

From Fantasy to Imagination: A Cultural History and a Moral for Cultural Psychology

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Wenn ihr's nicht fühlt, ihr werdet's nicht erjagen

J.W. Goethe, *Faust I*

[If you don't feel it, you won't catch it]

Abstract

By doing history of psychology, we occasionally find areas of inquiry that have been forgotten in contemporary psychological language. One of these themes is *fantasy*. In this lecture I present some major contributions to fantasy before the establishment of scientific psychology. The exploration will begin with J.W. Goethe's (1810) fourfold conception of the human soul: *fantasy* [Einbildungskraft], *sensuality* [Sinnlichkeit], *rationality* [Vernunft] and *intellect* [Verstand], whose roots can be traced back to Nicholas of Cusa's *De Docta Ignorantia* (1440). Nicholas of Cusa introduces through the term *intuitio* [Anschauung] a sort of "wise ignorance", i.e. a special kind of knowledge without grounding [*visio sine comprehensione*]. The mystic-theological tradition of the *intuitio* is extended toward a modern framework through Giambattista Vico's *fantasia* (1725), understood as the main key to enter into the singularity of any human creation. In the context of the Romantic revolt against modern science and the hegemony of rationality, Goethe's (1810) model of soul attempts to integrate the knowledge of intuition, via *fantasia*, while maintaining the rational capacities of human beings. Goethe criticizes the lack of fantasy and sensuality of his fellow scientists. Goethe's plea for a holistic thinking in modern science implies the formation of the less developed fantasy and sensuality. Schiller's *Letters on Aesthetic Education* should be framed in this spirit.

Thus, during the first part of 19th century the human sciences (anthropology and psychology were indistinguishable at that time) embraced the non-intellectual faculties, primordially *fantasy*. As a consequence, the history of psychology (before its scientification) is indissolubly intertwined with the history of aesthetics. By middle of 19th century, the introduction of quantification implied the massive abandonment of non-rational human dimensions: vital forces, empathy, tendencies, physiognomic sensibilities, intuition and fantasy, among others. While some of these were still developed in other disciplines —such as the emerging phenomenology and psychoanalysis— some others were radically abandoned. Such was the case of *fantasy*: It was transmuted into an intellectual process of representing and operating on unreal objects in front of the mind's

eye —the *imagination*. The connection with vital feelings and aesthetics was lost. Not surprisingly, the original fantasy survives in literary theory and aesthetics rather than in psychology. Thus, the fate of fantasy in psychology is a fractal reflection of the fate of the whole dimension of internal experience: abandonment or transmutation. The challenge for cultural psychology is to recover the forgotten dimensions of the human being, whose roots connect psychology to anthropology rather than to epistemology.

Introduction

As any long-standing discipline, psychology has its own dictionary of forgotten words. Major technical terms of the 18th and 19th centuries, such as *apperception*, *will*, *soul*, *sympathy* or *genius*, scarcely appear in current technical psychology language. Some of them disappeared by the end of 19th century, their meanings being thus hardly comprehensible at present. Other terms gradually were relocated in other intellectual domains, so that we have certain notion of them because of our familiarity with other disciplines. We have furthermore the case where some antique words survive in modern jargon, but with a present use diverging from the precedent in important ways. This is the case of *fantasy*. Whereas during the 18th century and until the first half of the 19th century, *fantasy* played a central role in the then current psychologies, its importance steadily decayed after the irruption of the “new psychology” -the successful research program developed by Wilhelm Wundt and others to recover by means of natural sciences methodology the pre-Kantian questions on mind. Our inquiry will mainly focus on the use of *fantasy* by prominent authors before 1870 -that is, immediately before the institutionalization of modern scientific psychology. By contrasting those views with post-Wundtian psychology, we will be able to visualize what aspects of *fantasy* continued being considered part of psychology’s object of knowledge and what aspects were left behind, so to say, in the pre-history of the discipline.

Words acquire their meanings only in a specific sentence; sentences in texts. In their turn, texts can only adequately be interpreted in the socio-cultural context in which they are produced. A specific scientific term makes sense only within the entire language used by a discipline to approach its knowledge domain. Consequently, by following the historical course of a technical term such as *fantasy* we obtain not mere anecdotal facts, but valuable information on the implicit cosmological and anthropological models extant through the European societies where it was used. The changing role that *fantasy* satisfies in different theories of 19th century psychology offers us an entrance into the mutating anthropological models of that time. Knowingly, the 19th was the century when the objectifying view of Nature, long ago consolidated in the natural sciences, protracted to comprise human affairs. Not only Nature came to be considered as a complex machinery of causally related objects and things, but also personhood itself was deemed part of the mechanistic world. From social issues to mental functions, human life during the 19th century was progressively modeled after the same causal laws that proved predictive of the natural world. Because of its historical connections with creativity, aesthetics and poetry,

modifications of *fantasy* throughout time throw light on the model of person that made feasible and even obvious the project of a natural science of mind.

Today psychology is widely regarded as a discipline born at some point of the second half of the 19th century, when the first experimental laboratories to study psycho-physiological processes were founded. Academics originally instructed in philosophy and natural sciences spearheaded this intellectual movement whose aim was to create a natural science of mind. Conveniently Wilhelm Wundt named this new enterprise as “new psychology” establishing a liaison with -and a distinction from- Christian Wolff’s old *rational psychology* of the 18th century (Wundt, 1907). In this view of history, pre-Wundtian psychological theories are regarded at the best as precursory, not properly psychological approaches. Psychologies from before 1850 remain massively unknown, so much, in fact, that we nowadays have only a faint idea of the forms that the discipline had, preserved mainly in important psychology textbooks from the first part of 19th century -for example: *Handbuch der Psychologie* (1804) by D. Tiedemann, *Psychologie zur Erklärung der Seelenerscheinungen* (1824) by E. Stiedenroth, or *Vorlesungen über Psychologie* by C.G. Carus (1831).

It is indeed true that the institutionalization of modern scientific psychology required the “huge influence [...] of an increasingly prevalent positivistic small enterprise” (Wundt, 1907, p. 15). Yet it would be mistaken to underestimate the relevance and development of the psychological studies before the consolidation of the new psychology. Such ‘pre-scientific’ psychology was quite extended by the end of 18th century and it was the arena where models of manⁱ were proposed and discussed. Moreover, certain beliefs established by *old* psychologies were incorporated to experimental psychology and persist even today. Thus, from a wider point of view, modern psychology looks more like another chapter of the large book of the human studies; neither the first one, nor the last.

Our exploration of the concept of fantasy will begin about two generations before the emergence of the positivistic-oriented scientific psychology -“Wundt’s creature” as Sigmund Koch once named it (Koch, 1969). To situate the right place of modern psychology in the history of human studies, we need to visualize the evolution of the ideas of person and mind. We will begin this exploration with the philosophical and scientific ideas of one of the most important intellectual figures of Germany at the turn of the 18th century: Johann Wolfgang Goethe, whose importance as poet transcended his time, but whose scientific contributions were -and still today are- greatly ignored. We would like to show him as heir of the long tradition of holism, and by this way, one of the forgotten precursors of cultural psychology. His theoretical position on *fantasy* offers remarkable dissimilarities with the other big name in the German culture of his time: Immanuel Kant. The muffled collision between the models of man defended by Germany’s two main sages in the aftermath of the 18th century can be observed in their contrasting modes of approaching *fantasy*. This cultural dispute laid the foundations on which the new psychology was planned and successfully implemented.

Goethe's science

Although Johann W. Goethe gained international renown very early in his life because of his works as poet and prose writer, his contributions to philosophy and natural sciences never received an even remotely similar acknowledgment. Goethe was intensively concerned with natural scientific issues, as expressed in his *The metamorphosis of plants* (1790) and *Theory of colors* (1810) as well as in diverse brief commentaries and reflections. Despite the limited impact of his scientific works, Goethe's interest in science was not a secondary one. His close friend Johann Peter Eckermann reported indeed the following valuation made by Goethe: "As for what I have done as a poet [...] I take no pride in it whatever...Excellent poets have lived at the same time with myself, poets more excellent have lived before me, and others will come after me...But that in my century I am the only person who knows the truth in the difficult science of colours— of that, I say, I am not a little proud, and here I have a consciousness of a superiority to many" (Eckermann, 1850b, p. 145).

To have a notion of the relevance that Goethe assigned to *fantasy*, it is important to keep in mind three main features of his approach to science -and to life in general, as we will soon see: developmental perspective; holism; and personal experience as the source of knowledge. The first feature delineates his whole scientific effort as genetic. Goethe developed by means of many examples the primordial idea that the true knowledge about an object of inquiry can only be adequately obtained by capturing its development instead of fixed states of it:

If I look at the created object, inquire into its creation, and follow this process back as far as I can, I will find a series of steps. Since these are not actually seen together before me, I must visualize them in my memory so that they form a certain ideal whole [...] At first I will tend to think in terms of steps, but nature leaves no gaps, and thus, in the end, I will have to see this progression of uninterrupted activity as a whole. I can do so by dissolving the particular without destroying the impression itself (Goethe, 1785/1998a, p. 75).

Goethe's description of Nature as a living process, in permanent development, grows up from his observation that even though one plant species may vary across latitudes and times, still we are capable of identifying it as one. This is the seed of Goethe's *genetic method*, which from a historical perspective played a catalyzing role in promoting a new worldview, in which not only the botanic world, but every form of life is seen as an evolving process (Miller, 2009). Knowingly, the 19th century has been described as the century when the idea of evolution was discovered as pervading the whole universe (Jespersen, 1922). The developmental approaches emerge at the verge of the 19th century in different strands: from Buffon's geological descriptions of soil strata as signals of a prolonged evolution of Earth, through the conception of languages as evolving from a common root (which makes possible the concept of 'language family'), to Hegel's notion of History as evolving through cultures and epochs, until Darwin's depiction of biological species as permanently adapting and changing across times. Goethe is not merely part of this developmental spirit: He represents one of the most influential voices of his time bringing the genetic thinking forth.

It is not difficult to reconstruct his influence on the Humboldt brothers and, indirectly through Alexander's epochal voyage, on Darwin's evolution theory. Furthermore it is clear that he had also a remarkable impact on Kantian philosophers such as Hegel, Fichte, and Schelling. He is therefore a key author to understand *Naturphilosophie* and, by this means, *Lebensphilosophie*. Unfortunately, his philosophical-scientific contributions to advancing the idea of development in the 19th century intellectual landscape have been overshadowed by his prominence as a poet. Nonetheless, he was one of the fundamental precursors of the major change that took place from a worldview of static things united by mechanical connections to a developmental one.

A tight related feature of Goethe's conception of science is the primacy of wholeness over atoms and parts. He writes: "All things in nature, especially the commoner forces and elements, work incessantly upon one another; we can say that each phenomenon is connected with countless others just as we can say that a point of light floating in space sends its rays in all directions" (Goethe, 1792/1998b, p. 15f). Nature -that is, the very object of knowledge of the natural sciences- is, for Goethe, a *living organism*, whose proper apprehension requires looking for connections, because she "...hides amid a thousand names and terms, and is always the same" (Goethe, 1783/1998c, p. 5). Good science is that which grants priority to the perception of the wholeness, that which demands the scientist's capacity to see connections that initially may appear distant and dissimilar. Modern natural sciences, argues Goethe, err by focusing solely on analysis, neglecting the need for synthesis. However the plain accumulation of separate elements does not guarantee we will gain a better understanding of a subject matter. On the contrary, the more analyses the sciences run, the finer the grain, but also the farther the comprehensive vision: in such a case, the observations turn out to be obstructions to the vision. To see the wholeness of which Sanskrit and English are part, our attention should be detached from specific parts of them; only then can we see the wholeness that unites a multiplicity of languages. Scientific analysis works only when it is oriented by a theoretical synthesis: "the sciences come to life only when the two exist side by side like exhaling and inhaling" (Goethe, 1829/1998d, p. 49).

