

## **Transdisciplinary Pragmatism?**

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n this paper we will carry out an ongoing exploration of a phenomenon we chose to name Transdisciplinary Pragmatism/TD-P. This phenomenon will be addressed by recognizing our intellective capacity as a continuous unveiling, an opening, a movement towards a reality that is by nature muti-dimensional and multi-referential. In our investigation, we revisited the writings of Charles Sanders Peirce (1839–1914), Martin Heidegger (1889–1976), the epistemological, methodological and ontological pillars of Transdisciplinarity, as well as three archetypal roots that invoke and evoke core principles of the proposed pragmatism: Tao Te Ching, Prometheus and Percival. We view TD-P as an event of appropriation: a creative and free act, original, present since forever, open to possibilities, TD-P demands the but yet to be unconcealed. articulation of the phenomenal method and the "trans" dimension inscribed in the transdisciplinary system of thought. We will also touch some aspects of the structural situation that make such pragmatism possible.

**Keywords**: attunement, ereignis<sup>1</sup>, language, logos, ontology, phenomenon, pragmatism, rift, thought, transdisciplinarity.

#### 1 Introduction

Two routes of philosophic traditions. Some thoughts about the iconic landmarks of a contemporary philosophic tradition would be an initial possible approximation to understand what Transdisciplinary Pragmatism/TD–P may come to be. This because it manifests the existence of two routes of different natures and temperaments, characterized by the method they use and by their *démarches*: "logical method which associates the analysis of concepts and mental experiments in the Anglo-American tradition; historic method which allies formulation of problems and history of philosophy in the continental philosophic tradition" [1]. Continental philosophy is here understood to mean European, and specifically, the one cultivated in France and in Germany.

Each of these directions of philosophic tradition are expressed by two currents: the analytical current and the experimental one, marked by the English utilitarianism and by American pragmatism; the current of historicity and that of reflection, the philosophic thought of the French and German schools, with a historic method and systematic spirit.

Both philosophic traditions mentioned herein contain limitations within their core. Ivan Domingues states that the limitation of the logical method is its logicism and attachment to the universal, leading the philosopher to distance him/herself from the space—temporal context, of the real historicity of systems, of the author's personal marks. The limitation of the historic method, due to its contextualism,

<sup>&</sup>lt;sup>1</sup>German word for event, event of appropriation, appropriation that takes place, "enowning".

is attached to what is particular-specific and factual, impeding "philosophy from attaining higher peaks, overcoming the limits of time and space and providing a universal discourse" [2].

Based on contradiction  $\mathbf{A} - \mathbf{no} \ \mathbf{A}$  eminent in these two currents of philosophic traditions mentioned herein, what becomes patent is the need for a new path or route to emerge, a third way, one able to encompass a transdisciplinary perspective to come closer to reality. This way would be an emerging  $\mathbf{T}$  term able to go beyond the limitations of the logical and historic methods: be it from the logical method translated by its attachment to the universal, regardless of the temporal context, be it by the historic method, with its contextualism and attachment to the particular and factual.

As part of this proposal, the logical method, a tool of philosophy, and the historic method, a tool of biology, history and philosophy, are deemed as tools and propedeutic, in the sense of instruments and of preparation put underway for the exploration of truth, and not as an end in itself, but as a process for unveiling reality. In this sense, we would be entering the field of meta-philosophy, and would be led to come ever closer to epistemic patterns or standards, of a new philosophic approach that would make possible the emergence of a new pragmatism we would call TD–P.

Our investigation led us to revisiting the body of philosophy created by Charles Sanders Peirce (1839–1914), by Martin Heidegger (1889–1976) and some archetypal roots that invoke core principles for the emergence of a TD–P. Undeniably, we come closer to these possibilities for having been inspired and founded, during decades, on the research of eminent transdisciplinary thinkers from the XX and XXI Centuries, such as Barasab Nicolescu (1942), Francisco Varela (1946–2001), Hélène Trocmé-Fabre (1931), Michel Camus (1929–2003), Michel Random (1933–2008), Patrick Paul (1948), Raimon Pannikar (1918–2010), René Barbier (1949), Stéphane Lupasco (1900–1988), among others, and also on our experience with everyday living.

### 2 Pragmatism

Since 2010, the research and actions we have carried out at the Center for Transdisciplinary Education (Centro de Educação Transdisciplinar) – CETRANS, founded in São Paulo, Brazil, in 1998 has challenged

us to articulate a vision, a mindset and transdisciplinary practice. Based on our "hands on" experiences, it became evident we needed to better understand what the transdisciplinary work was all about. This concern led us to the following questions: What is Pragmatism? And what would a TD-P be?

Pragmatism is a philosophy which came about in the United States in the middle of the XIX Century, in the post civil war period, a stage of development and consolidation of industrial capitalism, when the cultural and historic horizon allowed for the emergence and subsequent development of this new thought, which responded to the desires of an intellectual American elite, and, up to a certain point, those of society. Three of their main representatives are: Peirce, William James (1842 - 1910) and John Dewey (1859 - 1952). As part of the scope of this article, we will dwell on Pierce's pragmatic vision, despite acknowledging the work of other philosophers who, in the XX and XXI Centuries, contributed to the reflection and deepening of Pragmatism.

