

# Discovery and Creation

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## Abstract:

This text aims to lay the foundations for a way of evaluating creation, through newness. It links different fields (art, science and design), and endeavors to define their connection to creation. It considers an exchange of texts and practices, between art and science. It also evokes a range of newness, with a minimum and a maximum. It reviews gradualness, and relates gradual production to social acceptance, which would also be gradual. Creation is a discovery that confronts the unknown with the known.

“You, you always dream about meeting the truly new  
-newness of a day, that will be newness always”  
(Calvino, 1995, p. 13)

## I. Creation

The creative act consists in making exist that which previously had no existence. Newness is measured by this discrepancy. The history of science indicates the evolution of this gap, by linking it to the power of nature. The thing adheres to nature because it gets its material from it. It *“involves the resources and power of “natura naturans “, “partakes of the indefinable and plunges into creation itself.”* The thing gets its material from nature. The object departs from nature, as does the “product”. Dagognet thus sees creation as a genealogy that moves away from natural materials, little by little :

*“a plate must be seen as an ‘object’, because it is fabricated, while the earth or clay that forms it falls into the category of ‘things’, whereas similar dishes in stainless steel and future paper plates after being used - are known as ‘goods’ or products.”*

This genealogy questions the basic categories, ‘nature versus culture’, by the denomination of objects and their materiality. A similar tension develops in the definition of forms that, first referring of forms of the body through a prothesis or a paleontology of gesture, then abandon those forms, little by little. The body is a boundary, between subjectivity and the world. It is a variable boundary, which first designs shapes in imitation of itself, before filtering and progressively codifying this connection. Thus, while they are becoming free of their bodily roots, forms contribute to the construction and complexification of new languages. Moholy-Nagy provides several examples of this adherence to the past. He esteems that square plates would certainly be more practical than round plates, but the since the first versions were made on pottery wheels, what followed maintained that preliminary shape. Creation adheres to nature and ancient gestures, and it preserves a memory of craft for a long time.

This connection with nature also determines scientific creation, whose history is can be seen, if not as progressive detachment from nature, at least as a change of epistemic relation. The history of scientific objectivity describes three ages. The first, which dominated the 17th and 18th centuries, was determined by likeness to nature. The scientist sought to distill universal truth from the variety of information observable to the naked eye. The second period, beginning in the 19th century, corresponds to mechanical objectivity. Without subjective intervention, it reproduced distinctive entities. The third, that of scientific imaging, starts to go beyond observation, through exploration, and produces mathematically elaborated images. These steps correspond to different images and practices (drawing, photography and, finally, scientific imaging), offering evidence of distinct epistemic conditions, since, in endeavoring to go beyond the visible, the third period engages a “truth” that is no longer based on the similarity between the image and the world, but refers to that which is developed through scientific imaging. Creation is certainly growing more distant from nature, but is also contemplating it in a new way, which redefines a relationship to truth.

This staying power of the past does not preclude a capacity to project into the future: Creation is both retentive and protensive [1]. It projects into the future. The object is not only a symbolization of the values of its era, but also contains a possibility of anticipation of a future culture, and of building the context for its reception. However, a difficulty arises, when, in describing a movement, that is both retentive and protensive, we summon

together different fields (science, industry, design...), without asking ourselves whether creation plays the same role in each field. Can we equate all creative practices? First of all, the field of art imposes certain prerogatives because it attests to a "race towards the new" that Barthes calls neo-mania and Darras calls neophilia, perceiving a negative or positive connotation. It could be argued that art specializes in the new, as long as it provides certain nuances that situate the art practice in a broader context, for example, within the field of visual arts. This reserve would allow to understand that "the requirement for newness" that we ascribe to art does not, for example, concern heraldry, which, on the contrary, copies coats of arms very precisely, so as to continue tradition, rooting it in legendary times long past [2].

