**OUR INCORRIGIBLE** **INNATE EPISTEMIC FACTORS AND LIMITANTS OF COGNITION**

***Or***

***The limits of mathematics and logic and the para-rational nature of reality***

***Or***

***The a priori determinants of cognition as deliverers of rationality, as a minimal aspect of reality***

***Or***

***Epistemic Limits to Possible Science***

***The Para-rational nature of reality***

***What the epistemic limits to possible science force to presuppose regarding the nature of reality***

**To my beloved Celia**

**and in memory of my wise and dear parents**

**Julian M. Gálvez**

**OUR INCORRIGIBLE A PRIORI FACTORS (enablers?) AND LIMITANTS OF COGNITION**

***Their role in cognition as innate information of the sensorial and of the structure of the non-sensorial rational aspect of para-rational reality***

**Their epistemic role in the delivery of a simplified and practical manner of conceiving the world from a para-rational reality.**

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# ABSTRACT

This is an updated and expanded version of my book “Our Incorrigible Ontological Relations and Categories of Being”, originally published in 2017. This augmented version preserves the previous content of the former book, but also addresses the innate *a priori* forms with which the intellect responds to sensorial activation and represents to itself the sensorily given -that is, what acts in our senses- and the forms with which it represents or makes patent to itself the things in the world which do not act on our sensory organs, such as the feeling brought forth by beauty or the emotion of the sublime in mystical experiences, and how these too, constitute a limit to possible knowledge.

As the former version it refers to the innate *a priori* information about reality in itself, with which the intellect makes possible its cognition, yet also constrains our possible knowledge of what there is to the rational aspect of what exists. As shown in this work, the information they provide, no matter the extent of empirical data, does not suffice to explain reality, which makes necessary to presuppose the existence of, either a higher order of reality beyond the rational cognitive reach, or that the nature of what is judged rational reality be a mere aspect of what there is. In other words, that mankind is doomed to have a mere glimpse of what exists and its nature, and totally unable to attain an ultimate explanation of reality.

August 16, 2023

**FOREWORD**

This is an updated and expanded version of my book “Our Incorrigible Ontological Relations and Categories of Being”, originally published in 2017. In this new version are also addressedthe*a priori*enabling and limiting factors of perceptual and imaginary physical representation, what, following Kant, may be called “forms”, of sensitivity, and include the temporal, the spatial and what I shall call, the emotional.

The main epistemic conclusions here presented are that reality is para-rational and that the human intellect is not structured to have but a minimal knowledge of an infimal aspect of reality, most likely, just enough of a nature merely appropriate for the survival as a species in the competitive environment of the physical world. In other words, that an explanation of all is in no manner accessible with our intellect, regardless of how much empirical data be generated, or processing power and time applied to its search. The mind lacks the necessary concepts to generate an ultimate explanation of reality

Notwithstanding all the knowledge attainable by way of empiric-rational judgment, whether logically or mathematically, our system of cognition cannot deliver understanding of *“why there is being rather than nothing”*. It is not just an issue of empirical information, but of how the intellect represents sensorial input, converts it into information about the world, and what judgment can extract from it. It can be said that, in the same manner that mankind had to acknowledge that the earth was not the centre of universe, it is time to realize that its belief in the powers of empirical rationality, and thus of science, to explain all there is, is unfounded. It is not just a question of whether our knowledge is phenomenal or noumenal as did Kant, as not even a phenomenal explanation is possible. Humanity is intellectually doomed to have only a limited -if not infimal- understanding of what there is. The powers of reason are not those dreamed by philosophers since Parmenides and Plato. Humankind lacks the intellectual resources to understand or explain the world *lato sensu,* nor to overcome such hurdle. Our intellect is geared just for our survival in a competitive realm short of resources to sustain a greater intelligence than the one we are biologically endowed with. The power of our intellect -and thus of science- to understand and arrive to an ultimate explanation of reality, is irremediably limited, if not also biased by our passions or animal instincts, which -worsening such limitation- have the power to overrun adherence to its rational conclusions. The intellect cannot overcome the bounds of rationality. Our intelligence is nearer to that of an oyster than to that of a deity.

Moreover, though it might seem questionable, rationality makes necessary presupposing a para rational ultimate condition of all. In fact, rationally speaking, it is so amazing that there be “Being”, that relative to it, the existence of a supreme intelligence is a more viable hypothesis than the existence of something instead of nothing.

As in the previous editions, this book is, primarily, about the nature and epistemic role of the Ontological Scheme that the ontological relations and categories determine, and what this leads to presuppose regarding the nature of reality. It is here claimed that these ontological relations and categories are incorrigible innate limitans to human understanding. However, contrary to what was held in the original edition, that there must be a higher order reality if the world is to be judged explainable, it is here held that all reality, even the one distinguished according to these ontological relations and categories, is actually meta or para-rational, and our intellect either enables our distinction or, better still, conception, of an aspect that works in the world, what can be called “the empiric-rational” reality. To the point that it can be held that the human intellect simply converts the para-empirical -if not translate or reduces it- into a rational version of it. That is, into our three-dimensional rational reality. Though rationality is a practical conception from the para-rational, it appears as a distinction of the rational aspect of our para-rational reality, because it is a conception based on what is distinguished. An aspect is not a part that the intellect properly speaking distinguishes, but how it sees the para-rational (this includes, the para-empirical).

Although some might argue that the world and reality is a simulation or a thought of a superior mind or consciousness, this is alien to this work. Here are only addressed how the mind converts impulses into representations of reality, which judgment relate to allow us to discern to what category something belongs, and thus, as a cause or a effect, of what.

It is concluded that our judgment lacks the means to deliver an ultimate explanation, and that reality is para-rational, that is, constituted by relations and categories or something else to which our intellect identify.

# FOREWORD – Empieza muy bien

This is an updated and expanded version of my book “Our Incorrigible Ontological Relations and Categories of Being”, originally published in 2017, under a new more encompassing title. As explained in the former version, it is here shown that, contrary to the prevailing dogma in philosophy and science since Parmenides, reality is not rational, and our possible knowledge of its ultimate nature is barred to the intellect. By this is not claimed that reality is irrational, but para-rational. The mental structures we are endowed with to understand reality, only allow for a rational version or interpretation of the world, and judge irreal, if not irrational, whatever fails to meet the standards of mathematic and logic. But there is more to reality than such, and reality, properly speaking, is para-empirical, that is, structured by orders of relations and categories of a higher order to those with which our intellect operates, if not by something else or not structured at all. Rationality is just a simplified and practical manner of interpreting the para-empirical and para-rational reality we live in. There are facts that seem illogical, as well observed Parmenides *regarding change and plurality on the argument of how could there be change if the Being cannot both be and not be what it is? This argument applied to co-existence and forced to consider that the Being could both be and not-be, was solved with the argument that there was no contradiction since what it is not, is something else.*

*It can be said that classical -and even modern philosophy up to our days -as Meyerson or even Heidegger did- is an intent to explain out this supposed apparent contradiction between reason and the observable. Besides the sensorial scepticism of Parmenides, and the rational of Pirro, the proposed solutions have ranged from the atomism of Democritus, the world of ideas of Plato, the substance and accident of Aristotle, to those proposed by empiricism, or Hume’s and Kant’s theories of knowledge, positivism, materialism, or relativism (that is, depending on the position of the observer).*

*In our days there are myriad of theories regarding the nature of reality based on the discovery of quantum phenomena, the power of AI to simulate worlds, if not also, grounded on an extended conception of consciousness, near death experiences, etc.*

*This work only refers to our cognitive powers, to what is it that they are structured and capable of cognizing, and how the limits that they set to our possible knowledge, force to presuppose that reality is not just phenomenal regarding sense experiences, but phenomenal too, regarding rationality. It might be argued that this is a Kantian approach, and that Kant already said this. But I judge to be more specific, regarding reality in itself. I show that there is a correspondence between the a priori aspect of the empirical, and the a priori aspect of rationality, but that as is already known, the empirical aspects cannot properly represent all of reality, an as I here hold, the rational cannot identify all the structure or whatever it be, that makes it explainable.*

The fact is that we are barred from cognition of what ultimately there is. A higher order of intelligence is required. Probably one that can distinguish other ontological relations and categories of things. But, to access and understand the para-rational nature of reality probably requires a biological mind that would have been a hindrance to successfully compete in a world of scarcity, impossible to hold or feed. This explains why intended rational explanations of ultimate reality, are self-contradictory, either circular or absurd, as the one that nothingness exists. However, the magic of the fact that *“there is something rather than nothing”, is such that mankind should not be surprised if* human consciousness subsist after death, and free from the shackles of human judgment, raise to the beauty of a superior existence and knowledge.

# Former Foreword

It can be reasonably said that mankind is merely programmed to have the minimum knowledge required for a successful adaptation to the world with the greatest economy of intellectual resources; that its system of cognition delivers a simplified practical manner of conceiving the world. The operations of the mind are intensive consumers of energy, and we are one of the many species competing for it in a realm of scarcity.

In fact, our cognitive powers are infimal. The representations of reality delivered by our perceptual powers is limited by and restricted to a few forms of representation. What is sensed as temporal and spatial, indicate that they are three dimensional adaptations of a higher order of empirical reality or even of a non-sensible physical reality as has been proposed by particle physics and quantum theorists. Our senses only respond to stimuli generate by photons and assigns to what it judges to exist as being of a non-sensable nature, the same forms of sensation with which it reacts to sensorial stimuli. Our sensorial faculties force us to presuppose that there is more to empirical reality than what is observed, or that these are simplified manners to represent it. Moreover, what we distinguish as not being of a sensable nature -such as an idea of a neutrino- is assigned a sign -it can be a shape or mere expressions as words or numbers- though we cannot have direct awareness of the same.

In what regards our conceptual resources -as the ontological relations and categories- it is these what deliver understanding. Understanding -as shall be further explained- is mere awareness of relations.

Though the subject of this work originally was solely intended to address the role of our primary ontological relations and categories, after further thought, now it includes reference to the forms of representation as factors and limitans of perceptual awareness.

As in the former book, conclusions are of two basic kinds. First, *epistemic*: that our forms of representation of reality and the ontological relations and categories with which judgment operates -as said- are cost effective, practical simplified manners of delivering awareness of a minimal aspect of reality; just the aspect needed for our competitive adaptation for survival in the world. As happens with the ontological relations and categories, which are innate non-empirically-accessible information about the world necessary for interpreting and acquiring some understanding of reality in itself, so too are the forms of perceptual representation innate manners to enable a simplified representation of physical reality. As it is explained, it cannot be denied that the mind - contrary to Kant- does generate true knowledge of the world, though only of what might be called the empirical-rational aspect of what there is.

The *second* main conclusion is ontological, not to say metaphysical: that rationally speaking, existence requires that the nature of reality be para-rational. A rational nature, and lesser still a temporal empirical -perceptual- one, does not suffice to explain *“what there is”* nor holds the ground for existence in-itself. The nature of reality cannot be merely rational as the rational cannot -rationally speaking- exist by itself without a para-rational that complements and fundaments it. It is, thus, observed that Kant’s distinction between the phenomenal and the noumenal can stand, provided that by phenomenal knowledge of the world be understood the in-itself under a rational perspective, and, by noumenal, the para-rational, that is, what lies beyond or comprises the rational-perceptual aspect of reality. In fact, even the empirical three-dimensional spatio-temporal reality appears to require a para-empirical reality to exist in itself, as it needs grounds that cannot be rational to make it explainable, as it is contradictory to think that a rational reality itself.

More specifically, it is explained that our knowledge of the world is grounded in sensation and *a priori proper non-sensable information about reality in-itself, without which there is no possible cognition*. As shall be shown, sensorial input is shaped by innate forms of sensation that supposedly play the role of forms of representation. Knowledge is acquired from such *empirical* constructs (not sensorily given but delivered by the mind in response to sensorial stimuli), by means of distinctions with relations and categories *a priori* givenand what can be rationally inferred (either logically or mathematically) from these distinctions and the *a priori proper* principles of judgment that rationality determines. It is these circular sources of knowledge what makes possible the progress of science. Due to the fact that the sensorial does not suffice to generate knowledge, as there is no possible empirical scientific knowledge without *a priori proper* content contributed by the mind, humankind is barred intellectual accessbeyond what the perceptual -and this includes change in any of its forms, from biological evolution to motion and time (which is the measure or measurable change)- and the conceptual forms of ontological relations and categories force to presuppose regarding the nature of reality. This cognition only reveals the existence of a reality that cannot be a mere three-dimensional temporal rational version of the world in-itself.

