourse but as a conscious acknowledgment of the content and the power of the imaginary world metaphors induce into a rhetorical discourse. Seen from this perspective, the rhetoric is coming much closer to the initial demand quoted

from Volosinov indicating a shared authorship of the expressed utterances. Extrapolating these insights to the creative dimension, adds more depth to the type of the content being organized through rhetoric and narrative in a social context. It is not only words and verbal expression that we are dealing with but also visual, and three-dimensional structures that have a rhetoric quality. In order to better sustain the argument of socially constructed power rhetoric and underline the close connection between content and form it is necessary to look at the definition of rhetoric as explained by Gianbattista Vico in "The Art of Rhetoric". This will also allow to coherently align the previous argument about the significant role of imaginary entities as explained by Shotter, who also brings forward rhetoric as a seen by Vico, in its socially constructed dimension:

> "Rhetoric or eloquence [...] is 'the faculty of speaking appropriate to the purpose of persuading'. [...] For this reason, speaking is fitting to the orator. But the orator must speak so as to persuade, that is, so that he tries by his speech to bring about in the listener a spirit of conformity with the oration by which the listener will feel about the cause (emphasis added) as does the orator. [...] Truly to persuade is **to instill in the listener wills** (emphasis added) the same as that which the oration proposes. (Vico, 1996, pg.5)

A power rhetoric in this case goes beyond sustaining and temporary winning an argument, to the creation of a partially shared imaginary in which the very idea and feeling at stake is fruitfully inseminated in the listener's conscious through the **art of persuasion**.

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CONFLICT
LATENT
NAVIGATE
AGAINST
EQUILIBRIO

Kronos. Saturn Devouring his Son
Francisco José de Goya
Prado Museum, Madrid (1810-1822)

SINGULARITY 2

3. Manifesting the latent potentiality through power

3.1 Balancing conflict and creativity to create momentum for action.

This setup of a larger historical framework allows a speculative parallel between the struggle of the creative process in the context of the current crisis of the production, distribution and managerial models and the presence of political crisis and conflict. This concerns global strategies of change such as the ones applied in warfare and include the tactics that help exercising local power. The difference between strategy and tactics is particularly relevant leadership where, roughly put, the capability to plan has increasingly become, equally important to the skills involved in "doing" or craft. But perhaps what is most important in creating a strategy is the actual structure behind it. The kernel of a good strategy, as Rummel explains it, can be drafted according to a basic pattern that follows three main steps:

1. A diagnosis: an explanation of the nature of the challenge. A good diagnosis simplifies the, often overwhelming, complexity of reality by identifying certain aspects of the situation as being the critical ones.
2. A guiding policy: an overall approach chosen to cope with or overcome the obstacles identified in the diagnosis.
3. Coherent actions: steps that are coordinated with one another to support the accomplishment of the guiding policy. (Rummel, 2011, pg. 9)

This very concise recipe doesn't include the management and implementation of the overall strategy and the consequences triggered by adopting a certain type of strategy. One of the main issues coming from that is the inherent use of power as the essential element needed to catalyze intent into action (Bennis & Nanus, 1985, p.6). Moreover the politics involved in exercising power is, as Pfeffer underlines one of the most delicate, feared and criticized aspects of managing and governing organizations. He argues that not only power is the main agent of change and renewal of an organizational system but that innovative processes require politics — in either an implicit or explicit manner:

There are politics involved in innovation and change. And unless and until we are willing to come to terms with organizational power and influence, and admit that the skills of getting things done are as important as the skills of figuring out what to do, our organizations will fall further and further behind (Pfeffer, 1992, pg.32)

From this perspective the author challenges two of the most common organizational management strategies, the hierarchical, authoritarian system, and the organizational culture based on creating a common vision and argues that both models somehow fail to engage into innovative changes within the organization. While in the first case the authority is no longer credible and lost its effectiveness the second model is difficult to implement in the case of increasingly heterogeneous organizations and agencies, with a considerable gender, ethnic and race diversity. He proposes the implementation of an alternative management strategy based on the implementation of power and influence in several steps:

1. Decide what your goals are, what are you trying to accomplish.
2. Diagnose patterns of dependence and interdependence; what individuals are influential and important in your achieving your goal?
3. What are their points of view likely to be? How will they fell about what you are trying to do?
4. What are their power bases? Which of them is more influential in the decision?
5. What are your bases of power and influence?
6. What bases of influence can you develop, to gain more control over the situation?
7. Which of the various strategies and tactics for exercising power seem most appropriate and are likely to be effective, given the situation you confront?
8. Based on the above, chose a course of action to get something done.
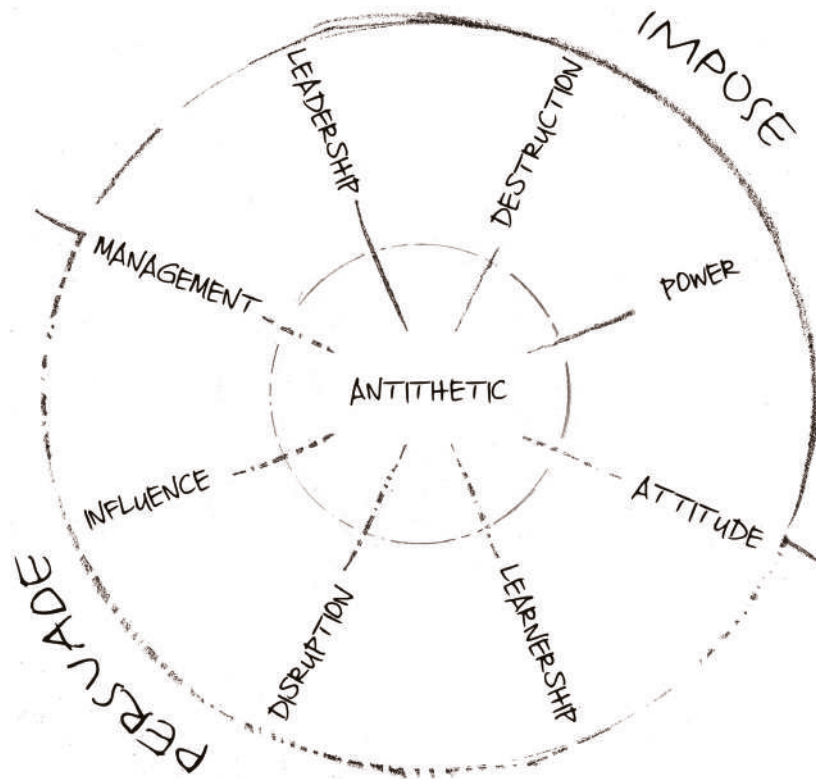
Figure 8. A disruptive strategy between persuade and impose

Considering the above guidelines, it is necessary to stress out how the power and influence paradigm presented above, follows closely recommendations for the structure of a good strategy mentioned before by Rummel. This is even more interesting when considering Pfeffer's claim that "the use of power and influence [puts] an emphasis on method rather than structure" (pg. 44).

The comparison of the two models brings forward the close attention given to individuals' behavior and the social environment in which they interact, and the readiness of the leader to adjust to the unfolding events. Paradoxically the scenario outlines an anthropocentric facet

of power leadership, in which the dominant advantage has to be constantly negotiated by the leader according to the circumstances. The exercise of power and influence implies an increased responsibility and the capability to assume and maintain a competitive advantage. Finally Pfeffer shows how it is possible to wield power and influence without necessarily having or using formal authority.

3.2 The importance of conflict to corrupt a stagnant system

If the hazard is rot from within a dominant culture, or its failure to adapt, obviously the pressing immediate task is for the society to be sufficiently self-aware to recognize the threat of accumulating cultural weaknesses and try to correct them, and so stabilize its complex cultural network."
Jacobs, 2004, p.174

The complexity of the project teams triggers important communication issues and therefore a **continuous negotiation** process. (fig. 8)Many literatures have reported the important role of the creative leaders in integrating the specific disciplinary knowledge of the participants in a collaborative dynamic (Sonnenwald, 1996). In particular Brereton stressed out the role of social interaction and the impact of consensus in shaping the final product (Brereton et. al., 1996). The importance of creating shared meanings, brings forward the continuous negotiation process in the creation of a common ground of understanding. In this concern Larsson (2003) shows that "design" is a social activity, in which the common ground has to be built and re-built according to the social circumstances that emerge in the working environment. In this context partially shared territories emerge on temporary basis (Gregory, 2001) and boundary objects or negotiating artifacts give shape to the object of "design" (Buciarelli, 2002).

In this case the negotiation process can be seen from two different perspectives: first as a collaborative process with a fairly stable characteristic, in which consensus prevails, and that encounters occasional breakdowns, and second as a state of unsettlement in which consensus is seen as a temporary agreement. In the second perspective the breakdown is intended as outlined by Flores et al. as

...Any interruption in the smooth unexamined flow of action. It includes events that participants might assess as negative (as when the pen you are writing with runs out of ink) or as a positive new opportunity (e.g., a stray useful thought that interrupts your flow of writing or a friend knocking at the door)" (Flores et al. 1988)

While the first perspective is usually preferred in the "design" collaboration literature, it also presents an idealistic facet of the reality. The second perspective however, comes closer to the actual struggle encountered in real-life situations in which the circumstances are in a continuous flow. It is at this point that the disruption has to be understood as a liberating factor, unleashing tensions and making place for creativity. In fact to better understand the emergence and impact of conflict in a wider view it is necessary to consult the group creativity findings.

Charland et. al. shows a critical view of the "design" thinking in the multidisciplinary creative firms, that explicitly ask participants in brainstorming sessions to avoid criticism. They argue that groups that share an optimal relational experience tend to avoid conflict and therefore display a lack of competitiveness. The danger of this type of group dynamic stays in the leveling of controversial issues and the flattening of differences. The minority dissent rooted in cognitive conflict is shown to enhance creativity and group performance. They argue that "people exposed to minority dissent search for information on all sides of the issue; utilize all strategies in the service of performance; and detect solutions that otherwise would have gone undetected". (Nemeth et. al., 2004, pg. 368)

The difference between cognitive and personal conflict is also discussed in creative leadership literatures (Jehn & Mannix, 2001), explaining how leaders must manage stress, insuring that conflict is task as opposed to personalized in nature (Mumford, 2007), and in organizations conflict and encourages thought and innovative solutions (Moscovici, 1980; Nemeth & Nemeth-Brown, 2003).

3.3 Breakdown and breakthrough as the balancing point between disruption and destruction.

As shown previously these events interrupt a flow of action and introduce a diversion that can enable the occurrence of change in unexpected and innovative ways. In this concern, Madsen shows how breakdowns are necessary to introduce new and / or unseen "domains" of action. Moreover, making reference to Heiddeger's initial concept of breakthrough by breakdown, he argues that metaphors can be used to provoke a breakdown:

"By this (breakdown) we mean the interrupted moment of our habitual standard, comfortable 'being in the world'. Breakdowns serve as an extremely important cognitive function, revealing to us the nature of our practices (...) making them 'present-at-hand' to us, perhaps for the first time. In this sense they function in a positive rather that negative way" (Madsen, 1988).

In other words the metaphors, that are constructed on imagination and storytelling can act as one of the main triggers that enable the manifestation of power in a conflict situation and triggers the anticipation of an emerging territory with **different rules, norms and behaviors.**

In this context the role of the leader stays in having the capability to envision the latent potentialities, find and "design" the appropriate metaphors that can enable the activation of power and find the right balance between disruption and destruction by controlling the breakthrough by breakdown. As it will be shown in the next chapter, the activation of power forces brings an important level of entropy that has to be controlled and shaped through the use of authority and influence.

4. The backbone of the power manifestation: corruption – disaggregation and entropy

Wind extinguishes a candle and energizes a fire. Likewise with randomness, uncertainty, chaos: you want to use them, not hide from them. You want to be the fire and wish for the wind.'
Taleb, 2012

4.1 Towards the consequences of the manifestation of power. Redefining a new territory by using audacity, influence and manipulation

In the introduction we mentioned three instances in which power manifested taking shape of different models. After having shown the mechanisms of power and the sequence in which they unfold it is interesting to remark how the manifestation of conflict corrupts the existing balances and redefines new territories. This is particularly evident in the instance of Thomas Chippendale where the opening of the own workshop not only creates a precedent but establishes a new meaning to the concept of craft and furniture making. The arguably democratic act of sharing knowledge, imposes the disintegration of a controlled furniture making a process introducing a disruptive business model that relied on the detachment of the actual designing and planning system from the actual making of each piece. Moreover the 1754 "Gentlemen and Cabinet Maker Director" was published by subscription anticipating by almost 300 years the notion of shared knowledge and creative commons (http://www.vam.ac.uk/content/articles/t/thomas-chippendale/).

I have chosen to underline the importance of the Chippendale style, as a way to direct attention towards the neutral interpretation of the term corruption in our context. In this sense the instance helped focusing on the etymology of the term that emerged in the 14th century French language (and derives from the Latin "*corrumpere*" to breakdown and / or destroy. This brings us back to the argument discussed in chapters 2 and 3 in which I have shown how the breakdown or corruption of a ill functioning system has to be seen as an opportunity for the definition of a new territory. If the Chippendale case has been presented as one of the major events that determined the evolution of the history of "design", it is also important to point out the lack of intent and awareness towards both the excellent conditions provided by the social and political context and the impact that the introduction of a novel way of imagining furniture manufacturing will have in the history of "design". In other words, when Thomas Chippendale intuitively reacted to the given circumstances unconsciously recognizing a state of uncertainty as a territory for change. This proves the relevance of the power manifestation model adapted from war theory and presented previously (fig. 4) and advances the argument to the double role of the leader as observer and change provoking agent.

