'FEELING' AND METAPHYSICS IN WHITEHEAD

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Abstract. For someone who knows the history of Western metaphysics, it is entirely unexpected to hear that Whitehead's metaphysics contains as one of its fundamental pieces the concept of 'feeling.' This could work if one envisages a metaphysics of the human being but not metaphysics in general. In my paper, I show what sinuous ways Western metaphysics had to follow so that 'feeling' could be postulated as a universal feature of all entities in the universe and why 'feeling' is a sine qua non condition in conceptualizing the 'actual occasion.'

Keywords: Whitehead, metaphysics, feeling, function.

As is well known, *Process and Reality* represents Whitehead's main contribution to philosophy and metaphysics. The specificity of this metaphysical project is that it can be considered the most comprehensive modern functionalist type of metaphysics. In what follows, I intend to show how Whitehead's functionalism was possible from the background of Western philosophy.

Metaphysics was considered in the past the queen of the philosophical disciplines because its main object was the ultimate conditions of the intelligibility of things. According to Ernst Cassirer, there were two main metaphysical paradigms in the history of philosophy: the substantialist paradigm and the functionalist paradigm. In his influential book from the beginning of the 20th century, Substanzbegriff und Funktionsbegriff, Cassirer discusses at length these two paradigms. Introduced by ancient thinkers like Plato and Aristotle, the substantialist paradigm considered that things were a combination of two preexisting principles: Form and Matter. The formal principle – which in Plato involved the famous *Ideas* and in Aristotle the so-called *secondary substances* – was atemporal, immutable, and non-spatial. In contrast, matter was the element that belonged to the concrete world; the latter embodied the formal principle and also continuously changed, allowing the permanent replacement of the eternal Forms in the so-called sublunary world. Plato's myth of the Demiurge endeavored to explain in an intuitive or mythical manner the way in which these two principles interacted with each other, namely through the intermediation of a sort of divine power that created the concrete, material things by contemplating the eternal Forms and copying them into matter. A much more refined principle – but nonetheless sharing

the same conceptual structure – was Aristotle's *Primum Movens*, or the Unmoved Mover, which allowed change to happen in the world, that is to say the continuous emergence and disappearance of Forms in the material world.

The substantialist metaphysical paradigm received its name from the Aristotelian conceptual pair: primary substances and secondary substances. The first kind of substances were the concrete things, whereas the secondary ones were what we call nowadays logical genera and species, i.e., logical entities (what Whitehead called eternal objects). Due to the modern usage of the term 'substance,' we might have some difficulties in grasping Aristotle's conceptualization, but things become clearer if we remind ourselves that the ancient Greek term for 'substance' was ousia, which might be better translated as 'being.' In this sense, we can speak in Aristotle about primary beings and secondary beings or about a first level of beings - namely all kinds of concretely existing beings, like horses, trees, houses, ships, and so forth – and a second level of beings, the genera, and species to which each concretely existing being belongs. In this respect, a concrete horse belongs to the species of horses – the horseness, if we want to give it a name – and a concrete tree belongs to its respective species, the treeness. Further, the species of horses, in turn, belongs to a higher class, to the genus of mammals, for example, and then to that of living beings. Of course, to the latter belonged also the species of the tree in question.

Here is not the place to give a detailed picture of substantialist metaphysics. It suffices only to say that this thought paradigm was fundamental until the beginning of Modernity, when the new intellectual force represented by modern science challenged its domination, nevertheless without removing it completely. The two principles mentioned above changed into the Cartesian pair of substances: the intelligible or thinking substance and the extended substance. However, before addressing this change, we must say that pre-modern substantialism acknowledged the idea that a concrete thing is what it is because it embodied an eternal Form within itself. The concrete thing or primary substance was seen thus only as a temporary bearer of the eternal formal and secondary substance. In other words, the identity of a concrete being - what that being really was - was given by the secondary substance or the eternal Form. And, since knowledge - as Aristotle stated in Antiquity – was always a knowledge of the universal, that is to say, of the secondary substance or eternal Form that is present simultaneously in all the members of the class that it founds (the horseness in all concrete horses), matter, as the secondary principle of existence, tended to be - I would say, almost necessarily – neglected until modernity. Matter was not something universal, thus it could not be an object of knowledge. This is why the individual being, if considered entirely detached from all superior Forms that it embodied, was thought of as unknowable: individuum est inefabile.