In fact, both a reality of a higher order of relations or a non-relational reality beyond the rational would-be para-rational. Even a reality of a higher order of spatial dimensions would be so, since the ontological relations and categories of rationality that our intellect operates with, would not suffice to explain it, as it is the distinction conforming the *a priori* what delivers and explanation. And if the rational happens to be the only level of structure in which a physical reality can exist (that is, only in the three spatio-temporal dimensions), the para-rational can be said to be metaphysical. However, what can be inferred about the para-rational nature is practically nil, except that there is a rational requirement that it exist and be the nature of reality. We lack the intellectual tools to inquire about the same and whatever might be rationally concluded, cannot be a proper idea of what or how it is.

February 2023. JMG

# ALTERNATIVE FOREWORD TO THE NEW EDITION

This is a revised and expanded version of the previous editions of 2017 and 2019 of my book *“Our Incorrigible Ontological Relations and Categories of Being*” under a different name that comprises some observations and conclusions regarding our forms of representation -including change time and certain emotions-, and the limits of perception.

As before, in spite of Kant’s claim that all our knowledge is phenomenal, it is shown how rationality, understood as judgment according to such ontological relations and categories, enables knowledge of reality in itself. In other words, it is here held that by rational knowledge must be understood (i) empirical knowledge from (a) what is sensed or (b) properly inferred to be the case from the sensed, and (ii) what is distinguished as *a priori* information about reality in-itself that our intellect is endowed with of what is not sensable, such as is the one of causality. By information can be understood the subject matter of cognition, not depending on it being cognized to be held.

Indeed, knowledge of reality in-itself is not exclusively originated by sensorially given facts, as is held by empiricism. Knowledge of the in-itself also originates from the *a priori proper*, as are the ontological relations and categories, (and our *a priori* forms of empirical representation of objects, motion, change or time, and space, and also emotions) which is information about the world in-itself, of how its empiric-rational aspect is structured and what there is. Emotions -such as awe at the starry night, is -for example- a programmed awareness of something beyond our possible understanding, actually awareness that there is something extraordinary, well beyond what reason can explain.

Our system of cognition is geared not just to have awareness of the sensable, but of what cannot be sensed and is necessary for sensations to be of epistemic value (as well as for social behaviour, etc.). Moreover, though always withing the dichotomy of rational and irrational, in the same manner that the intellect has these means and manners *a priori* of sensation to deliver knowledge of rational reality, it also has certain other innate *a priori* information on the existence of a supreme and ultimate reality -the divine- that manifests itself as mystical, or emotions, that seem to be the fundament of religious belief.

By physical I refer to matter or energy, that is, to particles or energy waves, whether these be subjective or objectively determined. How we imagine them depends on the forms with which our representations of reality or ideas construct the same; and how they are distinguished by us according to our ontological scheme. Awareness of a higher order reality -that is, of a para-empirical and para-rational reality- should make our conception of the physical as something almost metaphysical, that is, as also differing from how we represent it. Very much as happens with some physical or empirical facts, as seems to be quantum events.

It must be realized that no matter our familiarity with the fact that there is existence, there is nothing deserving more astonishment than it; -paraphrasing Leibnitz- with *“that there be something rather than nothing”*. Regardless of how amazing the inventions and constructions of the human mind to investigate and explain the cosmos and the most basic constituents of matter, it is here explained why humanity is doomed to ignore the ultimate answer and actually, not even come close to an explanation of it. As shall be shown, the epistemic powers of the intellect do not suffice to ultimately understand reality. Empirical reality cannot be contrarian to mere three-dimensional space-time, and rational reality cannot exist by itself, and lesser still if temporal, and this is irremediable. Rationality presupposes that all reality is structured according to our ontological scheme of relations and categories and in no manner in contradiction with the principles that derive from it, as some -since Parmenides- have interpreted change to be. But a reality structured according to our limited ontological scheme, that is, which is merely rational, cannot be explainable, nor exist by itself. Moreover, it is contradictory with rationality.

As explained since the first editions of this book, the human mind operates with sensorial input or ideas represented with “forms” of sensation, and according to a few ontological relations and categories that constitute rationality and conform our ontological scheme.

These are innately determined, and consequently, incorrigible. Though they enable some knowledge of reality, they also constrict our cognition to what must be assumed to be an infimal aspect of what there is. This limitation bars us from an ultimate explanation of existence. In turn, both of these, force to presuppose -as just said- that the nature of the real is, properly speaking, para-empirical and para-rational, if not ultimately, just para-rational, for that may actually be the nature of the para-empirical.

As previously, I want to point out that, in the same manner that there seem to be higher orders of spatial dimensions there might be other ontological structures of higher order that our mind cannot intellectually access, if not something else. The ontological relations and categories -with which our judgment operates- are the basic relations and categories of rationality and cannot be held to apply to what might explain reality. Contrary to Hegel´s claim that all the real is rational, and the rational is all there is, logic demands that the nature of “what there is” -including the rational-be judged to be more than rational, what I call, para-rational.

As in the previous edition, the subject matter of this work may seem to be alien to the philosophical debate of our days. However, it addresses a topic that, as can be seen throughout the history of philosophy, can lead to a ‘*weltanschauung*’ (worldview) practically alien- to any correspondence with ultimate reality in itself, as well as to a false idea of what is the subject of study of philosophy.

The relevance of the ontological relations and categories has been questioned by highly reputable philosophers, as did Jean Westerhoff in his book on the ontological categories[[1]](#footnote-1). However, their importance is grounded in the fact that our intellect operates according to these *a priori proper* ontological relations and categories to generate knowledge of the world. These are the relations employed by the intellect in its search for identification and understanding of sensorial and mental distinctions. They constitute *a priori* given information about certain universal traits of reality or of an aspect or reality, without which the mind cannot turn sensations into knowledge nor deliver understanding -that is, awareness of the nature of the relations held by what brought them forth or they stand for. Without these ontological relations and categories there cannot be knowledge from sense experience nor faculty of judgment to infer any knowledge of what is not directly experienced from it. Not only are these relations and categories what inform our rational conception of the world *lato sensu*, but, also, what determine the principles of judgment on which logic and mathematics are dependent upon, such as -contrary to Russell’s conclusion about sets- that a plurality cannot be an instance of itself, or that an effect does not antedate the cause, or that a number cannot be less or more than the extension it stands for. These principles enable the proper assignation of these relations and categories to the forms that the intellect puts forth upon sensorial stimuli. It is these what makes possible the furthering of knowledge by way of inference from the mere sensable or mental distinctions constructed with the same.

Inversely to Kant, it is here shown that it is precisely with these relations and categories that true knowledge of reality in-itself is attained. However, this knowledge that the human mind can access by means of rational judgment or, rather, from rational reality, though huge from a human perspective, is the only accessible to mankind and, properly speaking, infimal. At most, it is knowledge a mere aspect of what and how things are. These ontological relations and categories are our ultimate tools to understand reality, yet do not suffice for an ultimate understanding of it, in particular of *“why there is being rather than nothing”,* as they it-selves, cannot be further explained.

In the same manner that our senses do not deliver but a partial and practical idea or representation of what is sensed, such as only of the side of an observed object, or of its exterior looks, in the same manner our knowledge of reality is limited to the aspect structured by the few ontological relations with which judgment operates, and the ontological categories that such relations determine, thus limiting the classes of things that we can judge to be existents.

This intellectual constraint of ours is irremediable, in the same manner that the “forms” given by our intellect to sensorial stimuli- are set mental determinants of the kind and extent of empirical knowledge accessible for cognition. Moreover, the ontological relations and categories constitute structures that inform *(make the backbone of)* our possible thought and language and cannot be in any manner modified, subsumed, or suppressed.

As said, it can be held that these ontological structures probably are biologically embedded information about an aspect of the structure of the non-sensable that there is, whose objective, mind-independent existence, cannot be denied without having to presuppose it. They constitute information that the mind contributes with to sensation to generate knowledge from sensory input or from what can be inferred of it according to the principles of judgment that they determine. As to the “forms” of sensation, they seem to be just practical manners of representing reality or presenting the empirical to the intellect. That is, just to the extent required for our adaptation to the physical world. Most likely, nature has not endowed us with microscopic nor telescopic eyesight, for the same reason that it has not endowed us with para-rational powers of cognition. The biological requirements of having these faculties are not cost effective in a world of scarcity to compete for survival.

Thus, it is here held that our possible knowledge of reality is not just limited by the empirical information that can be accessed and how it is represented by the mind, but also by the scant available (given) information about the structure of reality that our primary ontological relations and categories stand for. I am not referring to empirical limitations to knowledge of reality- we are well aware of these- but to a totally different constraint; to the one posed by the form in which the empirical is presented to our judgment and the structure that judgment *presupposes* to constitute such representation, as these forms and structure cannot be the ones according to which reality can exist all by itself. Properly speaking, these relations and categories are presuppositions regarding the nature of reality, as were the forms of sensation (such as colour) presupposed to be in the things in it-selves. It has always been assumed that all reality is rational, but it is not. Said presupposition does not hold in what regards all of reality, it only holds in what regards an aspect of it that we can know of.

These limitations entail that there is more to reality than what can be rationally accessed, whether mathematically or logically, and I am not just referring to what quantum phenomena are leading to presuppose regarding the nature of the universe. More precisely, from the nature of reality that the ontological relations and categories constitute, it follows that the nature of reality is neither rational nor irrational, but properly speaking, para-rational, and thus, way beyond our cognitive powers.

I thank my friend Horacio Walter Bauer –a fond reader of Heidegger-, Jan Westerhoff, Ian Kidd, and Sergio Barberis, for all the attention and support they have given me with the first edition. I want to thank my dear cousin, Cristobal Williams, for his observations. In particular, I thank Celia, my dear wife, for her patience, and my sons Julian, Florence, and Michael for their great and continued encouragement.

January 2017/March 2023. JMG

# INTRODUCTION

This book is an expanded version of my book “Our Incorrigible Ontological Relations and Categories of Being” published in 2017/2019. It carries a new title as it encompasses other subjects. Originally it addressed the epistemic role played as enablers and limitans, by the different basic kinds of *a priori* determined relations and categories with which judgment operates, as without the same no knowledge is possible. In this new edition the book also addresses the role played by the “forms” of sensation and certain emotional responses in the cognition of what there is.

Among the new conclusions arrived at are, that reality is para rational and para-perceptual, and that our system of cognition is just geared to deliver a simplified practical level of knowledge of reality, only enough, in extent and depth, for mankind to adapt and survive in a world of scarcity. While our sensorial system enables the cognition of a three-spatio-temporal dimensional kind of reality, our ontological scheme enables the distinction as real -as rational- of our immediate reality, with the emotional enabling awareness of the nature of certain things beyond our empirical-rational cognitive reach. Though the sensorial and rational systems make possible knowledge of what there is in-itself, they only deliver cognition of an infimal aspect of reality, and though the emotional enables awareness of a para-rational reality beyond what can be intellectually grasped, it does not deliver further knowledge of it. We shape reality, sort of translating a para-rational world into the empirical-rational of physical temporal reality.

In other words, the conclusions presented in this work are, on one side, epistemological, and, on the on the other ontological.

*Epistemological*, as it is here held, *first,* that knowledge -that is, conscious (and probably unconscious) awareness of the existence of something in-itself- depends on certain *a priori* constitutive elements (relations to other existents, as well as to forms of representation of what the sensations stand for) which are contributed by the intellect based on how sensorial stimuli are generated. In other words, that true knowledge of the world -and thus, empirical science- is not precisely empirical, but also constituted by these *a priori* given elements of cognition. That not even the hardest of true sciences, is free from what might be judged a subjective component. And *second,* that it is not possible to attain an ultimate explanation of reality with the same, that there is a limit to the extent of possible knowledge of what there is. That these a priori forms are enablers of only the kind of empirical- rational reality that we can distinguish That there is an epistemic limit to possible science.

*Ontological,* since based on this limit to possible knowledge, *firstly,* it must be assumed that there is more to reality than can be rationally distinguished with these *a priori* constitutive elements of cognition; and *secondly*, that the nature of reality must be judged to be *para-rational*, that is, of a nature not logically nor mathematically explainable. That reality surpasses by far what is possible for us to conceive as existent.

