# Artigos - E

## PHENOMENOLOGY AND RELATIVITY: HUSSERL, WEYL, EINSTEIN, AND THE CONCEPT OF ESSENCE

Fenomenologia e Relatividade: Husserl, Weyl, Einstein e o Conceito de Essência

Fenomenología y Relatividad: Husserl, Weyl, Einstein y el Concepto de Esencia

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**Abstract:** This paper aims to draw a new conception of "essence", starting from the analysis of Husserl's works (e.g. *Philosophy of Arithmetic, Logical investigations, Ideas*) and comparing with the Einstein and Weyl considerations (most of them unpublished) about grounding a new physical method which combines "philosophical analysis of essence" and "mathematical construction". The research about the physical nature of space-time provides us with an example of pure phenomenological analysis of essences. In developing this conception of essence, phenomenological subjectivity and consciousness play an important role in order to depict a relatively objective representation of thingly reality. For this reason, the principal purpose of this paper is seeking to address the complementarity between objectivity and subjectivity in the representational consciousness and in its production of essences; moreover, this study aims to demonstrate how phenomenological intersubjectivity acts on the constitution of essences, so that we might consider the intersubjective essences' constitution as one possible case of constructing a real world.

Keywords: Phenomenology, Relativity, Essence, Consciousness, Subjectivity.

Resumo: O objetivo deste artigo é desenhar uma nova concepção de "essência", a partir da análise das obras de Husserl (por exemplo, Filosofia da Aritmética, Investigações Lógicas, Ideias) e comparando com as considerações de Einstein e Weyl (a maioria delas inéditas) sobre fundamentar um novo método que combina "análise filosófica da essência" e "construção matemática". A pesquisa sobre a natureza física do espaço-tempo nos fornece um exemplo de análise fenomenológica pura das essências. Ao desenvolver essa concepção de essência, a subjetividade e a consciência fenomenológicas desempenham um papel importante para representar uma representação relativamente objetiva da realidade das coisas. Por essa razão, o objetivo principal deste trabalho é buscar a complementaridade entre objetividade e subjetividade na consciência representacional e na produção de essências; Além disso, este estudo tem como objetivo demonstrar como a intersubjetividade fenomenológica atua na constituição das essências, para que possamos considerar a constituição das essências intersubjetivas como um caso possível de construção de um mundo real.

Palavras-Chave: Fenomenologia, Relatividade, Essência, Consciência, Subjetividade.

Resumen: Este trabajo pretende dibujar una nueva concepción de "esencia", comenzando por el análisis de las obras de Husserl (por ejemplo, Filosofía de la aritmética, Investigaciones lógicas, Ideas) y comparando las consideraciones de Einstein y Weyl (la mayoría de ellas inéditas) sobre cómo establecer un nuevo físico método que combina "análisis filosófico de la esencia" y "construcción matemática". La investigación sobre la naturaleza física del espacio-tiempo nos proporciona un ejemplo de análisis fenomenológico puro de las esencias. Al desarrollar esta concepción de la esencia, la subjetividad fenomenológica y la conciencia juegan un papel importante para representar una representación relativamente objetiva de la realidad de las cosas. Por esta razón, el propósito principal de este artículo es tratar de abordar la complementariedad entre la objetividad y la subjetividad en la conciencia representacional y en su producción de esencias; además, este estudio pretende demostrar cómo la intersubjetividad fenomenológica actúa sobre la constitución de las esencias, de modo que podríamos considerar la constitución de las esencias intersubjetivas como un posible caso de construir un mundo real

Palabras-Clave: Fenomenología, Relatividad, Esséncia, Consciencia, Subjetividad.

#### Introduction

In the same year as Husserl's *Crisis*, in a writing entitled *Physics and Reality*, Albert Einstein (1936) affirmed that the physicists see themselves as working with a rigid system of fundamental concepts and fundamental laws which are clearly well established, but that this is a serious problem at a time when the very foundations of physics itself have become problematic.

For the great scientist the science as a whole is nothing more than a refinement of everyday

thinking (Einstein, 1936, p. 349; Husserl, 1954, p. 112; Merleau-Ponty, 1960, p. 194). It is for this reason that the critical thinking of the physicist cannot be restricted to the examination of the concepts of his own specific field (Einstein, 1936, p. 349).