This way of interpreting things started to be more and more challenged at the end of the Middle Ages, during the so-called quarrel of the universals or the quarrel between realism and nominalism. The first maintained that the secondary substances were real entities, real beings in which human thought only participates

(this interpretation sided with Plato and Aristotle). In contrast, nominalism denied that the universals or the secondary substances were more than names (*nomina*), i.e., instruments created by human thought but which do not have any prior relationship with pre-existent and correspondent secondary substances. Universals were not real; according to nominalism, they were only human mental instruments to cope with reality.

This victory of nominalism against realism had tremendous consequences for the whole of modern philosophy. The main consequence was that it changed forever the way in which our senses and their activity started to be thought. If previously, the sensible impressions we had about things had to pour themselves, so to speak, into the mold offered by the eternal Forms, now, in the absence of such Forms, knowledge contained an initial stage of chaotic sensations. The principle that there is a fundamental, ontological correspondence between knowledge that participates in the sphere of the eternal forms, on the one hand, and real things, that also participate, only in a different way, in the same sphere of eternal things, on the other hand, was broken forever. Knowledge was seen now as being completely separated from any ideally existing reality. This is why knowledge had to be grounded now exclusively on itself and on our sensations, which are the only ones that give us acceptable information about reality.

The nominalist paradigm enabled the development of modern science in that it forced people to resort to observation as the ultimate decisional factor instead of any pure logical constraint. If we were to remember the polemic between Cardinal Bellarmine and Galileo or the polemics between the characters of Galileo's dialogues, we must say that they were different forms of the polemic between realism and nominalism, as conflict between observation and what was thought of as necessary, indisputable, principles of thought. However, observation did not mean simply becoming aware of sensations. Such an attitude would have been possible in the previous realist framework. Now, sensations were not thought of as ordering themselves spontaneously in our minds to produce knowledge. The human mind was considered to be endowed with its own capacity to organize these sensations according to its own criteria.

Yes, for Descartes, these criteria happened to be still the criteria of reality. Nevertheless, Descartes was the first to see that once you abandon the presupposition of the ontological correspondence between the mind and reality, the mind necessarily separates itself from any of its external objects, and there is no internal necessity to connect it again with the external reality. The ontological Cartesian duality of substances – now in the form of mind and material reality (whereas in the past, the duality was that between the eternal Substances, or Forms, and matter) – becomes a logical necessity. One needed to resort to a conceptual artifice in order to re-establish the correspondence between mind and reality, namely the discovery within one's own mind of the idea of a perfect God, which is the ultimate warranty that our knowledge is not the product of a *malin génie*, of an evil genius who wanted to cheat us malevolently.

On the other hand, Descartes introduced the idea that the human mind must have its own criteria of truth or of what must be considered to be true. He refused to accept ready-made ideas or ideas that he could not see to be true based on his criteria. These criteria were that each piece of knowledge is acceptable only if it is 'clear' and 'distinct,' or undoubtable. Suddenly, all substantial forms of medieval philosophy were thus removed because all of them proved not to be clear and distinct, that is to say, self-evident. And, of course, they were no longer selfevident because the forms of things that our senses presented to us were no longer immediately recognizable, as it happened in the previous substantial metaphysics. The only thing we can be sure of is what we perceive through our senses without doubting it, namely that things move, that they are extended, and that they have consistency or impenetrability. That is to say, we must completely avoid acknowledging any form that could penetrate our rational knowledge along with sensations. And, of course, extension or motion are qualities that no one can doubt concerning what our sensations present to us, whereas colors can be perceived differently.

What is important to highlight in this context is that Descartes not only disapproves of medieval prejudices, but he also takes over into philosophy the scientific method of mathematics. One of the main features of this method is to develop a *model* or a specific 'concept' that is different from the concept of things that we usually use in our common experience. Such a model builds up also the principles of a science, in general, and from it all the body of that science is to be deduced.

Thus, modern science does not start from common human experience (as seemed to happen in the former substantialism) but from a previously elaborated concept of how its object must be thought of. An intuitive example of the practice of the new science can be found in Galileo's explanations concerning the motion of the Earth, which was no longer thought of as starting from the immediate experience but starting from a hypothesis that was allowed to contradict this experience (as the heliocentric hypothesis did).