The methodological question of how scientists can advance their analysis without losing sight of the synthetic wholeness leads us to the third feature of Goethe's scientific approach. The capacity to see the *unity in diversity* requires restoring "[...] to the human spirit its ancient right *to come face to face with nature*" (Goethe, 1829/1998d, p. 48; emphasis in the original). For Goethe, the right way to do science involves a *personal commitment* to directly see, touch and feel by oneself the phenomenon at stake. Goethe himself incarnated this prescription. *The Metamorphosis of plants* (1790/2009) is ripe with examples and remarks from his significant first journey to Italy (1787-1788). His *Theory of colors* (1810), where he defends a holistic approach to colors opposed to Newton's analytical view, began also with a personal experience, which he discloses at the conclusion of the historical part of the *Theory of colors*. When asked to return the prisms Mr. Büttner had lent him, Goethe reports:

I had taken the crate in order to give it to the messenger, when it occurred to me that I quickly wanted to see through a prism, something I hadn't done since my early

youth...I was in a totally white room. As I held the prism before my eyes, I expected keeping Newtonian theory in mind, that the entire white wall would be [g]radated into different colors...But I was quite amazed that the white wall showing through the prism remained as white as before. Only where there was something dark did a more or less distinct color show. The cross frames of the window appeared most actively colored, while the light-gray outside did not have the slightest trace of color. It required little thought to recognize that an edge was necessary to bring about colors. I immediately spoke out loud to myself, through instinct, that Newtonian theory was erroneous (Goethe, 1971/1810, p. 199).

This passage reveals a central aspect of Goethe's theory of knowledge: Knowledge [*Wissen*] is ultimately a form of experience [*Erlebnis*]. Accordingly, concepts should be grounded in *lived* experiences rather than in logical or formal connections. For Goethe every rational construction should start from the personal experience of being in contact with the phenomenon of interest. Our *scientific* theories are not separable from the life experiences that have fed our curiosity for that aspect of the world which the theory is about. Moreover, the aim of any scientific inquiry is precisely to rationally expand an *intuitive perception*ⁱⁱ [in German: *Anschauung*], which we not infrequently have even before any of our experimentally controlled observations: "In general, events we become aware of through experience are simply those we can categorize empirically after some observation" (Goethe, 1810/1998e, p. 194). Clarity of thought comes to our minds not after a painstaking ascending logical process, but from our intuitive perception of the phenomenon. The abstract principles and laws governing certain aspects of the natural world are not revealed "to our reason through words and hypothesis, but to our intuitive perception through phenomena" (Goethe, 1810/1998e, p. 194f). Goethe calls these intuitively captured phenomena "*archetypal phenomena*, because nothing higher manifests itself in the world" (Goethe, 1810/1998e, p. 195; emphasis in the original). Thus scientific formalizations emerge from an intuitive perception, not the reverse.

The statement that such *intuitive perception* is humanly possible situates Goethe in clear contrast with Kant, who assigns this possibility only to a divinity and thus limits human judgment to discursive reason, which needs concepts and logical structures. Goethe asks: "Why should it not also hold true in the intellectual area that through an intuitive perception of eternally creative nature we may become worthy of participating spiritually in its creative processes?" (Goethe, 1817/1998f, p. 31). Significantly, he counter-argues Kant from his own life experiences: "Impelled from the start by an *inner need*, I had striven unconsciously and incessantly toward primal image and prototype, and had even succeeded in building up a method of representing it which conformed to nature" (Goethe, 1817/1998f, p. 31f; emphasis added). The existence of an intuitive perception is thus in Goethe a conviction rooted in his personal experience; it is something *felt*, not the result of a logical conclusion. The priority of the intuitive perception over logical soundness corresponds to the conceptual manifestation of the mentioned third feature of his whole scientific work: personal commitment. From this insight, he develops his criticism to modern natural science. He repeatedly complains that Newtonians "put some distance between themselves and life" (Goethe, 1998g, p. 306) and that the only way to be faithful to a formal discipline is not to lose the wholeness of life: "And this exactitude [of

mathematics] - does it not flow from an inner feeling for the truth?" "A mathematician is perfect only to the degree that he is a perfect human being, to the degree that he can experience the beauty in what is true" (Goethe, 1998g, p. 310f).

One corollary of personal commitment is Goethe's dismissal of the use of scientific instruments that would potentially obstruct the guiding intuitive perception. Insofar as he privileges the sensual [*sinnlich*] access, not every scientific device seems suitable to see the phenomenon: "...man himself is the best and most exact scientific instrument possible...The greatest misfortune of modern physics is that its experiment have been set apart from man, as it were; physics refuses to recognize nature in anything not shown by artificial instruments, and even uses this as a measure of its accomplishments" (Goethe, 1998g, p. 311). In a conversation with Frederic J. Soret, he reflects:

I have never affected anything in my poetry...I have never uttered anything which I have not experienced, and which has not urged me to production...I have only composed love-songs when I have loved...How could I write songs of hatred without hating! (Eckermann, 1850b, p. 259).

Similarly, in *Conversations to Eckermann*, he confessed:

I have [...] attempted natural science in nearly every department; but, nevertheless, my tendencies have always been confined to such objects as lay terrestrially around me, and could be immediately perceived by the senses. On this account, I have never occupied myself with astronomy, because here the senses are not sufficient, and one must have recourse to instruments, calculations, and mechanics, which require a whole life, and were not in my line (Eckermann, 1850a, p. 360f).

To better understand why the use of technical instruments impedes to feeling and palpating the phenomenon of interest we have to explore Goethe's model of man and its position in nature. This vision allows us to clarify why instruments, calculations, and mechanics are not in his line.

Goethe's theory of color

In *Theory of Color*, published in 1810 after 10 years of preparation, Goethe argues vehemently against the Newtonian view that light is the additive product of the colors. Instead, he states, "[...] colors are the deeds of light" (Goethe, 1810/1998e, p. 158), and although colors and light are intimately related to each other, "we must consider both as belonging to all nature" (Goethe, 1810/1998e, p. 158). Light should be considered not as a secondary compound, but a primary phenomenon; and the same holds for the eye: Nature as a whole reveals itself to the eye through color: "Though it may sound a bit strange, we will now assert that the eye does not see shape as such, since brightness, darkness, and color operate together as the sole means for the eye to distinguish among objects or parts of objects" (Goethe, 1810/1998e, p. 163f). Light is not the summation of colors; these only

appear when light suffers alterations from shadowing. To see colors we need the interplay of light and dark.

While light shows itself and objects in a “generally characterless way” (Goethe, 1810/1998e, p. 267), each color is expressive from its very creation: “Color [...] always appears as specific, full of character and meaning” (Goethe, 1810/1998e, p. 267). This insight requires a mind disposition that already in Goethe’s times was almost forgotten in natural science: to pay careful attention to the senses before promoting these observations to abstractions via reflection: “Two needs arise in us when we observe nature; to gain complete knowledge of the phenomena themselves, and then the to make them our own by reflection upon them” (Goethe, 1998h, p. 155). The fact that colors are imbued with meaning from the start receives confirmation not from abstraction, but from the careful attention to our sensitive reaction in the whole organism whenever we are immersed in a colored landscape:

Thus nature also speaks to other senses which lie even deeper, to known, misunderstood, and unknown senses. Thus it converses with itself and with us through a thousand phenomena. No one who is observant will ever find nature dead or silent. It has even provided a confidant for the rigid body of the earth, a metal the least fragment of which tells us about what is taking place in the entire mass (Goethe, 1810/1998e, p. 158).

Colors, accordingly, do have effects on man’s inner nature, those being sensorial, moral, and aesthetic. However, each color brings about a specific impression to the mind, so that these connections are not arbitrary and not interchangeable. To capture such effects, we have to be completely surrounded by a determined color, for example, in a room of a single hue or by looking through a colored glass. In such cases “[w]e will then identify ourselves with the color; our eye and spirit will be brought into unison with it” (Goethe, 1810/1998e, p. 279). Through the concept of *polarity*ⁱⁱⁱ Goethe opposes the primary colors yellow and blue. Both represent, respectively, the active and passive sides of light. Considered as a whole (that is, becoming aware of their sensory, moral, and aesthetic effects), such a polarity may be extended in this way (see Figure 1):

<i>Plus</i>	<i>Minus</i>
Yellow	Blue
Causation	Deprivation
Light	Shadow
Brightness	Darkness
Power	Weakness
Warmth	Cold
Nearness	Distance
Repulsion	Attraction
Affinity to acids	Affinity to alkalis

Figure 1. Yellow-Blue polarity and their corresponding sensorial-moral effects (Goethe, 1810/1998e, p. 267f).

The diversity of colors comes basically from this original polarity by means of *intensification*^{iv}. Intensified colors bring unexpectedly new colors. When blue and yellow intensify, they become violet and orange, respectively. The reddish-impression in violet and orange will increase at the highest degree of intensification. Such color turns out to be the purple -or pure red. This is the “most exalted of color phenomena” (Goethe, 1810/1998e, p. 282), whose effect is “...as unique as its character [...] It may take a serious and dignified impression, or one of grace and charm; the first effect arises when it is dark and condensed, the second when light and dilute [...] Thus the dignity of age and the charm of youth may be clad in a single color” (Goethe, 1810/1998e, p. 282). In the case that the opposites yellow and blue join without being intensified, the color green appears. In the green, yellow and blue are evenly balanced, producing in the eye and the soul the impression of simplicity and rest: “We cannot and will not go beyond it” (Goethe, 1810/1998e, p. 283).

The diverse colors originated by intensification and the new oppositions they form can be adequately expressed through the *color wheel* [*Farbenkreis*]. Goethe presents his own version of it on part VI of his *Theory of Color*. Figure 2 shows Goethe’s own watercolor drawing from 1809. Several aspects are worth mentioning from this diagram. First, colors opposed within the circles are not strictly opposite but rather *complementary*, in the sense that whenever the eye sees a color, “...by nature it unconsciously and necessarily produces another color on the spot, and the two colors together will contain the whole circle of colors” (Goethe, 1810/1998e, p. 283). The eye, in brief, is constantly looking for the complementary colors to recover the totality and find satisfaction. Thus, the contemplation of yellow demands violet, purple (pure red) demands green, blue demands orange, and vice versa. Second, Goethe’s color wheel includes the *symbolic* effects that each color produces in human souls at sensorial, moral and aesthetic levels^v. Thus purple produces in us the sentiment of the *beautiful* [schön]; orange is *noble* [edel]; yellow represents the *good* [gut]; green stand for *useful* [nützlich]; blue evokes the sentiment of *mean* or *common* [gemein]; while violet corresponds to *unnecessary* [unnöthig].