Peirce, upon coining the name Pragmatism in 1878 defined it as the maximum rule to clarify the content of a hypothesis and its practical consequences. In the same way, he introduced fallabilism in his epistemological view, an anti-Cartesian stance, as an essential standard for the exercise of investigation. Twenty years went by, at a conference imparted in Berkeley, James brought Peirce's innovative thesis and his name to the attention of a seasoned and enshrined circle of philosophers, at a lecture that he called: Philosophical Conceptions and Practical Results. Since that time, James gave a personal interpretation to pragmatism, distancing himself from the original conception given by its creator.

Peirce states he coined the name Pragmatism for the theory according to which a given conception, what it means, the rational meaning of a word or of a given expression, consists solely and uniquely in its conceivable reach in leading life. Peircian pragmatism implies experimentation and, refers to thought, that is to say, to a reflection of how people think, how to make ideas clear and how to set forth beliefs. The principles of this pragmatism lie, in essence, upon the need to obtain clarity in our thoughts, and for that, it is necessary to consider the conceivable practical effects that objects may have, as well as the sensations we can expect from them, and also, which reactions we can anticipate. For him, the final test of what a given proposal means, in its truth, is

Sensible Reason	Experiential Reason	Formal Reason
firstness	secondness	thirdness
(possibility)	(concrete existence)	(law, habit)
«mental mediation"»	«mediation – process»	«continuous mediation»[*]
re-presentation	sense	meaning
(strategy of the senses)	(strategy of the sense )	(strategy of the meaning)
immediate Interpretant	dynamical interpretant	final interpretant
primacy	primacy	primacy
transduction	abduction / induction	deduction

Table 1: Pragmatism of the Three Reasons.

the behavior it dictates and inspires.

Peirce's pragmatism is a sound reference to think about a TD–P, as this pragmatism articulates sensible reason – feeling and imagination; reason arising from experience – experiences and memories; formal reason – theories, concepts, rules and generalizations. To each reason, its logic, its inferences and its methodologies. According to Denoyel [3], the processes of inference interwoven or overlapped with the three reasons, do not place impenetrable borders between then and communicate with the pragmatism of the three peircian categories: firstness, secondness and thirdness as pointed by him as shown in Table 1.

Our reflections led us to consider that even the term pragmatism be expanded, its original make up, defined by Peirce upon creating, should be preserved. For Peirce his pragmatism is interwoven into a philosophical system and aims to make that philosophy a science. Understanding the meaning of the three categories, which permeate our entire existence, allows for a fertile dialogue with the levels of reality, one of the pillars of the transdisciplinary methodology.

## 3 TD-P Inspired by Peirce's Thought

In the article *The Fixation of Belief* Peirce points out that the object of reasoning is based on what we know, to find what we still do not know. He states that whenever hope is not verified by experience, it can lead to extravagant results, that because we are inclined to fulfilling our pleasurable visions regardless of their true value, that is why he deems the strength of *foundation thought* as a decisive factor for the

world's evolution.

Peirce warns that whenever conceptions are the product of logical reflections or are mixed with our common thoughts, there is great confusion and this result is never the object of observation. Exemplifying: he says a thing may be blue or green, but the quality of being blue or green are not things we see, they are the product of our logical reflections. Thus, common thought that emerges outside of what is practical, has a poor logical quality and is called metaphysical, because of this his criticism of metaphysics.

For Peirce our beliefs guide our desires and configure our actions and, because of that, they should be understood. Our beliefs determine our habits. Doubt is a state we want to get rid of so as to go on to a state of belief. All in all, doubt never changes our beliefs, but enables us to revisit them. Doubt impels us into action, until it is dissipated, it struggles until a new state of belief is attained. We resort to investigation to leave this state of irritation caused by doubt. In that sense, we perceive that because life has that old pragmatism under doubt and questioned, there is the chance for a new pragmatism to emerge.

In the second article, How to Make our Ideas Clear, Peirce refers to the differentiation that exists in the treaties on logic between the conception of clear and obscure and between the conception of distinct and confused. Says he: "A clear idea is defined as one which is so apprehended that it will be recognized wherever it is met with, and so that no other will be mistaken for it. If it fails of this clearness, it is said to be obscure" [4]. Moreover, the issue of the feeling of subjectivity can distort this clearness or clarity. Due

<sup>\*</sup> Gérard Deledalle distinguishes three types of mediation as it relates to the interpretant's trichotomy in Peirce (Deledalle, 1979, p.64).

to that, the idea of clarity should be supplemented with the idea of distinctiveness. Peirce writes: "A distinct idea is defined as one which contains nothing which is not clear" [5].