In Formal and transcendental Logic Husserl (1929) had just affirmed that the special sciences fail to understand the essential one-sidedness of their productions; in fact, they relate their combined researches to the universality of being and its fundamental essential unity. The present condition of European sciences necessitates radical investi-

gations of sense, so these sciences have lost their great belief in themselves, in their absolute significance (Husserl, 1929, pp. 4-5). But Husserl's Sense--investigation (die Besinnung) signifies nothing but the attempt actually to produce the sense itself, the sense in the mode of full clarity or essential possibility (Husserl, 1929, p. 9). I want to assume that the existence of real thing, which is the object of physics, is only given and can only be given as the intentional correlate of the processes of consciousness of a pure meaning-bestowing ego (Weyl, 1918, p. 69). The physical world, with which we reckon continually in our daily lives, this *objective* world is of necessity relative; it can be represented by numbers or other symbols only after a system of coordinates has been arbitrarily carried into the world. Intuitive space and intuitive time are the adequate medium in which physics is to construct the external world. The investigations concerning space and time appear to us to be a good example of the analysis of essences (die Wesenanalyse) striven for by phenomenological philosophy, an example that is typical for such cases where a non-immanent essence is dealt with. What remains is ultimately a symbolic construction of exactly the same kind as that which Hilbert carries through in mathematics (Weyl, 1949, pp. 113-116).

Precisely for these reasons, the formulation of Einstein's theory of Relativity – according to Hermann Weyl, one of Albert Einstein's most important discussion partners and collaborators – realizes "a method which combines *Wesenanalyse* (analysis of essence) with *mathematische Konstruktion* (mathematical construction)" (Weyl, 1956, p. 26).

In this article I intend to clarify that the concept of essence – which Einstein and Weyl received from Husserl's phenomenology – is on one hand strictly connected to this pair of opposites: subjective-absolute and objective-relative and on the other hand how this conception is always to be considered in a re-defining intersubjectivity manner as consequence of irreducibility between the Erleben (experiencing) and the *Erfassen* (understanding) in the process of understanding thingly reality. To this interpretation all sense-objects are - as essence in phenomenological sense – only a specific and possible manner of consciousness-givenness in a continuous intersubjective process of clarifying and understanding their totality and objectivity (Zahavi, 2003, p. 112).

At the same time I try to point out that for Husserl what the knower intends is not merely what he or she directly experiences, but what is objective in the sense of that which can be in theory experienced by any knower or a community of knowers in which each individual is aware of him or herself as merely one fallible instance of the process of knowing in general. Husserl also shows how these essences, these formal structures are also relative in the sense of pointing necessarily to a *tode ti*, a concrete, independently existing individual object of which they are the formal structures (Husserl, 1913a, p. 28; Zhok, 2012, p. 120). In this sense, the

essence itself is dependent upon the concrete individual. The overall theme then is that each of the two sides of this relationship, the formal/essential and the material/individual/empirical necessarily stands in relationship to the other in a way that both maintains the difference between the two poles, but at the same time shows how neither can be appropriately comprehended apart from its relationship or relativity to the other side (Zahavi, 2016, p.293). *Relativity* and *objectivity* thereby show themselves not as mutually exclusive alternatives, but as necessarily each connected to the other in this conception of essence. In this sense, we could speak about a phenomenological Relativity.

In an attempt to solve the question mentioned above, in the first two sections I will show why and how space and time, to which the Theory of Relativity is intimately connected, can be considered as essences in a phenomenological sense and how they could save their objectivity in science. I am going to affirm that every essence relating to something physical is a composition of different layers many-sidedly of different visions, a kind of essence of a different category many-sidedly constituted in my consciousness. For this conception are very important the early Husserl's studies (Husserl, 1886/1901) about the concept of number, the mathematical-logical notions of konnective Verbindung and Variations-Rechnung, such as Riemann's formulation of a n-dimensional multiplicity theory (Husserl, 1891, p. 232; Becker, 1923, p. 401; Boi, 1995, pp. 127-172). On the other hand, I pay attention to define the role of phenomenological subjectivity, and so, the role of *observer*, with his psycho-physiological structures and functions (kinesthesis) (Husserl, 1973, p. 85; Husserl, 1992, p. 90-97; Farber, 1940, pp. 307-325), the knower in the relationship between perception and reality.