Not only is creation not exclusive to art, but artistic creation finds its roots in an episteme from which it borrows the arguments and the technologies that ensure its renewal. By sharing this episteme, the different fields concerned by creation evolve at the same pace. For example, Baxandall provides a striking demonstration when he examines Chardin's painting, in the light of Newton's discoveries about light. Art and science are "steeped" in the same world. They share areas of interest, mainly the body and the world, which correspond to the major painting genres of portraiture and landscape. Scientific imaging that shows the inside of the body offers a possibility to go beyond an envelope that the artist's gaze stumbles upon, just as images of the outer world are an extension of landscape beyond visible limits, towards the infinitely small and infinitely big. Though art and science consist of separate communities and develop parallel histories, they find themselves together in one historical collective actant [3], collaborating and exchanging models and technologies.

We have noted that art adopts scientific models and, conversely, that science completes demonstrations by aesthetic (not artistic) images, that offer the eyes a visual; capturing the experience of that which cannot otherwise be represented. More recently, contemporary art news (Fabrice Hybert, Eric Duyckaerts, Wim Delvoye) has shown that this borrowing also relates to the practice and organization of the creative laboratory. This development emphasizes some similarities between how laboratories and workshops operate [4], starting with division of labor and a principal of competition. This development tends to make the objects produced (which in both cases are conferences and notes, etc.) more similar. When the workshop turns into a laboratory, it frees itself from traditional approaches and media, develops mixed objects (mixed media) and turns to languages of syncretic manifestation (installations, performances). It brings together practices that participate only in collective objectivation, to make a presentable object. Contemporary art practices are now driven by a tension between practice and object. They no longer necessarily go through objective intentionality (to make a painting or carve a sculpture), but find meaning in the practices themselves, the art object providing only an opportunity to conserve a practice that has almost become intransitive. Thus, the objectified practice can present something to the community, that embodies the presence of the artist in a given space-time, within a genealogy.

The objectified activity establishes a communication relationship between a producer and a receiver. An artistic production is "at the meeting point between two distinct intentionalities, that of its producer(s) on one hand, that of or its receiver(s) on the other." According to Doguet, it is this encounter that makes the artwork. Like the activity of a scientific laboratory, that of its artistic equivalent addresses a community with a different range of levels, made up of experts (critics, curators and gallery owners) and the general public, to whom simplified

articles are devoted. The relationships built in this community, through various objects, determine funding opportunities, and thus the possibility to continue the research activity. Yet the communities remain separate. One can affirm that, although the transformation of the workshop tends to reduce the differences between scientific and artistic objects, the conditions for their realization and implementation, of how to get works to function and have “*arts be part of culture*” [5] (Goodman, 1984/1996) (through exhibitions, publications, etc.), remains specific. These means of implementation, relative to an artistic community, ensure the status of these art objects, that so resemble scientific objects.

This outline highlights one requirement of artistic creation: it necessitates (a) physical realization that allows attribution, comparison of forms, and the construction of a line of references. It is essential to be able to situate the object and its author in history. Materialization brings into focus the strength of the decisional break that, for Joas, determines the creative nature of the act. It emphasizes the importance of responsibility. The “creator” is not only capable of judgment and “owner of his or her own actions” (Benveniste), but also shows him or herself able to invent a path, because he or she controls the entire modal structure (*will, can, know, must be and do*) and moreover imposes a *meta-will* that allows to comment on his or her own will, and go beyond the obligation of the will described by Arendt [6].

The artist is not only subject to the obligation of the will, but wants to want, as it were, and to determine the stakes. The artist thus assumes the role of expert, capable of taking a stand on art history, defining his or her place and how to proceed in regards to legacy. This status as expert, must nevertheless be considered in light of postulates by Levi-Strauss, which contrast artists of today with those from so-called primitives societies. Only the former has status as an expert and proceeds with “*an almost insatiable consumption*” of all systems of signs that have been used throughout humanity and, from this, establishes his or her repertoire. One could contrast this attitude of integration, to the refusal of “primitive” artists, concerned with preserving their own language. The artist of today is ahead of, or rather *in history*, whereas artists of yesterday, immersed their culture, acted from outside.