In the beginning of the book, the creative system was proposed as an autopoietic system defined by organization and structure that self reproduce in a closed dynamic but in the mean time are open to external influences. Moving forward from the initial paradigm by Maturana and Varella, I have shown how Niklas Luhmann borrowed the principles of autopoiesis, transferring the paradigm in the realm social sciences. In this sense one of the most interesting aspects of the social autopoiesis was the exchange of social interactions in a closed system and the way in which a system of communication codes was generated within the network. As Mingers reminds us there are two main requirements for a system to be considered as autopoietic:

> 1. Fundamentally, autopoiesis is concerned with processes of *production* — the production of those components which themselves constitute the system. Can we identify clearly what are the components of an autopoietic *social* system, and what are its processes of production of those components?
> 2. The autopoietic organization is constituted in terms of temporal and spatial relations, and the components involved must create a boundary defining the entity as a whole. In the case of social systems, is it possible to identify clear demarcations or boundaries that are constructed and maintained by the system? (Mingers, 2004, pg.406)

Moreover Mingers asks if in the context of social systems the initial Varela's (1979) idea of production could be used to refer to non-physical entities such as concepts or ideas. This reflects Luhmann's

perspective, outlined in the previous chapters. Moreover starting from this trans-disciplinary interpretation, the previous chapters concentrated on the frictions and inherently conflictual nature of the endogeneous interferences that make the system to re-create itself. Having said that, the next step is to present the role of the leader as a provoking agent as well as a catalyzer of change. By introducing the figure of a catalyzer the argument re-connects to the previously mentioned process of power manifestation, showing the territory opened in the aftermaths of an unleashed conflict as affecting the initial status of the autopoietic system, by opening a breach for change both from in and outside. This perspective is sustained by Smith and Sharicz who make reference to the concrete case of business organization underlining their hybrid state of closure and openness. As they stress out:

> Even whilst autopoiesis is taking place among members of the leadership network, and linked networks, a process of ongoing socialization is taking place among members across some or all of the extant networks. This leads to the development of one or more open systems that arise and live or die concurrently with the autopoietic system (formal organization). (Smith & Sharicz, 2010, pg.2)

It is in this territory of partial ambiguity that the will, interest and capacity of the leader manifests by influencing the future of the autopoietic social system through audacity. As we will see in the next chapters, the circumstances created by the confluence of order and entropy generate a state of uncertainty in which the previously known parameters are completely modified. In this case, given the speed of change, even before trying to understand and making sense of the newly created circumstances the leader has to learn to adjust to them, learning by doing and shortening the time in between the decision making process and the sequence of actions.

4.2 Navigating versus making sense of the unknown

I have chosen to exemplify the above statement about the velocity with which a leader has to react to incoming circumstances and the increase of uncertainty, with the analogy of unplanned navigation in order to introduce several concepts that can guide the orientation in unprecedented situations. Perhaps one of the best instances is brought by Suchman quoting Gladwin as a way to explain the essence of situated actions:

> This total process [of Trukese navigation] goes forward without reference to any explicit principles and without any planning, unless the intention to proceed to a particular island can be considered a plan. It is non-verbal and does not follow a coherent set of logical steps. As such it does not follow what we tend to value in our [western] culture as "intelligent" behavior. (Gladwin 1964, p.175) in (Suchman 1987, p.49)

 Suchman in this case refers to the contrast between plans and actions, in order to introduce the term "situated actions" defining the way in which every course of action depends and is determined by material, social and arguably also political circumstances. This brings forward several aspects about leadership behavior that relies mostly on the personal capacity of the leader to constantly learn and improve a (apparently) chaotic behavior crafted according to the circumstances. What this means in practical terms is not necessary that a leader should not start from a given plan but that the very meaning of leadership is seen as a constantly renewing activity in which the original plans can also be completely reconsidered in order to reach the final aim of a given activity. The elements that allow a leader to achieve his purpose are only partially visible and are also related to chance seeking (Bardone, 2012). As Bardone remarks a chance can by seen as an opportunity that will be assessed in the future and relates both to what we know but more interesting to what we don't know. In this sense he divide the "knowns" in three main categories:

> **Forgotten knowns**, refer to the knowledge that was once acquired but remains stored in our memory only as a fading memory. This kind of knowns are still present and have an important influence on the way we reason even though cannot be fully recollected.
> **Secreted knowns,** are related to the Freudian concept of repression of a known and are hidden or unknown to one's unconsciousness and therefore secreted.
> **Tacit knowns**, comes from Michael Polanyi "The tacit dimension" and describes the knowledge acquired through experience in time that cannot be expressed in words or images. In other words we are not fully aware of the accumulation the tacit knowns. All three categories are called by Bardone **silent knowns**, and they affect the chance-seeking behavior:

>> "Unknown knowns – in the form of silent knowns – merely offer a **potential chance for knowing**, which, however, does not appear immediately evident or at one's disposal. […], time is a major factor determining whether a silent known is going to remain silent or it will turn out to be a good chance." (Bardone, 2012, p. 6)

Acknowledging the presence of the silent knowns helps us draft a different type of leader, whose role is to become open towards the impact of the changes strengthening his/her leading capabilities in contact with incoming adversities, embracing the chance seeking within a chaotic system. This brings us to what Taleb calls antifragility, or the capability to benefit from randomness, volatility and uncertainty (Taleb, 2012) and is a quality that defines chance seeking because it takes advantage of (apparent) irrelevancy. Seeking relevance in randomness is perhaps best expressed in Sun-Tzu's words: "[i]f we do not know what we need to know, then everything looks like important" (Sun-Tzu, 2010). It is important to note how this links also to the imaginary entities

explained in a previous chapter. To be more explicit, the use of imagination unleashes the silent knows allowing them to act as intuition rather then structured representations therefore leaving space to envision an open system.

Coming back to the initial quote, it is precisely the vision of the open system conveyed in the Trukese navigators' imagination that allows them to lead with confidence without a plan. Perhaps one of the most important advantages that comes from being aware of the existence of the silent knowns is precisely the strength and confidence in one's own actions that a leader must acquire and display in order to be able to accomplish his/her role. If previously I underlined the double role of observer and changing agent that has to be achieved by the leader, one of the most important points of this chapter was to explain the multidirectional aspect of observation, aimed at chance-seeking and envisioning an open system guided by intuition and confidence in unknown knows; as Bardone explains:

> Inconsistencies and falsifications are unexpected events, which emerge by luck in the course of one's investigation. Conversely, silent knowledge survives inconsistencies, and luck is precisely what may help us find out new and meaningful connections. This may clarify Sun Tzu's argument based on what may be called transparent relevance: when we do not know what we need to know, luck may show to us something potentially relevant, namely, good chances. It follows that silent knowledge exhibits its values especially when the impact of luck is significative. Or, better, luck detonates it. (Bardone, 2012, p.11)

4.3 Disequilibrium and mastery

The previous quote introduces the importance of poise in situations of uncertainty and disequilibrium If as Bardone argues, silent knowledge survives unexpected events, the attitude of self awareness and governance in uncertain situations is a question of mastery of an adaptive attitude that enables leaders to rest aware of the presence of what Sun Tzu calls "good chances". The manifestation of power in this sense stays in letting go of the certainties acquired through experiential knowledge, and seek the right amount of disequilibrium as a way to provoke momentum for change. The importance of seeing the state of disequilibrium as a step forward rather then the end of a process is relevant in particular in the context of the global multifaceted crisis which cannot be denied. Not only changes occur and are expected to happen in all domains but they are interrelated to, and provoke each other at all scales. In this conditions, as Heifetz remarks,

Without urgency, difficult change becomes far less likely. But if people feel too much distress, they will fight, flee, or freeze. The art of leadership in today's world involves orchestrating the inevitable conflict, chaos, and confusion of change so that the disturbance is productive rather than destructive. (Heifetz et al., 2009)

Attaining leadership is not necessarily an obvious concern in the creative practice. Not necessarily because creative leaders are less capable of mastering the leadership skills but rather they are by definition detached from the organizational aspects of the creative environment pondering their work between form and function or art and science and concentrating on the quality of the final outcome rather then re-interpreting the meaning of their own activity. However in one of the first reflections about the levels of expertise Dreyfus identifies 4 levels of expertise as novice, competent, proficient and expert (Dreyfus & Dreyfus, 1980). (fig. 9)

SKILL LEVEL / MENTAL FUNCTION	NOVICE	COMPETENT	PROFICIENT	EXPERT	MASTER
RECOLLECTION	NON-SITUATIONAL	SITUATIONAL	SITUATIONAL	SITUATIONAL	SITUATIONAL
RECOGNITION	DECOMPOSED	DECOMPOSED	HOLISTIC	HOLISTIC	HOLISTIC
DECISION	ANALYTICAL	ANALYTICAL	ANALYTICAL	INTUITIVE	INTUITIVE
AWARENESS	MONITORING	MONITORING	MONITORING	MONITORING	ABSORBED

Figure 9. Mental functions and skill levels of expertise (Dreyfus, 1980)

The first three levels are concerned with the full acquisition of skills and ability to perform them, which in the context of the creative training are equivalent with the undergraduate level. What is more interesting is a former addition of the **advanced beginner**, **master** and **visionary** levels (Dreyfus, 2003) which are also quoted by Dorst when discussing the skills development in the creative practice (Dorst & Reymen, 2004). It is interesting to note that the initial instances used by Dreyfus to exemplify the different levels of expertise are coming from very different domains

such as foreign language learning, chess playing and air force training, proving therefore the relevance of the different categories for seemingly remote activities. Moreover an important point is made by describing mastery as an elevated level in which the performance attains moments of optimal experience and creative flow (Czicksentmihaly, 1996):

> Although, according to our model, there is no higher level of mental capacity than expertise, the expert is capable of experiencing moments of intense absorption in his work, during which his performance transcends even its usual high level. [...] This masterful performance only takes place when the expert, who no longer needs principles, can cease to pay conscious attention to his performance and can let all the mental energy previously used in monitoring his performance go into producing almost instantaneously the appropriate perspective and its associated action. (Dreyfus & Dreyfus, 1980, pg. 14)

The visualization of the different skill levels of expertise and the and mental function connecting to it reveals the importance of awareness and complete involvement in the mastery level, in which Dreyfus & Dreyfus outlines that the expert, and though an individual with an already acquired experience and skills choses to let go of the guiding principles acquired through practice in order to discover new meanings and actions.

This is a particularly interesting stance that implies challenging the equilibrium of rules and analytical decisions in favor of the experimentation and acceptance of the change. In this sense it also brings the preservation of power and the capability to embrace uncertainty through the absence of action as an initiation in the **mastery of adaptive capabilities**. As Agamben notes:

> Every human power is adynamia, **impotentiality**; every human potentiality is in relation to its own privation. This is the origin (and the abyss) of human power, which is so violent and limitless with respect to other living beings. Other living beings are capable only of their specific **potentiality**; they can only do this or that. But human beings are the animals who are capable of their own impotentiality. The greatness a/human potentiality is measured by the abyss o/human impotentiality. (Agamben, 2005, pg.183)

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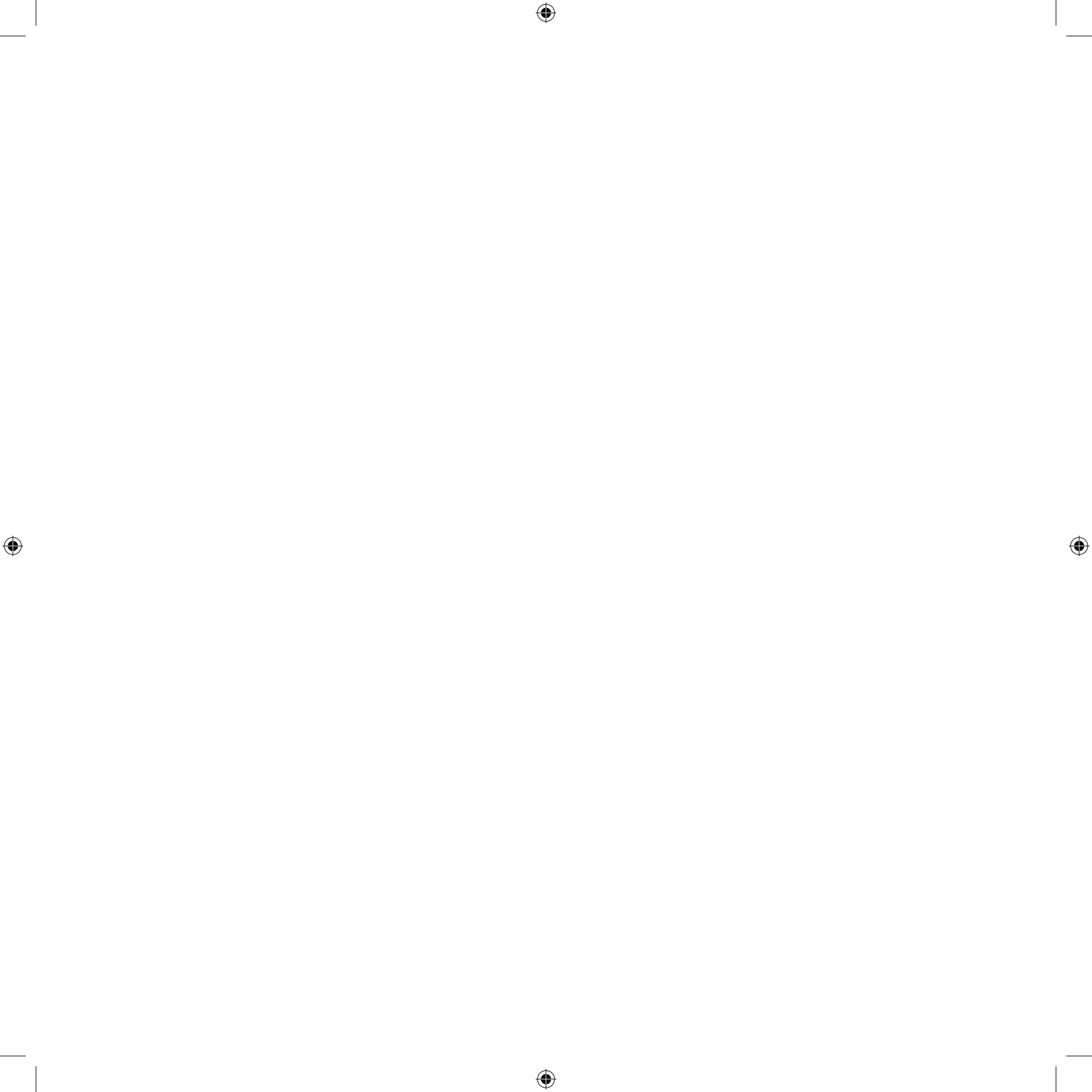
EMPOWER
COACH
LEADING
LEARN
MASTERY

The Colossus of Constantine
Capitolini Museum, Rome
280–337 AD

SINGULARITY 3

5. Leadership and empowerment

5.1 Transformational leaders – coaching a new generation for chaos leadership

Several organizational management literatures have outlined the different forms of leadership and the emergence of the transformational leadership based on a ongoing process of learning (Atwood & Mora, 2010) and contrast it with transactional leadership, based on transactions between managers and employees, conducted according to the personal interest of the leader (Bass, 1991, pg.20) (Tucker, 2004). Enlarging the frame of action, the distributed leadership model aims to include different hierarchical levels within the organization and bridge interdependency between various leaders (Spillane, 2004). The learnership model proposed by Cooksey (2003) (fig. 10) is perhaps the most relevant to help draft a definition of the role of leader that exercises a disruptive creative strategy, and that is because it emphasizes the importance of the adaptive behavior as an asset of the leader. This gives an important value and attention to the emergent leaders and the capability to become a leading figure no matter the level of experience within the organization.