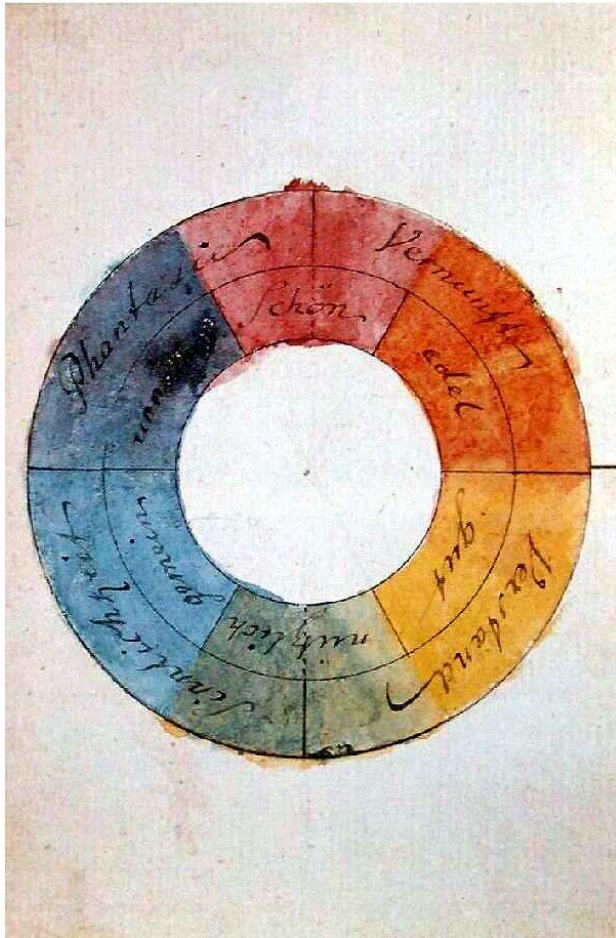


Figure 2. Goethe's color wheel with associated symbolic qualities, after his own drawing (1809). Sensual-moral attributes are associated to specific colors. [Original in the Freies Deutsches Hochstift-Frankfurter Goethe-Museum.]

Third and most important for our discussion, Goethe establishes in his color wheel the association between specific colors and their symbolic effects to four *powers of soul*: *fantasy* [Phantasie]; *reason* [Vernunft]; *intellect* [Verstand]; *sensuality* [Sinnlichkeit]. *Fantasy* occupies the red-blue (violet) space of the color wheel, possibly producing effects of that which is unnecessary, but beautiful. *Reason* is placed in the orange space, being associated with nobleness and beauty. In its turn, human *intellect* stays in the yellow-green part of the wheel, becoming associated with sentiments of goodness and usefulness. Finally, *sensuality* corresponds to the green-blue part of the circle, connecting the soul with the common and the useful.

Fantasy in Goethe

A golden goal for philosophy is, according to Goethe, to bring together again what nature originally created unified. This also applies to human soul faculties. Under such orientation,

the anthropology proposed by Goethe defines the integration of capacities associated to the active colors on the wheel (reason and intellect) with the passive powers (fantasy and sensuality). This meant recovering human faculties that were at that time already were disappearing little by little in the scientific communities in favor of the more and more central 'active' capacities of intellect and rationality.

Goethe is writing at the dawn of the 19th century, when the theory of knowledge that supported the growth of the natural sciences was a broadly extended philosophy, beyond the scientific domain. In fact, European society as a whole was at that time rapidly changing because of the scientific revolution, and its practical consequence, the industrial revolution. The astounding success of the natural sciences not only modified the physiognomy of cities, social composition and economy structure, but importantly expanded the modern-rational worldview, which progressively relegated human activities and faculties that were unrelated to the art of logical analysis. During the "century of science" (Dilthey, 1910b) the same vocabulary used to describe physical processes began to be applied to human processes: from the social institutions to mental life. Words such as *system*, *causal relations*, *mechanisms*, *effects*, *associations*, *reflexes*, *atoms*, became usual forms for describing and explaining aspects of human reality. If science could formalize the celestial region, making it possible to explain and predict the stellar movements, was it not reasonable to expect the good day in which social behavior and human affairs would also be modeled and predicted? During the 19th century, it gently became self-evident to understand the human body, social institutions, and the very inner life of humans as mechanically constituted. The belief that Kantian transcendental categories of space and time pervade and structure not only natural phenomena, but also the social world and the individual mind was mere common sense in industrial societies.

This expansion of the mechanical-objectifying cosmology toward society and human dimensions is concomitant with the rise of intellect and reason as the central powers of the human soul. This is the growing movement against which Goethe is trying to oppose. He vigorously argues for the need to integrate the common *sensuality* and the beautiful but unproductive *fantasy* to the rational powers of the human soul. Modern science conceives a rationally ordered universe whose unveiling requires the methodic exercise of reason and intellect. Such unilateral emphasis leads only to the impoverishment of science, since analyses needs syntheses in the same way as breathing is both inhalation and exhalation. Soul powers conform a totality, whose division may originate quarrels and biases that distort the original harmony among the parts of the whole:

We are well enough aware that some skill, some ability, usually predominates in the character of each human being. This leads necessarily to one-sided thinking since man knows the world only through himself, and thus has the naïve arrogance to believe that the world is constructed by him and for his sake. It follows that he puts his special skills in the foreground, while seeking to reject those he lacks, to banish them from his own totality. As a correction, he needs to develop all the manifestations of human character— sensuality [*Sinnlichkeit*] and reason [*Vernunft*], imagination [*Phantasie*] and common sense [*Verstand*—into a coherent whole, no matter which quality predominates in him. If he fails to do so, he will labor on under his painful

limitations without ever understanding why he has so many stubborn enemies, why he sometimes meets even himself as an enemy (Goethe, 1824/1998i, p 45f).

Goethe's aim was to balance the rationally biased model of man by integrating sensorial and imaginative powers. Consequently, it is the scientist's task to develop 'all manifestations of human character' into a coherent whole. Even more, as the color wheel suggests, the primordial tension between sensuality and intellect gives birth via intensification to beauty, a mixture between fantasy and reason, represented by pure red - the perfect color. A rational model of reality phenomena does not come from the mere intensification of the coldness and calm of the intellectual apprehension; it also requires similar intensification of the senses in order to obtain "an exact sensuous fantasy" [*eine exakte sinnliche Phantasie*] (Goethe, 1824/1998i, p. 45f). No rationality is possible without feeling. "If you don't feel it, you won't catch it", admonishes Faust to Wagner. *Fantasy*, for Goethe, is not opposed to reason and does not consist in a poetic faculty to put ourselves outside the mechanically ordered world; it is not a human capacity to rest in a parallel world where logic does not rule. Instead, *fantasy* represents the faculty to fully feel this world, that is, to see nature's inner relationships and not merely the superficial ones. Hence, *fantasy* is a precondition to achieve an ideal science, one that respects nature by depicting it faithfully. As a consequence, *fantasy* is not a faculty reserved for poetry and art only. In a conversation dated on January, 27 1830, Eckermann reports the following reflection by Goethe:

In fact [...] a great natural philosopher without this high gift [fantasy/imagination] is impossible. I do not mean an imagination which goes into the vague and imagines things which do not exist; but I mean one which does not abandon the actual soil of the earth, and which steps to supposed and conjectured things by the standard of the real and the known. Then it may prove whether this or that supposition be possible, and whether it is not in contradiction with known laws. Such an imagination presupposes an enlarged tranquil mind, which has at its command a wide survey of the living world and its laws (Eckermann, 1850b, p. 220).

Fantasy is a necessary faculty to unveil the hidden relationships of nature. The capacity to see these connections depends on an *exact sensorial fantasy*: "Although arguments may deal with utterly separate matters, wit and imagination can group them around a single point to create a surprising semblance of right and wrong, true and false" (Goethe, 1792/1998b, p. 16). Thus, the final goal of knowledge, namely, to have an *intuitive perception* [*Anschaung*] of the wholeness in which the phenomenon of interest is partaking, does depend on our capacity to feel within ourselves the inner connections of nature. Out of such an intuition the human mind is capable to construct rational models and theories of the phenomenon. If abstract reason rests on 'the actual soil of earth', scientific formalizations are meaningful and full-fledged; if, on the contrary, a sensorial basis is not provided, scientific formalizations risk being hollow abstractions: these are pitfalls of abstraction. *Fantasy* nourishes rationality making concepts and abstractions intuitive and vivid. Scientific theories lacking in fantasy are exercises of empty abstraction.

The vividness and concreteness given by the sensorial-bounded fantasy close the gap between nature and mind. The more formally science proceeds, the greater the risk of constructing hollow models. For nature is not a book written in the language of mathematics; nature “[...] has neither language nor speech, but she makes tongues and hearts with which to feel and speak” (Goethe, 1783/1998c, p. 4). The ability to feel in our inner self the movements of nature is thus a requisite to create a trustworthy science. “It is yourself you should scrutinize to see/ whether you’re center or periphery [of nature]”, as he writes in the poem *Spontaneous Outburst* (Goethe, 1820/1998j, p. 37). He also reflects: “The human being knows himself only insofar as he knows the world; he perceives the world only in himself, and himself only in the world... Every new object, *clearly seen*, opens up a new organ of perception in us” (Goethe, 1820/1998j, p. 38; emphasis added). To *see clearly* means here to develop a sensorial-imaginative approach to reality. Modern science only does justice to nature when its models are tightly tied to the soil of earth. The sensorial-imaginative mode of perceiving is a requisite to the *intuitive perception* [*Anschauung*], the golden goal of science and poetry. This special kind of knowing implies *seeing clearly* natural phenomena, not just having a precise set of concepts about them. Concepts and models are certainly necessary for doing science, but if they lack in visual, sensorial, palpable imagery, they will not lead us to the sought intuitive perception.

To be sure, sensuousness and vividness provided by sensuality and fantasy cannot be exhaustively translated into words and abstract language. An epistemological corollary of this is Goethe’s skepticism concerning the capacity of science to offer a complete formalization of nature: “Neither things nor ourselves find full expression in our words” (Goethe, 1805/1998k, p. 26).

Even though intellectual rationality offers logical precision, such clearness will be empty without the content provided by the sensorial-based *fantasy*. Since sensuality and fantasy are rooted in the vital organization of human beings, science needs a direct, personal involvement in scientific inquiry: “My intention is to collect all the empirical evidence in this area, *do every experiment myself* [...]” (Goethe, 1998b, p. 17; emphasis added). Thus the rational constructions are meaningful insofar as they have a sensorial-imaginative grounding, which however cannot be exhaustively described through abstractions. Fantasy and sensorial vividness refuse to be tied to discrete concepts. Nature and life offer the ground to intellectual and rational constructions, not the reverse. The priority of life over intellect and the consequent skepticism over scientific knowledge will be a central tenet for the *Philosophy of Nature* of the following generation and, at the end of the 19th century, for the *Philosophy of Life*. Nevertheless it would be misleading to circumscribe its beginning to Goethe’s way of science. Goethe’s position doubtlessly represents a remarkable moment of the critical spirit against the potential dangers of a hegemonic mechanical worldview, but it incorporates insights gained centuries ago.

Mystical-Theological Background

The primacy of intuition over intellectual understanding can be traced back at least to the early Renaissance. The role of faith in human understanding and its relation with intellectual knowledge became an important question ever since the first Latin translation of Aristotle's *De Anima* -and its Arabian commentaries- became available. During the second half of the 13th century, most prominent theologians devoted themselves to discern how the Aristotelian concept of mind -including his distinction between vegetative, animal, and rational souls- could be coherently assimilated to the vernacular patristic tradition. Besides many critical issues for Christian theology -including the immortality of soul, free will and divine determinism, or the role of the intellect and love in revelation-, an important question extensively discussed at the verge of the Middle Ages and modernity is the nature of faith. Is it a kind of knowledge? If so, what exactly do I know when I believe in God? And, what is the difference between knowing God and knowing the workings of earthly reality? Several late-medieval thinkers developed anthropological perspectives to bring together the emerging scientific approach -conspicuously represented by Aristotle- and the scholastic theological tradition. In the context of the present article, my aim is to sketch the main features of these anthropologies, emphasizing the proposed relationship of faith and knowledge and the role that *fantasy* plays in it. Having this in mind, I will focus on only one of these transitional authors, Nicholas of Cusa. We have two main reasons to explore his work. First, during the 19th century he was identified as the first modern philosopher (e.g. Cassirer, 1906; Falckenberg, 1880; Windelband, 1911). Second, as we will soon see, he developed a sophisticated anthropology whose echoes can be heard until the 19th century.