In the final two sections, I try to explain my ideas about the importance of the Life-world and intersubjectivity in the physical constitution of essences. In fact, the knowledge of the objective-scientific world is grounded in the self-evidence of the life-world: things, objects are given phenomenologically as being valid for us in each case, but in principle only in such a way that we are conscious of them as things or objects within the world-horizon. In this life-world the co-subjects of this experience themselves make up, for me and for one another, an openly endless world of possible instruments (as symbolic constructions of mathematics and geometry) that allow us to represent an intersubjectively well established series of essences. The relativity of these essences shows the existence of a possible manner of consciousness-givenness in a continuous process of clarifying and re-defining their objectivity and validity (Husserl, 1992, pp. 33-36). This infinite and important process I'll call the intersubjectivity constitution of essences. The conclusion is based on some unpublished reflections by Albert Einstein that seem to me taking for granted and answering to this Husserl's great problem of intersubjective constitution of the world.

## Essence-eidos as reality of a different category and the role of Subjectivity.

We refer ourselves to the conception of essence, not in metaphysical sense of substance, the Aristotelic concept of ousia, but in the Platonic one of eidos, idea, that directly involves the act of seeing. Nevertheless, the eidos, in this sense, is a result, a copy of those realities that "I saw", in an higher world, upon this material one. For this reason, the research into essences (Wesensforschung) is the perfect coordination between the Ideenschau and Ideenerkenntnis, that we define as a priori knowledge (Husserl, 1988, p. 13).

Husserl seems to hold this important characterization of concept of essence, but his conception of eidos, free from the Platonic transcendent relevance, is deeply influenced by that of Kant (Husserl, 1956, pp. 256-258). In Kantian philosophy the essence is: "the first inner principle which concerns the possibility of the existence of something in general" (Kant 1973, p. 467); so, the psycho-physiologic inner act of seeing and the logic concept of possibility are bound together in the phenomenological conception of essence, which constitutes the basis of all our experience and knowledge.

In *Ideas I* Husserl defines the *essence* as an object of new kind, an individual object which gives itself in an *eidetic vision*. Experience is therefore an *empirical vision*, consciousness of an individual object: what is seen when that occurs is the corresponding pure essence, or *Eidos*, whether it be the highest category or a particularization thereof – down to full concretion. The specific character of certain categories of essences is such that essences belonging to them can be given only *one-sidedly*, in a sequence *many-sidedly*, yet never *all-sidedly*. Correlatively, the individual singularization corresponding to such essences can then be experienced and otherwise objectivated only in inadequate *one-sided* empirical intuitions (Husserl, 1913a, p. 10).

Every essence relating to something physical is a composition of different layers many-sidedly of vision: the *Ding* is not given in itself as a spatial constituent, but it is a kind of essence many-sidedly constituted in my consciousness. For this reason, the early Husserl's studies about the concept of number, besides that notions of konnective Verbindung (collective representation) and Variations-Rechnung (calculus of variations) furnish the formal and mathematical basis for his conception of essence, such as Riemann's formulation of a *n*-dimensional multiplicity or variety (Husserl, 1983, pp.408-411). Particularly relevant, from this point of view, is the Husserlian formulation in the *Prolegomena* to the Logical Investigations of a multiplicities theory or doctrine in which the mathematician theorizes his thought objects as objects that produce possible relations of such determined forms in a formal ontology (Husserl, 1913b, p. 247; Husserl, 1901, pp.110-112).

Therefore, an essence is consciousness of something, an object, a something to which the intuitional regard is directed and which is itself given but in the intuition; any possible object – logically speaking - has prior to all predicative thinking, precisely its modes of becoming the object of an objectivating, an intuiting regard which reaches it in its personal selfhood, which seizes upon it. Seeing an essence is seeing in the pregnant sense and not a mere and perhaps vague making-present. The seeing is an originarily presentive intuition, seizing upon essence in its personal selfhood (Husserl, 1913a, p. 10). Phenomenologically, we can say that natural world is thinkable as the correlate of consciousness, and what the things are, they are as things of experience. Experience itself gives us their sense: the *Erlebnisse*, as well as our ways to live experience, as thing perceptions, are our correlates of our factual experience in which real world seems to us one of many possible worlds, correlates of eidetic possible modification of our experiencing consciousness idea (Husserl, 1913a, p. 10).