Summarizing, our possible knowledge of reality is constrained to what *the a priori* constituents of it make possible to cognize. It might be held that the role of the forms of sensation and that of ontological relations and categories were observed by Kant, which is to a great extent correct, though with certain variants that lead to other important conclusions. As to the fact that reality in itself is an unknown I dare say that it is only regarding what there is beyond the rational aspect of it. That is, beyond our Ontological Scheme of ontological relations and categories and the extent that the forms of sensation match or correspond with reality in itself. The fact is (a) that judgment operates with the forms of sensation that it assigns to sensorial input, relations, and classes, that is, relating and classing; and (b) neither all reality in-itself can be judged to be relationally constituted. As shall be seen, an explanation of reality presupposes, not just the existence of a reality that cannot be comprised under rationality but requires that reality in itself not be rational but para-rational. That is, not just related and classed according to the kinds of ultimate relations and classes that our intellect can distinguish. This is, that in order for reality to be explainable, the rational cannot be but an aspect of “what there is”, as “what there is” must be of a para-rational nature in order to exist in itself. The structure of rational reality alone does not suffice to explain it, regardless of all the possible empirical data.

It thus results that this book can be said to be about the *a priori* determinants of cognition. That is, not exactly factors, nor elements of knowledge, but rather what make cognition to be as it is. That is, about the forms with which the mind represents (a) the sensorial stimuli, or the manner in which those “forms” are employed to represent ideas -including among the last, the language with which some thoughts are conveyed-, (b)on the basic ontological relations and categories that constitute our Ontological Scheme, and (c) an innate determined emotional response to awareness of certain relations between sensed things, such as melodies, flavours, shapes, ideas, etc., as is art, or to certain ideas Since all these elements also reflect a limit to what is cognizable, it is here explained what such limitation forces to presuppose regarding our epistemic powers and the nature of reality in-itself. For example, though the ontological relations and categories are causal factors of knowledge, since they bridge the gap between the mind and the world, they also are limiting factors of it, for they constrain our cognition of the objective world to the aspect of reality that they can stand for as structure of it. That is, of reality being of a rational nature, rather than para-rational, as must be assumed to be the nature of what exists “by” itself.

Since, in my opinion, the last is one of the interesting conclusions arrived at and presented in this work -though not necessarily the most significant- allow me to illustrate how our cognitive faculties can restrain and alter our world-view.

## *Perceptual Constrains*

1. *Incapacity to represent all possible reality.*

By incapacity to represent all possible reality as it is, I refer to reality as it is in-itself. That is, to the impossibility of conceiving it without a symbol, a sign, or at best, with a picture.

Imagine taking a Flatlander cosmologist out of the fictional two-spatio-temporal world of only height and depth, where she exists[[2]](#footnote-2). The idea is to move her along the side of her flat reality, for her to see the universe she exists in, from the outside and our three spatio-temporal reality from the inside. The idea also is, that upon her return to Flatland, she may report to her fellow Flatlanders what she has observed of both their reality and ours.

Although we assume that once back in her world, she would astound her Flatlander colleagues with the account of our higher order reality, the truth is that she will disappoint them, as she will report that both Flatland seen from the outside and the three-spatio temporal reality from the inside, are practically identical to how a Flatlander sees reality within Flatland. The major difference, she would say to have noticed, is that Flatland, from the outside, appears to be just a mere *one-spatio-temporal universe*, and not two spatio-dimensional, as from the inside, she would conclude that the nature of her world is incomprehensible if not rationally contradictory physical nature.

Her view from the outside would not be two-spatio dimensional, because her vision of Flatland would be limited to a depthless vertical line. Depthless, given that their reality, seen from the side, being flat, lacks depth (even if Flatland were a universe in the surface of a sphere, which we shall assume it is not). And temporal because being moved about without the capacity of mentally constructing a flat surface from the succession of vertical lines, she would judge the line no longer perceived as no longer existent. In fact, her interpretation of the spatial dimension of width as a temporal dimension -and not spatial-would follow from the incapacity of Flatlanders to conceive and perceive other spatial dimensions besides those of height and depth, as such capacity would be a hindrance to their successful adaptation to their flat reality. In other words, such cognitive incapacity of her would be caused by the Flatlanders natural inability to mentally record the perceptions of the vertical lines as co-existent in space with the previously perceived vertical lines. This is a consequence of Flatlanders being unable to mentally organise the succession of the mental representations of lines of reality, one beside the other to form a continuous idea of surface (Even if she were moved along Flatland laying horizontally, she would still see her world as being one dimensional and temporal, due to the fact that as she advances the linear sections of the surface of Flatland falling out of her visual field, would be preserved in her memory as images of past events).

Though the visual sections of the surface that passes away for our Flatlander, will continue to be objectively existent to us, each of these linear sections would be a past reality no longer existent to her. This would be so, to the point that if she were moved back, she would deem the supposed lineal view as ‘resurrecting’ from the past, but not as co-existent with the lines that she had already perceived, and she would not realize to have been moved backwards. The same would be the case with her observation if Flatland is the surface of a revolving sphere. Such misconception would be a consequence of her incapacity of having awareness of the spatial relations that constitute a 3D surface.

As to her report of what she saw in her visit to our three spatio-temporal reality, Flatlander cosmologists would be surprised with her answer that our three-dimensional reality, seen from the inside is identical to Flatland, except that she was unable to recognise or understand anything, for things in it -even the inhabitants of it- would turn out to be of an illogical shape, that is, contrarian to the principle of non-contradiction. This would be due to the fact that she could not realize that something was a chair, even if it was explained to her that it is one, nor what was a person, for she would at the time only see of the three-spatio-dimensional objects, a mere two-dimensional line -for she would perceive depth- and, as she was moved about, things would appear to her as being and not-being since -from her limited and moving perspective- things would change their looks all the time and she would fail to recognize the relation between them. This would be a consequence of her perception of them as totally temporal and one dimensional. She would see the things of her world in Flatland as they are in it, so a table in Flatland would correspond with how a table is in her reality; but she would see of the objects in our world only a minimal linear aspect of the same at the time; she would perceive them as merely two spatio-dimensional temporal realities. Consequently, she would not find any reasonability or logic in how they appear to be in our three spatio-temporal world. She would be unable to grasp any functionality in our objects based on the succession of shapes that she perceives, such as tables and chairs at times with legs and then without them. If she were to describe how we look like, she would depict us in the weirdest manner, or, simply, as totally absurd, unexplainable, two-spatio dimensional entities.

As should be expected, her fellow Flatlander scientists would deem her observations entirely inconsistent with science and common sense. They would deny her claims of having left Flatland, something that, in their opinion, is impossible. Unable, as they are, to conceive higher spatio-temporal dimensions- they would judge Flatland to encompass all possible reality. Still more, they would point out that it is contradictory that a one-dimensional temporal universe enclose two spatial dimensions, or that a temporal world of one dimension may enclose a temporal realm of two, or that a motionless atemporal thing move and be under constant change, disappearing and reappearing, being and not being, as some three-dimensional objects may seem to her. Moreover, they would not accept that entities of a greater number of spatial dimensions be just one or two dimensional or more, subject to change in a greater degree than the lower dimensional. They would be unable -as may be happening to us with quantum phenomena- to explain higher-spatio-dimensional events, such as objects passing through Flatland. Empiricists, naturalists, and physicalists in their universe would argue that the sole fact that they appear to our Flatlander as one or two spatio-dimensional would be the very proof that she never left flatland, and that there is no such a thing as another reality beyond theirs.

It is worth noting, that the scientists in Flatland would be certainly right in considering her conclusions about their external reality and ours to be mistaken. However, her observations would be correct, for nothing that she claims to have seen is not objectively true from her perspective. Her observations would correspond with what she distinguished of the reality shown to her, according to her intellectual faculties. Because of this, it could be said that she has a limited rather than a wrong conception of reality: of both her reality from the outside and of our reality from the inside. But of a reality not limited in its extension, as would be the view of a part of reality. It would be a limit to an aspect of reality, *of how reality can appear to an observe lacking all the required means of cognition* necessary to distinguish it.

Now, what if there are spatio-temporal realities of greater number of spatial dimension, and we were taken out of our four-dimensional reality so that we may see them from the outside and have a glimpse of what there is in the higher order reality? Would we not conceive them but four dimensionally and, as the flatlander, find their content unintelligible? As to our view of our four-dimensional world from outside, it is impossible for us to imagine what we would see of it, as to do so, is necessary to have the possibility of conceiving a representation of higher order of spatial and, in the same manner, temporal dimension.

Though these examples only apply to our cognition of spatial dimensions and time, it illustrates how our conception of reality depends on our cognitive capabilities. Indeed, our experience of time[[3]](#footnote-3) and space might just be the end result of a limited perceptions of reality, if not of a simplified manner of perceiving a higher order of spatial dimensions or a more complex reality[[4]](#footnote-4), as might be the conception of the unfolding of a spatial dimension folded[[5]](#footnote-5) in itself.

It can be thought that with our cognitive faculties –in addition to being unable to perceive a higher spatio-dimensional reality- the greater the number of spatial dimensions, the lesser we would perceive and understand what there is. We would probably reach a point where nothing is detectable, where things would be hidden to our view in a myriad of hyperspaces and among a plurality of different hyper-orders of temporalities.

The point is that our worldview can be substantially altered by the lack or addition of a mere cognitive capability. Our idea of reality, as in her case, would well be the result of ascribing our mental structures, naturally intended for the minimal conception of reality merely apt to our worldly survival, to a reality of greater number of spatial dimensions, or even, to a reality of a different or more complex manner of existing.

### *Second Example: Temporality*

What is temporality if not the representation as real of what cannot exist without dependence on the subjective existence of non-existents, that is, of the past and future?

Mental constructs, as the past and future only exist as mental representations of what cannot exist outside of our mind. Our distinction of change and, thus, of motion and time (what a change is relative to another) are a simplified manner of delivering awareness of a reality or an aspect of a reality, that would not be otherwise distinguished with mere sensorial experience (that is without a representation, memory, and foresight), that is, judgment. There cannot be awareness of change without memory. Change cannot exist in itself if the past ceases to be and there is no future. And what is then a subject under motion or change, if not too a mental construct dependent on memory and judgment? Is this not a reason to ask if there is more in the nature of what changes than what memory and judgment enables us to be aware of, either in part or as an aspect of?

While without memory we would lack awareness of the existence of what we distinguish as temporal (subject to motion and change) and there would be no awareness at all of the spatio-temporal -for awareness also requires and presupposes time- on the other hand memory constrains such temporal representation of motion and change to something that cannot exist in-itself as we distinguish it to be. Change, thus, seems to be a practical simplified manner of generating some awareness of what a reality more complex is, such as of a fourth -if not more- spatial dimension and/or higher order of motion and change, if not also something of para-rational nature.

In fact, let us assume, that we have no memory (that is, no record of past events), that we only have awareness of the present. That our representation of what there is does not depend on what non-is, as are presupposed to be the past and the future events. Would temporal reality be distinguished? In the first place, there would be no awareness of motion, nor consciousness of an “I”, nor of anything that, in order to be distinguished by us, has to be compared with mental records of past events. We would be unable to recall the past -what was and is no more present- neither our childhood nor our early years nor parents, nor friends, nor to have a reason to expect a future differing from our present. Moreover, we would lack knowledge and, lesser still, awareness of causality. We would not distinguish anything at all. The rational world of pluralities of things, properties, causal factors, effects, would not be possible since the suppression of just one of the ontological relations -as is explained below [[6]](#footnote-6), terminates with the possibility of distinction. The same if we had memory but lacked judgment to compare and infer the difference.

Our distinction and conception of the temporal requires of memory of past events and judgment. Actually, even if judgment were had, the acquisition of knowledge of rational reality, requires memory. Causality alone implies time, and time presupposes memory. The temporal reality that we distinguish cannot be distinguished without it. There cannot be time for us, without it. It must be assumed that without memory endowed observers in the universe, neither the past nor the future would exist in reality in it-self, at least as we distinguish it to be. Foresight requires awareness of change and awareness of change presupposes memory (or at least record of past events). Would temporal reality exist, as we distinguish it to be, without such observer? No. If there were no observer of it with memory and intelligence to distinguish movement, change, and thus, temporality, the temporal would not exist. Reality would not be what subsists through change. There would be no fourth temporal dimension. Moreover, if reality were just the mere present, there would be no reality at all as we distinguish it to be. Following Augustine, if the past and future do not exist, and the present is the transit from one to the other, not just time, but the present, and thus, reality itself would not exist. This forces to presuppose that there is more to reality than what we distinguish as temporal. Further still, even if the distinction were of mere difference among co-existents.

In awareness at the level of sensorial impression memory is essential to distinguish new from former representations. The distinction of time is, actually, a distinction of difference and similarity between records of past events. An infinite difference would not even be difference, as there cannot be -as shall be explained- difference without some similarity.