Peirce points out that the limitation of these two visions is that they are given in abstract terms. According to him, this intellectual activity of logics, for centuries left aside the engineering of modern thought, and because of that, it would be necessary to set forth the method to obtain greater clarity of thoughts. Another idea on the notion of clarity and of distinctiveness involves and understanding that "Nothing new can ever be learned by analyzing definitions" [6].

Said in another way, Peirce want to move forward regarding three proposals set forth previously: 1) that of Descartes, which discards the method of authority as the apogee of the source of truth and goes on to an a priori method which it professes to find in human mind, in whatever is agreeable to reason, as a source of truth; 2) that of Kant, founded on a priori and, 3) that of Leibniz, on abstraction. Thus Peirce states that the highest level of clearness of any idea merges and will be found in its highest expression, considering that "what effects, that might be conceivably have practical bearings, we conceive the object of our conception to have" [7]. Furthermore, beliefs and order are the essential elements for intellectual economy, so much so as the other elements approached. He therefore points to the need of going beyond the notion of clearness and distinction proposed by the logic of Descartes, Kant and Leibniz.

The issue that is set forth here is the importance of knowing what we think, of becoming the masters of our own senses, so as to create a sound basis for what we think. Another relevant issue for Peirce is that the mind can merely transform knowledge, but never originate it, unless it is nurtured by the facts of observation.

In his understanding, the moment has come to set forth a method able to clarify thought, as is already being announced in some of the thinkers which are his contemporaries. This method for the clarity of ideas should have a higher level and go beyond the idea of distinction proposed by the logics up to that point. For Peirce, differently from sensations, "Thought is a thread of melody running through the succession of our sensations" [8].

The philosopher says that the action of thought

is excited, motivated by the irritation of doubt and ceases only when belief is attained. For him, the only role of thought is the production of belief. Irritation, doubt, belief, fallibilism — that through which we believe that all existential truths, theoretically, if revisited by experience, offer the possibility of having something novel or better appear —, are sine-qua-non aspects for his pragmatism. Quoting Peirce:

And what is, then, belief? first, it is something that we are aware of; second, it appeases the irritation of doubt; and third, it involves the establishment in our nature of a rule of action, or, say for short, a habit [9].

Belief herein is understood as a rule for action and, as such, as an application which instigates new doubts and new thoughts. Belief inherently contains a contradiction: it is at the same time a place to stop and a starting point; a thought at rest and in action, despite the fact that thoughts or thinking is always essentially an action that consists in relation, as a consequence of the action. This being the case, the function of thinking is to produce habits for action. Each distinction in thought has a tangible and practical result, said in another way, each tangible and practical result has its roots in thought.

For Peirce whatever is added to thought, if disconnected from its purpose, cannot be deemed as part of it. In the same fashion, if there is a unit in our sensations that cannot be used as a reference on how to act at a given moment, we cannot call that thought. It is the identity for the habits which guide us on how to act. Thus, what is created is a causal enchainment where "... our action has exclusive reference to what affects the senses, our habit has the same bearing as our action, our belief the same as our habit, our conception the same as our belief" [10]. Thus, thought has no independent meaning from its sole function. For Peirce, the third rule on the clarity of ideas is knowing that we can only speak about which is the object of our conceptions when we consider the possible effects that its practical purposes may potentially have.

The operationalist maxims as a theory of meaning and the pragmatic maxims proposed by Peirce are valuable for the emergence and comprehension of TD-P. For him, any hypothesis has meaning in so far as it specifies what needs to be done, so that effects preconfigured by the hypothesis itself can be observed,

the effects it has on other people and in the changes it processes in the environment. Even considering that the formulation of the structural situation of the TD-P is at the beginning, a deep reflection on the issues of the nature of logics and ethics formulated by Peirce are fundamental to think about the dynamic of such pragmatism. Peirce writes:

"We have hitherto, not crossed the threshold of scientific logic. It is certainly important to know how to make our ideas clear, but they may be ever so clear without being true. How to make them so, we have next to study. How to give birth to those vital and procreative ideas which multiply into a thousand forms and diffuse themselves everywhere, advancing civilization and make the dignity of man as an art not yet reduced to rules, but of the secret of which the history of science affords some hints" [11].

A paradigmatic rupture implicit in Transdisciplinarity and the advances of science at the beginning of the XX Century announced changes posited by Peirce, the birth of what he calls vital and procreative ideas. TD-P is born from this rupture. Although the priority of such pragmatism cannot be deemed proof of its truth, simply through its exercise, constant analysis and renewal, we can, in a stepwise manner, come closer, remembering that here truth is understood as that which is closest to reality, to the origin, to singularity. To develop, understand and carry out TD-P is a choice. But, as Peirce writes, what we choose depends on if we are prepared to admire and this is the gesture which takes us to an aesthetic, differently from what we approached previously, that falls within the realm of logics and ethics. Without logic and ethics, TD-P cannot be set up, and it is worthwhile recalling that for Peirce ethics arises from contradiction, from the tension between a pair of opposites: logic-aesthetics.

# 4 TD-P Inspired by Heidegger's Thought

To know means to have seen, in the widest sense of seeing, which means to apprehend what is presents, as such. For Greek thought the essence of knowing consists in altheia, that is, in the revealing of beings. It supports and guides all comportment towards beings [12].