This eidos must manifest itself throughout all the potential forms of mental being in particular cases, must be present in all the synthetic combinations and self-enclosed wholes, if it is to be at all thinkable that is, intuitively conceivable. Phenomenological psychology, not as naiveté, but as an eidetic phenomenology is therefore exclusively directed toward the invariant essential forms. For instance, the phenomenology of perception of bodies will be the presentation of invariant structural systems without which perception of a body and a synthetically concordant multiplicity of perceptions of one and the same body as such would be unthinkable (Husserl, 1997, p. 24).

In this way, Husserl (1917) clearly says that experience of something external, of something physical is itself a mental experience, but related to the physical through our intentional experience. Naturally the experienced physical thing itself, which is presupposed as what is physically actual in the world, the thingly real, with all its real moments of necessity does not belong to the inventory of essences proper to us in our experiencing life-process (Husserl, 1976, pp. 376-377).

Husserl (1936) affirms that in consciousness the organs of perception play a constant role, specifically their function in seeing, hearing, etc., together with the ego's motility belonging to what is called *kinesthesis*. Thus sensibility, the ego's active functioning of the living body (*Leiblichkeit*) or the bodily organs, belongs in a fundamental way to all experience of bodies. It proceeds in consciousness only in combination with the kinesthetically functioning living body, the ego functioning here in a peculiar sort of activity and habituality (Husserl, 1954, p. 109).

Therefore, purely in terms of perception, physical body and living body (*Körper* and *Leib*) are essentially different – living body, that is, understood as the only one which is actually given to me as such in perception, my own living body (Husserl, 1954, p. 109; Husserl, 1992, p. 90), the privileged *observer* (the *Beobachter* in Einstein's Relativity as origin point of frame-system). However, though the objects of the world, if they are to show their very own being, necessarily show themselves as *physi*-

cal bodies, this does not mean that they show themselves only in this way; and similarly we, though we are related through the living body to all objects which exist for us, are not related to them solely as a living body (Husserl, 1954, pp. 109-110).

The consciousness of the world, then, is in constant motion; we are conscious of the world always in terms of the different ways of being conscious.

#### Essence and real world.

In general, we ascribe a *real* existence to material things, and we accept them as constituted, shaped, and colored in such and such a way, and so forth, as they appear to us in our perception in general (Weyl, 1952, p. 3). These material things are immersed in a manifold of analogous realities which unite to form a single ever-present world of space to which I, with my own body, belong.

With Kant, Hermann Weyl (1918) in his greatest work *Space*, *Time*, *Matter* affirms that space is only a form of our perception; and in the realm of physics it is perhaps only the Theory of Relativity which has made it quite clear that the two *essences*, space and time, have no place in the world constructed by modern mathematical physics (Weyl, 1952, pp. 3-4).

Real world, and every one of its constituents are, and can only be given – Weyl says – "as intentional objects of acts of consciousness" (Weyl, 1952, p. 5). I "have" the perception, but it is only when I make this perception in turn the intentional object of a new inner perception that I "know" something regarding it. In this second act the intentional object is immanent: like the act itself, it is a real component of my stream of experiences; whereas in the primary act of perception the object is transcendent: it is given in an experience of consciousness but is not a real component of it. What is *immanent* is absolute, it is exactly what it is in the form in which I have it in *its essence*, by acts of reflection.

On the other hand, transcendental objects have only a phenomenal existence in my stream of consciousness; they are essences because "I see" them as appearances presenting in manifold ways and in manifold "gradations" (Weyl, 1952, p. 5). It is the nature of a real thing to be inexhaustible in his essence; we can get an ever deeper insight into this eidetic content by the continual addition of new experiences, partly in apparent contradiction. From this arises the empirical character of all our knowledge of reality.

The contents of consciousness do not present themselves simply as being (such as conceptions, numbers, etc.), but as being now filling the form of enduring present with a varying content. Time is the primitive form of the stream of consciousness (Husserl, 1928, pp. 387-388), so that one does not say this is, but this is now, yet now no more. If we project ourselves outside the stream of consciousness and represent its content as an object, it becomes an event happening in time, the separate stages of which stand to one another in the relations of

earlier and later (Weyl, 1952, p. 5). That is to say, every material thing can, without changing content, equally well occupy a position in space different from its present one. This is immediately gives us the property of the homogeneity of space which is the root of the congruence conception (Ryckman, 2005, p. 145-176).