Nicholas of Cusa (1401-1464), born in Cues (Germany), cardinal and bishop of Brixen (Italy) was an important theologian and philosopher, who at the same time intensively handled diplomatic functions on behalf of the Pope. In one of these diplomatic missions, Nicholas of Cusa was sent to Constantinople to arrange the visit of representatives of the Eastern Church to the Council of Ferrara-Florence of 1438. Nicholas himself wrote that during his return from Constantinople he received as a divine gift the insight that beyond the rational knowledge, where the Aristotelian principle of non-contradiction applies, there is a deeper and more robust knowledge: the *docta ignorantia* or *learned ignorance*. Since divine infiniteness and absoluteness exceeds human intellectual capacities, the only way human beings can obtain a faint idea of God's absolute presence is by means of a sort of *knowing not-knowing*, where although we understand, we are incapable of giving grounds for such understanding. This level of knowledge is governed by the *coincidentia oppositorum* principle, through which opposites may coincide. The *learned ignorance* allows for seeing the unity where the ratio discovers differences. The square and the circle become one and the same when we add progressively n-angles to the square. Apparent dualities dissolve when approached from the cultivated ignorance: God and Christ; Earth and Heaven; *maximum* and *minimum*; sense and ratio.

Therefore, if the foregoing points are true, then since the desire in us is not in vain, assuredly we desire to know that we do not know. If we can fully attain unto this [knowledge of our ignorance], we will attain unto learned ignorance. For a man -even one very well versed in learning- will attain unto nothing more perfect than to be found to be most learned in the ignorance which is distinctively his. The more he

knows that he is unknowing, the more learned he will be (Nicholas of Cusa, 1440/1990, p. 6).

Like in Goethe's *intuitive perception*, the certainty and vividness of the knowledge reached through *docta ignorantia* contrasts with its ineffability: "... someone who desires to grasp the meaning must elevate his intellect above the import of the words rather than insisting upon the proper significations of words which cannot be properly adapted to such great intellectual mysteries" (Nicholas of Cusa, 1440/1990, p. 7). The *docta ignorantia* "[...] will suitably lead you [...] unto wondrous delight [...] (provided you rise from the sign upward to the truth, by understanding [the meaning of] words symbolically)"^{vi} (Nicholas of Cusa, 1440/1990, p.18). The Latin expression *verba transsumptive intelligendo* ("understanding beyond the words") denotes the requirement to surpass language in order to *see* what by pure intellectual means is incomprehensible.

The relinquishment of words and intellect as condition for deeper understanding seems to be a heritage from the mystical movement from the middle of the 13th century, about 150 years before Nicholas of Cusa (Windelband, 1911). Meister Eckhart, for example, defended the primacy of the *unspeakable intuition* ["unaussprechliches Anschauen"] within the human soul as the fundament of faith over the intellectual knowledge of scholars (Windelband, 1911). Human thought, although important, is secondary to faith felt inwardly, since "essence and knowledge are one...Knowledge is...the unity of essences between the knower and the known" (Windelband, 1911, p. 28, translation mine). This connection illustrates the historical gravity of the German verb *anschauen* [literally *to see* or *to contemplate*], usually translated into the Latin form *intuitio* and their variants in modern European languages^{vii}.

It is not difficult to perceive the commonalities between Goethe's *intuitive perception* and Nicholas of Cusa's *docta ignorantia*. In both cases, a special attitude toward reality is necessary to obtain an understanding of a higher level. Such an attitude implies overcoming the pure intellectual mode of approaching the world, so that we can assume a contemplative approach to *see* the reality rather than impose on it a conceptual framework implicit in our linguistic distinctions. This is a call for grounding the higher forms of knowledge in a simple, direct, visible *intuition* (a *visio sine comprehensione*) rather than in formal arguments or rational procedures. The *docta ignorantia* expresses such certainty that cannot be thoroughly translated by language. In the same way Goethe's *intuitive perception* does not "find full expression in our words" (Goethe, 1998k, p. 26).

Moreover Goethe's model of four powers of the soul seems to be a modern version of the model offered by Nicholas of Cusa in *Idiota: De Mente* [*The layman on mind*] (1450). In this text, Nicholas of Cusa integrates in one common frame the kind of knowing that his *docta ignorantia* guarantees with the inherited three Aristotelian souls. He establishes four levels of knowledge, from the lower to the higher: senses; imagination; reason; intellect/intuition. At all levels, the human mind [*mens humana*] characterizes itself as being an "assimilative power", that is, it tries -by perceiving and conceiving- to assimilate [*assimilatio*] itself or to adopt the configurations [*configuratio*] of the form [*forma*] of the perceived object or thought:

Mind is so assimilative that in the sense of sight it assimilates itself to things visible, in the sense of hearing it assimilates itself to things audible, in the sense of taste to things tasteable, in the sense of smell to things that can be smelled, in the sense of touch to things touchable. In the senses [mind assimilates itself] to things perceptible, in the imagination to things imaginable, and in reason to things accessible by reasoning (Nicholas of Cusa, 1450/1996, para. 100).

While the *sensorial organs* are the first way to assimilate to objects, there is still another “arterial spirit” (i.e., corporeal, material spirit), which is “configurable—though in a gross and nondiscrete manner—to all perceptual forms” (Nicholas of Cusa, 1450/1996, para. 101), namely *imagination* [*imaginatio*]. This power of soul differs from the senses only in the fact that it apprehends (though confusedly) objects when these are absent. In addition to this, the human mind is capable of assimilating objects in a more clear and subtle way by means of the identification of concepts from the perceptible objects. This function requires the third power of the soul: *reason* [*ratio*], which allows the soul to distinguish among mental states. Importantly, even through *reason*, “the soul does not grasp the true nature of things, since it apprehends forms united to matter [...] But the matter distorts the form, so that the form’s true nature cannot be grasped” (Nicholas of Cusa, 1450/1996, para. 115). Sense, imagination and reason are assimilations for perceptible objects because they all are assimilations of “corporeal spirits” (Nicholas of Cusa, 1450/1996, para. 102). Mind perceives, imagines and discerns concepts insofar as “mind acts as a soul, enlivening the body” (Nicholas of Cusa, 1450/1996, para. 102). Hence, these three powers of soul are in fact three different ways in which “the soul uses the bodily instrument” (Nicholas of Cusa, 1450/1996, para. 115). As reason apprehends ‘forms united to matter’ and ‘the matter distorts the form’, rational knowledge is necessarily conjectural: “So, then, I maintain that concepts which are attained by means of assimilations made by reason are subject to uncertainty, because they are [made] in accordance with images of the [true] formal natures rather than in accordance with the true formal natures themselves” (Nicholas of Cusa, 1450/1996, para. 102). Reason is conjectural since it is tied to the body, and therefore not free from matter.

There is still an *intellectual* power of the soul, by which the mind conceives the immutable essence of things “using itself as its own instrument, apart from any instrumental [corporeal] spirit” (Nicholas of Cusa, 1450/1996, para. 103). This is possible because our mind does not only act operatively in a body, but it is also in itself, i.e. it is “free from matter” (Nicholas of Cusa, 1450/1996, para. 104). When mind per se -not tied to matter- looks on its own immutability, it “[...] makes assimilations of forms not as they are embedded in matter but as they are in and of themselves” (Nicholas of Cusa, 1450/1996, para. 103). When this happens, mind assimilates itself not to things, but to *abstract forms*, i.e. incorporeal forms. This is the origin of mathematical branches. This procedure leads to discovering truth, but still in a partial way. That is, the mind discovers a certain necessity in a specific domain of reality, or in another. In this condition, “mind is still unsatisfied, because it does not behold the precise truth of all things” (Nicholas of Cusa, 1450/1996, para. 105). To reach the truth in its own infinite precision, mind should advance from *intellect to intuition*:

[...] mind, looking unto its own simplicity [...] uses this simplicity as an instrument, in order to assimilate itself to all things—assimilate itself not only abstractly, apart from matter, but also in terms of a simplicity that is incommunicable to matter. And in this way mind beholds, in its own simplicity, all things [...] And within its own simplicity mind beholds all things as without any composition of parts—beholds them not as one thing is this and another is that but as (1) all things are something one and (2) something one is all things. And this is the intuiting of absolute truth [*Et haec est intuitio veritatis absolutae*] (Nicholas of Cusa, 1450/1996, para. 105f).

At this point we can make explicit similarities between Goethe's *intuitive perception* and Nicholas of Cusa's *intuition* or *docta ignorantia*. First, in both cases *intuition* is simple and direct. Intuition does not emerge from strengthened efforts for rationality or the construction of models of increasing abstraction, but rather from the attention to the more simple and direct aspects of our own experience. The totality intuitively experienced is lived with full certainty or self-evidence. Second, intuition is something that can be *seen*. While reason "assimilate concepts by conceiving", intuition produces "intellectual viewings" (Nicholas of Cusa, 1450/1996, para. 99). Even though intuition is holistically lived and felt, the visual dimension of this experience receives an outstanding place in the descriptions of both authors^{viii}. Third, intuition cannot be translatable exhaustively. As described above, for Goethe intuitive perception will never find full expression in words, while Nicholas of Cusa declares that on intuition "enough could never be said" (Nicholas of Cusa, 1450/1996, para. 106). Finally, in both cases, knowledge obtained by intuition is always accompanied with a remarkable positive affectivity, described as tranquility, delight, beauty and pleasure by Nicholas of Cusa and as sublimity and beauty by Goethe.

Nonetheless, two important differences between Goethe and Nicholas of Cusa on intuition should be addressed. First, intuition in Nicholas of Cusa is the right way for understanding God and his Creation. It also fulfills theological aims. For Goethe, intuitive perception is oriented mainly toward aesthetical goals. A just apprehension of reality -even the objective, scientific one- involves a ubiquitous aesthetic dimension that emerges from a contemplative attitude rather than from an analytic one. It is true that for both authors theological speculations and aesthetic feelings are not contradictory, as a cosmic order pervades the whole nature -a divine order experienced as beauty. But it is also true that they were writing in radically different historical and cultural contexts, so that their aims differentiate undoubtedly.

The second difference between Goethe's and Nicholas of Cusa's theories of knowledge concerns the role of fantasy or imagination. Nicholas of Cusa understands imagination as a 'chamber' [cellula] in the mind, where the images originally produced by sensorial stimulation are again brought to life. Its productivity is accordingly rather limited to having images in the absence of the corresponding objects: It can generate only what once was perceived and now is absent. Imagination provides images to the ulterior intellectual abstraction of forms from material perceptions. For Nicholas of Cusa, imagination is disconnected from the power of intuiting, because it is still attached to the material world;

intellect, on the contrary, unites the human soul with the immaterial world. Thus, the “intellectual viewing” [*visio intellectualis*] produced by the intuition remains closely related to the *revelation* of Christian tradition. This is a personal illumination as a consequence of God’s gift to those who faithfully contemplate the world. Since this kind of intuition involves the immaterial soul, it implies a detachment from the material body. In Nicholas of Cusa’s case, there can be intuition only when immaterial soul understands “free from material world”, whereas imagination corresponds to an “arterial spirit”, since the soul uses the body as instrument to re-create images.