Can the phenomemic approach by Heidegger contribute to understanding the phenomenon TD-P? Upon remarking on the concept of phenomenon, the philosopher explores the Greek roots of this word. They refer to showing oneself - and also to that which shows itself, to that which reveals itself. To bring to the light of day for him is what should be maintained as the meaning of the expression phenomenon, that is, that shows itself. Heidegger points out that manifesting oneself is a non-showing oneself. The self-showing that makes possible the manifestation is not the manifestation per se. Thus, the concept self-showing is not delimited, but an assumption, an assumption that remains concealed or unveiled. To manifest oneself is understood as announcing oneself through something that is shown. There is ambiguity and a contradiction in the word to manifest oneself, as it is at the same time what is announced and what is shown, as what is announced is not shown, it merely indicates something which is not shown. These ideas inspire and nurture the understanding and formulation of the pragmatism proposed herein.

Phenomena are never manifestations, and all manifestations are remitted to a phenomenon. It is necessary to understand the concept of manifestation to understand what the phenomenon is. All in all, there is another meaning for – manifestation, manifest oneself –, that is, something that emerges, that radiates, in that which is being announced and manifests itself, as that which can never reveals itself. Heidegger says: "Every disclosure of being as the transcendens is transcendental knowledge. Phenonenological truth (disclosedness of being) is veritas transcendentalis" [13].

The phenomenology of Heidegger shows two meanings: 1) method to exhibit the fundamental structures; 2) theoretical framework to be able to respond to the crisis in contemporary science. These two meanings are elucidated through the understanding of the term he created *DASEIN*, impossible to be translated in a definition, as it is about a structural situation that lies upon subtle nuances of interpretation: **DA**sein and da**SEIN**, be it in the sense of **THEREbeing** or of **BeingTHERE** as an unconcealing of being.

Dasein can further be understood as the individual non-existence, with presence, meaning, the set of all

possibilities, that which is taken from the masses, the subject as maximum and ulterior authenticity, truth as unconcealed, as absolute silence, as pure moving, pure mutant, a continuous quest for that which is more one's own. Dasein also refers to the cure as care – as expressed in the meaning of curator of a museum – that has the role of bringing together, harmonizing, preserving. Dasein is not a rational animal, it is not the intentionality of consciousness, it is not monad, it is not idea, has no gender, nor species, nor categories, it is not logos, it is not res cogitans, it is not will and representation, it is not the will for power, it is not collective, it is not developing roles, functions. Dasein is imbalance par excellence, as it is a constant movement in the search for what is more authentic to one's own. The world is the coming into effect of *Dasein*.

Investigation and thought are two phenomenological horizons for Heidegger, even when it is about a work of art. Heidegger is not concerned with the work of art from the viewpoint of the object, nor about the creator, nor about the spectator. For him, a work of art is not an aesthetic, nor the subjective fruition as posited by Baumgarten, Kant and Schiller, nor a creating event as wanted Nietzsche, but a structural position which transcends. Art is a displacement which makes possible to unconceal that which is most authentic at a given instant, in the wink of an eye.

The substance of the work of art, its qualities - extension, form, color, weight - do not reveal it. Albeit color is a semantic filter, even so it does not reveal the initial or the rightly an origin. A work of art goes much beyond that, as we can never determine what it is fully. Heidegger states that we can use a work of art as a utensil – be it as social or orgiastic representation, profits or gains – however, a work of art as a utensil, in the sense of serving for something that will not lead us to Being. The foundation of art is to lead mankind in the direction of Being, contrary to technique which hampers and distances the unconcealing of Being. A work of art is not subjective, it is the product of the potentialized collective, that helps respond to the question about Being, about the genesis of ontology, not positioned in the realm of beings[seiend]. A work of art is deemed by him as being a possibility of going in the direction of the essence, of the origin, of the idea of opening to Being[Sein].

The focus of a work of art for Heidegger is not

existence, but truth. Despite beginning not as a phenomenon, but as a product, it should lead us to the original phenomenon. Being is not a substance, nor a utensil. But within the utensil is the proof of how it is in itself, as well as how it is in the original horizon, what it was before being positioned by the artist or the spectator.

Which is the network of references that is set up when faced with a work of art? Is it ontic or ontological? How far can it lead us? The work of art itself encapsulates a given network of references. The work of art point towards itself and to its original phenomenal field. In the work of art, through the network of references, truth of the beings is setting-into-a-work. The function of a work of art for Heidegger is: "Setting-into-a-work-of truth". He writes:

Truth is the unconcealment of beings as beings. Truth is the truth of Being. Beauty does not occur apart from this truth. When truth sets itself into the work, it [Beauty]appears [14].

The work of art waves to the abyssal dimension. Truth is that experience, the experience of Being. This revealing of oneself always conceals something. In this sense, the work of art is a event, not a substance. The event demands a complete disappropriation of oneself to receive one's own *Dasein*. Art for Heidegger is the place of truth – the historic power and the horizon where the one's interior, the oneself is founded.