Consciousness, without surrounding its immanence, becomes a piece of reality. Moreover, as result of this, consciousness spreads out its web, in the form of time, over reality. Change, motion, elapse of time, becoming and ceasing to be, exist in time itself; just as my will acts on the external world through and beyond my body as a motivating power, so the external world is in its turn active (Wirken). In fact in physics we can see how cosmic time and physical form are bound together with one another. The new solution of the problem of amalgamating space and time offered by the Theory of Relativity – according to Weyl – brings with it a deeper insight into harmony of action in the world (Weyl, 1952, p. 6).

In a similar "transcendental" sense Einstein (1936) affirms that physics treats directly only sense experiences and the understanding of their connection. But, at first glance, even the concept of the real external world of everyday thinking rests exclusively on sense impressions. Einstein is well aware that the first step in the positing of a real external world is the production of some sort of order among sense impressions by the creation of general concepts, relations between these concepts, and by relations between the concepts and sense experience. It is in this sense that the world of our sense experiences is comprehensible. The fact that it is comprehensible is - in Einstein's opinion - a miracle (Einstein, 1936, p. 351). The connection of the elementary concepts of everyday thinking with complexes of sense experiences can only be comprehended intuitively, and it is unadaptable to scientifically logical fixation. In Einstein's formulation there exists for the individual an I-time, or subjective time, which in itself cannot be measurable. But I can associate numbers with the events in such a way that a greater number is associated with the later event than with an earlier one. This association I can define by means of a clock by comparing the order of events furnished by the clock with the order of the given series of events. In fact, in physics we use the clock as something for providing a series of events which can be counted. The natural sciences, and in particular physics, deal with such sense perceptions. The conception of physical bodies, in particular of rigid bodies, is a relatively constant complex of sense perceptions as mentioned above. A clock, a point or line, is also a body, or a system with the additional property that the series of events which it counts is formed of elements all of which can be regarded as equal: they serve to represent the complex of our experiences (Einstein, 1953, pp. 1-2).

The aim of science is, on the one hand, a comprehension, as *complete* as possible, of the connection between the sense experiences in their totality by the use of a minimum of primary concepts and relations (Einstein, 1936, p. 352).

### Life-world and intersubjectivity: the Husserl's solution.

Husserl in his *Crisis* book criticizes the disdain (*Verächtlichkeit*) with which everything "merely subjective and relative", and thus the sense experience, is treated by those scientists who pursue the modern ideal of objectivity changes nothing of its own manner of being (Husserl, 1954, p. 128).

In fact, to use the Lebenswelt, life-world, in this way is not to understand it scientifically in its own manner of being. Husserl responds to Einstein who uses the Michelson experiments and the corroboration of them by other researchers without a careful examination of what enters in there – the persons, the apparatus, the room in the institute, etc. But Einstein could make no use whatever of a theoretical psychological-psychophysical construction of the objective being of Mr. Michelson; rather, he made use of the human being who was accessible to him, as to everyone else in the pre-scientific world, as an object of straightforward experience, the human being whose existence, with this vitality, in these activities and creations within the common life-world, is always the presupposition for all of Einstein's objective-scientific lines of inquiry, projects, and accomplishments pertaining to Michelson's experiments. It is, of course, - according to Husserl - the one world of experience, common to all, that Einstein and every other researcher knows, in which he lives as a human being, even throughout all his research activities (Husserl, 1954, pp. 128-129).

But while the natural scientist is involved in his activity, the subjective-relative is on the other hand still functioning for that scientist, not as something irrelevant that must be passed through, but as that which ultimately grounds the theoretical-logical *ontic* validity for all objective verification, as the source of self-evidence, the source of verification. The visible measuring scales, scale-markings, the Euclidean space, the rigid bodies and clocks, the homogeneity and congruence in space, and so on, are used as actually existing things, not as illusions; but that which actually exists in the life-world, as something valid, is only a premise. The knowledge of the objective-scientific world is grounded in the self-evidence of the life-world. If we cease being immersed in our scientific thinking, we become aware that we scientists are, after all, human beings and as such are among the components of the life-world which always exists for us, ever pregiven; and thus all of science is pulled, along with us, into the merely subjective-relative life-world (Husserl, 1954,

The question then arises: what is the relationship between the *objectively true world* and the *life-world*. As we already know, physicists, who are human beings like other human beings, who know themselves as living in the life-world, the world of their human interests, have, under the title of physics, a particular sort of questions and their theories are the practical results. And this includes, as Husserl has said, everything *objectively a priori*, with its necessary reference

back to a corresponding *a priori* of the life-world: this *reference-back* is one of a founding of validity (*Geltungsfundierung*) (Husserl, 1954, p. 143).