By this Cooksney underlines how learnership, or a continuous learning process is fostered within the organization empowering its members to take the responsibility of learning in autonomy from the experience of performing their own activity. As Cooksney explains:

What "learnership" really implies is a fundamental shift from leaders ``facilitating", ``mentoring" and ``empowering" learners to learn evolving to become leaders in their own right. This goes beyond ownership of process and outcomes to responsibility for process and outcomes (as Dixon, 1998, suggested). Leadership roles in the business thus progressively become less vested in a few people at the top of the organization while simultaneously becoming more diffused amongst all people in the business [...]. (Cooksney, 2003, p.203) (Agashae and Bratton, 2001).

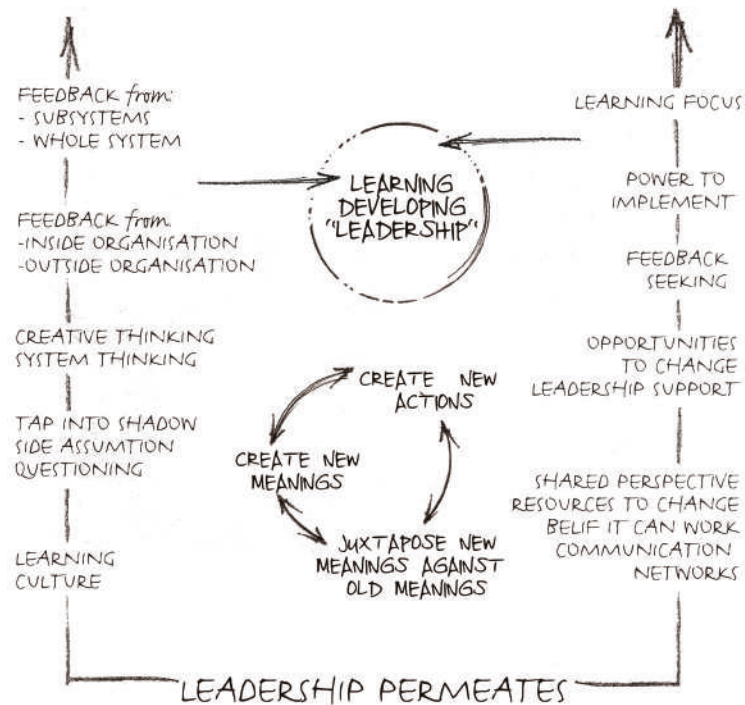Figure 10. Factors and forces influencing "learnership" and learning process.
Modified by the author after Cooksey, 2003)

The leadership – learnership model has many points in common with the transformational leadership bringing it to a more in depth dimension of the distributed empowerment. This is also pointed out by Bass who enlists some of the main characteristic of the transformational leader characteristics

such as charisma, inspiration, personal stimulation and individual consideration of the employees. It is important to note that the exercise of power and influence as shown in Pfeffer's management strategies requires the above qualities in order to be effectively implemented and the learnership capabilities to be consistently maintained. Moreover Cooksney proposes a scheme of the learnership development (fig. 11) which has as a motion point the cycle through which a leader is capable to:

juxtapose new meanings against old meanings > create new meanings > create new actions.

It is important to underline the central place the meaning changing forces have in the scheme and focus on the capillarity of these forces inside the organization. In this sense I suggest that the juxtaposition of old and new meanings generates the generation of an uncertainty zone as a way to make place for a newly created meanings expressed and shared through alternative metaphors, and that the implementation of actions geared towards decision making implies even in restraint social groups the exercise of influence through power.
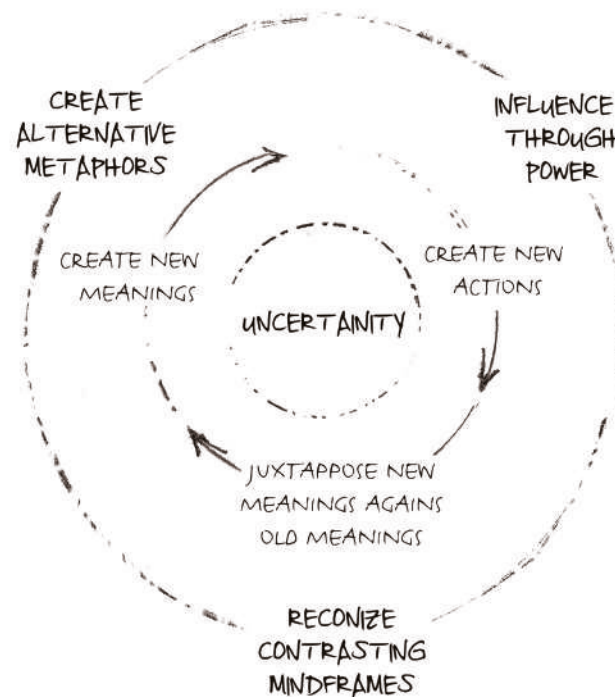

Figure 11. Implications of the meaning – changing process

5.2 The leadership and learnership contexts

In the previous section I pointed out the relation between leadership and learnership in the model proposed by Cooksney emphasizing its distributed empowerment aspect. To better understand the importance of the empowerment it is necessary to outline the importance of the context and the different levels at which the learnership evolves. Taking into account the business environment the author underlines the different scales at which leadership can be studied. The "environment" outlines the area outside the organization, in which the interests of different stakeholders, social and political actors influence the dynamic of the organization; the "organization" defines the overall features of the agency such as its history, structure and hierarchy, internal culture, resources and procedures; the "groups" refer to the formal and informal networks and communities of practice within the organization, with their specific behavioral patterns and influences; finally each "individual" is seen with his/ capabilities, personal resources, needs, weaknesses and emotional features (Cooksney, 2003, pg. 205) (fig. 12)
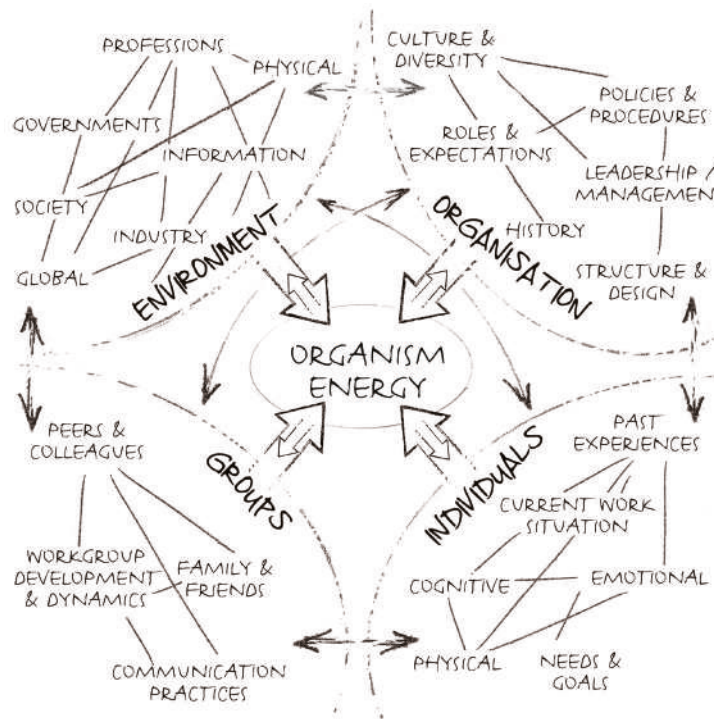

Figure 12. Contextual complexity of organizational activities Modified after (Cooksney, 2003, p.205)

This generic description of the different layers of the organizational context help us envision the complexity of the creative environments and their autopoietic features, and emphasize the fuzziness and entropy of the interferences at all levels pictured above. The duality of leadership – learnership model aims to direct what I previously called the "navigation" in the uncertainty balancing several dimensions embedded in the model. In this concern, Murphy, & Toomey draft several dimensions of learnership that help constructing a view of the overall model and places it at the boundary between educational and business environments (fig. 13).

DIMENSIONS	LEARNING	LEADING
GOALS/OUTCOMES	FOCUS ON INPUT	FOCUS ON OUTPUT
PRINCIPLES	PACING	MOTIVATION
PARTICIPANTS	INCLUDING	INFLUENCING
PROCESS	THINKING SKILLS	DECISION MAKING SKILLS
PROBLEMS	DEFINED	UNDEFINED

Figure 13. The learning and leading dimensions. Modified after (Murphy, & Toomey, 1993)

In an early version of the model proposed by in the educational context, there are five axes on which the several dimensions of learnership unfold: **vision, empowerment, evolution, action and accomplishment** (1993, p.14) (fig. 13) that have their own meaning and understanding in both learning and leading practices. This axes help delineate the territory in which the various dimensions of the model evolve.

5.3 Cultivating learnership and mastery

Having drafted the bases that identify the convergence of learning and leading, the next issue taken into consideration is how to pursue the development of this model verifying it against different contexts. As shown in figure 28, it is necessary to envision the contextual complexity at the different scales, assessing the relevance of the different dimensions of the learnership model proposed and understanding how to use and adapt its various parameters. In each circumstance

the juxtaposition of old and new meanings for the purpose of adjusting but also introducing change passes through a cycle of observation, orientation, decision and action. This cycle or loop was developed and tested by air force pilot and strategist, John Boyd who throughout his own career and life studied its development and application pushing it from a hands-on knowledge related to his personal experience and skill as pilot to an extended theoretical concept and trans disciplinary strategy (Hammonds, 2002) (Dahl, 1996). To better describe the OODA loop Boyd devised a thought experiment as follows:

> Imagine four scenarios: someone skiing, someone power-boating, someone bicycling, and a boy playing with a toy tank. Break down each domain into its component parts: For skiing, there would be snow, chairlifts, skis, hot chocolate, and so on. Within their domain, the parts have directly identifiable relationships with one another. But scramble together the parts from the four domains, and suddenly it's hard to determine any relationships at all. We are thrown into chaos.
> Now, […], take one part from each scene: From skiing, select the skis; from power boating, the motor; from bicycling, the handlebars; and from the boy with his toy tank, the treads. What do these elements have to do with one another? At first, seemingly nothing — because we still think of them in terms of their original domains. But bring the parts together, and you've used your creative pattern-recognition skills to build … a snowmobile! "A winner," Boyd concluded, "is someone who can build snowmobiles… when facing uncertainty and unpredictable change."(Hammond, 2002)

Boyd's OODA loop brings us back to the initial description of the social autopoietic systems (Luhman, 1996) that exchange communication codes amongst them. As we have seen in the beginning chapters the awareness towards the nature of the endogenous and exogenous interferences in the system can be achieved by *observation in action* (fig. 14) adjusting the orientation by continuously re-defining the imaginary entities and building up flexible, antifragile mind frames In other words we are talking about a continuous learning in action process that asks for the ongoing adjustment of the cognitive perception. Before presenting the representation of the OODA cycle in a more synthetic way, it is useful to better understand the logic of his reasoning in several phases:

Recalling that we use concepts or mental patterns to represent reality, it follows that the un-structuring and just shown reveals a way of changing our perception of reality. Naturally, such a notion implies that the emerging pattern of ideas and interactions must be internally consistent and match-up with reality. To check or verify internal consistency we try to see if we can trace our way back to the original constituents that used in the creative or constructive induction (emphasis added).

In the above quote, Boyd starts from a point 0, a first moment in which the original representation of the reality, that generates internal mental patterns, is induced by the previous experiences and the external stimuli provided by the context and circumstances. He pinpoints this first moment as a constructive or creative stance. This phase allows the introduction of the second moment:

If we cannot reverse directions, the ideas and interactions do not go together in this way without contradiction. Hence, they are not internally consistent. However, this does not necessarily mean we reject and throw away the entire structure. Instead, we should attempt to identify those ideas (particulars) and interactions that seem to hold together in a coherent pattern of activity as distinguished from those ideas that do not seem to fit in. In performing this task we check for reversibility as well as check to see which ideas and interactions match-up with our observations of reality.