If the transdisciplinary method is phenomenological, be it at the ontic existential level [existenziellen] or at the ontologic existential level [existenzialen], Heidegger's phenomenal approach is a great contribution to configuring the phenomenal field of TD-P. Such pragmatism addresses events with a high degree of complexity and of complexity of a high degree. It recognizes reality in its ontic dimension, that which refers to loved ones and the being of loved ones and, in its ontological dimension, that of Being. Thus, in it, in vivo, different levels of reality are articulated: macro-physical – emotional, psychic, mental – mythical, symbolic and of the soul – and the level of nonresistance, that is, the realm of what is sacred, of the indescribable, intangible, ineffable, where concepts do not exist, nor substance, nor loved ones. It is in this continuous being that transdisciplinary evolution is thought of in TD-P.

### 5 TD-P: Three Archetypal Roots

Our thinking led us to exploring the archetypal roots of thinking, as it is our understanding that the origin of our way of thinking, understanding and acting in the world dates back to teachings that arise from the traditions of wisdom of the East and the West. The history of thought is a constant summing up of instances that were set up in time and formed a complex structure that came up to us, after a long trajectory. In this line of thought, to elucidate the TD-P, we have chosen three archetypal currents: the first, from eastern origin, Chinese – the Tao Te Ching; a second and a third, of Western origin, European – with the myth of Prometheus, and the saga of Percival respectively.

What led us to choosing the Tao Te Ching? We chose this text for its attunement with the thinking of philosophers that we chose to work with, and because of its affinity to the guiding principles of TD-P. What does the Tao mean? The Tao can at the same time be a path in the direction of some place, a trajectory, trail and also a way in which we do things or lead our lives. Tao can further mean a discussion, a text or a way of thinking and speaking. It may refer to the fundamental nature of reality, that which things really are, the way in which the universe exists. Human life is centered on thought and language, in making distinctions, discriminations, Tao also means thought and language.

Tao is first of all the Tao of life, a way of life, a way of living in harmony with the universe. Tao is the fundamental nature of all things, that is to say, the right way for life to happen. Thus, Tao is the way we should think about the nature of the universe, and how to live according to the nature of the universe, and how to live according to those movements. These are necessary principles for the emergence of TD–P.

Some other highly relevant points in the Taoist tradition also dialogue and have that direct link with TD-P. Among them we highlight:

• Life demands constant pruning, a clipping, reaming, that requires cutting and throwing out, lapidating, getting rid of additions in its form to make it possible to return to the natural state, therefore, it's a return to the origin and valuing the primeval. Culture is always an addition which inhibits our natural state. For Taoism, we become better the more we denude

ourselves of culture and regain our primordial state.

- In this path, the emphasis is placed on the back-ground on the concealed plane, the backdrop, the forerunner, in the depths and not on the fore-ground. It is not about building a spontaneity, but instead recovering an effortless spontaneity we carry within us since our birth.
- In Taoism the recommendation is to return to the primordial state of thinking, which is prior to and more fundamental than that which surrounds logical thought. It is shown to us clearly that a basis of non-discursive primordial experience is necessary, one that considers not only the signs and thought, but also simple language as instruments for a common life.
- Tao Te Ching, shows exhaustively that the world is open for what is across and beyond, for a sort of coming into awareness, a state of permanent presence where everything that takes place has to be taken into account. It prioritizes calmness and openness to receive what comes, as what happens ends up like all good or bad things end up [15].

Tao Te Ching [16] further presents the idea of mutual relativity of all things, the mutual dependence of opposites which makes us, many times, characterize something through them. But above all, it points to our preference for choosing one of the two pairs of opposites, in detriment of the other when, in truth, there is not privileged pole that defines objects, situations, things. This trend shows us that we are constantly comparing, judging the appearance that we project on things and forgetting there intrinsic quality. It is our concerns that make objects what they are, reality is not previously sculpted for us in beings. Tao Te Ching in chapter two says the following:

Under heaven all can see beauty as beauty only because there are ugliness,

All can know good as good only because there is evil.

Therefore having and not having arise together:

Difficult and easy complement each other; Long and short contrast each other; Voice and sound harmonize each other; Front and back follow each other. Therefore the wise go about doing nothing, teaching no-talking. The ten thousand rise and fall without cease, Creating, yet not possessing, Working, yet not taking credit. Work is done, then forgotten. Therefore it last forever.

Therefore the wise go about doing nothing, teaching no-talking.

The ten thousand rise and fall without cease.

Creating, yet not possessing, Working, yet not taking credit. Work is done, then forgotte Therefore it last forever.

For Taoism, a man who knows how to live recognizes that actions do not iniciate with him, it is up to him merely to begin them. Everything is part of a vast set of processes. He does not claim for himself what he fulfills or achieves, as fulfillments or achievements are a consequence of the confluence of a vast network of events, and that causal network is built by many people through many, many years. The life of each person is a particular fact, it is merely the extraction of a moment taken from the background, from a greater plane and it would not be different for the emergence of TD–P.