If we seek out, simply looking around us, what remains invariant in the life-world throughout all alterations of the relative, we involuntarily stop at what alone determines for us in life the sense of talking about the world: the world is the universe of things, which are distributed within the world-form of space-time and are *positional* in two senses (according to spatial position and temporal position) - the spatio-temporal *onta*. Here would thus be found the task of a life-world ontology, understood as a concretely general doctrine of essence for these *onta* (Husserl, 1954, p. 145).

Things, objects are *given* phenomenologically as being valid for us in each case, but in principle only in such a way that we are conscious of them as things or objects within the world-horizon. Each one is something, *something of* the world of which we are constantly conscious as a horizon, as a *frame-system*. On the other hand, we are conscious of this reference-horizon only as a horizon for existing objects (Husserl, 1954, p. 147-148).

If I remain purely within the realm of seeing, I find new differences, arising in very manifold form in the course of any normal seeing, which, after all, is a continuous process; each phase is itself a seeing, but actually what is seen in each one is something different.

This is the phenomenological proof, at a theoretical layer, of all Relativity processes. I am directly conscious of the thing existing there, yet changing from moment to moment, I have the experience (*Erlebnis*) of an *exhibiting of* although the latter, with its remarkable "of" becomes visible only in reflection. Implied in the particular perception of the thing is a whole *horizon* of nonactive (*nichtaktuelle*) and yet co-functioning manners of appearance and syntheses of validity (Husserl, 1954, p. 162).

Every essence here can be displayed only in relativity, in an unfolding of horizons in which one soon realizes that unnoticed limitations, horizons which have not been felt, push us on to inquire into new correlations inseparably bound up with those already displayed (Husserl, 1954, p. 162).

The world exists as a temporal, a spatio-temporal world in which each thing has its bodily extension and duration and, again in respect to these, its position in universal time and in space (Grelland, 2017, pp. 87-94). (Husserl, 1954, pp. 164-67).

## Conclusion: Einstein's answer and the intersubjective essence of the world.

In an unpublished manuscript from the same year as Husserl's *Crisis*, Einstein seems to turn to this phenomenological problem using the same Husserl's terminology:

Science as something existing, confectioned, is more than something of objectivized and, at the same time, impersonalized that we as

human beings know in general. Science as something becoming, as destination, is also equally subjective, psychologically conditioned as all the other human aspirations. (...) Naturally there are people who affirm that science has produced a too high connection among experiencing facts [erlebbaren], so we can deduce from experienced facts other experiencing facts. According to the opinion of some positivists, the possible solution of such assignment would be the unique end of science. (...) There is in fact a stronger and, for this reason, also darker impulse behind these assiduous disputes: the will of understanding Being, the Reality. However, it seems that we have avoided using such words, since we are really embarrassed in clarifying what we must properly intend for real [Wirklich] and what we must understand [begreifen] in this general affirmation. All these efforts are founded upon the trust that Being in its structure is in complete harmony (Einstein, 1931/1933, p. 1).

But, let us turn our attention to Husserl's conviction that in our continuously flowing world-perceiving we are not isolated but rather have, within it, contact with other human beings. Thus, according to this reading, the world exists not only for isolated human beings but for the human community; and this is due to the fact that even what is straightforwardly perceptual is communalized (Husserl, 1954, p. 165-166).

In this communalization, too, there constantly occurs an alteration of validity through reciprocal correction. In reciprocal understanding, my experiences and experiential acquisitions enter into contact with those of others, similar to the contact between individual series of experiences within my (one's own) experiential life; and here again, for the most part, *intersubjective harmony* of validity occurs, and thus an intersubjective unity also comes about in the multiplicity of validities and of what is valid through them (Husserl, 1954, p. 166).