With Descartes and modern science, a new way of thinking emerges in modern philosophy, which is functionalism. This type of thinking reaches its first complete self-awareness through Kant, who denies entirely any correspondence between the human mind and external reality, a correspondence resulting in an adequate knowledge of this reality. However, it is important to highlight that, despite the fact that many features of the later functionalism can be found in most of the works of modern philosophers, these features were also attended by other features that belonged to the previous substantialist metaphysics. Such was, for example, the idea of an objectively existing matter that supports the diversity of qualities (whether they be primary or secondary). Or, expressed more generally, the idea that one can know something unmistakably about objective reality: that, for example, the primary qualities belonged to the extended substance of the material world.

Kant, as stated earlier, breaks entirely with this view. He considers that our mental acts, grounded ultimately in our categories, are based on functions, that is to say, on the acts of bringing several representations under a single, more general, one (Kant p. 203; A 68/B93)

Important in this context is the verb 'to bring,' in other words, the spontaneous activity of the human mind. In Kant, the human mind is, concerning its knowledge relationship with nature, explicitly depicted as a judge who weighs the proofs according to its own criteria and this image is contrasted with one in which the intellect is a passive pupil who listens to whatever nature might display to him. In other words, Kant rejects entirely even the ultimate traces of any correspondence theory: traces that could still be found in Leibniz's monadology, where the monads, despite the fact that they had no contact with the external world, still could mirror the latter within themselves, so that Leibniz could speak about the parallel worlds. The external world, seen independently of any human knowledge, becomes, in Kant, a 'thing in itself,' that is to say, a completely unknowable sphere of reality. What we know is only the world of experience or the world of appearances or phenomena.

What is the main metaphysical contribution of functionalism? The main contribution of functionalism is that everything we consider to be knowledge of external reality is nothing but a model that we build about it, and we cannot go beyond this model to see if it might or might not correspond to reality. Everything happening in European philosophy followed this path since Kant developed in his philosophy this fundamental assumption. Even Hegel's philosophy – his Absolute Idealism – is a theory of God seen from within the world of phenomena. Hegel thinks of God as the 'World Spirit' that develops within the world by constantly creating the world and moving it forward. Hegelian ontology and metaphysics is not at all a relapse into the pre-Kantian philosophy, but, as it were, the complete development of the Kantian philosophy as well as its historical insights.

All of the important representatives of 19th-century philosophy, such as Schopenhauer, Marx, Mill, Nietzsche, William James, and, later, Henri Bergson, thought in the wake of Kantian philosophy. They are all functionalists in this sense. Things become even more radical within 20th-century phenomenology, the method of which starts explicitly from the assumption that we need to put into brackets the question of the relationship of our knowledge to external reality and focus only on the analysis of our concepts.

However, in all these cases, we deal rather with a functionalist approach, an approach only of human knowledge. Since Kant marked European philosophy so indelibly, perhaps it would have been very difficult, if not impossible, to enlarge this perspective, which was restricted only to human knowledge, to something beyond it.

In this context, it is imperative to highlight that Kant's philosophy was intimately related to Newtonian science and its materialist premises. So intimate is this relationship that Kant even claims that one of the main intentions of his metaphysical research in the *Critique of the Pure Reason* is to answer the question

of 'How is pure natural science possible' (Kant p. 147; B 20) (the 'pure' natural science concerns the principles of Newtonian physics) and to transform philosophy itself into science after the model of Newtonian science. The importance, for Kant, of Newtonian science resided in its capacity to predict the future mathematically, something that, according to him, no generalization of the past experience would ever allow because such a generalization lacks *necessity* and *universality*. These two latter features define all propositions of Newtonian science, as well as of any other recognized science, such as geometry or logic.

Much later, after Kant, philosophy had real difficulties in integrating the new developments in physics and making them organically compatible with philosophy, deriving them from its ultimate ontological or metaphysical assumptions. In the Kantian model of philosophy, which would then extend into the interpretation of the whole of human knowledge as a system, the different sciences are specific developments of certain consequences derived from the ultimate principles of philosophy. This is why Kant said that his philosophy's explanation regarding the capacity of Newtonian science to so accurately predict the evolution of nature is the main argument for the validity of his philosophy (the so-called 'experiment of pure reason': Kant p. 111; B XVIII-BXIX).