## 2. Discovery

We have situated creation between retention, rooted in the past; and protension, which projects into the future. For Deleuze, this adhesion to the past is the biggest challenge of creation, and can be seen in the form of stereotypes that, even before the painter takes brush in hand, already saturate the white canvas. Deleuze recalls those “*clichés of common opinion*” that the artist must “*erase, scrub clean, pound and even destroy, to allow a breeze to emerge from chaos (..)*”. The artist should “*bring forth the unlikely figure*” [7] (Deleuze, 1981/2002) just as the poet “*splits the umbrella of public opinion*” to let “*a little free and windy chaos*” pass through.

Newness is difficult, even unlikely, and confronts the solitary artist with a community empowered by the doxa. Reaching for the new, artists and scientists share a concern with discovery. As Bastide and Fabbri pointed out, it’s a question of, making apparent “*unseen properties or phenomena, whether they be invisible, without*

the slant of a particular experience, or whether they have not yet been discovered (or made clear) for lack of appropriate experience.” [8]

This description is essential, because it rids artistic creation of an appearance of futility. Art, like science, can and must “make worlds” in the words of Goodman, by revealing knowledge that did not exist, by renewing the visible or, better yet, according to the famous phrase by Klee, by “making visible”. Not only does art reveal a new phenomenological perspective, but it names and makes exist, that which, not yet objectivated, does not yet exist. On this matter, proposals by Ricoeur seem invaluable, because they make the case for art as an intermediary. He says that twentieth century art has allowed to “identify language properties that would otherwise have remained invisible and unexplored”, thus giving access to new worlds of meaning.

Discovery raises a modal question, a tension between potentiality and actualization. According to this signification of potential, this tension consists in perceiving a lack and in a believing that there is “something” and thus making this “something” present, so it can be reviewed and evaluated. On the scientific side, discovery gives rise to a veridictory judgment; on the side of art, the discovery is aesthetic and artistic. More precisely, once a scientific assertion is declared true, it is no longer discussed and assumes community consensus and shared acceptance, depending on the authority of the speaker; the degree of trust; and the level of knowledge of the receiver. In relationships thus established, a *have know* (conviction) and *have believe* (persuasion) therefore encounter a *can know* and a *can believe*. This modal dialectical gives rise to a debate that precedes agreement, indicating a balance of knowledge and establishing scientific truth. The same goes for artistic newness, with the difference being that this latter considers truth as beauty, also debated within the community, without seeking a reassuring outcome. In this case, beauty is given other names and questions its canonical forms.

### 3. Newness

We have outlined a genealogy that allows to measure a change and progression in time that is not necessarily progress, term applicable to science, containing the idea of improvement. We have emphasized the uprooting force of creation. But how can one measure the amplitude of newness? Is renewal even indispensable? If we can distinguish art from related practices and the art of today from “primitive” art, does the question of newness concern recent art? Appropriation artists have asked this question by producing works already made. Did Sherrie Levine “reproduce” works by Malevich and Duchamp, by questioning superficial changes that characterize the new (by redoing oil paintings in watercolor, by redoing Duchamp’s *Fountain* in bronze ..)? At what point is there newness? This echoes Goodman’s question, “When is there art?”

For example, minimum amplitude is seen in Michael Mandiberg’s taking of photographs, made by Levine after Evans ([Afterwalkerevans.com](http://Afterwalkerevans.com) and [Aftersherrielevine.com](http://Aftersherrielevine.com), 2001). In this case, the difference refers less to expressive contrasts between works than to “the history of their production.” [9]

The work is new even when the means of expression has not changed, because the period and the conditions of expression, thus the meaning, are different. Yet the force of renewal seems greater when the difference

concerns conventions, which, for example, from the outset, grants certain prerogatives to abstract painting and the ready made. Beyond the capacity to analyze and comment on the composition of the discourse (metadiscourse), these works demonstrate a capacity to analyze their language status (metalanguage), their ability to elaborate a new way of analyzing the natural world; or way of “talking” about something other than themselves...