In spite of Nicholas of Cusa’s separating imagination from intuition, his descriptions of the latter reveal features that Goethe attributes to *fantasy*. Goethe describes it as an instrument to penetrate into the living world; an indispensable faculty to obtain the intuitive perception. On theorizing about intuition, Nicholas of Cusa connects it with God’s agentivity: “For our mind differs from the Divine Mind as seeing differs from doing. The Divine Mind creates by conceiving; our mind assimilates by conceiving—i.e., by making concepts, or intellectual viewings. The Divine Mind is a reifying power; our mind is an assimilative power” (Nicholas of Cusa, 1450/1996, para. 99). Human *intuition* reflects imperfectly God’s creative power. God creates and human intellectually apprehends the Creation. Their knowledge powers define human being as *second creator* [*secundum creator*] (Westhof, 2013). Whenever human beings strive for knowing the world, they ‘assimilate’ it, that is, they become the world themselves. These second creators apply the intellectual powers to re-create within themselves the order of the cosmos. In this sense, the human being is described by Nicholas of Cusa as a *living image of God*: “And God, who is all things, shines forth in mind when mind, as a *living image of God* [*viva imago dei*], turns to its own Exemplar and assimilates itself thereto with all its effort” (Nicholas of Cusa, 1450/1996, para. 106; emphasis added).

From the fact that the human being is a *second creator* Nicholas of Cusa draws the epistemological insight that humans know the world insofar as they reflect the world as a *living mirror*:

Similarly, God, through the movement of the heavens and from a suitable material, brought forth a proportion [*viz.*, a body] in which animality would shine forth in a very perfect manner. To this proportion He then added mind as a *living mirror* [*vivum speculum*]” (Nicholas of Cusa, 1450/1996, para. 87; emphasis added).

The capacity of knowing by feeling into oneself is the main source of knowledge for both Nicholas of Cusa and Goethe. For the former this capacity allows an immaterial access to God’s Creation; for Goethe this is precisely *fantasy*. In both cases, this capacity obviously implies human beings have an active role in knowing the world. Insofar as the active role of the human being in the act of knowing becomes more prominent, *fantasy/imagination* comes nearer to intuitive perception. For Nicholas of Cusa, imagination does not take part of intuition; for Goethe, *fantasy* is a *conditio sine qua non* for having intuitive perceptions. The critical difference seems to reside in the role played by the human being in the act of knowing. For Nicholas of Cusa, the intuition lays still near to the divine revelation, which is a gift, not a personal achievement; for Goethe, intuitive perception requires the intentioned

cultivation of the skill to anchor abstractions with the actual soil of earth. Having intuitions demands active efforts to give vitality and sensuality to the intellectual constructions. The contrasts between Nicholas of Cusa and Goethe profile the change from a passive to an active mode of knowing. A transitional author that shows the increasing importance of *fantasy* in the act of knowing the world is Giambattista Vico.

Fantasy in Vico's thought

Giambattista Vico (1670-1744) developed one of the first criticisms to the Cartesian method. The formal method, argued Vico, turns out to be inapplicable to the field of human issues. This claim is the corollary of his tenet *verum et factum convertuntur*, with which Vico abruptly begins his *De antiquissima italorum sapientia* (1710): "For the latins, *verum* (the true) and *factum* (what is made) are interchangeable, or to use the customary language of the Schools, they are convertible" (Vico, 1710/1988, p. 45). True knowledge can be obtained only about something that was created by us, since only in such a case do we know the reasons for every detail of this object. Since God is Nature's creator, He is the only true knower of the natural world. Natural sciences are therefore merely conjectural and cannot provide the certainty and clearness that Cartesians allegedly sustain.

There is another corollary of the *verum et factum convertuntur* principle: there are reality domains from which we can indeed have true knowledge, namely those that are created by ourselves. Such domains include foremost what Vico calls the "civil world", i.e., human social life. Hence, Vico inverts the Cartesian hierarchy of epistemic supremacy, putting the natural sciences below the human sciences, since the latter but not the former may have access to true knowledge. The method to understand human social life -particularly that of ancient nations- is the *fantasy* ("imagination" in the English translation), described by Vico as an imaginative effort performed by the scientist on the object of knowledge. By analyzing ancient times in European culture, he states: "For when we wish to give utterance to our understanding of spiritual things, *we must seek aid from our imagination to explain them* and, like painters, form human images of them" (Vico, 1725/1948, para. 402; emphasis added).

Fantasy becomes for Vico the more genuine and exact way to discover true knowledge in human affairs. The imaginative capacities of the scientist become the method for a new science. The discovery of the principles of the civil society demands that the scientists look "within the modifications of our own human mind" (Vico, 1725/1948, para. 331). Thus, the method of *fantasy*:

...seeks its proofs not in the external world but *within the modifications of the mind of him who meditates it*. For, as we have said above, since this world of nations has certainly been made by men, it is within these modifications that its principles should have been sought (Vico, 1725/1948, para. 374; emphasis added).

The *fantasy*, argues Vico, implies the task of abandoning momentarily one's own culture to enter into an alien culture, perhaps already disappeared. This procedure may not be as easy as one could think, since we have to overcome the difficulties of imagining symbolic worlds far distant from our own. For example, when understanding past cultures we have "to descend from these human and refined natures of ours to those quite wild and savage natures, which we cannot at all imagine and can apprehend only with *great effort*" (Vico, 1725/1948, para. 338; emphasis added).

In the same spirit of Nicholas of Cusa's *assimilatio*, for Vico the *modifications of our mind* implied in the method of the *fantasy* correspond to a transformation by which the scientist becomes the inquired object:

So that as rational metaphysics teaches that man becomes all things by understanding them (*homo intelligendo fit omnia*), this imaginative metaphysics shows that man becomes all things by not understanding them (*homo non intelligendo fit omnia*) and perhaps *the latter proposition is truer than the former*, for when man understands he extends his mind and takes in the things, but when he does not understand he makes the things out of himself and becomes them by transforming himself into them (Vico, 1725/1948, para. 405).

Many aspects of the method proposed by Vico are quite similar to Nicholas of Cusa description of the maximal intellectual power (the *intuitio*). The big difference lays in that for Vico such intuition is dependent on corporeal imagination. Vico is therefore strongly arguing for granting *fantasy* an epistemic role. As we saw above, for Nicholas of Cusa imagination does not participate in knowledge of higher levels -intellect and intuition-, because of its corporeal determination; rather it is the intellect -the immaterial part of the microcosm of man- the faculty responsible for intuition. Intellect and imagination run separately in Nicholas of Cusa's theory, precisely as form and matter or as divinity and humanity do. Vico, on the contrary, affirms that there is no real intellectual access to human reality without integrating imagination as the key instrument to understanding. The form of this claim is expressive of an anti-intellectualist position: man becomes all things not by understanding them but rather by *not* understanding them. A real comprehension of social life requires incorporating in us the modes of thinking of others; not applying our own concepts and distinctions to an unknown culture. This act of knowledge is not intellectual; it is imaginative.

Concerning Vico's tacit anthropology, he explicitly opposed imagination to intellect, e.g. "Imagination is more robust in proportion as reasoning power is weak" (Vico, 1725/1948, para. 185). In his analysis of the development of civilization, rationality and abstraction are considered recent achievements of humankind when compared to the "poetic wisdom" of the primordial times of Greek culture. The "power of ratiocination" (Vico, 1725/1948, para. 375), i.e. rationality and abstraction capacities, are developed later than "sense and vigorous imagination" (Vico, 1725/1948, para. 375). Vico uses the known four capacities of the soul in a socio-cultural developmental sequence that follows the late-medieval hierarchy. More interesting is, nonetheless, the epistemological claim that the human scientist should combine abstraction and rationality with an epistemic attitude of

imaginative contemplation. Without *imagination* (in Vico's words: *fantasia*) we will never experience the "divine pleasure" of contemplate the principles extended along the "world of nations in all the extent of its places, times and varieties" (Vico, 1725/1948, para. 345).

Fantasy in Kant

Let us return to Goethe. Considering the historical background, it becomes clearer how significant was Goethe's aim of bringing together again what Nature created as unity. In his anthropology this maxim takes the form of the integration of *fantasy* and *reason*. The union of imagination and rationality, of synthesis and analysis, turns out to be a condition to *intuitive perception* -the apodictic vision of a global truth. The importance that Goethe assigns to *fantasy* represents a significant development for what was a rather limited contribution in Nicholas of Cusa's thought. It plays an even more central role than that of an indispensable methodological instrument - as in Vico's work.. *Fantasy* seems to advance from a supplier of images for intellectual tasks to come, to the a force that modifies our own intellectual constructions so that we may understand the social and natural realities. It provides flexibility and adaptability to rational concepts. Thus *fantasy* seems to encrypt the ancient idea of an active movement from the *spirit* -or *pneuma*- that leads to deep truths by a simple but certain *in-tuition* (i.e., *in-sight*). It tacitly represents hence the connection between the modern rational science with the mystical and Christian *revelation*.

The fate of Goethe's attempt to raise an integrative anthropology and its impact in the emerging psychology may be better understood when we take into account that he was coetaneous with Immanuel Kant, for many the greatest philosopher of modern times, whose influence on 19th century psychology was immense (Valsiner, 2012). Knowingly, in his *Critique of Pure Reason* (1781), Kant analyzes the question of how the mind should be constituted in order to reach accurate knowledge. His analysis leads to what he called his own Copernican Revolution: the constitution of the sensible objects depends on the structure of our own faculty of reason -and not the reverse, as was assumed by empiricism and rationalism. Kant inquires accordingly into the conditions of possibility of our reason; not what is beyond our rational understanding, but what makes it possible at all. This is his 'transcendental method', which does not concern transcendent knowledge -i.e. knowledge on substances outside of this world-, but the a priori conditions that make knowledge possible -where *a priori* means before we have any sensible experience. Kant will dismiss the questions concerning the domain beyond sensible experience as *metaphysical*. Thus, Kant is interested in the conditions that make possible our sensible experience [*sinnliche Erfahrung*], rejecting the suprasensible domain whereof we cannot have experiences. Any attempt to theorize on the suprasensible leads unavoidably to aporias or antinomies.

Important for the coming psychology are Kant's statements on mind. He postulates three faculties of the mind: *sensibility* [Sinnlichkeit]; *understanding* [Verstand]; and *reason* [Vernunft]. Sensibility corresponds to the capacity to have sensible experience, which does not function like a passive reception instance, because all what we perceive is *spatiotemporally* structured. Since neither time nor space is externally given, Kant assumes

those are a priori *forms* given to the sensible data. We cannot perceive the things in themselves, but only structured in time and space; we perceive *phenomena* not *noumena*. In line with Locke, Kant advances that self-knowledge pertains also to the category of perceptions; when we observe our own internal states, we have an internal experience [*inner Sinn*], which is also matter structured by space and time. According to Kant we perceive the world and ourselves from the start within a spatiotemporal structure. We are constituted for perceiving the world (and ourselves) in a mathematical way. Any attempt to get rid of this framework is misleading. Such a belief will be fundamental for ulterior experimental psychology. The second mental capacity, *understanding*, allows clarifying the sensible experiences by bringing a multiplicity of partial impressions in unified perceptions. This process takes place insofar as the mind applies logic-formal functions to the (already spatiotemporally structured) perceptions, giving them unity. These functions are the *transcendental categories* (e.g., causality, unity, persistence, etc.), as they are a priori and determine our understanding of reality. Thus, for Kant knowledge is the blend of sensible experience with concepts. Finally, *reason* represents the highest knowledge capacity. It gives unity to the rules of understanding and therefore produces increasing levels of integration through abstraction.