*It can be said that memory is an essential mean for distinguishing, not just time, change and the temporal, but reality in-itself. This is reasonable even if reality -what we understand as such- were immutable or simply atemporal. What can reality as a whole be distinguished from, if it is everything that is?*

Distinction of difference and similarity presupposes time, and if there were no motion how could an object or thing be distinguished from another what makes possible the distinction of the unique properties that constitutes difference, is that they bring forth an existence of a different kind to that of all others. Though different details of a picture do not play a discordant or different role to other images, it is us who judge them to differ because they carry properties that in real life enable a difference from the rest of things.

Thus, the question that follows is, how can we know if reality is as we distinguish it to be with the aid of memory? Or if what is distinguished as temporal is not a mere aspect -not a part- of something of a higher order of reality or a more complex reality than the temporal?

Properly speaking, physical reality is entirely in motion and, without a mind with memory, it cannot be said to exist in itself (moreover, as a temporal reality it would be contrarian to the principle of non-contradiction-unless it either be an aspect of what reality is, or the product of higher order intelligent observer). The most reasonable appears to me is that the temporal is a mere aspect of what reality actually is. That is, a reality dependent on the cognitive capabilities of the observer. The Flatlander perceives her world from the outside as temporal because there is a higher posited observer in three spatial dimensions that moves her externally to her world. Why won’t we be in a like situation than the Flatlander?

If this dependence of cognitive faculties, what, if there is a God that created all yet lacked memory, though our temporal reality be a divine creation of His. Would the temporal not be a non-foreseen consequence of His creation of which He would lack awareness? A deity as we understand it to be, as a reality aware of our temporal existence, would have to have awareness of what we distinguish as past, present, and future; that is, of our temporality. We cannot preclude the possibility that there be other temporalities of which only higher positioned observers can access, for example, a temporality that includes something else besides the past, present and future. A condition of all, that is, with awareness of motion and change, would have to have not just intelligence to distinguish with the capacity of awareness of human intelligence, that is, which can have awareness of our record of what no longer is or exists for our temporality to exist in-itself.

It might be held that, in consequence, the need for a creator of all requires that it have memory and judgment, and thus, that the supreme condition of all be intelligent (the existence of time, might thus be interpreted to be a proof that a condition of all must be intelligent, as it requires distinction and thus comparison, and that it have memory?).

Indeed, if such condition of all lacked the intelligence to be a condition of all the temporal, why would the ontological relations and categories, nor even judgment, be a creation of His? As is explained below, without causality the other ontological relations and categories do not exist, and causality presupposes it, even if it be considered a co-existent condition of something; the very distinction of present presupposes it. Would space exist if there were no temporality? Would spatial dimensions exist? For sure a spatio-temporal dimensional reality could not exist if temporality depended on a condition of all or Supreme intelligence lacking memory of change. Would such condition still have awareness of mere space? As said, even space-time would be an unwanted consequence of His, there would be no divine intention that it exist.

*But how is it possible that such temporal dimension exist if it is a mere distinction?* And w*ith no factual correlation in reality in itself?* So, the fact that time and temporal events requires a reminiscent observer mean that there will be no temporality in the word in-itself? (And so too no space, nor matter if there is no memory?) No. There are two possible alternatives, but both require memory and judgment as we have it. The *first* is that the temporal is a part of what exists in itself, so that there is a higher order of temporality (or whatever it be); that is, a reality that exists independent of the cognitive means of observers as ourselves In such case an intelligent creator must be presupposed in order that it have awareness of it, and the distinction of time would refer to something not-temporal standing by itself. The *second* alternative is that there be no change. That the temporal be a manner of perceiving a non-temporal reality existing in itself, such as a spatial dimension of which a mere aspect is observed, depending on the cognitive means of the observer. That as the Flatlanders, we only perceive an infimal aspect of a spatial dimension. But it would still require of a temporal reality that enables us to perceive such infimal aspect. In this case, thought the existence of a supreme intelligence cannot be precluded, though it might perceive all as we perceive lines as surfaces as being in the present.

In any case, spatio-temporal reality, whether temporal or not, cannot be as is distinguished by our intellect. If the *second* alternative holds, many observed phenomena -such as motion, time, change, space- may be nothing else but the expression of a non-temporal reality of a higher order, if not something far more complex or different. The fact, as shall be explained, is that with the forms of sensation and the basic relations and categories of rationality it is not possible to attain an explanation of reality, and a para-rational reality must be presupposed. The para-rational cannot be but presupposed when what is conceived as phenomenal reality cannot exist in itself in the manner it presents itself to us, as spatio-temporal, or rather under change in space.

Furthering the subject, the temporal is a reality that requires some form of memory to be “observed” -and if the temporal is something under motion, motion requires a particular “form” of representation-; that of an uninterrupted sequence of positions in space to exist, in addition to comparison between records of memory. This validates that change and the temporal, is non-existent, for neither the past nor the future relata that constitute the distinction (the past and the future) exist in itself.

It might be argued that this is a proof that reality is non-existent for the present cannot exist in itself if there is no past nor future; that it is not just an issue of time non-existing, as held Augustine. But we do exist, as showed Descartes with his “ego sum” and thus, nothingness has to be discarded.

It might be further argued that a reality of greater number of spatial dimensions might explain change. However, it is quite reasonable that rationality may not necessarily apply to it; that it also be para-rational. The quantum experiment that shows how any intent to measure the particle of a photon alters its nature into a wave and vice-versa, may be due to the para-rational nature of reality being sensible to though, or else, it could be that the different results depend on that the measurement takes place in different spatial dimensions in three spatial reality alone what is observed, is a particle, while when it is observed as a wave function, it is observed in a para -empirical order or number of spatial dimensions. If this conjecture were the case, it would be interesting to consider how our three spatial reality would manifest itself in a reality of more than three spatial dimensions, and then, why might it not manifest itself as a wave function?

It is worth realizing that there cannot be memory proper of the subject of distinction under all our categories, without intelligence. It is the distinction of things under all our categories that constitutes intelligence, and not the mere record of the representation of the distinction. This somehow entails that there must be an intelligence for it, and a higher order temporal dimension to exist, even if it is a reality in-itself. Temporality presupposes that either the past non-is longer observable, and that the future as yet is not or is not observable. Under this alternative, a temporal reality is a “mental” reality were the past and future are not present. The dimension and the reality in it, can only exist in the mind of the observer, in-it-selves. The mind infers their existence from what is sensorily given. They are not something that is sensed, or existent in itself without an observer that has memory and judgment to infer it, and with capacity of constructing a representation of a temporal object. To see an object in movement requires the capacity to represent the object and the spatial background that enables grasping motion, and to represent the travelling object changing positions in spatial dimensions. What would motion be like if it takes place under a larger number of spatial realities? *Is motion just a three-dimensional phenomenon?*

Kant was right in that it is the mind that contributes with space and time to the representation of sensations. But the mind only provides what it takes to shape such representation, not what change and space actually are, nor does it mean that time and space are mental and do not stand for themself. Quite likely the mind constructs the representation, and the mind has an innate *a priori* program to give such change, the shape of space and motion; of a space and motion that are simplified manners of picturing a more complex reality. Could it be the case that motion, or temporality be a practical manner of conceiving a para-rational fact?

Therefore, it is impossible to assert the mind independent existence of time and the temporal as something in-itself, and thus, not even of space nor our ontological relations and categories, without a mind or observer if not an intelligence, as these last cannot exist in-themselves. (Is temporality the proof of the existence of an intelligent condition of our reality, if not also of a supreme intelligence? I ask for the third time.)

Though the para-rational is not accessible to our intellect, the rational need of the para-rational is of such “force” that it is even possible to rationally arrive to the conclusion that there is such supreme explanation, either by means of causality -as did Aristotle and Thomas Aquinas, or based on the relation of property, as did Anselm. The argument based on properties would be, that, in order to differ or to be similar every entity -and thus too, the properties themselves-, have to carry properties. Since this cannot be infinite, a first property must be assumed to exist which does not require of other properties in order to differ or be similar to all other things.

But what if we had the faculty of knowing the future and perfect knowledge of the past? If we had perfect representation of the past and future, what would characterize the present? Would change take place? Yes, if the past and future can be distinguished. But would intelligence and knowledge be possible? The knowledge attainable would be like the knowledge of the world that provides another spatial dimension because the distinction of alterity would result from co-existence.

In sum, all things change, and either there is more reality than we can distinguish such as the immutable demanded by rationality, as seen in Parmenides, Atomism, Plato, Aristoteles, Scholasticism, and even modern physics, or else, it is a memory dependent mental construct (Is, thus, what is memorized the only reality?) which leads to presuppose a sort of Supreme Intelligence that distinguishes the same. In both cases there is more to reality than meets the eye and rationality can conceive. Wouldn´t this somehow explain why Schrodinger’s cat is both dead and alive, or neither dead not alive? Could it not be the case that the temporal be a manner to present a para-rational reality to a rational mind?

### iii. Space

Is our perception of space a *a priori* manner of representing something that cannot be what it is as we perceive it to be? (Do we perceive it?). Space is judged to be the void, but it is also the extension of what constitutes a body.

Space is most probably something far more complex than what we distinguish as such. It is something that cannot be measured, nor specified or distinguished, without the perception of objects in it. Is it something that alters the mass of what travels faster than the speed of light (or is this caused by the higher levels of energy required to impel it? Is it an expression of energy? And if so, what is energy?).

Space is something without which there would be no movement, and thus, no time, no space-time, and consequently, no physical reality. It is a pre-requisite for the existence of change; it is actually the existence of something that the mind detects by means of inference. It is that which can be transited. We assume that it is infinite and merely extending in three spatial dimensions, but it is curved by gravity and there might be an infinite of spatial dimensions, even if each is only an aspect whose existence depends on the cognitive powers of the observer, as well as different times for an object travelling through all of it (Quantum physics or string theory, presuppose many others). It might even be the case that ultimately there be no space between points that seem to be infinitely distant in lower dimensions- I give an argument for it below regardless of how hypothetical it is. Space is a reality without which there can be no sensorial factors. It is something that is not sensed, if it is not the space of an object that emits photons that act on our sensorial organs. It is something that we cannot sense if it expands or contracts, no matter what cosmologists claim. We cannot know if space originated from the expansion of a singularity -as is called the starting point of the big-bang- into a hyper-space or expanded internally, imploding into itself. It is as yet not possible to know if there is a higher order of space that encompasses our space or others, nor what is ultimately space. Expanded energy? What?

Our representation of space might also be said to be a practical, simplified manner of having awareness of a plurality of co-existents subjects of distinction (physical objects) that can move, hold relations of causality, property, plurality, difference, similarity. That is, what makes possible the existence of physical rational subjects of distinction holding the different kinds of basic relations (the ontological relations) to others. It is something without which there cannot be physical relations between objectively existent subjects of distinction.

Space also is what that cannot be distinguished as something separate of reality, as all our distinctions presuppose it. It is not possible to distinguish one space from another -at least, as yet-, though it is possible to distinguish the space (extension) of an object, or between objects. It is something that lacks the property of difference but among its extensions holds that of similarity. And it is something that can be distinguish from another space based on the objects that can be perceived as holding a determined extent of dimension, relative to a standard or to another object, yet it is something essential to objects. It is a condition for the temporal. It is a condition of all that is perceivable, and thus, not of our ontological relations as these are not observable but inferred (even physical properties?).

Thus, if it is impossible for us to understand space and the need for it to be materially existent, it is certainly impossible to understand why there must be space for such material objects to exist, or even, why material objects require of space as a condition for their existence. Nor it is possible for us to know if these are non-empirical spaceless things, if any, that can exist in itself.

The forms of sensation or of perceptual reality can be said to be enablers of perceptual awareness. However, it must be accepted that there is more to reality than is accessible with our senses, and that our system of perception is a simplified manner to generate a cost-efficient manner to enable distinction of what is required to survive and adapt to the physical reality.

1. *Awe and emotions brought forth by art and art, nature and other (what does emotion enable and of what it is a constraint?)*

The emotions and feelings are a priori of experience. They don’t come along with sensation, but they are a pre-set reaction to activation on our nervous system or to an idea or to awareness of an object or something. The sensation or emotion is not the activation on the nervous and other sensorial systems, such as pleasure centres, but what such activation brings forth in the mind.

Sensations, feelings, emotions also constitute *a priori* knowledge. They deliver information about the nature of its factor, such as that we must avoid it or be careful of it (fear), worthy of being bonded to it and to protect it (love), or that it stands for something different, superior, sublime (art, religious feelings).