After Kant, several things happened. First, with Hegel, one discovered the historicity of man. Second, Darwinism entered the scene, challenging the existence of ever-lasting organic species. Third, and this is perhaps one of the most important influential factors on Whitehead's philosophy, Newtonian physics ceased to be seen as the ultimate step in the development of natural science. 20th-century physics abandoned the assumption of absolute space and time and, with it, the belief that relativism is specific only to human knowledge. Relativism became an acknowledged fact about the whole of reality. Motion was now seen as a much more profound principle of reality than its carriers, or, in other words, energy was considered to shape the fundamental characteristics of real bodies and not viceversa. Due to these changes in physics, the assumption of a universally and objectively existing matter that keeps its properties was metaphysically no longer tenable. Simultaneously, on the other hand, the Kantian assumption of a universal structure of the human mind and knowledge was also abandoned long before, therefore, making it impossible to think in the old, traditional conceptual framework. Or, this conceptual framework, to which even Kant subscribed, was that of things whose identities were to be thought of starting from the concept of a substance endowed with its accidents, i.e., a subject. This structure was used even when, in the 17th century, the famous distinction between the primary and secondary qualities was introduced, a hypothesis that was derived from the methodological needs of modern science. The fact that modern philosophy then borrowed the view of science had a very negative impact on modern philosophy, 'ruining' it, considers Whitehead. (SMW p. 55) In other words, modern philosophy started from the premise of a lifeless matter (substance) endowed with a few properties (accidents). Accordingly, human beings and knowledge were impossible to see as part of reality and of inanimate matter, being thought of as opposing it.

Now, if the inherited concepts through which philosophy and science interpreted reality, the human being and knowledge no longer worked, how was it possible to speak about these items? The human mind could no longer be seen as participating in the external ideal Forms (which were abandoned with latemedieval nominalism), but neither could it be seen as having an internal universal conceptual structure, as the post-Kantian evolution of philosophy showed. To a certain extent, metaphysics was brought back to the pre-critical debate concerning the communication of substances, i.e., to the question of how it was possible that things could act upon each other and assimilate external actions, or influence each other. With the difference that no immutable structure was any longer acknowledged. In other words, how could one think of real things if one no longer could apply the traditional understanding of their identities? In traditional substantialism, it was relatively simple to think of this identity because one thought of them through the concept of their corresponding species. The horse was what it was due to the 'horseness' that it embodies. Later, in modern and Kantian functionalism, indeed, objectively existing eternal species were not accepted any longer. However, there were still accepted unchanging forms or categories of the mind, i.e., subjectively existing eternal Forms. But post-Kantian evolution and 20th-century physics eliminated the belief in such an unchanging mind structure.

The main question that Whitehead faced was, thus, what were things if they were not matter and form? But this question was related to another, namely, what was the fundamental nature of human nature, given that man could no longer be thought of starting from the traditional conceptual distinctions or as being confronted with the modern inanimate 'matter.' A purely phenomenological stance – which again separated human being and knowledge from the rest of the world – could not be adopted because it was based on the modern assumption of inanimate matter firmly located in space and time (a hypothesis proved as completely false by contemporary science), only in relationship to which one could state that human knowledge builds its phenomenal world. In other words, if things are, essentially, not matter and form, what are they?

Although Whitehead did not consider that science had the ultimate word in knowledge, he acknowledged its fundamental importance for human knowledge. Recent development in science led to the conclusion that things were *energy*. Thus for Whitehead things had to be thought of also as energy.

The problem with the concept of 'energy' is that, as Whitehead says, it is a scientific concept, i.e., an abstraction. 'It must be remembered, said Whitehead, that the physicists' energy is obviously an abstraction.' (SMW p. 36), being therefore quite opaque for a metaphysical understanding, which strives to go beyond science by making science itself ontologically intelligible. Energy is activity, emphasizes Whitehead (SMW p. 35-36). And activity is related to motion. However, energy as activity can no longer be thought of mechanically as the result of a mechanical impact upon a given inanimate body because, then, all the previously rejected metaphysical assumptions come back through the backdoor. Things must be thought of then as 'pure' activity.

In other words, we can no longer think of them as consisting of an ultimate activity performed by an irreducible agent because then, again, we fall back into the traditional substantialism, with its subject-object distinction.

But now, another aspect of Whitehead's philosophy comes to light: he refuses not only to think in the traditional conceptual framework but also to think of ultimate components of reality, which is, in fact, another aspect of the formmatter distinction. Thus, when we say that in Whitehead, things must be thought of as 'pure' activity, it is not as if we should see them as a sort of pure spirit devoid of any material content, in motion, something like pure hallucinatory motions. In fact, things remain the same concrete things in Whitehead, a concreteness that past modern philosophy thought of as matter. The difference is that now things are seen as being eternally 'in the making,' without there being any first moment of the world and any ultimate immutable and eternal components (not even something like the Democritic atoms). However far we were going into the past or down into matter, we would never discover a first moment or an ultimate component, but always things that are in motion and transformation. I.e., in activity, because this is a transformation that does not imply the metamorphosis of a preexisting immutable core that simply or passively continues to exist – like the matter of past philosophy – but is a constant striving to acquire a form and maintain it. 'We conceive actuality as in essential relation to an unfathomable possibility,' (SMW p. 174), says Whitehead in this respect. Or, 'The unity of all actual occasions forbids the analysis of substantial activities into independent entities. Each individual activity is nothing but the mode in which the general activity is individualized by the imposed conditions.' (SMW p. 177)