In the second moment, he then explains how in order to introduces the verification and confrontation of the constructed mind frames with the **observation of the reality.** In this case he actually implies the passage from an active state – the constructive induction, to a reflective state – observation. This change is necessary in order to tune or "verify" the relevance of the existent mind frame, constructed through induction, in accordance with the surrounding reality. It is important to stress out how he mentions a "check for reversibility" which actually implies a circular observation of the endogenous or internal constructions, the personal mind frames, and the exogenous or external state of the surrounding system. In the third moment Boyd introduces the new inputs:

Using those ideas and interactions that pass this test together with any **new ideas (from new destructive deductions)** or other promising ideas that popped out of the original destructive deduction we again attempt to find some common qualities, attributes or operations to re-create the concept — or create a new concept. Also, once again, we perform the check for reversibility and match-up with reality. Over and over again this cycle of **Destruction and Creation** is repeated until we demonstrate internal consistency and match-up with reality. (Boyd, 1976, p. 2)

This passage is perhaps the most important node in the OODA cycle because requires the (partial) destruction of the existent, consolidated mental patterns and their transformation into "new concepts". This requires again a reflective stance and the capability **to doubt** about existent constructed inductions as well as the potential power to change, and destroy to re-create in order to align an internally created interpretation with the perception of the modified circumstances in reality. Moreover the reconsideration of the internal perspective and the introduction of new concepts have the potential to lead to decision-making and finally action, in order to complete the cycle.
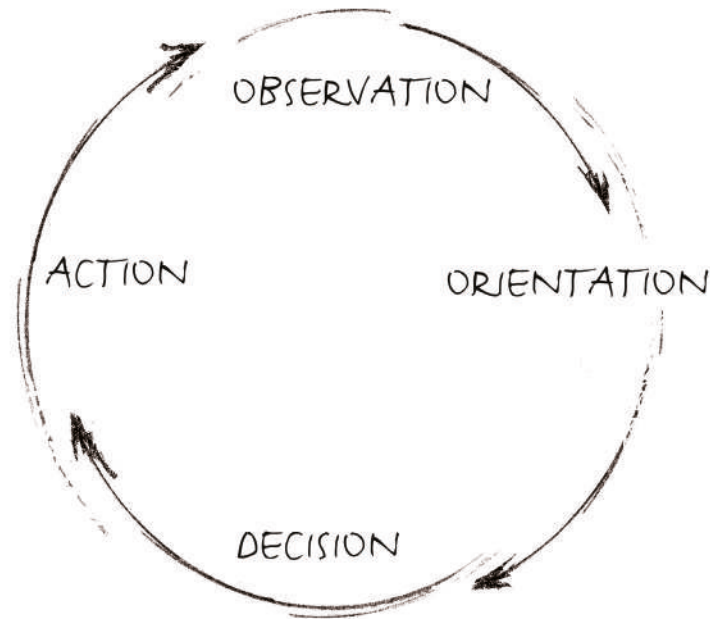
Figure 14. The OODA cycle: Observation, Orientation, Decision and Action. Modified after (Dahl, 1996)

As seen before, the description of the OODA cycle alternates moments of reflection and action (fig. 14). It is necessary to point out that the sequence in which the above phases or moments occur in real life situations is most of times random, alternating and even overlapping moments of creation and destruction of the known concepts and accepted ideas. In this sense the learnership process becomes even more visible, emphasizing the ultimate reason of the cycle to control and lead actions towards the achievement of a certain vision or scope.

In the context of organizations or creative groups the continuous process of adapting a mind frame through induction/construction and deduction/destruction is always present but seldom made visible. The learnership can be facilitated by the understanding of the process and by its mastery through its application to real life situations. The OODA loop reveals the two facets of learnership: one that deals with individual reasoning and the achievement of the personal development towards the mastery of leadership and second that deals with the influence on the competing agents and the navigation in the context of change leading the organization towards achieving the shared vision.

MASTERY

STIMULUS FROM
ENDOGENEOUS AND
EXOGENEOUS
PERTURBATIONS

CREATIVE · DISRUPTIVE
THINKING

SYSTEM THINKING

INTEGRATE
SHADOW SIDE
KNOWLEDGE

LEARNING
CULTURE

EXPERIENTIAL
LEARNING THROUGH

DEVELOPING
"LEADERSHIP"

ADJUSTABLE
LEARNING FOCUS
ADAPTIVE BEHAVIORS

COACHING LEADERSHIP

POWER TO IMPLEMENT

FEEDBACK AND
STIMULUS SEEKING

RESOURCES -
OPPORTUNITIES
TO CHANGE

BALANCE
SHARED / IMPOSED
DECISIONS

CREATE AND GOVERN
NETWORKS

LEADERSHIP
TRANSFORMATION

CREATE NEW
MEANINGS FOR
ACTIONS

CREATE NEW
ACTIONS

JUXTAPOSE REINTERPRET
OUTDATED MEANINGS

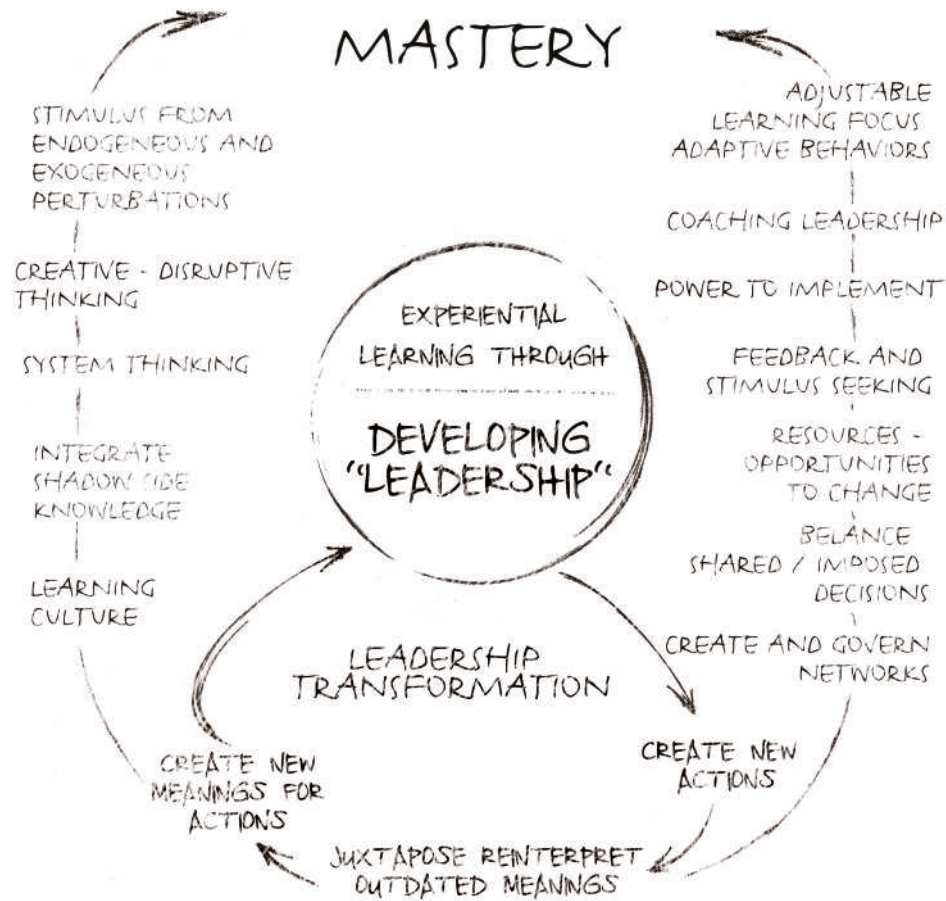Figure 15. Developing learnership in the Creative context

Having looked at the above considerations, the next chapter will push the argument even further towards the ways in which improved learnership can be achieved and mastered. As I will explain in the next chapter the concept of "mastery" it is understood as the potentiality to engage the followers or the team, in a complete experience (fig. 15).

Although abstracted to a theoretical model the OODA cycle expresses precisely this type of total experience that in Boyd's case is induced by combat rather than negotiation. The creative practices are in this sense closer to this type of full immersive experience in which the audience has to "gained" and transformed. In this sense it is necessary to consider the leaders not as carriers of a disembodied concept but rather in the full dimension of their physical presence and stamina controlled and performed with mastery, or as Sinclair argues:

> ... Although leadership has been constructed as an activity of brains without bodies...It is a bodily practice, a physical performance in addition to a triumph of mental or motivational mastery...leadership works at a visceral and sensual level, activating appetites and desires. The accomplishment of leadership is often highly dramatic and full-bodied; there is intimacy, titillation, sometimes mystique. (Sinclair, 1995, pp. 387- 388).

Furthermore the full leadership mastery is given by the empathy with which the leader knows to respond to the external stimuli deciding either to express, or **preserve** his/her **power** and influence. In this sense the preservation of power and the moment chosen for the decision of not taking any decision, is perhaps the true achievement for a leader and brings the recognition of his / her **mastery.**

6. Preserving the power manifestation

*What is essential is that potentiality is not simply non-Being, simply privation, but rather the existence of non-Being, the presence of an absence; this is what we call "***faculty***" or "***power***". To have a faculty means to have a privation. And potentiality is not a logical hypostasis but the mode of* **existence of this privation***.*
Agamben, 2005.

6.1 Learnership mastery and distributed empowerment

In the beginning of the book, were mentioned four different instances that have inspired and motivated the inquiry into the hidden side of creativity, tackling its power mechanisms. One of the instances cited, was the work of Edward Bernays, the advocate of public relations as a science and the author of some of the most successful and powerful commercial and political campaigns. His mastery of manipulating the public opinion though, stayed not in loudly spelling out a memorable slogan, but finding ingenious, artful ways of leading the public opinion towards

the achievement of their commercial goal, which at the end resulted in increased sales and profits. Bernays's approach was to induce people to appropriate the idea he supported by organizing and promoting involving, empowering experiences. To exemplify this it is enough to look at the now famous case of the campaign for Ivory soap, in which as he explains, "one of the most effective methods [to influence public opinion] is the utilization of the group formation of modern society in order to spread ideas."(Bernays, 1928). Here's how he explains the case in one of his best-known books "Propaganda":

> An instance of this [method] is the nationwide competitions for sculpture in Ivory soap, open to school children in certain age groups as well as professional sculptors. A sculptor of national reputation found Ivory soap an excellent medium for sculpture.

The Procter and Gamble Company offered a series of prizes for the best sculpture in white soap. The contest was held under the auspices of the Art Center in New York City, an organization of high standing in the art world. School superintendents and teachers throughout the country were glad to encourage the movement as an educational aid for schools. Practice among school children as part of their art courses was stimulated. Contests were held between schools, between school districts and between cities. Ivory soap was adaptable for sculpturing in the homes because mothers saved the shavings and the imperfect efforts for laundry purposes. The work itself was clean. The best pieces are selected from the local competitions for entry in the national contest. This is held annually at an important art gallery in New York, whose prestige with that of the distinguished judges, establishes the contest as a serious art event.

The **mastery leadership** in this case is precisely choosing to preserve the manifestation of personal power re-directing it in a distributed, mass empowerment action that gave the freedom of artistic expression to an unexpected public: young children, housewives, school teachers, all belonging to the working class, allowing them to be represented by their works in an elite institution such as the Art Center and art galleries in New York and so giving them the access to the highest levels of society. Moreover the event was organized in sequence over the time span of several years, which insured a long-time communication of the brand name and a long lasting relationship with the customers, through the raising numbers of participants:

In the first of these national competitions about 500 pieces of sculpture were entered. In the third, 2,500. And in the fourth, more than 4,000. If the carefully selected pieces were so numerous, it is evident that a vast number were sculptured during the year, and that a much greater number must have been made for practice purposes. The good will was greatly enhanced

by the fact that this soap had become not merely the concern of the housewife but also a matter of personal and intimate interest to her children.

In chapter 5.1 I described the OODA cycle as a method that enables the mastery of the learnership process, citing Boyd's instance of dismantling three different domains to produce change by re-creating a new concept. The simple instance of the physical object with a new function built from the assembly of seemingly disparate domains of functionality, helped Boyd to exemplify at a small scale a theoretical principle successfully applied at large scale by Bernays for the purpose of inducing a new vision in the imaginary of the consumer:

A number of familiar psychological motives were set in motion in the carrying out of this campaign. The esthetic, the competitive, the gregarious (much of the sculpturing was done in school groups), the snobbish (the impulse to follow the instance of a recognized leader), the exhibitionist, and — last but by no means least — the maternal.

All "motives" listed by Bernays belong to different domains as exemplified by Boyd. As such "the esthetic" belongs to the domain of art, and artistic expression, which has as final aim the achievement of harmony and beauty, "the competitive" belongs to the domain of sports and physical performance, in the same way in which "the maternal" motive relates to care and comfort. The campaign designed by Bernays was no other than Boyd's "snowmobile" in which old meanings where juxtaposed with new meanings not only of a product, the Ivory soap, but also of the activity that can be done using the product. By qualifying the potential of a domestic product to be turned into artwork material (without any waste), through a creative activity, Bernays dismantled a constructed a mental pattern at the scale of the society. He in the mean time introduced a completely different way of thinking about the product by using the metaphor of artistic creation and the whole imaginary related to it, and empowering masses of people to dream and envision the recognition of self-expression.

All these motives and group habits were put in concerted motion by the simple machinery of group leadership and authority. As if actuated by the pressure of button, people began working for the client for the sake of the gratification obtained in the sculpture work itself.

The figure of Edward Bernays is perhaps the perfect instance of leadership mastery by preserving the manifestation of personal power to transform it into distributed empowerment. In this case although as he points out "people began working for the client", the true architect of the movement was not the "client" but the person to whom Procter & Gamble commissioned the work, and so Bernays. He therefore announces what Cooksney refers to as the leadership – learnership model (Cooksney, 2003) in which, as quoted in chapter 5.1, the true mastery of the

learnership, "goes beyond **ownership of** process and outcomes to **responsibility for** process and outcomes" (Dixon, 1998). He reflects in this sense the possession of **potential power** but in the same time the privation of the **authorship**, as beautifully shown by Agamben:

> The following essential point should be noted: if potentiality were, for example, only the potentiality for vision and if it existed only as such in the actuality of light, we could never **experience darkness** (nor hear silence in the case of potentiality to hear). But human beings can, instead see shadows [...], they can experience darkness; they have the potential not to see, the possibility of privation. (Agamben, 2005)

6.2 The Ambiguous meaning of "Design" is Power: dismantling to re-activate

The mastery of the learnership as seen in the case of Edward Bernays stays in his capacity to prepare new domains and provide all the necessary elements for challenging the mass perception of the reality, however what made him a master in the art of public influence is his capability to anticipate the psychological mechanisms of the public, and predict the reaction to his campaigns. His power stays in the capability to blend the learning and leading processes controlling the simultaneity of observing, orienting, decision and action in the public, to the point in which it was confounded with personal, intuitive choice.