These feelings, sensations, and emotions are also enablers, in the sense that they generate a belief stronger than what reason can provide. Those who experience it believe without the need of any proof. But this too constrains, as it only provides awareness of the nature an aspect of what there is. It is a constraint in the sense that reason is set apart, and such sublime nature is often attributed to ideas or things that cannot hold such properties; and secondly because what it delivers is just awareness of existence of a supreme nature, without information regarding what it is or the properties it holds, if any.

It appears that it cannot be attributed of they, to be constrictors of possible knowledge. At most, it can be said that they just give us a glimpse of the different levels of sensations that are available to us, though there is no question that pain, pleasure, or even the feeling of the sublime, make lead us to postpone the acquisition of rational cognition or of advancing science. However, certain pleasures and sufferings can constrict or block our awareness of the sublime, or to disbelieve the truth.

Is it possible to explain reality without them? Is reality explained if art is not comprised under the explanation? Is art explainable by a biological or neural explanation?

There are factors of emotion, which are caused by proportions in things, ideas, and nature -such as the starry sky. These strong feelings are *a priori* determined. They are not something acquired from experience, but an innate response to awareness of certain property in things. The observer becomes aware of such properties in things because of the emotion that our awareness of the same brings about.

In this sense, the question of the feeling of such intense emotion is an *a priori* proof that the property that brings forth is present in the thing. What stirs the emotion -for example, that of the sublime or awe- is either the thing or the property. If it is the thing is because we are programmed to have it upon awareness of it. And if it is a property in the thing what brings about emotion of awareness of its holder, is the same. In both cases it can be said that such emotions are *a priori* factors of cognition. The emotion that either of these generates that brings forth such awareness of it is actually brought forth by awareness of the nature of the property. It is not the sublime nature of the property what stirs the mystical emotion, but the property which stirs an emotion that allows to judge something sublime.

And I say such awareness because, for example, a Cantata by John Sebastian Bach for some is just church music, and stirs no emotion, but rather dislike. On others, it stirs forth a strong mystical sensation. It is not precisely of the cantata that the emotion brings forth awareness, but of its mystical expression.

This I heard from my teen age-daughter, in tears of deep emotion, a day that by a very strange reason, she turned on her CD player and rather than Freddy Mercury, it played “Jesus the joy of man”. Her emotion was so strong that she -then an agnostic- came crying and sobbing into my room, to tell me that she had just heard a “song” that was the very proof of God’s existence.

I know of some individuals who have been so impressed with a work of art, that they had to sit down and relax to overcome the shock of the emotion that they had felt.

The interesting thing of these emotions is that they generate awareness -I would say, knowledge- of the existence of something that does not act on our senses because it does not emit photons, but on the mind.

And it is worth to realize, that the awareness that they generate in whomever feels them, is of varying degrees. One, for example, is the feeling of human love, and another is that of awe, as when one sees the night sky full of stars. And another is the mystical -to give it a name- the sensation that some experience upon having awareness of what is then the divine.

The emotion stirred by a subconscious awareness of it, brings forth a rational awareness, which is a proof of something superior to all, so sublime that the mind is confounded with the awe it brings forth.

So not only do emotions generate awareness of things that we cannot sense but probably infer -such as the grandiosity of the night sky- but they also generate some indication of the kind of external non-empirical factor of the same.

Of course, this does not seem to be a universal reaction to those inner experiences. It is necessary to be open to them, and not to resist acknowledging them, as usually happens with the many human monsters that did and do not hesitate to kill for no other reason than their human pursuits.

It is awareness of what something is, that is of its nature, what brings about the emotion. It is not awareness of the existence of something, but of what it is.

We are programmed to respond with an emotion on acquiring such awareness. In other words, the proper response to such a thing depends on our cognitive faculties.

It is possible to have an erred attribution of nature. For example, a mystical emotion may be felt upon the occurrence of a miraculous event, that is not miraculous at all. However, it is not the miraculous events what triggers the emotion, but the idea of the divine that it brings forth.

We are *a priori* programmed to feeling awe or a sublime emotion upon awareness of the divine, or simply, of the para-rational. Is this not an indication that the sublime or divine exists?

In generating such emotion, the human mind becomes awareness of the existence of a superior reality, regardless of whether it is mistaken or not in what it takes for divine.

There is a natural desire to have such feeling, and thus we are prone to take a normal event for a sublime fact.

## *Ontological Constraints*

Our natural system of cognition does not provide awareness of properties or traits (if not something of a para-rational nature) not essential for survival in a world of scarcity. It does not access the inner parts of an animal, nor has vision of its molecules nor of the atomic properties of its atoms. The same can be said of the other main limit to cognition. This other limit is not of the inferential potential of judgment for conceiving realities under higher orders of spatial dimensions, or from lacking other sensory organs and forms of representation, nor in the processing potential of our intellect. This limit to cognition, to which I now refer, is about the impossibility of having awareness of other basic kinds of relations and categories (kinds of most encompassing pluralities) not comprised under our ontological relations and categories. As shall be explained, the most basic ontological relations that we distinguish –that is, the most abstract and universal- are those of difference, similarity (observe that the distinction of temporality as all and any distinction, presupposes similarity), property, and causality. These relations determine our most universal categories of one and plurality; particular pluralities (classes, sets, etc.) and instances; property and subject of attribution; and cause and effect. These relations and categories cannot exist by themselves and, thus, force to presuppose a higher order of reality to the rational, the rational being the reality that our Ontological Scheme enables to distinguish; that is, a reality of a higher order to rationality -what I call a para-rational reality. The limit derives from the fact that all our judgments and their conclusions are ultimately grounded on relations belonging to these kinds of ontological relations and categories, as they determine the most primary premises of all our conclusions, whether logical or mathematical, scientific, or not, as it is not possible to think other basic kinds of relations and categories to these. Contrary to our sensorial organs that can be made to access information beyond their natural powers, such as micro and macroscopic, the ontological factors of cognition cannot be in any manner aided to provide more information. The reason is that the information that they deliver is set, and incorrigible, while the “perceptual forms”, are just manners of representing what is accessible to the senses. What is not possible in perception is to represent something physical or fictional, in a manner that differs from the “form” with which the mind constructs such representations: such as colours, shapes, shades, aromas, sound, taste, tactile impressions. Moreover, only the sensorial impressions can trigger all those manners or “forms” of representations; fictions -even dreams- cannot be represented with a form that is not an image or a sound or that stands for our other kinds of sensations.

We can certainly assign arbitrary forms to ideas, in order to represent them, as is done with numbers, words, images, but these are constructed with the basic forms with which perceptual representations of sound or images are made.

To understand what an ontological constraint would be like, the best is imagining what would be our situation if, for example, we lacked awareness of the relation of causality. If this were the case, there would be no causes nor effects, that is, no subjects of distinction depending on other for different or similarity, and thus, for existence. There would be no science nor knowledge, nor any interest in furthering it, and we would not relate past and present events to infer future possibilities[[7]](#footnote-7). Further still, we would have a totally different conception of what there is than we now have.

For example, an idea of reality without causality would not just constitute a diminished conception of the content of the world, but an idea differing from what the world is like. As said, there would be no notion of temporality, as there would be no awareness of dependence on sequences of others to exist or simply, to be similar, as is required for motion or even change of the physical world. Would there be distinction of entities, such as us, which depend on innumerable “parts” (substances, and a certain relation between them, as are the formal causes of Aristotle)? Moreover, there would be no awareness of the consequences of events and actions.

Still further, if a suppression of one sole of the ontological relations were possible, it would lead to odd linguistic interpretations between people lacking and having awareness of causality. For example, imagine that after an intergalactic flight, astronauts from earth arrive to a planet inhabited by people like ourselves. The main difference is that the inhabitants in it cannot have conscious awareness of efficient causality, though their behaviour presupposes it, which allows them to thrive in their world by mere instinct; when asked for “why”, or “what for”, or simply, for “how”, they don’t understand. Their many tongues would lack terms to deliver an answer to such questions and produce an explanation. They would not be able to give us any reason for whatever happens in their world.

Let us assume that our galactic travellers do not realise that the inhabitants of that world ignore what causality is and cannot understand what such relation is. In such distant galaxy, their scientists –if any- instinctively, unaware of the causal intention, dedicate their time to identify physical properties of the different things, and even to class them according to these; as for them, identifying physical properties not-involved with causality, and classing things according to them, is all there is to science.

Suppose that our astronauts ask them if they have religion, and if they believe in God. Wouldn’t they say that they do not know of any such things in their world? That they have no registry of it. Since God belongs to no higher class, nor is a plurality, it would be something totally unconceivable to the same. In order to make themselves better understood, one of our astronauts could explain them that God is the creator of the whole universe and insist to know if they believe there is a God. However, their scientists, unable to distinguish casualty, would insist that there is no God, as there is no reason for a creator (not understanding what this means), since to them things simply are or are not, not realising that, for example, they owe their existence to their parents, and their survival to being fed.

Let us further assume that to be sure that they are having the right answer, the astronauts explain to them more carefully that God is supposed to be the all-powerful and the supreme good. Since both these terms imply causality, the aliens would insist that there is no God. They would check their records of things and it would not be registered in these. Moreover, they would not find any such causal or effective properties present in things, and thus, would be unable to class them.

Unable to realize that there can be beings uncapable of being aware of causality, our astronauts on their first message to earth would report that they have discovered alien life, and that they are people exactly like us, but have no religion and do not believe in the need for a creator; they are all atheists, and categorical in that there is no God.

I do not want to say that many philosophers would be delighted with the news and argue that Hume was right in denying causality –which actually he never did, he just denied its mind independent character- and some would conclude from this report, that the universe originates from nothing.

In contrast, an alien ship lands on earth. They are very intelligent and have awareness of higher orders of ontological relations and categories to those we judge and split the world with, as well as of what is intellectually needed to be capable to have an ultimate explanation. Their technological achievements far surpasses ours. We ask them where they come from, and they say from nearby, to have left a couple of terrestrial hours ago from a galaxy that we judge to be located in deep space and takes centuries to reach travelling at the speed of light. When inquired by us about it and how they manage to travel faster than light, they might say that no, that they had a very slow ride, that they just cut across the innumerable spatial dimensions structuring the universe of whose existence we are not aware. When asked if there is God, they might reply with surprise. It would call their attention that we cannot be aware of what is obvious to them; or else, they might say that what we understand as such, cannot exist, but that there is a Fundament of All (to give it a name) of a totally different nature than we think of. Moreover, upon our request they might try to give us an explanation of it. However, to our surprise, whatever ultimate explanation they present to us, would not be understandable at all by us and would seem a wordy statement lacking meaning and the most elemental common sense. This would be due to their explanation being grounded on ontological relations and categories (if not in something else) that we have no idea to exist, lack the words for, and cannot grasp.

What would then be their report to the people in their world? Would they judge us equally intelligent to them? They would inform, that unfortunately for us, we are one of those kinds of very primitive creatures lacking –as their pets at home- awareness of all there is, except of a limited, if not also a minimum, of spatial reality, and that we are unable to grasp the many manners in which the nature of the universe is split and explainable. They might even say that we lack materiality, that we are practically nothing, like a chair without legs; that we have very scant content, for we are merely three- spatio-temporal The news in their world would be, that their intergalactic interdimensional travellers had to do a technical feat to make themselves visible to us, for we can only see things in three spatial dimensions, but that their new technology made it possible for them to adopt a three spatio-temporal shape like the one we have, without any loss of their superior cognitive faculties.

Although the intergalactic visitors try to make us understand that we all exist in a myriad of spatial and temporal dimensions, (as well as, for example, in a reality of many higher ontological orders to ours, one higher to another) we would still think such reality to apply only to their world. The problem would be that we cannot think of our reality in an alternative manner to how we conceive it, as happens to our Flatlander in conceiving our world as being of equal spatial dimensions than theirs, if not less. Further still, we would not be able to imagine how ‘their’ reality is like, at least, the one that they distinguish, nor how they truly look like, nor how or what they perceive of us. Most probably, they can grasp para-rational aspects of ours which we cannot know of. Moreover, it might be the case that they try to address themselves to these higher order aspects, to end up surprised that the three spatio-temporal aspect of us cannot grasp their thoughts nor realize that the para rational one is aware of and understands them.

Now, allow me to consider another case; to better contrast our ontologically constrained view of reality with one possessing a superior intelligence; that is, with an intelligence that can distinguish realities of higher ontological orders, and to which we also happen to belong as para-rational things, but of which we have no possible knowledge.

From such a higher ontological perspective, that is, from an intelligence that can grasp orders of relations and categories of things that complement or encompass the few we judge with, it might be the case that –as said- what rationally is contradictory to us, is not so to such superior level of intelligence. It might also be the case that to those -if any- with awareness of orders of categories higher to ours, what seems different is similar for them, to the point that the rational being be almost irrational even from the perspective of the higher order.