This is why things as an activity must not be thought of according to the old principle of identity, based on the concept of a subject that accomplishes that activity (in which case, the 'activity' is separated from the subject, which continues to exist, as they said, as a statue, isolated from everything), but always as a sort of preexisting sediment of previous forms of activities. As far as a thing is obviously constituted of many component parts and elements, it is then composed of an unfathomable number of activities or forms of energy that have previously been actualized in the form of those components.

How can one think of an activity – which is a form of motion – if that motion is not to be conceived within the mechanical paradigm, in which the motion is always the motion of an inanimate bit of matter that was hit by another absolutely passive bit of matter? There is no other option than to think of activity in terms of spontaneity. In this respect, Aristotle already distinguished between the efficient cause – that later became the concept of cause conceived of mechanically as an external cause – and the teleological cause, or internal cause, that defines development in nature. However, in Aristotle, teleological cause was the secondary substance that coordinated the whole development from within. Such a substance was denied by Whitehead. Then, the only means to comprehend the concept of activity is to relate it to human behavior.

At this level, spontaneous activity is always oriented toward something; that is to say, one cannot think of it without using the concept of intention and with it of desire. But desire is a form of feeling, of self-experience. This is why Whitehead seems to be logically constrained to introduce the concepts of 'feeling' and 'experience' in his metaphysics as a fundamental principle of the intelligibility of things. (Metaphysics, since Aristotle has been defined as the science of the ultimate principles of things, which were not only principles of their being but also of their intelligibility). Energy or activity is thus a manifestation of 'feeling.'

Of course, hearing that the concept of feeling is used beyond the realm of living beings is not only unexpected but also completely against our usual way of understanding reality. And it is especially seen with deep mistrust by trained philosophers who swear on the Kantian legacy. But we must recall that in Whitehead's opinion, philosophy must dare to give a rational explanation of the whole of reality, not only of the human being, while employing all the data that sciences provide us. Faced with the recent development in physics, one has then two options: either to leave them unexplained, as a matter of accepted perplexity, or to try to create a coherent interpretation of the whole of reality, by overturning our thought expectations and beliefs. Of course, this is what Whitehead did. However, such an enterprise had not only a negative aspect but also a positive one, and the latter necessarily entailed the creation of a new philosophical terminology.

Suggestions for relating the ultimate substance of nature to a sort of activity dominated by sensibility (and not by Spirit, as in the previous tradition culminating with Hegel), thus by what was considered *irrational* in the past, had been around long before: in Leibniz, monads had appetite and exerted 'living forces;' Schopenhauer thought of the thing in itself as a cosmic Will. Nietzsche, in Schopenhauer's wake, spoke about the Will to Power, but one that did not define the whole of reality as something universal and unique but was related to a multitude of impulses, among which one becomes dominant and unites all the others within the framework of its power. And Bergson also spoke about the creative cosmic Urge, l'élan vital.

All these thinkers thought of the involvement of sensibility on a grand scale (Schopenhauer, Bergson), so to speak, or they belonged to substantialism, like Leibniz. Now, 20th-century physics has brought the discovery of the quanta of energy, i.e., of quanta of activities, or – translated into the new metaphysical vocabulary – of will, urge, impulse, desire etc. But now, these quanta of energy, which Whitehead calls quanta of activity, had to be thought of as pure functions, without the substantialist basis of a preexisting subject. And thus, we might say that it was almost natural to think of them as quanta of feeling that emerged into a subject, creating it. And with this reuniting of several feelings, immediately you get a process of synthesis after the model of the Kantian synthesis, with all its moments, the apprehension of the diverse, its reproduction in memory, and then its recognition in concept (features which certainly were well-known to Whitehead, either through his own reading of Kant's works or as a consequence of his

familiarity with William James thought, who was a good knower of Kant and who was deeply influenced by the latter, or through the new discipline of Husserlian phenomenology).