The main key to control this is as shown before in the chapter 5.3 the art of inducing doubt and uncertainty to challenge the existent mind frames. If before I have shown the overall OODA cycle in this chapter I will concentrate on the meaning and importance of inducing doubt and uncertainty, arguing that the role of learnership in creative process is precisely to acknowledge and control the doubt and uncertainty, and when necessary induce it to produce change. The importance of uncertainty in the balance of powers was also extensively explained in the chapter 2.1. (fig. 7).

There it was underlined that a situation of uncertainty is the starting point in the passage towards change. Furthermore, in chapter 5.1 creating uncertainty was shown as a necessary condition to allow the introduction of the leadership and learnership model in the organizations, become aware of the old and new meanings, and create new meanings and actions (fig. 11). If previously I have shown the importance of uncertainty, it is necessary to understand what factors generate uncertainty and disorder. For this reason I will return to the explanation of the different phases in the OODA cycle as explained by Boyd. In particular he points out how we cannot expect a perfect coordination between the observation of the reality and its perception according to a

given mind frame. The main reason for this is the personal translation and appropriation that in this case introduces a level of disturbance and anomaly. As Boyd explains:

> According to Gödel we cannot – in general – determine the consistency, hence the character or nature, of an abstract system within itself. According to Heisenberg and the Second Law of Thermodynamics any attempt to do so in the real world will expose uncertainty and generate disorder. Taken together, these three notions support the idea that any inward-oriented and continued effort to improve the match-up of concept with observed reality will only increase the degree of mismatch (emphasis added). Naturally, in this environment, uncertainty and disorder will increase as previously indicated by the Heisenberg Indeterminacy Principle and the Second Law of Thermodynamics, respectively. Put another way, we can expect unexplained and disturbing ambiguities, uncertainties, anomalies, or apparent inconsistencies to emerge more and more often. Furthermore, unless some kind of relief is available, we can expect confusion to increase until disorder approaches chaos-death. (Boyd, 1976)

Although Boyd bases his argument on the increase in entropy as stated in the second law of thermodynamics, in our case, beyond the scientific argument it is necessary to understand his explanation extrapolated to the concept of disturbance in a psychological system. In fact as he underlines, in the case of the OOAD cycle, the uncertainty refers strictly to the psychological state of confusion that makes place for a conscious shift in perspective and the generation of the new mental patterns.

> [...] we can forge a new concept by applying the destructive deduction and creative induction mental operations. Also, remember, in order to perform these dialectic mental operations we must first shatter the rigid conceptual pattern, or patterns, firmly established in our mind. (This should not be too difficult since the rising confusion and disorder is already helping us to undermine any patterns). Next, we must find some common qualities, attributes, or operations to link isolated facts, perceptions, ideas, impressions, interactions, observations, etc. together as possible concepts to represent the real world. (Boyd, 1976)

Figure 16 visualizes the introduction of anomaly and disruption in the OOAD cycle enabling in this way the dismantling of the existent patterns of thinking as explained by Boyd previously, and the introduction of new interferences that can help create the new concept through a different interpretation of the reality.
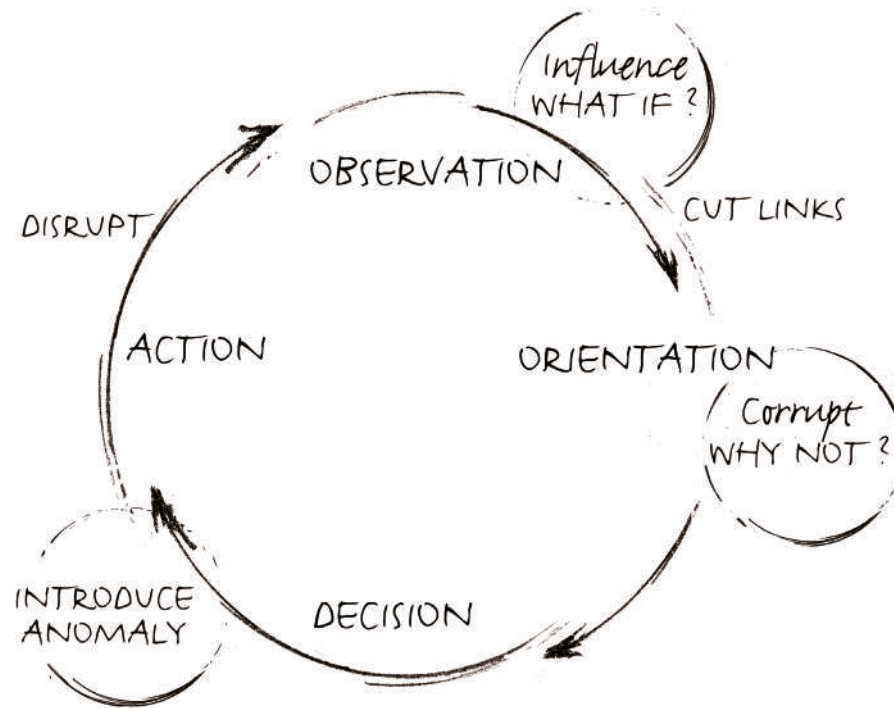
Figure 16. The Observation, Orientation, Decision, Action by Boyd modified by the author

It is at this point that the skills and expertise of the creative professional come into play. The reason for this, is the very nature of the profession that asks creative leaders to continuously adjust to different other disciplines and trades in order to be able to create a desirable outcome for the client. In this sense the argument comes back to the initial description of the creative system as an autopoietic system with its own ecology, which comes in contact with other systems, exchanging interactions through partially shared communication codes — as shown in chapter 1.2, (fig. 5). Rather than delineating "designers" "role" it is more important to emphasize the leading position they should strive to achieve in any organizational context through the integration of the learnership model. The OOAD cycle is only one of the strategies that can support the implementation learnership and help leaders to induce uncertainty and confusion, corrupting the "comfortable" mental schemes. In this sense the creative leaders has more than one definite

role combining as was mentioned previously the reflective stance of the observer with the ability to activate changes and stimulate decision-making processes. In this sense ideally, the duty and most important contribution of the "designer" is to act as an **agent provocateur** pushing the boundaries of the limited perspectives with the use of imagination, continuously enlarging the domain of vision, action and possible achievements. The ultimate achievement is not to find solutions to incoming problems, but to revert the perspectives transforming the obstacles in opportunities for change or introduce new problems with the objective to frame the context of change. The final goal of this, is to attain, at least temporary an open and antifragile quality of the organizational system through empowerment.

6.3 Towards the awareness for an flexible system

Having briefly seen the change in how creative leader's contribution changes with the introduction of the learnership model, it is necessary to briefly remind what I intend by "system". For this purpose I will go back to chapter 5.3 in which fig. 15 shows that according to the situation can be consider as unit of analysis the individual, group of organizational systems. In this case the learnership integration has been seen as permeating in both senses: bottom-up, from individual to group and organization and top-down. As such by open system I intend the capability of the individuals, groups and organizations to respond to incoming adverse circumstances transforming them into triggers for improvement (Taleb, 2012) through the application of an ongoing learning process. This type of flexibility and openness towards learning becomes apparent when the individual, group or organizational systems are confronted with diversity. As explained by Hall:

> Everything man is and does is modified by learning and is therefore malleable. But once learned, these behavior patterns, these habitual responses, these ways of interacting gradually sink below the surface of the mind and, like the admiral of a submerged submarine fleet, control from the depths. The hidden controls are usually experienced as though they were innate simply because they are not only ubiquitous but habitual as well. (Hall, 1989)

Hall in this case recalls the habitual behavior patterns, generated by what Boyd underlines as "rigid conceptual patterns firmly established in our minds" (Boyd, 1976, cited in chapter 6.2). But what is most interesting in Hall's argument is the discovery of the moments in which these patterns become evident, and this is when a stimulus from the outside context challenges, or contradicts the hidden program:

... The only time one is aware of the control system is when things don't follow the hidden program. This is most frequent in intercultural encounters. Therefore, the great gift that the members of the human race have for each other is not exotic experiences but an opportunity to achieve awareness of the structure of their own system, which can be accomplished only by interacting with others who do not share that system ... (Hall, 1989)

The moment in which this type of awareness occurs arrives naturally in the case of intercultural encounters as explained by Hall, but it can also be triggered by a provoked conflict. The purpose for such an intervention comes precisely from the observation of the rigidity of the conceptual patterns and the consequences that this has on the well functioning of the system. This is where the creative talent can introduce the leading part of learnership, by learning to integrate and balance a positive conflict, or as Murphy & Tommey explain:

Optimal conflict refers to valuing the need to move oneself and others toward change while maintaining a safe environment for discourse on dissatisfaction with current conditions and the need to change. Conflict here is viewed positively. In learnership, optimal conflict is an individual's awareness and understanding of a healthy balance of dissatisfaction with the status quo and d safe environment in which to change. In learnership, organizational leaders must create an environment that is safe for change and allows discussion of dissatisfaction and change. (Murphy & Tommey, 1993, p.16)

As explained in chapter 3.1, fig. 8 the conflict can be seen as the balancing point between the disruption or total destruction of a rigid mental pattern, and stays in creative leader's power to control this type of fine balance taking responsibility of the consequences of an open system. Here it is necessary to return to the importance of concept of antifragility. In chapter 4 i underlined how the term antifragile, coined by Taleb envisions a system (tangible or not) that benefits from entropy:

Fragility is the quality of things that are vulnerable to volatility. Take the coffee cup on your desk: It wants peace and quiet because it incurs more harm than benefit from random events. The opposite of fragile, therefore, isn't robust or sturdy or resilient-things with these qualities are simply difficult to break. [...] We instead need things that gain from volatility, variability, stress and disorder. (Taleb, 2012)

Here it is worth mentioning that Taleb considers a particular type of "large events that are both unexpected and highly consequential" which he calls "black swans". As an example he mentions the 9/11 events or the rise of the Internet.

> As a practical matter, emphasizing antifragility means that our private and public sectors should be able to thrive and improve in the face of disorder. By grasping the mechanisms of antifragility, we can make better decisions without the illusion of being able to predict the next big thing. We can navigate situations in which the unknown predominates and our understanding is limited. (Taleb, 2012)

Taleb's vision casts light on the necessity of adopting an adaptive approach towards change, seeking to embrace it by learning to cultivate leadership at individual level and understand the fluidity of uncertain situations. In a wide, global context, the "task of leading during a sustained crisis" (Heifetz et al., 2012) as underlined by Heifetz, implies learning in action, preserving only the potential loss of the previously acquired experience in order to make space for the discovery of the unknown.

If previously I have shown how being aware and understanding conflict leads towards the readiness to accept the uncertainty of an open system, the next chapter focuses on the application of the **adaptive leadership** to the creative training and coaching, merging the adaptive leadership approach with the principles of **critical thinking**, "design" **philosophy** and **ontology**.

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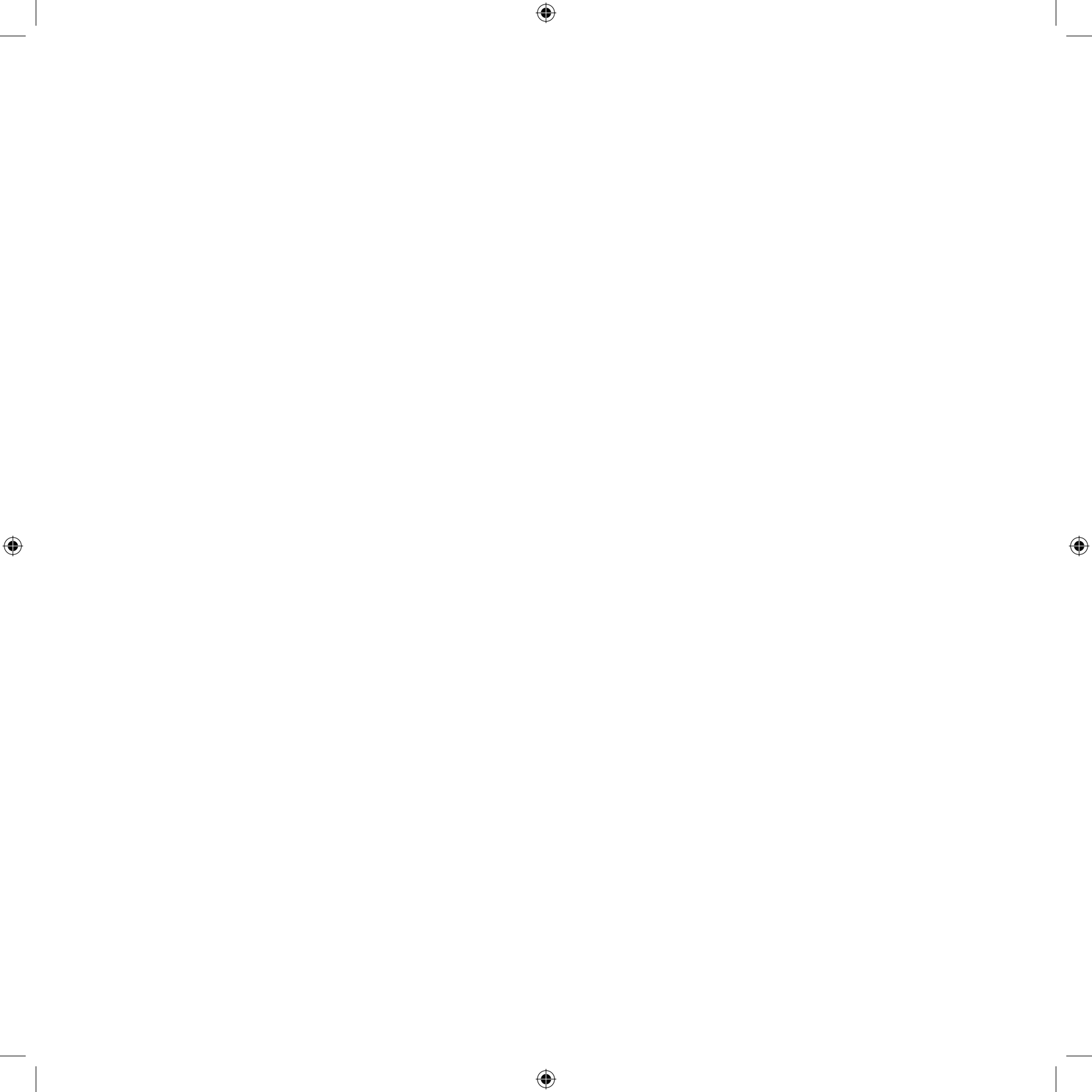
CRITICAL
PARADOX
POTENTIAL
PRESERVE
ANTITHESIS

Pietà Rondanini – Unfinished
Michelangelo Buonarroti - Castle Sforzesco, Milan
1503 -1553 (1°version) / 1555 -1564

DIVERGENT CONCLUSION

7. Coaching for Learnership. A different approach to empowerment for creative discipline

The problems that require leadership are those that the experts cannot solve.
We call these **adaptive challenges.**
The solutions lie not in technical answers, but rather in people themselves.
Marty Linsky

7.1 Learning & leading

If in the previous chapters I have introduced the concept of leading and learning as parallel concepts, and shown the premises for identifying the conceptual axes on which learning and leading evolve and that enable the creation of the learnership model in the creative context (fig. 12), this section advances the discussion into a more practical direction, suggesting that the already established method of training for adaptive leadership can be adapted to fit the purpose of training leaders in the creative environment. At this point it is important to underline the adaptive capabilities of the learnership model embraces.