In this life-world each individual has experienced things, that is, what is seen by that individual and, through the seeing, is experienced as straightforwardly existing and being-such. Each individual knows that she, in her actual contact, is related to the same experienced things in such a way that each individual has different aspects, different sides, perspectives, etc., of them but that in each case these are taken from the same total system of multiplicities of which each individual is constantly conscious as the horizon of possible experience of this thing (Husserl, 1954, p. 166).

The *thing* itself, the essence, is actually that which no one experiences as really seen, since it is always *in motion*, always, and for everyone, a unity for consciousness of the openly endless multiplicity of changing experiences and experienced things, one's own and those of others (Husserl, 1954, p. 166-167). The co-subjects of this experience themselves make up, for me and for one another, an openly endless world of possible instruments

that allow us to represent an intersubjectively well established series of essences. An intersubjectively determined *world of essences* in which all sense-objects are only a specific and possible manner of *consciousness-givenness* in a continuous process of clarifying and understanding their totality and objectivity. A *merely subjective appearance* is valid as simply what exists in the particularity of its manners of givenness in life itself. In this general intersubjectivity, the concepts of *what is*, of *manners of givenness*, of *syntheses*, etc., are repeatedly relativised (Husserl, 1954, p. 167).

Then phenomenological *Relativity* comes into view, and finally, Einstein grants Husserl's solution its philosophical and scientific extraordinary relevance. In fact, in an unpublished 1941's manuscript in response to Prof. McCrady, a philosopher of the Oxford University in U.S., Einstein affirms that:

(...) Setting a physical reality, independent from any percipient subject with rigid physical laws of structure, has never been something lasting. In fact, it seems that also the actual theory of quantum physics does not change anything. This escape, which derives from a momentary embarrassment in a statistic formulation of the physical laws, is not to be considered as definitive, although another way has not been found yet. Physics on one hand, Psychology, History and Theology on the other hand, employ concepts of different nature to deduce the connections in the proofs. These two distinguished conceptual worlds cannot be fused together in an unitary structure. A thought will be always something of other in comparison to its correlative physical event in a nervous system, such as a representation of a person will be always something of different in comparison to a linguistic description of particularity of the same person (Einstein, 1941, p.1).

Referring himself to Husserl's phenomenology – as I think – Einstein concludes that:

(...) In our time *a new and original thought* is beginning to emerge. If this time has produced a progress of the epistemological sphere, so in fact it seems to me that we could not give for granted any reasonable ways that brings us from the *Erleben* (experiencing) to the conceptual *Erfassen* (knowledge) of things, since every thought is founded on a free theoretical construction, which systematically derives through *sense experiences* (Einstein, 1941, p. 2).

The world as it is for us becomes understandable as a structure of meaning formed out of elementary intentionalities. And meaning is never anything but meaning in modes of validity as related to intending ego-subjects which effect validity. Intentionality is the title which stands for the only actual and genuine way of explaining, making in-

telligible (Husserl, 1954, pp. 170-71). In this regard we speak about *intersubjective constitution* of the world: the world of life, which as a matter of course takes up into itself all practical structures is, to be sure, related to subjectivity throughout the constant alteration of its relative aspects.

Objective truth belongs exclusively to the attitude of natural human world-life: the world is from the start taken only as a correlate of the subjective appearances, views, subjective acts and capacities through which it constantly has its changeable but unitary sense. Now if the phenomenological Husserl's inquiry initiates, proceeding from the world back to the essential forms of these *appearances and views* of it, the ego-poles become the subject of essential inquiry, they become, in a new and still higher sense, the subjective aspect of the world and also of its manners of appearing (Husserl, 1954, p. 174).

But – according to Husserl – precisely herein lies the difficulty. Universal intersubjectivity, into which all objectivity, everything that exists at all, is resolved, can obviously be nothing other than humanity (Husserl, 1954, p. 183).

Transcendental intersubjectivity, which is constituted as a *relativity* in a plurality of egos, exists with the mode of existence that belongs to something *absolute*; in the form of an intentional life and for this reason it has an essential capacity to reflect on itself, on all its structures that stand out for it, an essential ability to make itself thematic and produce judgments and evidences relating to itself. But this essence includes the possibility of *self-examination* that starts from vague meanings and, by a process of uncovering, goes back to the original self (Husserl, 1929, p. 241).

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