What led us to choosing the myth of Prometheus? There are several versions of the myth of Prometheus in Greek mythology [26-28], and one of them says he is a late descendant of the titans. His name, in Greek, means "the one who sees before, foresees". As a titan, he is a figure that is born from the earth and the fire of the sun, his nature is dry and a source of fire, and because of that, far from aging and deterioration. A great friend of Zeus, Prometheus helped the supreme god to dribble the fury of his father Chronos, who was dethroned by him. In exchange, Zeus granted him his friendship. However, Prometheus enjoyed the company of men, which left the god indignant and full of rage.

Prometheus fools Zeus twice: firstly, when he, wishing to mislead him and benefit the men, sacrifices an ox and offers Zeus the largest and worst part, setting aside for the men the smaller and better part. Nonetheless, the supreme god, upon perceiving what has happened, is infuriated and takes away from the men the control of fire, and symbolically deprives them of nous, of intelligence. For the sec-

ond time, when Prometheus, wanting to benefit the men, steals the fire through lightning, which is an attribute of Zeus, cunningly placing it in a hollow of narthex. This plant has a combustible nature and there men once again have fire at their disposal, no longer depending on Zeus's lightning to be granted fire. Prometheus, upon stealing the sacred fire to give to the men, granted them the power to think and reason. Hesiod [17] writes:

...from then on, never forgetting the trick, he would not give the strength of untiring fire to ash-trees for mortal men, who live on the land. But the great son of Iapetus deceived him and stole the far-seen light of untiring fire in a hollow narthex; this bit deep in the spirit

of high-thundering Zeus and his heart was angry when he saw the far-seen light of fire among men.

Zeus' anger mounts even more when he discovers that his purported friend has betrayed him and decides to punish him, decreeing that his son Hephaestus, the blacksmith god, imprison him with chains at the top of Mount Caucasus, during 30 thousand years, during which he would daily be pecked by the beak of an eagle, that would destroy his liver. The tragedy Prometheus Bounded narrates:

...for he stole and gave to mortals thy honor, the brilliance of fire [that aids] all arts. Hence for such a trespass he must needs give retribution to the gods, that he may be taught to submit to the sovereign of Jupiter [Zeus], and to cease from his philanthropic disposition [18].

As Prometheus was immortal, his organ regenerated constantly, and the cycle of destruction would begin anew every day. He simply frees himself from this destiny when Chiron exchanges his own mortality for his release. Zeus allowed Chiron to rid himself of the suffering caused by the poison arrow of Hydra who wounded him, thus Chiron became mortal and died serenely.

We can comprehend this myth in several ways and approach it different ways and, as a myth, its meaning will never be depleted, beginning with the name Prometheus that gives it a fundamental characteristic: that of *metis* – keen and wily intelligence,

provident and practical –, *metis* warped. In this story there is an evident imbalance: Zeus is the father of the men and of the gods and is sovereign, as, he has not only *metis* but also *nous*, reflexive intelligence, the spirit. Prometheus is a titan, and his *metis* has a different nature, he is impulsive and skillful in the art of plotting. There is therefore an opposition between intellect and spirit.

Continuing to punish men and in response to the plots suffered, Zeus makes Hephaestus responsible for fabricating a woman to give to Prometheus' brother, Epimetheus, which means "what came after", the imprudent one. Thus, Pandora was created, the first woman and with this transforms the anthropoi (primordial man) dividing them in andres (men) and gynaikes (women). Pandora therefore brings separation. She carries a jug containing all evils and also Elps – expectation, pre–science, waiting, hope – and with Pandora the human conditions sets in. It inaugurates another era marked by separation, where sexuality is the form of creation that requires two opposites to give life to a third. Paradoxically, upon bringing separation she also brings the possibility of union, of reunion.

In the myth of Prometheus, the new creature, Pandora, was shaped from a mixture of earth and water and received two attributes: the first, auden (potential human language), the language of the andres, necessary for this new conditions, as that of the anthropoi no longer sufficed for an understanding with the gods; the second, strength, physical vigor of man. In her making, this woman should be similar in her face to the immortal gods and in her body, similar to a beautiful virgin. With Pandora therefore the process of imitation comes about, she is the imitation of what already exists, and at the same time, by not being completely novel, she is the first of her species. She is a product of the  $cn\bar{e}$ , of the arts, whilst the primordial man belongs to the physis, he is, besides the gods, the original element. All of those who are born from her, are copies.