In this concern the learnership model proposed by Murphy & Tomey (1993) and then Cooksney (2003) is closely related to the adaptive leadership concept and strategy of leading developed by Ron Hiefetz and Marty Linsky from Harvard University.

The core of the adaptive leadership focuses on the activation of change by observing and orienting emerging challenges at organizational level, determining the core practices of an organization and the obstacles to change; developing and testing "future" practices and integrating them into the organizational structure (Cambridge Leadership Associates).

The adaptive leadership framework emphasizes learning in action, underlining the importance of navigating in uncertain circumstances.

Adaptive leadership framework aims to counter the precious and meaningful core of an organization and its expandable practices; encourage the experimentation and intelligent risk taking and thoughtfully considering the implications and consequences of the implementation of the future practices.

This mirrors what Taleb calls antifragile capabilities (2012), by identifying the challenges, creating and modeling strategies according to the emerging situations, and in which as Ron Heifetz explains it:

> **Leadership is an improvisational art.** You may be guided by an overarching vision, clear values, and a strategic plan, but what you actually do from moment to moment cannot be scripted. You must respond as events unfold. (Heifetz & Linsky, 2003, pg.66)

It is the responsive capability that brings forward the intuitive and creative capabilities of the talents and their role as leaders rather than executers of an imposed brief. In this sense the skills and knowledge acquired through experiential learning enable to understand the consequences and impact of change in a temporal dimension.

Here an important role is played by the difference between **technical problems** and **adaptive challenges** at systemic level. To clarify the two terms Ron Heifetz explains how the solutions to technical problems can be found in "our current" repertoire of knowledge, in the know-how acquired through experience and training. On the other hand adaptive challenges are complex situations in which

> "...our current know how just isn't quite sufficient, where there isn't an expert on the subject who can fix the problem, where a current organizational design or structure, stories, narratives, metaphors don't do the job sufficiently." (Ron Heifetz, 2009, video interview)

The important distinction made by Heifetz, casts a light on the inactive capabilities of the creative to imagine and use introspective intuition to foresight a clear vision of adaptive challenges, by activating the "**silent and unknown knowns**" (Bardone, 2012) as shown in chapter 5.3.

These characteristics of the creative reasoning and attitude have to be cultivated and coached in accordance to the specificity of a context or territory, taking in consideration the inertia of the organizations and the refusal to change (Galli, et al., 2015) an established management. The contribution given by future talents who lead is precisely to learn how to disrupt the status quo

narratives and prepare the ground for change. As shown in fig. 16, by cutting cognitive links that are no longer relevant, disrupt "comfortable" habits and introduce anomaly in the OODA cycle of an organization, creative leaders can introduce an anti fragile leading practice and prepare the outdated system for adaptive challenges. Understanding and leading conflict is an essential part of the adaptive leadership.

Not only conflict is always present and needs to be dealt with but is also " a necessary part of the change process and, if handled properly can serve as the engine of progress" (Heifetz & Linsky, 2003, pg.69).

Mastering adaptive leadership comes from maintaining the right level of disequilibrium as a way to enable people to shift course and experiment future practices in uncertainty and turbulence (Heifetz et al. 2012).

Learning is therefore an essential part of leading for adaptability and implies most of all gaining the insight and awareness that in order for change to happen it is natural to face the loss of old values and meanings.

7.2 Coaching future leader with adaptive leadership methods

Brought into the context of creative education the adaptive leadership model described enables several dimensions that have been outlined in the previous chapters.

Firstly an introspective dimension into the multifaceted dynamics of the creative system: in order to acknowledge the power dimension of the environment, creative leaders need to learn how to shift back and forth from practice to observation. This was explained in chapter 1.1, where I described the environment as an autopoietic system that continuously re-configures, destroys and re-creates itself (fig. 11). The role of the observer has been shown as a determinant factor in changing the power balance in the system by interfering and provoking disruption, in order to create a state of uncertainty and emergency. This dimension brings into discussion a learning process that implies the discovery of what practices are core to the system and can be expanded and what are the obstacles to the future.

Secondly an experimentation and risk-taking dimension, in which creative leaders juxtapose new meanings against old ones, create new meanings and create new actions (fig. 15). This refers to the, latent capabilities of the leader as shown in chapter 2, and his/her capability to combine different imagination domains envisioning new values for new practices. Metaphors are in this case instrumental for creating new realities and guide future actions (Lakoff & Johnson, 2008, pg.132). An important part of this dimension is the activation of the decision-making capabilities

combined with the determination to guide and influence for real actions. Constructing power rhetoric and narratives within the social context (chapter 2.3) is therefore essential for re-framing values and ease their acceptance. In this dimension it is particularly important to guide and coach the activation of the silent knowns, such as the capability to question a stereotyped modus operandi or observing, orienting, decision and action (OODA) cycle (fig. 14), by introducing doubt, anomaly and disruption. By using their experience and skills not in the traditional creative domain of "making" but for developing and testing new practices, talents are coached to identify and activate potential leadership situations, and take responsibility for provoking change.

Thirdly the rigorous assessment of the future practices to be implemented introduces the mastery of balanced decision-making and action with the preservation of potentialities to be activated. Coaching for the integration of new practices implies in this sense the breakdown from old values and the capability to navigate in uncertain situations, consciously holding back the potential known cognitive path and the will to become vulnerable to potential chances for knowing (Bardone, 2012) and discovery. This dimension recalls how individual mind frames affect and are influenced by the contextual power dynamics. For this reason a higher and more personal level of coaching for leadership can only in part be facilitated, most of all being achieved through a high level of self awareness and constant re-assessment in relation to the social context. The dimensions drafted above bring forward the possibility of systematically organize a strategy of implementing the adaptive leadership training in the creative curriculum, suggesting its implementation at graduate and professional level rather then in the first years of creative education.

7.3 Implications of the learning & leading training.

From its beginnings at the Bauhaus, the scope of creative education has evolved from a discipline concerned with concrete outputs such as material and digital artifacts towards the re-thinking of the experience, activities and to a larger scale the strategic re-definition of systems. This evolution was studied and reported by several authors, who advanced different ways of categorizing the aim and purpose of the discipline following its developments from a historical perspective. As such, Richard Buchanan (2001) outlines four orders that help categorize "design" like creative and cultural industries according to the meaning, focus and with outputs.

He argues that the first order can be seen as concentrating on symbolic and visual communication being focused on symbols and that generate visual signs mediated by graphic artifacts as final creativity outcome; the second order is represented by material objects and

artifacts and the process through which the objects are produced. The **third order** instead moves to a different dimension of expertise being concerned with the creation of **interactions and processes** and having as outputs the development of product service and systems, and user consumer experiences. So far it is important to note that one of the most important distinctions between the first two orders and the third one is the complexity of the tasks and the advanced training necessary to achieve coherent and meaningful outcomes. Moreover the third order implies having the full understanding of the first two orders and their skill-related outcomes.

This brings us to the **fourth order** in which produce is not anymore a profession but rather a way of thinking and an approach transferable to other disciplines and capable of activating latent potentialities. If in the previous orders there was a clear distinction between the "traditional" production brief and the final output, in this case the beginning and end of the creative process is cyclic rather than linear and most of the time expandable to consequent processes that take place in an longer timespan. The complexity of the fourth order brings in discussion a different role of the creative talents that puts them in a more strategic position in terms of decision-making process and brings into discussion adaptive leadership skills.

This is outlined by Buchanan who emphasizes the potential power of the creative leader " designer" offering the following definition of the discipline activity: "Design is the human power of conceiving, planning, and making products that serve human beings in the accomplishment of their individual and collective purposes." (Buchanan, 2001, p.9). In the mean time, even after having identified the presence of power and a hierarchy in the complexity of discipline tasks, outcomes and role in the four orders mentioned Buchanan returns to the initial concept of "product" and formal outcome as the overall scope of the activity:

> "Power" is the efficient cause or agency of action in design […]. It resides in human beings as a natural talent that may be cultivated and enhanced through education. "Conceiving, planning, and making" is the final cause, in the sense that it identifies the sequence of goals towards which design thinking and practice move. "Products" represent the formal cause, in the sense of the formal outcome of the design process that serves human beings. And "in the accomplishment of their individual and collective purposes" represents the material cause of design, in the sense that the subject matter or scope of application of design is found in the activities, needs, and aspirations of human beings. The definition suggests that design is an art of invention and disposition, whose scope is universal, in the sense that it may be applied for the creation of any human-made product. (Buchanan, 2001, p.9)

Buchanan's perspective casts light on the different approached proposed by our main argument. Without denying the importance of the outputs, the attention shifted from the human-made **products** that belong to the first three orders to the **human generated dynamics of power** that influence and alter the process of invention and disposition. The creative training in adaptive leadership comes to support precisely this type of role, of expert that acquired, through skills and experience, the power of decision making and exercise it from within the self-referential creative system. At this level professional experts are confronted with a continuous flowing cycle of **learning, leading and mastering** the skill of exercising power, being called to balance the **creation, disruption and preservation of power.** In this case and as shown in fig. 17, in all instances the adaptive leadership trains professionals to acknowledge and accept **uncertainty** and navigate in **situational complexity** having as final scope to induce **change.**

Moreover this emergent order evolves in an extended timespan, acknowledging the context in which creative talents practice adaptive leadership skills. As shown elsewhere (Galli, 2015) the futuring, de-futuring and re-futuring cycle has to be seen as a transversal paradigm that enables the anticipation of change in the creative system as a research unit and the overall environmental mutations (fig. 17). In conditions of ongoing, fast speed changes, it is difficult if not impossible to *predict* the global consequences of local actions. Rather than drafting strategies, the decision making process can be supported, by versatile navigating instruments that enable the *imagination* and *anticipation* of **futuring, de-futuring and re-futuring scenarios.** The diagram bellow (fig. 34) makes reference to Fry's observations on the shortsighted socio-political plans of economic growth that generated and increased the actual period of crisis:

> No matter who or where we are, we live in a world in which political regimes uphold economic systems and interests that negate the future. This has neither been planned nor happened by chance. It is the result of incremental designed action and thinking without vision or critical reflection over a long period of time. The most basic failure is a global system of economic exchange that is actually disarticulated from the 'nature' of fundamental exchange." (Fry, 2010).

The diagram drafted in figure 18 transcends the purpose of a **static visualization** that helps framing the state of the art of a situation in a given moment towards becoming a **dynamic instrument** that can be proactively used and modified to help envision strategies of re-futuring for the systems to be re-interpreted and "designed". This brings forward the meaning of the time and its importance in imagining adaptive leadership strategies focusing on power dynamics rather than outcomes.
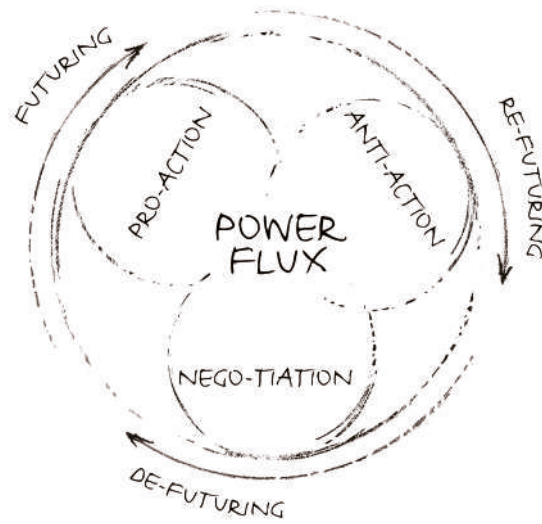
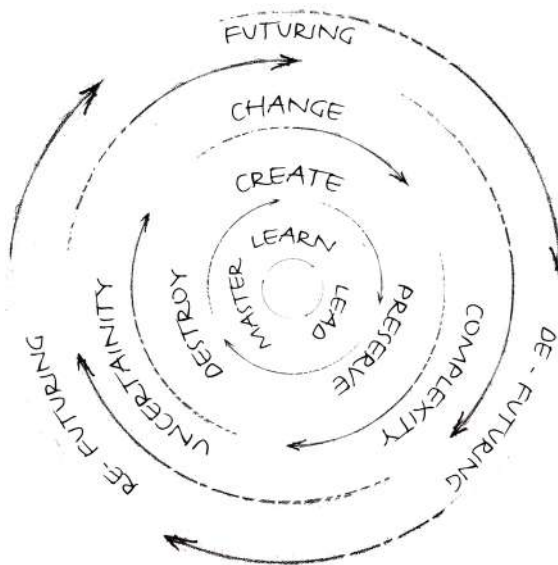Figure 17. The futuring, de-futuring and re-futuring

Figure 18. "Compass" awerness of adaptive leaders

The implications of learning and leading coaching strategies in the creative education are therefore firstly the identification of a new order that integrates the previous ones outlined by Buchanan in 2001 and has a **new order** that introduces dimensions as **power, influence** and **disruption,** and considers learning and **leadership** as overarching goals.