If so, it might even be the case that Joe’s rational nature be only an aspect of his true nature, which is para-rational.

Since Joe’s rational aspect cannot access nor understand the logic of the higher reality because he lacks access to the ontological information or manner of cognition required (such as a memory of a superior nature to ours), he will judge his situation and the outcomes of his life according to his cognitive faculties, that is, according to the aspect of information about reality that he can access. That is, not only by way of the senses, but intellectually, by means of his judgment about it. In other words, he will judge depending on how he determines the relations among the facts to which he has access via de senses, and what he infers from them, since relations -as shall be explained- are not sensed. Relations are inferred based on a criterion of judgment that we are innately endowed with. As a result, Joe would not be in a condition to understand or appreciate what is taking place from a higher order perspective and would judge the situation that he has to go through to be a negative event in his life.

This is very similar to what would happen to a man who bathes in the sea because, though there are dangerous sharks lurking around, lacks the information that the other person possesses. However, the difference with Joe’s ontological constraint, is that the information and evidence that he has, that his hardships are harmful to him, is true, yet contradictory with the true knowledge available to an intelligence operating with higher ontological orders, which judges them good for Joe. Since this contradiction is a consequence of the lower orders of relations and categories under which the judgement of Joe operates, for Joe´s rational aspect there would just be one explanation at hand, that of the forces of nature. Joe cannot understand that there is a reason, beyond his possible intellectual grasp of how, what is terribly bad for him, can be good.

What this shows is that our world-view, in this case, about where we come from, who created us, if there was something or nothing, good and evil, etc., depends on our cognitive faculties, such as on the kinds of ontological relations or categories that our judgment operates with and we distinguish, as well as on how we distinguish them to be.

In sum, as already said, in the same manner that we came to accept that we are not the centre of the universe, it is about time that we intellectually mature and meekly acknowledge that our epistemic powers –and excuse the comparison- are closer to those of an oyster than to those of a deity. Our intellect is unable to cognize but an infimal manner of how reality can be distinguished by an observer; and, in the manner that a colour-blind person will see all in black and white and conceive the world to be colourless. We are blind to the nature of what there is, and of what is required for existence rather than nothing to be the case. Allow me to observe that, in the same manner that the first would claim that all reality is black and white, if it were not because others see it in colour. The human mind, unable to free itself from the shackles of its system of cognition, has no other choice than to be humble about its cognitive powers, and adopt a more flexible conception of what there is.

Though for most philosophers today, the issue about our ontological relations and categories and other *a priori* factors of cognition -such as the forms with which are represented sensations as objects, motion, and space- does not merit significant attention, it is here shown the tremendous relevance that it has in our conception and understanding of the world. The importance of this study resides in the conclusions -many hypothetical- that are arrived at, such as that these *a priori* forms of perception and ontological relations and categories are simplified manners of most economically representing and splitting an aspect of para-rational (and para-dimensional) reality, the one which we have to deal with for survival as a sensorial/rational species in this competitive world. We go our own way in life with a naïve and lower order view of reality, even of our own selves. Moreover, we cannot explain why we exist or why we exist as we do. Some accept that it is not possible to explain reality because we cannot have a complete view of it. But the problem might be far greater because such view may require seeing the world in infinite manners that we cannot conceive or shape at all.

We judge our ignorance of the most fundamental reasons, as something natural –which it certainly is- and seek an explanation of it in religious beliefs, or through the natural sciences; but at most we are only seeing or studying the very shadows reflected in the wall of Plato’s cavern. Though most suspect that there is more to the world than the observable -as quantum phenomena lead to believe- some mistakenly think, that the reason for not being able to attain such knowledge of the objective world, is that we arbitrarily construct our worldview based on our conventions, convenience, or culture.

In my opinion, the significance of the study that I here present is that it shows that we are subject to an amazing epistemic constraint far worse than the one posed by our sensory organs and the *a priori “forms”* of sensitivity); this is, by our sensory forms and the ontological structures of our conceptual scheme. In particular, a constraint determined by the scant ontological traits of the nature and extent of the reality that we can conceive (which leads to presuppose that reality is far more than the aspect that can be distinguished with our cognitive faculties).

Our situation is such that if given the opportunity to have a glimpse of what is barred to our intellect by our lack of means to represent and distinguish the physical space and the structure of reality as it actually is, we would not be in condition of becoming aware of it. And this would be so, to the point that, if allowed to come out of Plato’s cavern, contrary to what Plato held, we would not realise to be free nor able to see neither the light nor the world outside of the cave.

However, and this is a significant or transcendental point, the fact -as shall be explained- that the reality that we can distinguish with our intellect cannot stand by itself as we conceive it to be, will make us aware that the reality outside of the cavern cannot be as poor as it appears to be to us.

Let me now proceed to fundament and -if possible- to further explain and illustrate with some examples what is claimed.

*May 25, 2016/January 2023* J.M.G.

1. **Forms of Sensation: Perceptual and Emotional Factors of Cognition and Cognitive Constraint**

The forms of sensation are of two kinds: the forms of perceptual sensation or representation -mere mental responses to sensorial input-, and the forms of emotions, which are the basic kinds of feeling brought forth by distinctions. Both deliver elements of reality that cannot be accessed by judgment from mere sensorial input, in the same manner that our intellect delivers non-sensable information about the structure of reality with *a priori* concepts of relations and classes (or sets or simply pluralities) reducible to their respective ontological kinds of relations and categories.

* 1. *Forms of empirical representation*

These forms of perceptual sensation or of representation are the different manners in which sensations are constructed by the mind from sensorial input, such as images, odours, tastes, pains, pleasure, motion, time, etc.). They deliver information about the world, that is, awareness of what there is in-itself, and how it is given -such as alone or jointly with another form, or on what it depends on to take place- that is not given in sensory input. They provide information that make possible the distinction of the causal factor of what is acting on our senses -such of what is being seen, heard, felt, smelled, tasted. They are forms of empirical representation.

These forms of empirical representation actually are the manners in which the mind represents to itself whatever is sensed or conceived as sensable, and so too, some properties of these. Moreover, the intellect always appeals to them to represent even the most abstract of notions, or to translate into them sensations for which a sensorial forms is lacking (such as heat radiation into a visible object). The intellect interprets reality based on the “forms” that it has assigned to the sensorial input and how it takes place. Their absence in sensations are a clear indication that the causal factor is not external to us or that it stands for something of a non-sensorial nature.

In effect, we are innately programmed, that is, *a priori* determined or have learned, to seek for a particular causal factor or effect of our sensation from a chain of possible factors and results. We are selective regarding which factor to focus on, of the endless line of causes or effects that bring about the sensation. For example, on an object, or in an animal, a blow, a cut, a loss, a gain, but rarely beyond those we have to deal with in nature or society to survive. (Except in our creator if we believe in the existence of a deity and even in some that do not believe in an intelligent creator). In the lamp or bulb, not in the photons or the weak force. This is instinctively done.

In fact, this identification is instinctive. It follows innate instructions and is subconsciously performed. This is reasonable as it is a requirement for survival that we avoid what is harmful and cannot consciously distinguish as such.

Though this it is not my field of knowledge, I dare say that the biological reason for the same is to generate a simplified and practical manner of awareness of what there is, and the effects it brings about on us and in the things in themselves we know of, and only at a certain level, as not at the atomic, nor at the microscopical (unless a scientist). Solely at the level that we need to be aware of, to feed and protect ourselves in the natural environment. This may explain why it is information of the causal factor and effects -e.g., to sate hunger) that they generate. Moreover, it is quite likely that the reason they are *a priori* given is not-other than there cannot be representation of reality by sensorial input alone as it is given, nor judgment can extract all the information required about the world from the mere stimulus. Maybe, the biological requirements to do so directly -without assignation of forms- requires an intelligence of orders of processing powers and nature, that would be impossible to feed with available resources for an organism that has to compete for the same in a world of scarcity. Would it have sense that that an oyster have intelligence as ours with all the energy that intellectual activity demands.

These are what Kant would have called “forms of intuition”. Manners *a priori* given with which sensorial stimuli as well as ideas are presented to our mind for judgment to interpret and infer new knowledge. They force to presuppose that sensorial reality is not as we perceive it to be, for reality cannot be assumed to be as it is represented by our sensorial impressions. They are the forms of sensorial representation of rational reality, since, what is represented is related and classed according to our ontological relations and categories that constitute rationality. In fact, as shall be explained, it must be assumed that reality is para-perceptual, this is, of a nature that differs from what we sense of it. Thus too, that these manners of perception are simplified *a priori* forms (not acquired from sensation, nor inferred from these) of the effects and causal factors that act on us in the physical world. Nonetheless, this information constitutes information about the world, at least of how it presents itself to the human mind. This allows a realistic painter to choose the colours that match with how the object if seen. They also allow us to distinguish things and properties of objects, and thus, plants, food, etc., as well as to construct mental fictions of things in the world, corresponding with how things in the world appear to us. This faculty of representation is probably minimal, only to the extent required for competing with other species in this realm of scarcity. As shall be seen, the fact that there exists things in the world that require special *a priori* information and means (such as memory, and -most likely- mystical experience), should make us think that there might be many orders of reality or aspects of para-empirical of reality (of more than three-spatio temporal dimensions) of which we cannot have awareness for lack of further innate “forms” (practical information) or due to its nature, as would require awareness of a condition of all or supreme intelligence, if any. In fact, there might be other things, including spaces and time, that we cannot distinguish.

1. *Forms of Sensation of Objects.*

By such I only refer to the manners in which a sensory impression is shaped, such as a tactile feeling, sound, odour, image, taste, etc. We see people as solids or coloured, but beyond our perception, that is, para-perceptually, neither people nor objects carry those colours or are solids in reality in itself. For example, solids are such because that is how we feel them to be, but properly speaking the molecules, atoms, and even sub-atomic particles, are not precisely sensed, but through the photons that these particles emit. Moreover, we are constrained to perceive only what falls under our sensorial impressions. Colours, e.g., are a manner of representing a property of a surface according to how it reflects the photons that constitute light. There are things that do not emit or reflect photons. We cannot sense the same, as they do not bring about a sensation that can be distinguished. However, in many cases, they are made to be emitted by a third source, with their action on it -as happens with neutrinos- their existence and properties can be inferred from it.

The fact that we are not endowed naturally to perceive beyond the surface of things, or short distances, is also an argument for this constrain, regardless of the fact that mankind has manage to expand its sensorial powers. Our perceptions -even those made by means of a microscope or telescope, X-ray scanners, or atom-collider- are always limited to what can be accessed by our sensorial organs and by how they are represented by the mind.

The awareness that they generate is only of what acts on our sensorial nerves (photons) or can be translated into a sensorial factor. This limits our awareness to what emits photons or can be inferred to exist by the behaviour of such sub-atomic particles. Though they of sensorial detection and ideal representations even if fictional. We cannot imagine a creature without appealing to those sensorial forms. Even the abstract idea representing a pure being of light, recurs to a sensorial representation.

1. *The forms of Motion and Change*

There is form of motion when our intellect represents to itself an uninterrupted succession of changes in spatial position. This perception of motion is memory and judgment dependent. Not any sequence of perceptual change delivers motion. It is motion if only there is a high degree of similarity between images within a certain time frame. For example, the abrupt change of images, does not show motion, but change. Change is something that can occur without apparent motion, such as by the sole passing of time. Change is a consequence of motion: of motion of things or their constituents. So too time is not the factor of change, but the measure of it.

To talk of the dimension of time, is to refer to measurable change, to measurable motion, that is to regular comparable motion. This is what time can be understood to be as a dimension. Time is a dimension if it is measurable -and measuring presupposes comparison, and, in turn, comparison, presupposes the existence of another motion or change that acts as the measure of the first, but in all cases, it requires memory. It implies a relation between motions. Thus, the dimension of time is the existence of measurable change.

What does time denote? That something can differ from itself? That something cannot-be or be as what it was?

The world is perceived as being under change, but, as Parmenides the Greek philosopher observed, change -and thus, motion- contradicts the principle of non-contradiction.