Once this power of questioning the conventional has been emphasized, we can measure the force of renewal of creation in increments, by referring to an action that is imitative (repetition), ingenious (adaptation), creative (invention), then chaotic (revolution), and which has a unique role, because it shows the strength of negation. Chaotic action implies the wiping away of information and offers a promise of a restoration of meaning. With this gradualness of practices, we outline various possibilities for renewal of means of expression, in which all (imitation) or nothing (chaotic) is conserved, and which implies starting the sequence over again [10].

#### 4. Unknown

Yet, production of the new questions its own social acceptance and is conceived as an insertion of the unusual into the familiar. On this point, some commonality between semiotics and design theories is very noteworthy. Greimas speaks of “*integration of the unknown into the known*” relative to the assessment of value, explaining that this confronts belief with a framework of knowledge; a certain state of knowledge. Hatchuel maintains that a designer must produce “*an unknown object that can be immediately recognized,*” likely to “*surprise or appeal, without need for explanation or education.*”

Loewy uses similar terms. He says that, “*the astute industrial designer is one who senses, with lucidity, the “shock threshold” in each particular problem.*” He refers to a “*MAYA stage, (acronym for Most Advanced yet Acceptable)*” [11], (Loewy, 1952/1963, pp. 294-295) indicating the gap between an “*unprecedented avant-garde form*” and “*an accepted standard*”. These contributions allow to grasp a key characteristic of the new in art. Indeed, in the field of design, both Hatchuel and Loewy link the acceptability threshold with the identification of the object, whereas art refers to an environment of social acceptability. There are no other limits to artistic innovation than those of “*social morals*”, which are called into question.

Yet, a gradualness emerges nevertheless. In his study of culture, Lotman indicates that the audience of the work is attracted by its explosive zones, but accepts this newness that emerges gradually: “*the audience would like the author to be a genius, but at the same time would like to understand the works.*” This paradox contributes to the movement of culture, by producing a “*two-step*” event, in which an explosive work is imitated by a more indulgent work, which contemporaries “*need.*” It, thus, considers a discrepancy in reception. Geniuses are “*useless*” for contemporaries who need an art which is, “*perhaps shallow and ineffective, but apt to be received today.*” These artists are working for the future.

## 6. Footnotes:

[1] In that it supposes resistance or, on the contrary, projection forward.

[2] We highlight this point in our book, *Sémiotique du design*, (2012). Paris, France, Presses universitaires de France, chapitre 4.

[3] The dictionary on Semiotics describes the actant as a generic agent: “the actants are beings or things which, through any skill and in any way, even as simple bit players, and in the most passive way possible, participate in the process.” The collective actant is defined as: “a collection of individual actors, equipped with a common modal skill and/or an action common to all the actors that it subsumes”. What defines this collective is, thus, a skill and a common action. Greimas, A.J. and Courtés, J. *Sémiotique. Dictionnaire raisonné de la théorie du langage* (1979). Hachette.

[4] See the descriptions by Latour, B., and Woolgar, S., *La vie de laboratoire. La production des faits scientifiques*, (1988). Paris, La Découverte.

[5] Translated from French

[6] Arendt observes that we are determined by duty to will which puts a hurdle in the will. Refer to *La vie de l'esprit* (1981). Paris, Presses universitaires de France.

[7] Translated from French

[8] Bastide, F. “La démonstration” (on front page: “Analyse de la structure actantielle du faire-croire”, translated as “Actantiel Structure and Analysis of Have Believe), *Actes sémiotiques, Documents*, III, n°28, 1981, p. 7-8.

[9] See discussion by Goodman, N., *Langages de l'art*, translated by Morizot, J. (1990, 1968). éd. Jacqueline Chambon and by Genette, G., *L'œuvre de l'art. Immanence et transcendance*, Immanence et transcendance (1994). Seuil, coll. “Poétique”.

[10] For a greater explanation see our *Sémiotique du design*, *ibid*.

[11] Translated from French

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