Interestingly, Kant assigns a main role in his framework to *fantasy* [Einbildungskraft]. Imagination explains the function of *synthesis*, i.e., the fact that from a multiplicity of impressions one object is experienced; or that from a multiplicity of experiences, one picture is obtained: "Synthesis in general is [...] the mere effect of the imagination, of a blind though indispensable function of the soul, without which we should have no cognition [*Erkenntnis*] at all, but of which we are seldom even conscious" (Kant, 1781/1998, p. 211). Kant distinguished two kinds of imagination: *reproductive and productive*. The *reproductive imagination* produces synthesis following the empirical laws of association and explains the psychological fact that representations are connected one after another. The *productive imagination* produces a transcendental synthesis that relates sensibility -in the form of certain sensorial impressions- with understanding -transcendental categories. The productive imagination grants the structure of forms to that which is given by the senses, as well as it gives the unity of thought to a mass of perceptions:

No psychologist has yet thought that the imagination is a necessary ingredient of perception itself. This is so partly because this faculty has been limited to reproduction, and partly because it has been believed that the senses do not merely afford us impressions but also put them together, and produce images of objects, for which without doubt something more than the receptivity of impressions is required, namely a function of the synthesis of them (Kant, 1781/1998, p. 239, fn.)

Unlike Goethe's notion of *fantasy*, Kant's definition of *imagination* lacks any relation with feelings and organismic processes. For Kant, *imagination* has an intermediary role between sensibility and understanding; it is a force that produces synthesis in the form of sensible experiences, concepts and ideas. It satisfies therefore a function strictly intellectual and its possible grounding in feelings is plainly ignored or conspicuously minimized. Kant's anthropology represents fully the model of man for the Illuminism, as it conceives the

human being as *cognizing subject* rather than as person. Human actions -from the ordinary to the moral- are governed by rational principles, i.e. logico-formal rules. Even sensible experiences are regarded as rationally structured, since they become experiences proper when the raw sensorial data become structured by means of a priori forms. Through such descriptions, Kant does not aim to do psychology, but to establish what he calls “the conditions of the possibility” of knowledge. To study the human nature does demand an *empirical* inquiry; but to search for its conditions of possibility has a transcendental character. He is not interested in understanding the developmental origins of cognition, but in its fundamentals. Kant delimitates his focus on the *epistemological subject*, an abstract instance endowed with sensibility and reason whose activity makes the existence of knowledge possible. It is important to note that the epistemological subject does not correspond to a *person*, since a person is an empirical instance. In fact, activities that people do and that are not related with knowledge gaining are simply not considered in Kant’s analysis.

The cleavage between epistemological subject and person runs in parallel with Kant’s conception on *imagination*. He separated the empirical *reproductive imagination* -the capacity to have representations of an absent object- from the transcendental *productive imagination*, which articulates sensations and experiences by means of a priori forms and categories. Reproductive imagination becomes part of psychology; productive imagination, part of the theory of knowledge. In Kant’s version, imagination is devoid of the sensuous and organismic aspects implied in Goethe’s understanding of the term *Sinnlichkeit*^x. Its role is making reason possible; there is no equivalence to Goethe’s *exact sensuous imagination* that leads to an *intuitive perception*. In fact, the very term *intuition* [*Anschauung*] undergoes a fundamental transformation to denote *sensible experiences* -i.e. spatiotemporally structured sensorial impressions, while the primordial idea of an *intuitive perception* -a *docta ignorantia*- is discarded by Kant since our understanding can only be *discursive*, i.e. category-based:

And further, it is not at all necessary here to prove that such an *intellectus archetypus* is possible, but only that in the contrast of it with our discursive, image-dependent understanding (*intellectus ectypus*) and the contingency of such a constitution we are led to that idea (of an *intellectus archetypus*), and that this does not contain any contradiction (Kant, 1790/2000, p. 277).

Kant’s empirical assumptions are: (a) that there cannot be *human* understanding of a non-discursive nature; and (b) that *human* scientific language satisfies by definition his logico-formal conception of transcendental categories. Take notice that such tenets are *psychological*, i.e. empirical. As such, they fall outside the field circumscribed by Kant as transcendental. Thus they are accepted with no further arguments than that they have to exist to make rational science possible. Kant’s aim is not to describe how the human mind really is -a task assigned to psychology-; instead it is to describe how the mind *should be* in order to make objective knowledge possible. This description depicts an abstract *subject*, not a real person. Thus this epistemological subject is fully rational and her feelings -if she has them- do not interfere with the knowledge act. Accordingly, her imagination, far from being a critical force connecting sensuousness with reason as in Goethe’s model, either

provides images in a reproductive fashion (reproductive imagination) or imprints transcendental categories on sensorial data. In both cases, imagination for Kant satisfies only intellectual functions and is disconnected from feelings and organismic processes.

Goethe and Kant were the greatest exponents of two different approaches to humanity and nature extant at the beginning of the 19th century, and their influence would endure the whole century. Goethe represents the humanist attempting to correct the crooked growth of natural sciences by remembering the old truths of harmony and beauty. Kant bodies the illuminist thinker that designs a complex metaphysical skeleton to sustain the vision of man as a rational knower.

Fantasy at the dawn of the New Psychology

Psychology textbooks of the first half of the 19th century evidence the incorporation of Goethe's *fantasy* as well as Kant's distinction between a *reproductive imagination* and *productive* one. While the intellectual function to reproduce images in absence of the objects tends to be identified with *reproductive imagination*, Kant's *productive imagination* is progressively devoid of its original transcendental sense, becoming equivalent to Goethe's notion of *fantasy*. A nice example of this transformation can be read in Carl Gustav Carus' *Vorlesungen über Psychologie* [Lectures on psychology] (1831). In this text he distinguishes a *reproductive imagination* [*reproduktive Einbildungskraft*] from a capacity autonomous and productive that he calls *fantasy* [*Phantasie*]: "[...] the fantasy is a creating imagination, a call for representations to dress up in some way emerging ideas from the soul, where those representations [...] suffer essential modifications" (Carus, 1831/1958, p. 423f.; our translation). Fantasy, argues Carus, is the result of the union of productivity with imagination. On the other side, like Kant, Carus understands that the reproductive imagination deploys representations [*Vorstellungen*] according to the laws of association (simultaneity, similarity, opposition), and that its activity is limited to calling back earlier states and sensorial impressions.

Carus' real intellectual interest was *fantasy* rather than *imagination*. Following the long tradition that connects psychology with the Renaissance philosophy he recurred to the notion of 'man as *microcosm*' (see Cornejo, 2015), to assert that *fantasy* becomes the "germ of all visual arts", when it grabs and imitates "the organs and skills of natural life". By means of the imitation capacities awakened by fantasy, human beings learn to protect themselves and to adapt to their environments. Fantasy is also responsible for "the first art of making through imitation" (Carus, 1831/1958, p. 423f.; our translation). The centrality of fantasy in Carus' psychology becomes more evident in his *opus magnum* of 1846, *Psyche*, where he advances a theory of the developmental phases of the human soul from its first expressions in animals toward adult human beings. He proposes basically three ontogenetic phases: understanding [Verstand], fantasy [Phantasie], and reason [Vernunft]. In understanding, the mind learns to recognize and order its own representations [Vorstellungen]. Then:

At a higher level, the mind begins to produce autonomously with the already comprehended representations, to combine them properly to generate from

them new ones that never were externally perceived. This happens during the driving youth period of the mind [...] that we call the development of puberty in the real organism. Insofar as the mind manages to create something new, we call this level *Fantasy*. But at last the mind arrives at perceiving [...] the mystery of unity in multiplicity; in its capacity of creation the mind becomes aware of its own divine nature and of the divinity that underlies any form of being. In brief, the mind arrives at perceiving the idea, i.e. at *reason* (Carus, 1831/1958, p. 129f.; our translation).

Far from merely reproducing images to feed ulterior rational processes, *fantasy* is for Carus the core of artistic and scientific creativity. That ‘an exact sensorial fantasy’ was a necessary component of scientific activity was precisely the point raised by Goethe. The same insight is visible in the *Lehrbuch zur Psychologie* [Handbook of Psychology] (1816) by Johann Friedrich Herbart: “To do poetry, in the broadest sense, is the essence of any invention [...] There is as much fantasy in scientific thinking as in poetic production; and it is very doubtful whether Newton or Shakespeare possessed the more fantasy” (Herbart, 1816/1834, p. 74; our translation). Herbart assumed the fourfold model of mind, separating *sensibility* and *imagination* as “lower capacities” from “higher capacities”, namely *understanding* and *reason*. Despite the hierarchy, Herbart sustained that imagination/fantasy takes part of the production of rational conclusions:

To the extent that we ascribe to reason [Vernunft] the capacity to draw conclusions, an inadmissible demarcation becomes visible between the faculties of the soul. To extract inferences and to prove and verify them are two very different affairs, which in fact are in the majority of cases quite separated. The first may be attributed to fantasy [Einbildungskraft], whereas the second to reason (Herbart, 1816/1834, p. 69; our translation).

Similarly, Ernst Stiedenroth^x, in his *Psychologie zur Erklärung der Seelenerscheinungen* (1824) [Psychology for the explanation of the phenomena of soul] expresses that fantasy and intellect [Verstand] permanently blend, so that it would be more appropriate to talk of *one activity* rather than two separated faculties:

Furthermore, it is known from poetry that imagining [Phantasieren] and thinking [Verstand] mix constantly. It would be wishful that one could experience whether fantasy first brings up images, for which the reason prepare concepts, or whether fantasy fosters imagery to preexisting thoughts. Nothing about such strange split operations will be found in the soul. Rather it is obvious that both -concept and image- are constantly mixing, and that they represent only *one activity*, so that if anyone wants to split it, nothing will remain a secure property neither of the one nor of the other (Stiedenroth, 1824, p. 15; our translation).

Coherently with his criticism of the more or less arbitrary segmentation of the soul in different faculties or capacities, Stiedenroth (1824) writes about “the thinking” [das Denken] and “the fantasizing” [das Phantasieren], as actions of the soul rather than static properties, whose nature is doubtful. Moreover, according to Stiedenroth’s holistic

description, the fantasizing can play an important role in the scientific inquiry. For Stiedenroth, fantasy can “complete a representation [Vorstellung] or a sequence of representations” even when this representation is a concept. However, the “thinking in the narrow sense [i.e. *reason*] wishes to be objective...[but] the fantasizing does not want to be objective thinking” (Stiedenroth, 1824, p. 173). Therefore, the fantasizing cannot complete a concept in itself, but only “outside itself, i.e. by sensualization [Versinnlichung], by depiction [Darstellung]” (Stiedenroth, 1824, p. 173). When fantasy takes part of the thinking, the result is thus an *intuition* [Anschauung]. At this point, Stiedenroth connects again -as Goethe, as Vico, as Nicholas of Cusa- *fantasy* with intuitive perception: “Therefore, fantasy is everywhere related with intuition and its products will be intuible or will give an intuitive perception” (Stiedenroth, 1824, p. 173). Fantasy completes intellectual concepts by giving them vividness and physiognomy that should be examined in later operations by reason:

In this way, fantasy is therefore able to intervene in the thinking in the narrow sense [*reason*]; it prefigures or imitates vivid [*anschaulich*] relationships, which the thinking in the narrow sense has to objectify, i.e. it has to examine and prove their concordance with valid concepts and thoughts (Stiedenroth, 1824, p. 173; our translation).