To a certain extent, also Nietzsche's Will to Power is an anticipation of Whitehead's concept of 'actual occasion,' because the center of power that Nietzsche regards as the ultimate ground of reality, is something that emerges without being at all an eternal substance or subject, and in its dynamic, brings the 'many' under the 'one' and increases them by one. Only that Niesche could not think at such a microcosmic level as Whitehead did. (Whitehead read Nietzsche's book *The Will to Power.*)

Conceptualizing real things starting from 'feeling' is more challenging than it may seem because these things can no longer be thought of through traditional philosophical means. What is then a 'feeling' if there is no subject or substance having a feeling as its accident? As I said before, this is not quite true. In fact, Whitehead cannot completely abandon the notion of 'subject' or 'substance;' he rather re-interprets it. While in previous philosophy, these concepts referred to immutable entities considered as ultimate elements of reality (think of the Kantian 'subject,' for example), in Whitehead, they refer to entities that *become* subjects or substances and that, therefore, can, indeed, manifest 'feelings.'

However, one must take into account that they become such subjects through a constant and complex process of integrating other subjects moved, similarly, by their feelings. And this integration itself is coordinated by 'feelings.' Saying that things are energy or, expressed more concretely, things are built of quanta of energy can be, therefore, translated first into 'things are sets of activities' and then into 'things are clusters of feelings.' Or, expressed in the cryptic way of Whitehead's language: 'The many become one and are increased by one.' (PR p. 21).

In this way, feeling becomes a fundamental category of reality, being much more than an accident or property. In other words, in Whitehead's view, feeling does not only belong to someone, but it creates that someone or something. Whitehead requests us to shift our attention from the entity that already is to the entity that makes itself and especially to this self-making and self-creating process.

The extreme oddity of this new perspective perhaps becomes more intuitive if we imagine a building or a tower assembling itself and growing by itself without the contribution of any human worker or other devices or robots. Then, we just would see how the components place themselves next to each other, and, as a consequence, the whole building would grow as an entity. In this process, the components are not at all entirely passive either, but they are endowed with a specific magnetism that attracts the rest of the pieces, helping them to set themselves in their places. In this case, we would deal with that 'activity' or 'feeling' as a fundamental feature of reality that Whitehead envisages.

Metaphysics, ever since Plato's days, has been unable to believe that something like that is possible, that a building can build itself. Therefore, it felt itself constrained to introduce the worker into this image, the one who moves the blocks and stones and puts them in their place. This worker was the Platonic Demiurge and later the Hebrew or Christian God.

It is certain that by introducing the concept of feeling as such a philosophical category, Whitehead was also forced to think of it starting from the way in which it was comprehended with respect to human beings, and therefore, he had to take over the whole interpretation of the human consciousness. In fact, he acknowledges that the principles of his philosophy can be derived from the findings of natural science *and* psychology. And in the interpretation of man, the unity that that man is, started to be understood in a functionalist way.

In this respect, for example, Whitehead quotes William James, who says that consciousness is a 'function' (SMW, p. 143). Of course, James means 'function' rather in a mathematical sense, one that renders its elements values derived from its own perspective or identity. 'Consciousness, says William James, in this respect, is supposed necessary to explain the fact that things not only are, but get reported, are known.' (James p. 4). The same perspectivism was maintained by Nietzsche in his conception of the will to power, where a dominant impulse subdues all other impulses, forcing them to work for it. Both in James and in Nietzsche, the unity that man is represents a dynamic unity of a multitude of components that grow together.

The mathematical meaning of function – that which creates the new philosophical paradigm of modernity and that belongs to modern science – regards a rule that puts in correspondence the elements of two sets. Kant translated this meaning of function into his philosophical language, saying that 'by a function (...) I understand the unity of the action of ordering different representations under a common one.' (Kant 203; A 68/B93) and, by this, obviously, the meaning present in that common representation was assigned to the whole multitude of the other representations.

Once Whitehead interprets all real entities as 'feelings' and thus as 'activities,' and since activity can be thought of only in the framework of human experience, he immediately needs to take over this functionalist view dominant in the humanities starting with the 19th century and also supported by William James. In this view, human activity always implies an interpretation of all objects of that activity according to a previously existing set of interests and self-understandings. When Whitehead generalizes then the concept of *feeling* to the whole of reality, he also transfers the functionalist interpretation of the content of 'human consciousness' to every real entity. This is why such an entity transforms necessarily into a dynamic conglomerate that must constantly interact with the whole of the universe and individualize itself within this universe by bringing under the same self-identity every content that it can experience.

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