This emergent order has as subdisciplines the strategic "design", the "design" management and disruptive "design", and is concerned with human generated dynamics, coaching expert creative leaders for **adaptive leadership.** Expands the developing role of professional experts from practitioners to leaders and explores the re-integration of "design" with regard to the changing circumstances and considering incoming mutations. Most important the order outlined introduces a **circular dimension of leading and learning** in time, in contrast with the linear brief-output process practiced so far by professional experts.

8. An unfinished model for visionary leadership training

[...] The poem has to perform no more and no less than to perceive
the principle of being in the thing and adapt it to its own existence —
with the aim of becoming a construct with an equal power to convey a message."
Sloterdijk, 2013

8.1 Moving from creative expertise to adaptive leadership

To resume the discourse with the intended to unfold, there are several crucial points that should be emphasized. The goal was to introduce a different way of looking at the creative system, not from the point of view of the activity but unveiling the power forces that stand behind the creative practice with the aim to introduce the leadership dimension. In order to do that I started by considering the **creative context**, as a closed system receiving influences in interference with other social systems. To support this argument I introduced the paradigm of autopoiesis as developed by Maturana & Varela and later on "translated" in social sciences by Luhman and in the study of creative systems by Iba. This helped advancing to the **second important point**, the analysis of unseen social dynamics within the self-referential context, with a particular attention on **how conflicts emerge and unfold**, revealing opportunities for change. The importance of understanding conflict in all its details has been explained in order to reach the final aim of the inquiry, that of drafting a learning and leading model that enables talents to become adaptive leaders.

In this sense the aim was to reveal also the necessity to coach leaders that can purposefully educate the public to become "antifragile" and understand change. Training and coaching in creative industries has evolved in time from focusing on the foundation skills to understanding the process, and then to the empirical and scientific study as a discipline. In this concern many literatures have shown the various phases of the creative expertise (Cross et al., 1994) (Cross, 2004) (Reymen et al., 2005) (Dorst, 2007) (Lawson & Dorst, 2013) (Dorst & Reymen, 2005). In particular Kees Dorst and Isabel Reymen concentrated on the levels of expertise in creative education, building on the work by Dreyfus in order to identify 7 levels of skill based expertise according to the ways of perceiving, interpreting, structuring and solving problems:

1. **Novice :** A novice will consider the objective features of a situation, as they are given by the experts, and will follow strict rules to deal with the problem.

2. **Advanced beginner**: For an advanced beginner the situational aspects are important, there is sensitivity to exceptions to the 'hard' rules of the novice. Maxims are used for guidance through the problem situation.

3. **Competent**: A competent problem solver works in a radically different way. He selects the elements in a situation that are relevant, and chooses a plan to achieve the goals. This selection and choice can only be made on the basis of a much higher involvement in the situation than displayed by a novice or an advanced beginner. Problem solving at this level involves the seeking of opportunities, and of building up expectations. There is an emotional attachment, a feeling of responsibility accompanied by a sense of hope, risk, threat, etc. At this level of involvement the problem solving process takes on a trial-and-error character, and there is a clear need for learning and reflection, that was absent in the novice and the beginner.

4. **Proficient**: A problem solver that then moves on to be proficient immediately sees the most important issues and appropriate plan, and then reasons out what to do.

5. **Expert**: The real expert responds to specific situation intuitively, and performs the appropriate action, straightaway. There is no problem solving and reasoning that can be distinguished at this level of working. This is actually a very comfortable level to be functioning on, and a lot of professionals do not progress beyond this point.

6. **Master**: With the next level, the master, a new uneasiness creeps in. The master sees the standard ways of working that experienced professionals use not as natural but as contingent. A master displays a deeper involvement into the professional field as a whole, dwelling on

success and failures. This attitude requires an acute sense of context, and openness to subtle cues. In his/her own work the master will perform more nuanced appropriate actions than the expert.

7. **Visionary**: The world discloser or 'visionary', consciously strives to extend the domain in which he/she works. The world discloser develops new ways things could be, defines the issues, opens new worlds and creates new domains. To do this a world discloser operates more on the margins of a domain, paying attention to other domains as well, and to anomalies and marginal practices that hold promises for a new vision of the domain. (Dorst & Reyman, 2004, pp.3-4)

In order to fully understand the importance of the adaptive leadership training it is necessary to concentrate on the passage from the expert level to the description of the 6 and 7th levels, respectively master and visionary. While in the previous levels or up until becoming experts, creative talents respond to incoming problems the master and visionary levels transcend the mere execution of tasks. In fact Reyman and Dorst emphasize how many professionals do not exceed beyond this point. This is essential to note in particular because gives a further relevance and meaning to the importance of coaching for adaptive leadership which enables to surpass the expert level and attain the full awareness of the environment and the **capability to transgress** the boundary of the professional domains questioning its limitations. To better frame the drastic change introduced by this step it is necessary to look at the mental functions brought into play as explained in the original work by Dreyfus and Dreyfus (1980).

Figure 19 shows the mental functions of the each expertise level combined with the skill level attained, as pictured by the author adding the visionary level. Although the table refers strictly to the skill and performance the 6th level – mastery, transcends the practical abilities and the quality of the performance and points towards the holistic perception of the "whole situations", which otherwise can be considered as the sum of events during an ongoing activity. As the authors' outlines, this marks an important passage from the expert level:

The development in row 2 first becomes holistic when the performer perceives similarity in terms of whole situations. This change is accompanied by the recognition of salience. In row 3, the performer refines whole situations to the point that unique decisions intuitively accompany situation recognition without need of conscious calculation. In row 4, the analytical mind, relieved of its monitoring role in producing and evaluating performance, is quieted so that the performer can become completely absorbed in his performance. (Dreyfus & Dreyfus, 1980, p.16)

SKILL LEVEL / MENTAL FUNCTION	NOVICE	COMPETENT	PROFICIENT	EXPERT	MASTER	VISIONARY
RECOLLECTION	NON SITUATIONAL	SITUATIONAL	SITUATIONAL	SITUATIONAL	SITUATIONAL	CHANCE SEEKING
RECOGNITION	DECOMPOSED	DECOMPOSED	HOLISTIC	HOLISTIC	HOLISTIC	RANDOM
DECISION	ANALYTICAL	ANALYTICAL	ANALYTICAL	INTUITIVE	INTUITIVE	INSTINCTIVE
AWARENESS	MONITORING	MONITORING	MONITORING	MONITORING	ABSORBED	MUTATED
	TRAINING			COACHING		

Figure 19. 7th, visionary level, modified from (Dreyfus & Dreyfus, 1980)

Looking closer Dreyfus' analysis of the mental functions matched with skill level in row 3 – implies that the mental function of situation recognition is almost simultaneous with the decision-making process and therefore to the action performed intuitively. This is also supported by the level of "absorbed" awareness which reminds of Mihaly Czicksentmihaly's definition of flow as an immersive, creative experience which requires focus and concentration (Csikszentmihalyi & Csikszentmihaly,1991) (Csikszentmihalyi, 1997) (Seligman & Csikzentmihaly, 2000). In a certain way the master level is not anymore strictly related to skills but introduces the capability of being immersed in a creative activity and intuitively deduct the best decision from the cues in the environment. This also announces the visionary level cited earlier by Dorst. In figure 19 the 1st row — "experience based similarity recognition" is activated not only in terms of tasks by more important in term of learning capabilities correlated with the contingent events, for this reason the recollection becomes situational but also **experiential** where "experience" refers to previous experiential learning in novel situations. This leads to an open mind frame that allows

the recognition of the situations in a holistic manner integrating the **contextual perception of the circumstances**.

This enables what was previously shown in chapter 5.3 as being part of what Cooksney proposes in the learnership scheme, the update and re-interpretation of the old meanings and the creation of the new meanings for action. The decision-making process in this sense becomes not only intuitive but also **imaginative**, anticipating further developments of the situations but also advocating the potential change. Arrived at this point the visionary doesn't relate to a single domain of performance in terms of skills but rather activates the power of his/her knowledge to multiple domains of reference. For this reason awareness **expands** to envision transversal actions and further adaptation in an ongoing learning process.

Another important parameter visualized in figure 19 is the target of this type of training. While it is easy to understand and map the achievements of first levels of expertise on the already existent foundation and higher education creative training courses, the specificity of the expert training for adaptive leadership requires an elite audience with very specific characteristics. In the following part it will be shown how experiential learning models respond the needs of the expert training to achieve mastery and leadership.

All the above suggest the detachment of last two levels, master and visionary, from the previous ones in terms of balance between skill and adaptive capabilities. As such, if up until the expert level the skill was strictly related to the in-depth comprehension of technical capabilities, at the master level the fully proficient expert is engendered with the capability to face adaptive challenges, questioning the previously acquired expertise in a constraint domain of practice. In fact this particular passage marks the boundary and difference between management and leadership, tactical and strategic thinking, operational insight and activity diversification.

In the next chapter I will present the **master** and **visionary** levels as **potential** creative education domains of training for expert leaders.

This reasoning comes from learning to integrate the theoretical study into teaching and coaching practice, introducing a continuous feedback loop between theoretical insights and experiential knowledge acquired in several years of didactical activities at different expertise levels. The argumentation and result of the inquiry is supported and particularly relevant when looked at in self referential dynamics of the creative system. One of the reason for this is the little concern for long-term, futuring perspectives in the system.

8.2 Adaptive leadership training to empower expert levels

In the previous section I have shown the transformation of the mental function and mindset from the novice level of skill to the expert level. In the same time one of the main points was that having arrived at a high level of expertise in a specific profession, the master and visionary capabilities are not anymore related to technical skills but to the adaptive potential of trained experts to become leaders. To better understand this passage it is necessary to detach the master and leadership levels from the constraints of skills and analyze it introducing several additional parameters. As such, it is interesting to underline the presence of time and space dimensions, as two factors that remain only implicitly explained in the chart proposed by Dreyfus and Dreyfus in 1980. What make the expert become a master is precisely the understanding of time and the velocity of advancing from one mental state to another. The importance of time and speed of reasoning is in this sense well illustrated by Boyd's OODA scheme (1976) presented in chapter 6.2, and becomes evident when overlapping master's, recollection, recognition, decision, awareness on Boyd's cycle (fig. 16) and analyses the different tasks related to the respective mental functions (fig. 19).

Mapping the mental functions with the task characteristics helps delineating the areas in which expert designers can benefit from training in order to activate their leadership capabilities and becoming aware of a more profound meaning of "dark side" of their decisions and actions.

Looking into detail at each category of mental functions and tasks enables to envision the dimensions in which the training for mastery in adaptive leadership can evolve.

With respect to the recollection of situations at the expert level in which "the expert has learned to distinguish those situations requiring one reaction from those demanding another" (Dreyfus, 2004, pg. 180), at the master level it is the observation of the situation at hand that provides the cues for establishing the cues for orientation. In other words the master's mindset is not projected solely on the past experiences but remains alert to the present and incoming stimuli. This enables him/her to **recognize** the specificity of the new circumstances in a **holistic perspective** and activate almost instantly the **decision and action.** The speed of reaction with which the master activates his/her perceptive resources coordinating them with the decision process requires an inward attention towards the emotional signals that guide **intuitive action.** This underlines the state of **absorbed awareness** concentrated on self consciousness.

Bringing all the above in the context of the creative environment, the professional expert that before was confined to his/her own skills and ecosystem of the own studio, at master level gains a strategic role for an extended community of practice. The mindsets and tasks described

above can be activated by training an adaptive behavior and an increased awareness on the responsibility and role of the leadership position. Moreover the leadership position implies the full acknowledgement and assessment of the mechanisms of power and how to orient in a given system of influences. As Abraham Zaleznik underlines:

> Leadership inevitably requires using power to influence the thoughts and actions of other people. Power in the hands of an individual entails human risks: first the risk of equating power with the ability to get immediate results; second, the risk of ignoring the many different ways people can legitimately accumulate power; and third, the risk of losing self control in the desire of power. (Zaleznik, 1977, pg. 74)

If at the master level the expert professional displays an absorbed awareness in his/her performance, activating leadership capabilities, the above quote frames the weight of the leadership and introduces an even more advanced level, that of **visionary**. The risks listed by Zaleznik show the complexity of the leadership role that exceeds the boundaries of only one domain of expertise. If previously the awareness was concentrated on the individual performance, one of the determinant factors of the visionary level is the **mutated** awareness and capillary control of not only the situational stimuli but also of the correlation between group dynamics, context and circumstances. Figure 19 illustrates the differences between the master and visionary levels and proposes emergent factors present at the higher levels of leadership. In this sense, a close attention has to be placed on the longer-term perspective of the visionary who is able to **anticipate** the emergence of possibly unknown circumstances and empower others for adaptability.

More precisely at the visionary level skills — or how well tasks are performed — are not the main concerns anymore and the different mental functions refer to the attitude adopted by the visionary. Perhaps the most important parameter that changes is the level and the extent of **awareness** mutates from being inner centered towards the specificity of the internal dynamics in specific professional and social systems towards the evolvement of the much larger perspective in terms of time and disciplinary territories.

This is particularly relevant in the context of the autopoietic social systems in which, as shown previously in chapter 1, fig. 4 and 5, different values, rules and communication codes interfere with each other. The visionary embodies in this case a leadership role in which recollection extends, and the observation of the situation is transformed into a chance seeking process enabled by experiential learning. The visionary leader transforms his / her observation and experiences into knowledge through learning (Kolb 1984, p. 41) his / her attitude being geared towards shaping

ideas rather then responding to ideas as in the case of the manager (Zaleznik, 1977, pg. 78). In the same time this triggers a futuristic orientation and active rather than reactive power flow process.