The TD–P mandatorily has to deal with this ancestral break, this reality designed archetypically in this myth. We are heirs of Prometheus when we were granted metis and the nous; we are also from Pandora and the technique that made it possible to create her, acquiring a meaning of fabrication and copy. The phenomenon of the technique becomes a part of our history as a constructive mechanism, without a return to the primacy of functionality, of

total oblivion of the Being that transforms itself into something. To remember who we are we need to go back into our original experience and understand ourselves through that nature. As reported in the book *A Escola de Kyoto e o Perigo da Técnica*, São Paulo [The School of Kyoto and the Danger of the Technique]:

Quem sabe disso é Heidegger, por ter visto que o esquecimento da experiência do primeiro começo pode e deve ser rememorado já em vista a apropriação (Ereignis) do homem pelo desolcultamento que se oculta no e pelo outro começo do pensamento do Ser, que está por vir. [19]

The one who knows about this is Heidegger, for having seen the oblivion of the experience of that initial beginning can and should be remembered in view of the appropriation (Er-eignis) of man through the unconcealing that is concealed in and for the other beginning of the thought of Being, that is about to come.

Heidegger speaks to that regard:

But might there not perhaps be a more primally granted revealing that could bring the saving power into its first shining-forth in the midst of the danger that in the technological age rather conceals than shows itself? [20]

From the same poet Holderlin from whom we heard the word of salvation:<sup>2</sup>

"But where danger is, grows The saving power also."

He further tells us:

"...poetically man dwells on this earth" [21].

Inspired by the Prometheus' myth we realized that we are thrown into the world to connect future, past and present: future as a flight towards a becoming, which is a transgression of the established order, a

<sup>&</sup>lt;sup>2</sup>The word salvation in Heidegger's approach means to fetch something home into its essence, in order to bring the essence for the first time into its proper appearing.

boldness to innovate; past as destines that have been inaugurated long ago and in which we find ourselves immersed in; present as presence and our ability of being—in—the—world and being—with. This horizon of possibilities call out to be disclosed if TD—P is to be effective.

What led us to choosing Percival? This saga takes place in the ontic existential world, in which there is no unification of kingdom, but, in truth, it is about the quest for unification that takes places at the ontological existential world and, such search is an awakening process. This was the reason that led us to choosing it. Percival narrates the story of a young man who has no knowledge of his origins and who goes on the quest of the potential of becoming a knight in King Arthur's court, becoming engaged in the legendary search for the Holy Grail. We based ourselves on two versions of this text: the French by Chrétien de Troyes, Perceval ou le Roman Du Graal and the German by Wolfram von Eschenbach, Perzival, both written in the XII Century. Percival, whose name in itself is revealing, as it refers to crossing the valley or going through the veil, is about the construction and the destruction of the temple, the invisible castle, the cure of the wounded Fisher King. The version by Troyes falls into the Judeo-Christian tradition of the quest for the Grail and, that of Eschenbach, in the mythical Germanic tradition of the Grail from Munsalvaesche. In the version by Troyes, King Arthur begs Merlin, the court magician, for the unification of his kingdom, that will be consummated by the cure of the Fisher King. In the version by Eschenbach, the unification intended is in the kingdom of Amfortas, the wounded King, son of Frimutel, grandchild of Titurel, and uncle of Percival, creatively celebrated by Wagner in his opera Percival.

The line of narration of this saga is a field of successive experiences that map the road of initiation, a long journey. Finding the Grail means receiving the universal language, it is the re-appropriation of a much higher level of reality that brings the fragrance of what is Real. Percival lives many stories, each of them is a part of the whole. He does not know what he is living, he ignores his wisdom. He lives with complete detachment, presence in life. His experimenting will have the capacity of fixating something that is on the way and will culminate through the connection of his existential and spiritual body.

Percival reveres the Lady, an inspiring figure, the

inspiration. This path shows the need to enhance and to set out a dynamic to revere Beauty, as the opening to a spiritual dimension that implies being in attunement with what is Beautiful.

Countless passages of this experience are laden with meaning, with signs and signal to a destination. Among these, a strong scene where heads are cut and roll. Cutting the head means opening up to another dimension, it means establishing a new tie or link with life, it is birth into imagination, intuition, spontaneity, creativity. Heads are cut to lose human blood and open up to the emergence of royal blood.

Thus, Percival's experience is an energetic process, initiatic and not moral. He finds his own vital energy, experiences the world based on the spiritual path. He neither refuse, nor retreat when faced with confrontation. If there is no real confrontation, there is no path. Percival, listens in the first place, later sees, and does not shun, he is vigilant. His link is primarily with reality, and then with life, then with death and in a continuous purging, purifying the experience of living the path arises. Percival's experience is a passage, an opening to the field of Light.

Would the great experience of the TD-P lie in this archetypal root? Based on this saga, would it be possible to understand much more on the transdisciplinary attitude in the exercise of TD-P?

# 6 What else makes Pragmatism be Transdisciplinary?

TD-P is an event of appropriation in the heideggerian sense of that which is original, already present, but not yet thought of. It is based on this event that things begin to be thought of and are not remittable, as they are founding and cannot be founded, they originate. This moment is given, it is an open possibility, and it is up to each of us to accept it or not. This calling is silent, it gives us no explanation, no response, it is a calling that if we are dis-appropriated from the everyday occupation, we hear it or not. The difficulty which appears is that this calling presents itself to us as something peculiar, despite the fact its origin lies in the deepest part of ourselves, in truth: it is our interior self that calls us. It summons us to where we already belong and convenes us and provokes us to a creative act. To be faithful to this calling is an option, a choice. What calls us is the most authentic to one's own. It withdraws us from the everyday life and requests to be heard. It is based on this calling that we articulate new possibilities, more authentic to our being.