There cannot be change or motion if the difference brought about its existence is absolute. That is, if what changes does so in a manner that nothing remains of what was. Time is possible if there is some similarity, even if it is minimal, otherwise it cannot be determined that the thing that becomes or changes, was something that is not something else. The change can be of the object, or of its background or of both. There cannot be variance, change or time, if it gives place to otherness or difference rather than to similarity, that is, to something not similar. There is no motion if something of what characterizes an entity does not subsist through change. This is the reason why such “immutable” was judged to be what constitutes identity: what subsists through change. Since everything was observed to be subject to change, such identity was attributed to a non-sensible nature in sensible things, such as to a substance (Aristotle), or to atoms (Democritus) as ultimate immutable constituents in things, or as something existent in a world outside of physical reality (Plato’s world of ideas). True reality was said to be the rational reality -that which cannot both be and not be what it is- as for these philosophers, rational reality -the one following the principle of non-contradiction- was the only possible reality and could not be subject to change, that is to be and not-to be. Rationality forces to assume that there is a sort of para-perceptual reality in things, of a nature that is not subject to change, or even to judge motion and change as rational manners of distinguishing para-rational realities, as rationally speaking variance (change, motion, and time) seem to carry an irrational aspect, and all the para-rational, if observed, would appear such to a rational observer.

In effect, it is not rationally proper that our awareness of change be based on the representation as an existent of a non-existent. The perception of the temporal reality is dependent on memory, that is in the representation of a non-perceivable or rather, non-sensable (what is not further sensed). Does memory deliver a true image of reality, or only an aspect of it, in the same manner that the Flatlander perceives a flat surface as a two-dimensional line? That is, something para-perceptual is something para-rational to her. Though we cannot prove it, as yet we cannot deny it.[[8]](#footnote-8)

1. *The Forms of Space and Spatial constraint*

By such I refer to the constrain to perceive (and conceive) a reality with more than our three spatial dimensions. It can be included under the forms of representation of objects. We distinguish only three spatial dimensions, but there could be more as some physicists theorize. In fact, though it is reasonable to think that space is just what is comprised under our spatial dimensions, quantum events and even temporality, seem to be an indication that there might exist other spatial dimensions that we cannot distinguish. As shown with the example of the Flatlander, temporality might be a simplified manner of grasping another spatial dimension in which, what is distinguished as past and future, actually co-exist with the present. Some amazing predictions in dreams, tarot, and similar practices -thought strongly questionable- might be explainable with such a spatial dimension which is perceived as a temporal dimension.

In fact, reality might be more than three spatial. Even our notion of time can presuppose one more of which we only access an infimal aspect. This, in turn, could presuppose other levels of motion and time, as happens to the Flatlander that is moved about outside of her reality. It is more reasonable to think that there is an almost infinity of these, and that ultimately, there is no space. But if there are such, mankind would be in no condition to perceive them.

# *Forms of emotion or of feelings (constraints to cognition?)*

While it is clear that the “forms” of sensation deliver information about reality in itself that cannot be sensorily acquired, that is, of factors generating sensorial input, the different forms of emotion are the different manners in which our intellect is programmed to react to certain basic kind of information about the world. However, it is possible to say that the aesthetic pleasure delivers information that there is something that we call beauty, that something has it. The sensation of the sublime shows that there is something grandiose, beyond all the material. For example, though we have such feeling, and only access the things of a nature that cannot be directly sensed, by way of emotions, we cannot explain what such emotion is, nor the property of the things we only feel. Our system if cognition only delivers awareness of them. The idea of God is better identified emotionally than rationally, and lesser still, empirically. Our awareness of the most sublime delivers knowledge of its existence, but not of what it is, nor how, nor why, nor of its cause. Reason can tell us that it is not something that can be empirically sensed, and thus, that it might be something immaterial. The fact that the emotion is had may be argued to be something biological, but the emotion of the sole thought, or upon perceiving, e.g., a painting, cannot be denied, nor held to be false ¿on what grounds is false an emotion? ¿On that the event that caused it never existed or took place? Though this, in some cases is admissible, it is not on the emotions brought forth by something whose existence cannot be negated such as that of the idea of God. True of false, the idea brings forth emotions. If God exists the emotion if of joy, if He doesn’t, it could be of delusion. This shows that there are emotions which cannot be said not to be caused by a falsity or a fiction.

An example of a form of emotion is the feeling of fear upon the distinction of a danger, or surprise to an unexpected event, or of pleasure upon the distinction of certain proportions in a work of art. In the same manner that on perceiving a sound or a light the mind presupposes that there is a source of these in the world, certain emotions or feelings, lead to think that there is a source of it, existing in itself.

Though sensations may be brought forth by irreal external factors, so too emotions can be fictional and mistaken assumptions of what there is. One can be afraid of a lion if a strong roar is heard whether such roar is coming from a true lion or not, if we think it is real.

Though it can be held that emotions -that is, feelings- might stand for certain information about what brought them forth, this might not be the case, as happens with false judgments, as when someone is fooled by certain false information. However, though as a rule it cannot be held that something exists in itself or has certain true properties, because it brought forth an emotion of the kind brought about by true belief, there is a case that might justify holding that emotions can deliver true information about the world in itself. Such seem to be what are called awe and sublime mystical experiences, in particular if strong, even if they are brought forth by beauty or a grandiose melody, or an idea, and not by the direct awareness (which might be fictional) of something so grandiose of which nothing more grandiose can be thought of.

To hold that one’s own emotions can generate information about the world if they are mystical or brought forth by grandiosities of a lower order, such as the starry sky, or the sole idea of a supreme being that is a condition of all, is somehow to follow the logic of Anselm’s argument. If such emotion is so grandiose, that only the thought of an existent supreme deity brings it forth, the supreme deity cannot not-exist, because it is the most grandiose that we can think about.

The forms of emotions can be a reaction towards a distinction of fact, such as upon objects, as might be fear to the presence of a beast, or upon ideas, as is the emotion towards a new mathematical formula or a scientific discovery, or music. The mystical seems to be neither of the two, but the response to another feeling, such as the feeling of the sublime.

Could it be that the mystical emotion be determined *a priori* in us, as a manner of generating awareness of a reality of whose distinction we would be otherwise deprived? If such is the case, it could be argued that such emotion does not allow to acquire information about the world, as it was acquired by way of evolution, so as to provide us with an intellectual tool that strengthens our capacity to adapt to adversity. But the intensity felt by those who have it, is far beyond what is required for survival; on the contrary, it is a hindrance, as it isolates the individual from the things of this world. Moreover, not all have it, nor those who live it experience the same with equal intensity, while this is not the case with other sensations and emotions, which are generally had with the same force by all. Evolution by means of interbreeding over millennia has lead most of humanity to have a very similar kind and level of feelings or sensations.

In other words, though emotions or feelings can fool as to believe in a source that does not exist, what matters is that humankind is endowed with the faculty of feeling the same. And what would be the point of it if it is not to generate awareness of values and things sublime or of the sublime of some things? The starry sky fills us with awe, but *it is not the view of the sky what brings forth the awe, but the fact that we are programmed to be in awe of it.*

**And what is awe?**

If it were not for beauty and the sublime it is not possible for us to have awareness of the magnificence of all, or even of a Supreme Creator. Neither sense experience, nor logic or math can provide such knowledge; it can only confirm it or reject it. The sublime is something of which there is no possible awareness, without such capacity to become aware of it, that is, without feeling the intense emotion of the mystical. The sublime is something that without the emotion it stirs on us, would be an unknown. There is no manner that by way of sensation or judgment, there can be belief of the existence of such supreme reality of a non-sensable non-rational nature.

What emotions bring forth is not just awareness, **but belief**. Whomever has gone through such experiences, believe in what pure rationality will only deliver a questionable awareness.

Is it reasonable to hold as Pascal, that the heart has reasons that reason ignores?

1. **Conceptual Factors of Cognition: The Incorrigible Ontological Relations and Categories**

*As should be realized, it does not suffice to understand such role in cognition that there be particular relations, nor that there be innumerable kinds of basic relations.*

By conceptual factors (and limitants) of cognition refers to the most abstract relations and categories that can be distinguished and constitute our incorrigible Ontological Scheme.

What is primarily argued for, is that there are certain relations that our judgement operates with, which happen to be incorrigible. That is, which cannot be denied objective existence in mind independent reality without having to presuppose the mind independent existence of what they stand for.

These relations are those of difference, similarity, property, and causality. They constitute the categories[[9]](#footnote-9) of: one (thing, entity, being, particular, etc.) and plurality[[10]](#footnote-10) (all existents, totality, all others, etc.); particular plurality (such as classes[[11]](#footnote-11), collections, types, kinds, sets, and wholes) and members (instances, examples, components, exemplars, parts, sections, etc.); property (qualities, traits, attributes, predicates, etc.) and subject of attribution (that is, of what they are predicated or attributed to be or to have); and cause (factor, agent, determinant, author, creator, etc.) and effect (result, determination, consequence, creation, etc.).

These relations and categories are the most basic or primary ontology (if not, properly speaking, the sole one) that we can conceive. In fact, they are our highest order of abstractions, prior to our abstraction into ‘Being’. Though the concept of ‘Being’ refers to the most abstract, its referent is neither a category nor a relation, as “Being” is a concept standing “for everything” and “anything” that exists. That is -as shall be seen-, standing for all or whatever there is without reference to what makes it distinct or similar, that is, regardless of the properties or causal factors that characterize it.

These ontological relations are the most universal kinds of relations that the human intellect can distinguish. We cannot distinguish a particular relation not instantiating under one of these, and it is not possible for us to distinguish other kinds of ontological relations, nor categories than those that the ontological relations determine. The ontological relations thus refer to the most basic kinds of relations under which all the particular relations that we can distinguish, instantiate, and can be subsumed or are subsumable or abstractable into. It can be said that these ontological relations are the property in common of what instantiates or subsumes under the ontological categories. That, whatever is a cause, carries the property of causality, in the same manner, that what is a property carries the relation that enables distinction, or what is an instance of a plurality carries the relation of membership to a plurality.

While we can somehow distinguish the relations that constitute an individual under one of the ontological categories, it is not possible for us to distinguish the properties that constitutes something as holding a particular relations, except tautologically. For example, one can explain causality, saying that it is the property held by a subject of distinction to something without which, it would not exist or differ or be similar.

These relations and categories are the ones inferable from the fact that every subject of thought, language, and knowledge, must be presupposed to be different, as otherwise, there cannot be distinction of it. However, since difference cannot be absolute, difference, in turn, entails the existence of the relation of similarity, in addition to the relation of difference. This is so, because even what is different must be assumed to share certain elements in common, such as being subject of thought; and I say, ‘in addition’, because one cannot talk of similarity if difference is not preserved.

Now, from the relation of similarity it is possible to infer the other most basic relations and, from these, the other most basic categories that these relations determine. Indeed, difference and similarity compel to take as a fact the relations of property and of causality that determine them. The relation of property or, simply, of quality, can be inferred from the fact that properties are required for judging a subject of distinction different or similar to others. In other words, there must be something in what is distinguished, that enables the distinction of such difference or similarity. And what enables or delivers difference must be something to which the subject holds and exclusive relation, and to what makes it similar, must be something to which the subject holds a non-exclusive relationship. In fact, the property, if ‘unique’ (or presumed to be so) delivers difference to the subject of distinction and, if ‘universal’ -that is, common to many subjects of distinction- similarity.

Regarding the relation of causality, it is inferable from the fact thatthere must be an explanation of why a subject of attribution bears certain properties and not others (and thus, what depends on that a certain subject of attribution has the property or simply, exists, so as not to be an “other subject of attribution”[[12]](#footnote-12), that is, so as not to be something else).

These basic relations and categories are those to which is ultimately reducible what is asked for with the question of: *‘Which’*, *‘What’*, *‘How’* and *‘Why’*[[13]](#footnote-13).

It could be said that there are ‘categories of relations’ as well as there are ‘categories of ‘Being’. Nevertheless, to avoid confusion I will omit to class relations as a category proper. Though under these basic relations instantiate all the lower orders of relations, each of these relations does not comprise all the particular relations, as is expected of a category proper, but a particular kind of them, such as only causal relations and not of property under the category of the relation of cause. An ontological relation does not comprise each and all possible relations under them, while all and each of the categories that they constitute, do comprise each and all possible classes of things that we can distinguish. The category of cause includes all things, for all things can act as a causal factor, while only the relation of causality can bring about an effect.

It might be argued that space, time, existence, necessity, possibility, substance, property, mind, matter, states, facts, and events, are categories. However, neither space, time, existence nor possibility, are categories, as they do not refer to a primary or basic plurality of things, but to particular pluralities or a property or spatio-temporal fact of distinctions. In what regards *existents*, though it refers to a plurality it cannot be said that it is category since *existent* can be interpreted in the sense that it does not comprise past and future existents.