In conclusion the master and visionary levels mark the passage from experts who's perception and skills are dislocated from the surrounding system, towards managers and leaders fully aware of the inner dynamics of the system's internal dynamics, and able to translate their skill and capabilities into fluid power flow. The training for the above mentioned levels have to be seen as an empowerment process in which the roles of educator and student transform into a learning partnership (Jackson, 1992) (Kolb, 1984) (Kolb et al., 2001). Moreover achieving the visionary level has to be seen as an overarching goal of training and not as the end result. In this sense Zaleznik suggests an important difference between the personal development strategies of the managers and leaders:

In considering the development of leadership, we have to examine two different courses of life history:

1). Development through socialization, which prepares the individual to guide institutions and to maintain the existing balance of social relations; and
2). Development through personal mastery which impels an individual struggle for psychological and social change. Society produces its managerial talent through the first line of development; leaders emerge through the second.

Having outlined the difference between the task related activities up until the expert level, and the human development and negation at the master and visionary levels, the next part explains how the experiential learning paradigm can support the Adaptive Leadership training.

8.3 Experiential learning applied to the leadership training

In the initial chapter four experiences were mentioned in which creative activity and artifacts exercised their power over large audiences. The cases discussed were shown as bearing a political content and influence in particular because they proposed new interpretations of the known and accepted values. From the instance of Chipperfield and the distributed empowerment, to the inception of the distributed and capillary control of behavior through power in the case of Bentham's panopticon system, the instances chosen had shown the models as "anomalies", precisely because they came in contrast with the system of values and beliefs of their historical moment. The anomalies introduced presented the emergence of new experiences that trespassed and contradicted the expectations of a particular social context. Nevertheless, seen from a different perspective, all four cases created learning breaches in the collective imaginary of the

society, advancing the knowledge on the development of human behavior. The instances of the "anomalies" are particularly relevant when seen as emphasizing the difference between authority and leadership, and as learning instances for the advanced training at master and visionary level. As such they help continue the explanation of the experiential learning model as a meaningful approach for training adaptive leadership.

Building up on this assumption, it is necessary to unfold the definition of the experiential learning as a "holistic, integrative perspective on learning that combines experience, perception, cognition and behavior" (Kolb, 1984, p.21). What that implies is training the capability of the expert professionals to open up towards the possibility of embracing learning as a process focusing on the acquisition of knowledge rather than the final outcome. This stance enables the understanding of contrast and conflictual events not as impediments to a pre-established plan of action but as opportunities for learning. In Kolb's words:

> I move through my daily round of tasks and meeting with a fair sense of what the issues are, of what others are saying and thinking, and with ideas about what actions to take. Yet I am occasionally suspended by unforeseen circumstances, miscommunications and dreadful miscalculations. **It is in this interplay between expectation and experience that learning occurs.** (Kolb, 1989, p.38)

The capability of the visionary is to mutate the meaning of this apparent contradictory events transforming into the activation of the experiential learning training. Looking back at the structure of the latent conflict all factors that act as transformers, experience, communication, stimulated needs, (fig. 19) become learning opportunities. This brings us to the reflection on the training of the adaptive behavior at the master and visionary levels that implies the navigation between the proactive, negotiating and anti-action attitudes. The link between the different attitudes is better explained when looking at their etymology, in which action, action, or "agree" means putting in motion, performing, doing; "negotiation", communicating in mutual agreement, and finally antes action or standing in front of, observing action in a reflective stance. This three stances come in conjuncture with four learning styles retained by Kolb necessary to attain an experiential learning process:

> Learners if they want to be effective need four modes of experiential learning: concrete experience abilities (CE), reflective observation abilities (RO), abstract conceptualization abilities (AC); active experimentation (AE). (Kolb, 1989, p.30)

In the context of training for adaptive and creative leadership at master and visionary levels, the above learning styles have to be seen in the context of collective activities and working groups in

which experts test their leadership capabilities learning from each other and from their facilitator. The role of the facilitator in this case is not to lecture pre-defined rules but to indicate the learning opportunities emerging from the internal conflicts and **controversies.**

> "The essence of this learning is a **transactional process** in which the members **negotiate** as each attempts to **influence or control** the stream of events and to satisfy his/her personal needs. Individuals learn to the extent that they expose their needs, values and behavioral patterns, so that perceptions and reactions can be exchanged. Behavior thus becomes the currency for **transaction**. The amount each invests helps to determine the return. (Bradford, 1969, p.192)

All the above explain how the experiential learning is an adaptive process, that has to be seen projected onto different temporal dimensions looking at learning as a holistic, integrative process, the disciplinary boundaries that are relevant at expert level, are seen only as different perspectives of a similar process. By expanding his/her awareness on the different domains, the visionary understands the creative, decision-making, problem solving or scientific research as similar experiences that open possibilities of **adaptation**, evolving in space and time. As such an immediate reaction to a stimulus in a specific circumstance is seen as **performance,** a longer time process of recognition and classification of patterns of behavior and classes of situations refers to **learning,** and a lifelong adaptation to more profound change in one's total life identifies as **development.**

9. Critical Speculations. "Design" as paradox

Life and death are not properly scientific concepts but rather political concepts,
which as such acquire a **political meaning** *precisely only through a decision.*
Agamben, 1995

Rather than a neutral, scientific inquiry, the research completed in the previous pages is a diary of an ongoing learning experience on the way in which " productive act" is communicated in all its aspects. From this perspective, the initial motivation derived from the acknowledgement of a less communicated, and somehow taken for granted, dimension of politics and power that so far wasn't considered central to the "design" and research activities. Nevertheless, looking closer at the historical path of the creative activity, several voices have already criticized the "austerity" of the different areas of research in which the discipline practice is somehow detached from

its true nature of being an essentially political activity, imbedded with an incredible power of influencing and persuading users and/or audiences at global scale. This perspective has a worth noting historical and experiential background supported by the work and reflections of Viktor Papanek, Gui Bonsiepe and Tony Fry whom recognized the multifaceted dimensions of **power manifestation** through the **creative act.** Perhaps the most notable remarks come from Gui Bonsiepe who underlines the role of "design" as a political manipulation tool:

> The issue of manipulation has a long tradition in design discourse, especially in advertising. I remember a popular book that, at the time, provoked a wide resonance, The Hidden Persuaders by Vance Packard (1957). But one should be on guard against a critique with declamatory character that merely denounces. More differentiation is required. Manipulation and design share one point of contact: appearance. We design, among others and certainly not only, appearances. For this reason, I once characterized the designer as a strategist of appearances, phenomena that we perceive through our senses — above all visual senses, but also tactile and auditory senses. Appearances lead us to the issue of aesthetics — an ambivalent concept. On the one side, aesthetics represents the domain of freedom, of play — and some authors claim that we are only free when we play. On the other side, aesthetics opens the access to manipulation that is the increase of outer, directed behavior. When designing products and semiotic artifacts, we want to seduce, that is foster, a positive — or according to context, negative — predisposition towards a product and sign combination. Depending on intentions, design leans more to one pole or the other, more to **autonomy** or more to **heteronomy**. **(**Bonsiepe)

The quote from Bonsiepe casts light on the tensions present in the "design" discipline revealing as mentioned in the first chapters the self-referential nature of the creative system which faces the danger to rely on the self representing, narcissistic values. Moreover the importance given to the research on the positive value of productivity present it in as a neutral activity detached and untainted by the political agency.

To contrast this, throughout the different instances and coaching activities performed in the last several years, the research helped tracing a roadmap that gave context, purpose and meaning to the consequences of acknowledging what I initially and metaphorically called in the title "the dark side of ...". More important if in the beginning the main scope of this work was to pinpoint an unexpressed dimension of the creative act, the research inquiry enabled the discovery of the hidden potentialities of learning to understand the manifestation of power and politics, and the emergence of new territories inquiry that deals with leadership and adaptability.

In other words the focus shifted from the political and power impact of the creative act outcome to the mechanisms that generate and influence it. An important step in our narrative was to delineate the importance of controversy as the main engine for change and visualize its different phases. In order to do that I referred to conflicts, first in generic terms as the balancing point between disruption and destruction (fig. 8) and then more specifically as the essential engine for criticizing and eventually changing the outdated meanings and values in an organizational system.

The dual leading and learning model proposed by Cooksney (fig. 15) was introduced and explained in order to bring into discussion the relevance of the learnership. In the same time the examination of the model allowed me to introduce the intrinsically metaphoric language manipulated by leaders and emphasize its power to create and propose new meanings to consolidated organizational practices, that will replace the old and contested ones. The notion of leadership strategy was at this point brought into discussion as a way to underline the necessity of envisioning the creative act as an open system capable and subject to influence and be influenced by other systems. Again this perspective made reference to the social autopoiesis paradigm as enunciated by Niklas Luhman and aimed to underline the power of "act" to perturb other systems.

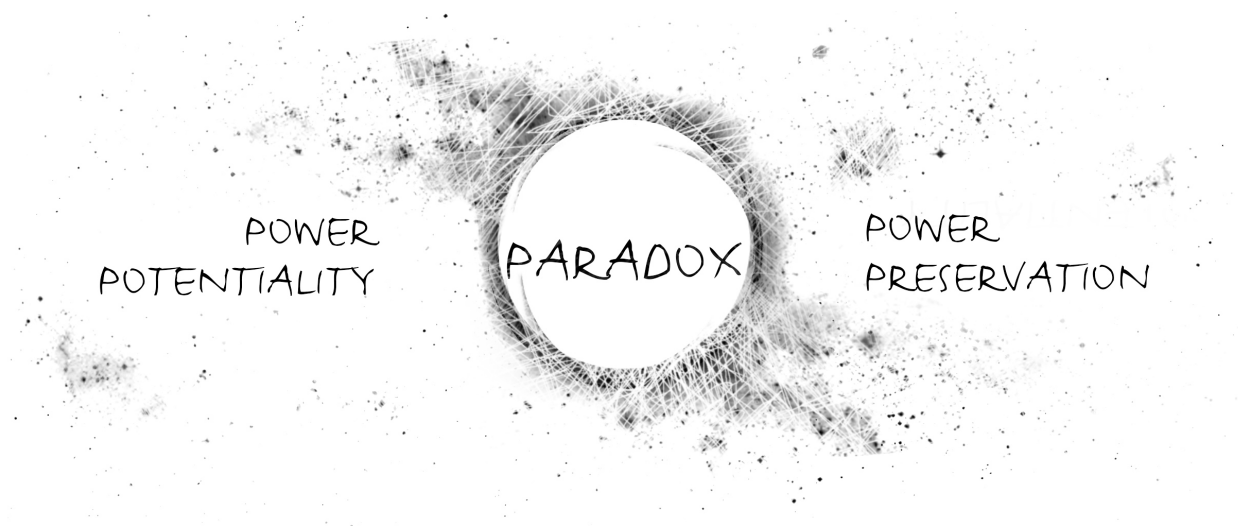POWER POTENTIALITY   PARADOX   POWER PRESERVATION

Figure 20. A paradox

This change in perspective helps to stress out a common view about "design" as an act of a sub-servant discipline, reacting to ideas from economic, societal and industrial systems rather than influencing them. Instead, by changing viewpoints, becomes a carrier of power, capable to create disturbance and radically influence other environments. At this point it is more clear how the role of creative leaders changes from being a mere expert, skill-fully at performing given tasks, to that of master, influencer and eventually visionary. It is at the last two levels that the adaptive leadership attitude becomes visible, gaining the dimension of time. Until the visionary level, the training for leadership can still be seen as belonging to the distinct discipline, instead the visionary level implies the mutated awareness on other environments and therefore the capability to negotiate anticipation and action. In this process of experiential learning the agile capacity is built by reducing the delay between anticipation, decision and action correlating the holistic perception of circumstances with their consequences.

Training for the different phases of experiential learning (fig. 19) becomes, as shown in the final chapter, a shared experience created through empathic transaction between the mentor and student, by accepting the role changing. The model shown previously has to be seen from this perspective, as an open field of experimentation in which the previous training and competency is continuously questioned, making place for the discovery of new territories. If previously I have shown how the interest of the inquiry into the power dimension evolved from the outcome to process and then to ability, arriving at visionary level the main question crystallizes around the influence of the potentiality power, and power preservation. In this concern G. Agamben reflects on the power of expectation by drawing the nature of potentiality as follows:

> The vocabulary of potentiality has penetrated so deeply into us that we do not notice that what appears for the first time in these lines is a fundamental problem that has only rarely come to light as such in the course of Western thought. This problem — which is the original problem of potentiality — is: what does it mean, "to have a faculty"? In what way can something like a "faculty" exist?
> ... These questions immediately bring us to the problem of potentiality. When we tell ourselves that human beings have the "faculty" of vision, the "faculty" of speech (or, as Hegel says, the faculty of death) — or even simply that something is or is not "in one's power" — we are already in the domain of potentiality.

The visionary in this sense is placed in the position in which he / she can possess the potentiality of vision but also the capability to restrain from articulating it and so from **activate its power** to influence and produce change.

Placed in the creative context the metaphor of vision indicates the possibility of the **paradox** (fig. 20) that is born from the tension between the concrete experience and its articulation in an abstract conceptualization. The same tension is created by the **potentiality** and the **preservation of power** and allows visionaries to attain the openness of the discovery while enriching their experience.

Paradoxically the journey on the "dark side of design" revealed that questioning the relevance of clarity in "design" opens new possibilities for the emergence of more meaningful ways to explain its purpose, for as Andrè Gide noted:

Nothing discourages thought so much as the perpetual blue sky.(Gide, 1970)

Power tends to corrupt, and absolute power corrupts absolutely.
The Lord Acton

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POLITICS
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Black Hole
A region of spacetime where gravity is so strong that nothing can escape from it
The theory of general relativity predicts that a sufficiently compact mass can deform spacetime to form a black hole
Galaxy Messier M87 - Virgo Constellation.
Processed image released on 10.10.2019 - Event Horizon telescope