Like Carus, Stiedenroth sustains the inseparability of *fantasy* from *thinking*, between sensorial-imaginative aspects of human experience and the intellectual functions. Furthermore, both authors agree that the specific contribution of *fantasy* to reason is to ‘prefigure or imitate vivid relationships’. Carus calls this process *imitation* [Nachahmung], referring to the human capacity to assimilate and to become the inquired object.

Scientific psychology and an irony of history

In 1911, looking retrospectively at the history of psychology, Max Dessoir called it “an irony of history” that despite Kant’s skepticism toward the possibility of a scientific psychology, this discipline had followed in a rather disciplined way his metaphysical scientific worldview and his anthropology. As a general framework, Kantian philosophy contributed decisively to the view of inner experiences *as* a succession of spatiotemporal events. By the middle of the 19th century this worldview was so commonsensical that it was natural to measure human subjective processes as extended in time and space the same way that electric stream was measured upon physiological tissues.

Concerning the term *fantasy* the second half of the 19th century shows the tendency to keep the psychological interpretation of the Kantian distinction between a reproductive and a productive imagination, reserving -in German language- the label *fantasy* to the second kind. For example, Oswald Külpe in his *Grundriss der Psychologie* (1893) [Outlines of psychology] argues that: “The activity of memory is reproductive: that of fancy or imagination [*Phantasie*] seems in contrast to it to be productive, creative” (Külpe, 1893/1895, p. 170). As seen above, the ‘psychological’ character of *fantasy* obeys to the fact that it was not understood as the *a priori* condition that unites sensorial data and

transcendental categories, but rather as a *psychological*, i.e. *empirical* process of synthesis. Thus, in his own *Grundriss der Psychologie* (1896) Wundt pointed out that the basic “psychic elements” (sensations [Empfindungen] and sentiments [Gefühle]) form more complex images [Gebilde], which in turn become related by means of either associative or apperceptive connections. Wundt described two “composite apperception functions”, namely analysis and synthesis, that is, the apperceptive activities of comparing and connecting representations. For Wundt *fantasy* is the activity involved in the synthetic function of building a total representation from elemental images, particularly when this composite corresponds to an “arbitrary synthesis” (Wundt, 1897, p. 306). Clearly the *synthesis* to which Wundt is referring here differs radically from the metaphysical function originally presented by Kant. Wundt’s synthesis takes place in a real person, not in an abstract subject.

A second tendency is assuming Kant’s belief that *sensibility* is passive, while *understanding* and *reason* are active capacities of the soul. This assumption together with the introduction of methods from physiology influenced the increasing bias toward the ‘passive part’ of the human mind in the scientifically oriented research of the “new psychology”. The initial studies by Ernst H. Weber, Gustav Fechner and H. von Helmholtz were precisely conducted on sensorial perception (Dessoir, 1911; Klemm, 1911). Wundt’s later expansion of the methodological innovation in the broader context of a new “science of immediate experience” does not promote applying experimentation to higher, more active functions of the human mind^{xi}. The consequence of this for the study of *fantasy* is that its scientific validity came to be in question in the same way that every psychological process that could not be experimentally or psychometrically measured. This progressively produced a sentiment of dissatisfaction with the productive *fantasy* that may explain its gradually disappearing from scientific psychological research. It is true that *fantasy* still occupies an important role in introductory books to the discipline (Erdmann, 1873; Külpe, 1895; Wundt, 1874, 1897). But it is also true that its description is lacking in experimental grounding, which characterizes the more basic processes, such as sensation, perception and even memory. On the whole, it was only the doctrine of the elements -and the experimental methods for their study- that outlasted from Wundt’s approach; not his voluntarism -which included the apperceptive modes to combine representations and *fantasy* activity; nor less his *Völkerpsychologie*.

A third trend concerning *fantasy* is its progressive displacement from psychology toward other knowledge domains. Insofar as psychology focused in the mental processes more susceptible to mechanical modeling, and subsequently dismissed the creative capacities of the human being, *fantasy* -i.e. *productive imagination*- became of interest in other disciplines, in which the model of person has creativity and activity as central features. An example of this movement is Theodor Lipps’ *Grundlegung der Ästhetik* (1903) [Fundamentals of aesthetics]. In this work Lipps develops a psychological approach to the aesthetic perception by using the concept of *empathy* [Einfühlung]. By doing descriptive phenomenology -that is, by describing in first person the own experiencing in front of natural scenes of reality- Lipps re-discovers the old insight that we permanently perceive the world not as a set of things and states emotionally neutral, but rather *expressively*. Lipps argues that objects are directly expressive, even the unanimated ones, so that they impress

immediately on us as beautiful, ugly, brilliant, hopeful, fearful, etc. The reason is that persons directly and unavoidably empathize, i.e., they feel into themselves what they perceive. In the encounter with the world, people act internally moving themselves according to the expressive features perceived. But not only when we perceive do we have expressive impressions, but also when we imagine. Lipps argues that the external action is not the only kind of “real acting”. There are in fact three kinds of action:

One is the *acting in the sphere of fantasy*, by which the will directs itself toward mere objects of the imagination; this is the plain “mental” working [...] Next there is the *intellectual acting* or the acting by reasoning, by reflecting, by thinking, by judging, by deduction, etc. And there is finally the acting that only gets satisfied in the *real existence*, i.e. in the perception and in the awareness that something is real (Lipps, 1903/1923, p. 129; emphasis added; our translation).

In fantasy there is a sort of “inner acting” by which we experience in a vivid manner the imagined object. This is the modern version of Nicholas of Cusa’s *living mirror*, Vico’s ‘modifications of the own mind’, as well as Carus’ and Stiedenroth’s *imitation*. An important point in Lipps’ proposal is the observation that the fantasizing entails aesthetic feelings: In the Gestalts formed by fantasy “lies beauty” (Lipps, 1903/1923, p. 166). Fantasy recreates life and its products are in the same way aesthetically experienced.

In a similar vein, Wilhelm Dilthey (1910) defines *poetic imagination* [dichterische Phantasie] as the capacity present in especially talented persons to produce vivid images whose content is intuitable but at the same time leads to novel ways to understand reality. In contrast to the intellectual discernment, the poetic imagination would connect with the vital forces of life, since “[l]ife already contains the forces operative in the imagination” (Dilthey, 1910/1985, p. 238). The poetic imagination takes contact not with the objects denoted by the literary work, but with their “life-value”: “The life I find in my own self, my situations, and the people and things around me constitutes their life-value [...] It is this life-value that the literary work shows first of all” (Dilthey, 1910/1985, p. 237). In this way, the poetic imagination reveals new aspects of reality. Even though a poem can refer to specific states of affairs, it is “wholly saturated by the universal” (Dilthey, 1910/1985, p. 243) because of the connection with deep aspects of our existence. Imagination opens up new ways to understand life and its multiple aspects: “For by representing some part of reality, every genuine poetic work accentuates some characteristic of life which has not been seen in this way before [...] The event is thus raised into something significant” (Dilthey, 1910/1985, p. 251). The modifications that imagination actively performs in memories and representations lead to new intuitive forms, which in its turn influence our “representational images” of the denoted objects or events. Thus,

A thinking in *images* emerges, and in it the imagination attains a new freedom. [...] The forces which produce this series of formative processes originate in the depths of the psyche as it is moved by life in various ways toward pleasure, pain, mood, passion, and striving (Dilthey, 1910/1985, p. 241; emphasis added)

Dilthey invites us to go beyond language to 'attain a new freedom' by creating intuitive images capable of connecting our mood with the vital forces of nature. Of course, Dilthey is also escaping from the scientific language, entirely colonized by the early 1900's by the logical-positivism. The connection to the depth of life transforms *poetic images* into escape windows to obtain new freedom. The poetic image fosters a wholly new approach to a certain aspect of reality through visible and sensuous means, liberating our imagination from Kantian "discursive understanding" (Kant, 1790/2000, p. 277). For sure, Dilthey separates the poetic imagination that he praises from the "regulated imagination" of the scientist, "whose steady self-control hangs on the imagining processes to the standard of reality" (Dilthey, 1910/1922, p. 184; our translation). Dilthey relinquishes Goethe's aim to integrate imagination with reason to create a new science; instead he formalizes the division of labor between natural sciences and sciences of spirit. By doing this, scientific psychology is left with reproductive imagination, while the creative part of imagination - the 'poetic imagination'- is left outside its reach. In fact, the concept of *poetic image* has proven to be very useful and productive in literary fields, as the following observation by Northrop Frye eloquently expresses:

The simple point is that literature belongs to the world man constructs, not to the world he sees; to his home, not his environment. Literature's world is a concrete human world of immediate experience. The poet uses images and objects and sensations much more than he uses abstract ideas; the novelist is concerned with telling stories, not with working out arguments (Frye, 1964, p. 27f.)

A further consequence of psychology's adoption of Kant's anthropology ought finally to be mentioned. Kant's epistemological interest is bounded necessarily to the knowledge capacities of the knower. Therefore the Kantian model of reason excludes the realm of feelings, emotions and moods of human beings. Nonetheless there are many descriptions converging to the fact that without the dimension of feeling, no fantasy is possible. Vico spoke of the "divine pleasure" of understanding remote cultures via *fantasy*, while Lipps made explicit also the connection by arguing that fantasy always entails aesthetical impressions. Dilthey sustained that "[f]eeling is the vital source of all poetry" (Dilthey, 1910/1985, p. 243). Also Felix Krüger, some years later, pointed out that: "The 'momentum' of fantasy as well as its capacity of anticipating, of completing, of creating images are supported and conducted primarily by *feelings*" (Krüger, 1953, p. 293; emphasis in the original; our translation). In general, the new psychology's absorption of the golden goal of epistemology -to study abstractly the conditions of possibility of knowledge- altered its primordial interest in people to their intellectual faculties. Consequentially, those dimensions of human existence that were considered peripheral to the action of rational knowing, like feelings and fantasy, were minimized or plainly disregarded.

Conclusions

At the dawn of the 19th century, the modern natural sciences had completed about 250 years of successful growth. The expansion of their rationale and methods had been

continuous from then onwards. By the end of the 18th century, the French revolution and the industrial revolution seemed to converge in the suggestion that a more promising civilizational order was beginning. In the new worldview, rational planning according to scientific theories occupied a central role. The conception that a mechanical order susceptible of mathematical modeling governed the whole cosmos became commonsensical for the European intellectual world. Hence the implementation of modern rationality on the human and moral sciences of that time advanced progressively throughout the 18th century. This was the context where the anti-intellectual revolt by the Romantic Movement took place. Even though the entire cosmos maybe mechanically constituted, for Romanticists the human soul could not be part of any formally explainable machinery, no matter how complex. They vehemently defended passion instead of reason, nature instead of civilization and spontaneity instead of planning. Human scientists of the early 1800s stood at the cultural crossroads of either -rationally- conceiving human soul as part of the mechanized natural world or -romantically- abandoning the very idea to do science.