If we understand transdisciplinarity also as an epistemology, as an experience of incompleteness, as something that is at the same time between – across – beyond disciplines, things and people, as a transversal crossing of the borders of formal and tacit learning, academic and non-academic that aims at the emergence of the subject in his/her multidimensionality – how to foster a pragmatism that could cope with such complexity? Or what would render such pragmatism be called Transdisciplinary?

To imagine what a TD–P would be like, based on the transdisciplinary paradigmatic model, requires to understand what logics, art, cognitive references and heuristic instruments could lead the practice of the *trans* dimension to its excellence. This is a *sine qua non* condition for TD–P to emerge. However, this structural conjuncture cannot be confused with a recipe nor with a check list, as it has to be attuned, contextualized and articulated to the reality that has demanded it.

The logic of this pragmatism sets in within a fluid non-binary dynamic. It is inherent to it contradiction and paradox, transductive and abductive inferences, the dynamics of potentialization and actualization, with its intermediate stages of semi-potentialization and semi-actualization as posited by Stéphane Lupasco. This theory also posits a successive generation of third terms included that sets themselves on higher levels of reality. Each third term included is constituted by other laws and materialities that differ from those where it originated from. This logic has the role of clarifying our ideas and elucidating the consequences of our choices, forging and reformulating our conceptions, beliefs, habits and actions.

The art of this pragmatism is a setting-into-a-work-of-truth, that is, of Being and contemplation, in the sense of acting for the benefit of knowledge and of the pulsating wisdom in the trans dimension of Transdisciplinarity. This idea evokes the original, in the sense that Heidegger ascribed to this term: "The origin of something is the source of its essence" [22]. The cognitive frames of reference able to nurture the TD-P have as their dwelling place: the humanization of science, the multidimensionality of reality, imagination, Art as the expression of Being, the emergence of the subject, phenomenology

in its ontologic existential level, the sacred and the ineffable.

Among the heuristic instruments of TD–P are: operational models; procedural pragmatism: experience–reflection–everyday living; triadic alternation: sensible, experiential and formal reasons; Art as opposed to technique.

The meaning as destiny, direction, orientation, signification, feeling and viability that fosters the TD–P emerges from the want of belonging and the search for plenitude. It is engendered by deaths as transformation, by the perception of emancipation through Beauty and what is Beautiful, and by the possibility of *coming-into-Being*. Conceived in this manner, TD–P operates in high complexity systems, that need to surpass themselves.

The Surplus is a type of device or activity of a cultural nature or of knowledge not directly related to a system. Whenever introduced into a system it forces the system to exceed itself. The surplus promotes the broadening of the spectrum and widens the margin of choice. This occurs due to the fact it makes available to the system resources that are vaster than those needed for its self–reproduction, of what it already has as unique in itself. In this sense, it increases the power of the system over itself, giving it greater autonomy. The surplus instigates curiosity, stimulates the imagination, enlarges the horizon of investigation and innovates the dynamic present in the system. The author writes that surplus is:

..cette partie de la «matière» sociale que le système potencialise pour se reproduire comme système. Le surplus social c'est donc aussi cet individu ou ce groupe qui a «plus» de culture qu'il n'en faut son rôle, une plus value pourtant indispensable à la tenue de ce rôle [23].

...a given part of the social "matter" that the system potencializes to reproduce itself as a system. The social "surplus" is therefore this individual or group that has a "plus" of culture, that it does not take into account for his role, a plus value however indispensable to sustain such role.

As regards the TD-P it is our understanding that the concept of surplus goes beyond the sociologic dimension, the social network, and can be applied to different levels of reality. Transdisciplinary thought articulates the four paradigms – mythological, philosophic, theological and scientific – that have been known since long ago [24] which were slightly touched herein. However, we are continuously faced with the challenge of articulating thought and action based on a transdisciplinary vision. To think about TD–P is a gesture in that direction and a possible way to respond to the personal and collective flooding of suffering that continues to grow ever more and whose origin remains concealed. As Heidegger says:

The closer we come to the danger, the more brightly do the ways into the saving power begin to shine and the more questioning we become. For questioning is the piety of thought [25].

The philosopher further adds:

... The lasting element in thinking is the way. And ways of thinking hold within them that mysterious quality that we can walk them forward and backward, and that indeed only the way back will lead us forward. [26]

### 7 Concluding Remarks

In this article, by revisiting the path already tread by many transdisplinary thinkers we reactivate and revere in our hearts and in our minds that invisible thread woven by our forerunners and thus, recognize its value for the emergence of what is novel. We trust we have somewhat moved forward in the reflection of what constitutes the TD-P. We also trust that the strength itself of this initial reflection will open up a rift and will create its own movement, in such a way that the status of this pragmatic utopia will be continuously enhanced, revised and updated.

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