Kant and Goethe represent two different ways to dissolve the “either science or art” dichotomy to which anyone interested in humanities was confronted during the 19th century. Kant designed a metaphysical architecture that, on the one hand, guarantees the modern sciences privileged access to phenomena. This is so because our perceived world is unavoidably structured through a priori transcendental categories. On the other hand, Kant grants philosophy a special supervision role over sciences, since philosophy is the discipline in charge of rationally delimitating the conditions of possibility of knowledge. Thus, the same architecture reserves for philosophy the transcendental role of judging the legitimacy of scientific procedures (see Rorty, 1979). This solution reaches a compromise between natural sciences and philosophy; the first rules on synthetic fields, the second on analytic ones. Kant generates for philosophy a legitimated and honorific new place in an intellectual world dominated from now on by natural science. This approach forces human sciences to choose between translating the human soul into the ‘discursive’ knowledge used for any other natural phenomenon or analyzing it transcendently in the frame of a rational metaphysics. The human soul should be either materialistically or idealistically redefined. This is one of the origins of the dispute between materialism and idealism.

Goethe offered a different solution. He strived for integrating science and art by starting from anthropological assumptions other than Kant’s. He recovered the Renaissance model of soul -as advanced by Nicholas of Cusa- to propose that the true knowledge can only be reached by combining intellectual efforts with ‘an exact sensuous fantasy’, that grants vividness and simplicity to the intellectual statement. The knowledge aimed at is clear though ineffable: It is an *intuitive perception*, a kind of knowledge rooted into the mystical-religious *intuition* or *docta ignorantia*. Goethe prescribes accordingly aesthetical education for scientists to enhance their diminished powers of *fantasy* and *sensuousness*. Fantasy has not the function to put scientists outside of this world, in a parallel reality beautiful but unreal. Instead, fantasy gives flesh to abstract ideas; it makes them concrete and palpable. It prevents the vices of idealism -confounding nature with the abstractions developed to model it. But it also prevents us from the failures of materialism, since nature is an organic wholeness, neither machinery nor system. The human soul should also be neither

materialistically nor idealistically studied. Such a polarity is based on a wrong anthropological assumption, namely that people are epistemological subjects. For human sciences, Goethe's way of science allows talking about the human soul, while rejecting its mechanization and recovering its non-rational capacities. Fantasy and organismic sensibilities play also a crucial role in science, as they express the connectedness between human organisms with the wholeness of nature. Ideas are not only thought, but also felt, seen and sensual-morally experienced. As Faust advises Wagner: *If you don't feel it, you won't understand.*

Goethe drew a middle way between materialism and idealism by proposing a "*poetic science*" (Kaufmann, 1980, p. 49). His scientific contribution was decisive for the ulterior *philosophy of nature*, later on for the *philosophy of life*, and for the holistic schools of 20th century psychology. He is certainly a precursor of holistic thinking, and should too be recognized as a precursor of cultural psychology -or at least part of it. However, from the advantageous point of view of the present, it is rather clear that Goethe's production as scientist and as philosopher of science received scarce attention both during and after his lifetime. Psychology as a whole respected Kant's general framework and attempted to revert his dictum on the impossibility of having a *scientific* psychology. Psychology set about translating the human soul and its capacities into a mechanical worldview and refrained from including terms incompatible with such a cosmology. In 1895, W. Heinrich retrospectively described this process with these words: "It is not difficult to find which was the moment that decisively interfered with the posterior progression of the philosophical and psychological research [...] This is the boom of the natural sciences" (Heinrich, 1895, p. 31; our translation). By the middle of the 19th century, a 'new psychology' was born: "From a 'psychology with soul' has emerged a 'psychology without soul'" (Heinrich, 1895, p. 32; our translation).

The fate of *fantasy* in psychology reflects precisely the emergence of a psychology without soul. Already in the work of Giambattista Vico, *imagination* [*fantasy* is Vico's word] gains epistemological status. For Vico, the "modifications of mind" produced during an effort of fantasy is the better instrument to know the human world. Even though psychology formally incorporates *fantasy* in its epistemological function, it does so by distinguishing a merely reproductive imagination that unites images according to the laws of association and fantasy proper -or productive imagination-, which creates novelty from existing images. The two kinds of imagination followed different paths in the second half of 19th century, when the program for a 'psychology without soul' became more explicit. On the one side, *reproductive imagination* was conveniently adapted to a mechanical view of mind. On the other, fantasy -i.e. *productive imagination*- was slowly displaced from scientific psychology to non-scientific disciplines, such as aesthetics and literature.

Reproductive imagination was transmuted into a pre-intellective instance of a mechanical mind. It foreshadows what will be massively understood as *imagination* in 20th century psychology: an intellective operation, whose aim is to recover information in the form of mental pictures previously registered for ulterior intellectual processing (e.g. Pylyshyn, 1992; Kosslyn, 1992). At about the same time the power of *fantasy* becomes *poetic imagination* and a quality of talented persons. Its function as ground of scientific

knowledge faded. *Fantasy* was disconnected from the fabric of scientific knowledge and, accordingly was progressively abandoned by scientific psychology, much more interested in repetitive processes rather than in creative ones.

Fantasy constitutes a prime example of what happens with non-rational processes in a psychology without soul. Since early times *fantasy* has been described as a felt experience, in which feelings and organismic sensibilities have a central importance. The ultimate claim of fantasy is to *become* the contemplated object: Mind modifies itself in order to reflect the features of the object --as a *living mirror*, pointed out Nicholas of Cusa. Fantasy is purely experiential, and therefore fully nourished by feelings and sensualities. The insight obtained is pictorial: visual, non-linguistic, and sensitively charged. Given this non-discursive character, images produced by fantasy were considered as belonging to the zone of irrational forces and expelled from the illuminated zone of rational powers. This is one of the reasons why the term *fantasy* still survives in psychoanalysis.

Psychology embraced the Kantian model of man, which paradoxically enough was never a description of a human being, but rather a prescription of "*what mind had to be like* to make the certainty of Euclidean geometry and Newtonian science possible" (Kaufmann, 1998, p. 94; emphasis in the original). By adopting Kant's model of the human being, Psychology introduced *epistemology* at the core of its scientific program. By the middle of the 19th century, psychology was accordingly prone to study perceptions and intellectual functions; the former experimentally, the latter analytically. Human dimensions that pre-Kantian psychology summarized in feeling and desire capacities were banished from the rational mind. Thus, psychology began its scientific path by making an ontological redefinition of its subject matter: the discipline is not about all that people experience, but instead about the rational aspects of such experiences. From then on, psychology pursues epistemological rather than anthropological aims.

This history has a moral for Cultural Psychology. Even though its sources are manifold, the interest in Cultural Psychology grew particularly as a reaction to the reductionisms of the new scientific psychology. As such, it inherits the dichotomy between idealism and materialism. Many founding authors of Cultural Psychology argued strongly against the axiom of *first cogito* as the starting point for human psychology. The very adjective *cultural* underlines that the starting point should be found instead in supra-individual instances. But remember that the noun is *psychology*. The moral is also this: We have to overcome Kant. Goethe's *poetic science* can be helpful to this goal. The constructive task of cultural psychology will not be completed until a psychology that includes all the aspects of human experience is recomposed. Let us imagine again a *psychology with soul*.

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Footnotes

ⁱ I use the expression 'models of man' following the 19th century style. No sexism is meant by this usage. The notion of man encompasses both sexes throughout this manuscript.

ⁱⁱ I follow here the translation for the term *Anschaung* suggested by Douglas Miller, editor and careful translator of Goethe's *Scientific Studies* (see translator's note on p. 315 in Goethe, 1998).

ⁱⁱⁱ Goethe understands *polarity* in the most general sense of one of the "two great driving forces in all nature" (Goethe, 1998, p. 6) -the other one being *intensification*, as we explain in what follows. Polarity corresponds to "a state of constant attraction and repulsion" (Goethe, 1998, p. 6), and can be observed in a myriad of dualities: "We and the objects/ Light and dark/ Body and soul/ Two souls/ Spirit and matter/ God and the world/ Thought and extension/ Ideal and real/ *Sensuality and reason/ Fantasy and practical thought/ Being and yearning/ Two halves of the body/ Right and left/ Breathing*" (Goethe, 1799/1998h, p. 155; emphasis added).

^{iv} *Intensification* is, besides *polarity*, Goethe's second great driving force of nature. It "is a state of ever striving ascent" (Goethe, 1998, p. 6). This upward force pervades the whole nature: the development from seed into plant; the crystallization of minerals; as well as the major keys in music (Miller, 1998). Goethe applies it also to color formation.

^v Goethe identifies three kinds of sensorial, moral and aesthetic effects: symbolic, allegorical and mystical. Symbolic effects are those consistent with nature (e.g. purple as majesty); allegorical effects, which are more conventional and therefore they may be learned (e.g. green as hope); mystical effects, i.e. archetypal relationships, which are "as much a part of human intuitive perception as they are of nature" (Goethe, 1998, p. 296). These last effects imply having an intuitive perception of a certain 'spiritual meaning': "When we see them [yellow and blue] bring forth green below and red above, it will be hard to resist the thought that green is connected with the earthly creation of the Elohim, and the red with the heavenly creation" (Goethe, 1998, p. 296).

^{vi} Here I use Jasper Hopkins' translation from German. The original latin text says: "...si ex signo ad veritatem te elevaveris verba transsumptive intelligendo, in stupendam suavitatem adducent" (Nicolai de Cusa, 1440/1983, para. 29), that may also be translated as: "...if you rise from the sign to the truth, by understanding beyond the words, toward a delightful softness" [translation by the author].

^{vii} The connection with the Christian philosophy helps incidentally to explain the Faustian expression *If you don't feel it, you won't catch it*. This can be reconstructed as the Goethian version of St. Augustine *If you don't believe, you'll not understand*, which in its turn seems to be St. Augustine's version of *If you do not stand firm in your faith, you will not stand at all* from Isaiah 7:9. Thus: "Dost thou wish to understand? Believe. For God has said by the prophet: "Except ye believe, ye shall not understand" [...] For understanding is the reward

of faith. Therefore do not seek to understand in order to believe, but believe that thou mayest understand; since “except ye believe, ye shall not understand” (St. Augustine, ca.414/1874, p. 405).

^{viii} As a matter of fact, the Latin word *intuitio* comes from the verb *intueri* “to look at” - etymologically: *in-* (in, on) and *tueri* (to see). German *Anschauung* [intuitive perception] corresponds hence to a precise translation of the Latin *intuitio*.

^{ix} Goethe and Kant use the same word: *Sinnlichkeit*. Although strictly its more precise translation would be *sensuality* or *sensuousness*, in the specific case of Kant *sensibility* is an arguably better translation (see Kaufmann, 1980/1998). This is also the preferred option in the Paul Guyer and Allen W. Wood’s English translation of *Critique of Pure Reason* (Kant, 1781/1998).

^x Ernst Stiedenroth’s *Psychologie zur Erklärung der Seelenerscheinungen* (1824) [A psychology in clarification of phenomena from the soul] represents a surprising case of oblivion in the history of psychology. To my better knowledge it is the only *psychology* book reviewed (and highly praised) by Goethe (1998/1824): “I always considered myself fortunate if an important book came into my hands at a moment when it coincided with my own work, strengthening and furthering my activity [...] In the above book I again met with this pleasant experience” (Goethe, 1998/1824, p. 45).

^{xi} Wundt will raise severe criticisms to the expansion of experimental methods to higher mental functions (memory, thinking, will), qualifying for example the experiments on thinking by the Würzburg School as “pseudo experiments” and “a youth sin of experimental psychology” (Wundt in Lenk, 1996, p. 76).