I agree that other proposed categories hold, but they are of lower orders, such as Frege’s concept and object. Anyhow, none of these lower orders is as universal and incorrigible as the ones to which this work refers. This is also the reason I do not include time nor space nor the other just mentioned pluralities. Time, because we can certainly conceive a triangle without presupposing its temporality; though the causal action of its conception presupposes time, the triangle itself does not. The same regarding space, for we can conceive spaceless ideas, regardless of the fact that we cannot represent them without it.

What is here held is that these, that I call incorrigible, are the most universal and absolute relations and categories, the ones that are presupposed in all our thoughts, but which cannot be judged to be just basic kinds of relations and categories of thought as they must be forcibly assumed to match with an aspect of objective reality.

These ontological relations and categories are identified by the intellect from the abstraction of particular relations held by non-sensorial or sensorial representations. They are universal, incorrigible *a priori*, irreducible, non- sensable true factual distinctions. They constitute identity, as well as the very grounds of our ontological scheme. They are our primary premises of judgement as well as our ultimate factors of explanation. As shall be explained in chapters 2 and 3 they also are causal factors of objective knowledge, yet a main limiting factor of it.

Allow me to posit the reasons I hold to make such claims.

## *The relations and categories are distinctions*

The subject matter of thought, language and knowledge are distinctions. Distinctions are the building blocks of our conception of reality[[14]](#footnote-14). By ‘distinction’ must be understood what we become aware of as being different, such as of a new sensation or idea; that is, of a sensation or idea holding a relation of difference to all other sensations or ideas. There cannot be thought or speech of what is not distinguished from all other possible subjects of thought and, thus too, of language[[15]](#footnote-15). Distinctions are the most fundamental kinds of mental entities of which we are consciously aware[[16]](#footnote-16).

Distinctions presuppose a relation between relata.All distinctions are of a relational nature. Every distinction presupposes a relation of difference between relata. The relata are, on one side, the subject relatum -the subject of thought or speech, or simply ‘of distinction’ or of ‘possible distinction’- and, on the other side, the object relatum (though it not necessarily is an object properly speaking) or object of distinction, to give it a name, which is the relatum to which the subject relatum relates. As to the relations that determine the distinctions, these are what a relatum is to another. The ontological relations are the basic relations between relata in a distinction.

Consistent with this, while the relation of difference constitutes one of the relata into a single or unique, and the other relatum into ‘all-others’, the relation of similarity makes of one relatum a particular plurality, such as a class, and of the other relatum, an instance or member of the plurality. And, while the relation of property makes of one relatum the subject of attribution or predication, and of the other relatum, a property, the relation of causality constitutes one relatum into a cause and the other into an effect.

Since of the distinctions there is not always awareness of what makes it different and similar, a distinction can be said to be *primary* if the relation of which there is awareness is only difference, such as the distinction of a bare sensation of light. And *secondary,* if also there is awareness of similarity, that is, to what a distinction of a bare sensation is like, such as of what kind of light. This does not preclude that, as is usually the case, a sensation be distinguished as a new experience, being secondarily judged to be -e.g.- a light of an odd colour, and thus, further distinguished as different from other lights. This last distinction is actually “primary”, because whether a distinction be primary or not is not based on the order it is made, but if it is about difference or similarity.

Relata in the distinctions can stand for abstractions based on the similarities that they hold. Such as “chickens”, which is an abstraction of particular chickens, based on the properties to which the particular “chickens” relate and,thus, share. Similarity constitutes pluralities. There are orders of pluralities, that is, pluralities of pluralities. Pluralities of pluralities are higher orders of pluralities. As shall be explained, the ontological categories are the highest orders of pluralities of pluralities that can be distinguished, that is ultimate or highest order of individual, cause, and property.

A category, as a subject of distinction, is under all the categories, but as a thing in itself it is only the plurality of things holding one of the ontological relations. These ontological relations are supposed to be all the basic kinds of relations that constitute rational things; that is, all the things that can be rationally distinguished, and, thus, which also fall under each of the ontological categories

A highest order of individual, rationally speaking, would be of a nature that instantiates under all our ontological categories, but not as a most particular, but in the most abstract manner as a plurality, or cause, or property.

As to a condition of all cannot be a plurality nor an instance, nor an effect or be caused (as it would presuppose other realities, nor be constituted by properties? It cannot be an individual as we understand rationally by individuals or a class. Rationally speaking, it must be of a nature not comprised under the categories, as it cannot be constituted by the ontological relations of which it is the condition of existence. However, it can hold external relations. By such external relations I mean those held between possible subjects of distinction with other subjects of distinction not constitutive of its nature.

Following what was being said, since all subjects of distinction relate and fall under these ontological categories, the difference to other distinctions of a subject of thought, language, and knowledge, is between the relata (as shall be seen, actually, between that for which the relata stand).

A relation can also be a relatum if it is taken for a subject or object of distinction. Such as in *“the relation between the husband and his wife brought forth a nasty relations of the couple with the members of the congregation”.*

Although all distinction are distinguished by means of judgment, relata originate either in sense experience or in the intellect (in the mind); that is, in sensation or not. According to this, distinctions are classable as *empirical* or *not-empirical*.

*Empirical* distinctions are classifiable into *properly* *empirical* and *hypothetically empirical*. It can be held that a distinction is *properly empirical* if both relata are sensations (whether primary or secondary distinctions of sensory representations, because sensorial relata are not distinguished before a representation of the sensorial impression is had, that is, before the odour, image, taste, etc., are sensed). On the contrary, a distinction arrived at is *hypothetically inferential*[[17]](#footnote-17) when only the subject relatum is a primary or secondary distinction of a sensation; that is, if one of the relata is not a *sensory* distinction. Most of the distinctions of science - constitutive of a formulation of a scientific hypothesis are *inferentially empirical* until verified. The distinction of protons or the calculation of galactic distances are all of an inferential nature ultimately made from primary distinctions, that is, from sensorial images that have been distinguished as being different. One can further distinguish between those *empirically hypothetical* distinctions that eventually can become *empirical proper* (as was the case of the hypothesis of the existence of the planet Uranus, which was later validated with direct sense experience) from those that are not verifiable through direct sensation, such as the death of Cleopatra. Even predictive assertions of empirical (sensable) facts are inferential until there is direct sense experience of what was claimed to exist. Observe that in the previous edition I defined the hypothetically empirical as inferential distinctions. I changed it here to hypothetical because, properly speaking, all distinctions require of inference to be made. Even difference requires of comparison, and there cannot be such without inference.

*Non-empirical* distinctions can be *fictional* or *a priori proper*. The *fictional* are constructs of fancy, made with elements of empirical distinctions or of the sensorial and the mental. The *a priori proper -*which*,* as shall be explained below, is the only true *a priori*- is the case of these ontological relations and categories, which are distinguished due to on an innate predetermination to do so. They are not primary distinctions, for they are not distinguished from bare sensations, nor secondary distinctions, as they cannot be distinguished from the sensed, without an innate predetermination or instruction to do so.

Please observe that inference, whether *deductive* or *inductive*, as shall be further explained, is the process of classing and property attribution for the determination of identity; it is the process of identifying the classes, properties and causes and effects, with which the subject of distinction relates and is both different and similar. While, from a realist perspective, inference by way of ‘deduction’ from the empirically verifiable generates true knowledge, by way of ‘induction’, inference in all cases delivers hypotheses, if not conjectures, whose validation require of other empirical distinctions or inferential distinctions. It is through inference that it is discovered, e.g., that a certain experience is a new sensation or has been caused by a particular factor or that there are neutrons in the nucleus of an atom. It is by way of inference that either an unknown relatum or a relation, is identified. It is through this process that knowledge is expanded. This happens when, by way of inference ‘from’ experience, the identification of either an unknown particular relation or unknown relatum is made. For example, how sensorial objects are in-themselves is not sensed but inferred from the mental constructs that constitute our sensations[[18]](#footnote-18). Such is the case of how we acquire knowledge about colour, temperature, or motion. From the experience that a, b, and c are white and hold the properties that make them members of Y, one can infer that ‘d’, being white, might also hold the properties that would make of it a member of Y. Some properties are very common and do not enable much specification by way of classing. In such cases, the mind generally recurs to other properties associated to them, such as ‘a‘ ‘is white, but also being a liquid and milked of a cow’, ‘d’ belongs to the class ‘milk’.

Regardless of whether they are objectively *true* or not, distinctions stand for things in the world or just for themselves. Those that stand for things in the world, stand for relata and relations in the objective world; these are distinctions *of facts* or *factual*. Those other distinctions supposedly devoid of total or partial ‘objective’ reference –whether of a relatum or the relata, or the relation, are *non-factual,* and only stand for themselves. “Mother is a fairy” is not a *factual* distinction, because though mothers are factual, “fairies” do not exist in themselves. Dreams, feelings, negations, fictions, false beliefs, falsities, the impossible, as well as the distinction of inexistent or nothingness[[19]](#footnote-19), or a mere possibility with no actual exemplar, are *non-factual* distinctions. However, not all the distinctions originating in the mind, such as those of our basic relations and categories, are *non-factual*. Abstractions of factual things are factual, as they are distinctions made of a plurality of factual things. Thus, colour, chicken universe, Being, are factual. So too are factual the categories and the ontological relations. The negation of the distinction between the *factual* and *non-factual* carries with it the negation of the difference between the subjective and the objective.

The distinction of *non-factual* distinction of other minds (such as of a dream dreamed by someone else or a fairy tale) are *factual*. This is due to the assumed objective externality of the other minds and their content, relative to the content of our mind. However, since the distinctions made by other minds may stand for things in the world or not, if the distinction of the other mind is *non-factual*, as is the distinction of ‘nothingness’, the distinction made of the distinction of the other mind is a *factual* distinction of a *non-factual* distinction. In other words, a *factual* distinction of another mind, is a distinction of an objectively existent -a something in-itself- of subjective distinction (mental or phenomenal); and this will be so, regardless of the name assigned to the subjective distinction of the other mind. An example of the last is the distinction of ‘nothingness’, since the objective *factual* distinction of it is not of nothingness proper, but of a false factual distinction, that is, of *non-factual* distinction that, as such, lacks an objective referent in the world. Likewise, the distinctions of thoughts of fictional minds (such as of a character in a novel) do not follow the nature of the ‘fictional mind’, and the *factual* or *non-factual* nature of the same, is given by the supposed objective existence or non-existence of that for which they stand.

Distinctions, in turn, can be said to be *true* or *false* regardless of the nature of the relata (such as being a primary or secondary distinction), exclusively depending on whether the relata and relation constituting what the distinctions stands for, respectively correspond and/or match with what they represent as objectively existent whether physical or ideal. If *non-factual*, a distinction is a *true* distinction if its relata respectively correspond and its relation matches, with the relata and relation of the “mental” or ideal distinction for which they stand –and which must be of a mental distinction already made. If *factually true*, the relata of the distinction must correspond with the objectively existent relata (whether sensed or inferred), and the relation –as will be explained- must match with the relations holding between the mind-independent objective relata[[20]](#footnote-20).

*True factual* distinctions would then be the ones constitute knowledge of objective reality. Based on what they stand for, *true factual* distinctions would be non-subjective distinctions of those who makes them; this is, one that -though a mental entity, as are all our distinctions- is a distinction of an objectively existent, whether it be of something in itself or a thought of someone else’s mind. Though *a priori proper* distinctions as are our ontological relations and categories, can be said to depend on the subject, they are objective. This is due to their incorrigible nature, which does not enable to judge them subjective (not existent in itself) without falling in contradiction, as they are presupposed by all our thoughts (As shall be seen it does not make sense to question this distinction between *true* and *false* on the grounds that it cannot be proven if a distinction corresponds or matches with the objectively existent). As will be explained, distinctions, if properly made, cannot be denied correspondence with mind independent reality due to the incorrigible nature of our ontological relations to which the particular relations are reducible.)

We also have to distinguish between the nature of the true *factual* distinctions and of the objective that they represent. Even the nature of the *factual* distinctions, as of any distinction, is made of subjective elements; these subjective components are the ‘*forms’* with which the intellect constructs representations of the objective -that is, of what is sensed and judged to be external to the mind- (and with which it also constructs non-factual and fictitious relata of distinctions). The *‘forms’* of our sensations are not those of the objectively existent. The substance of the distinction of a banana is not that of the fruit for which it stands. The nature of the objective is what, supposedly, the factual distinctions only stand for; that is, the relation and the relata existing in objective reality. In this sense, it can be said that the *‘forms of distinction’* actually are ‘forms of representation’ or signs with which are represented the elements of the distinction, that is, its relata and their relation. They shape the distinction of these relations and categories, as with them the mind gives shape and structure the same, but it is not “that” in-itself which they represent.

In *factual* distinctions, the relations between the relata (or of the more specific relations reducible to these) -as shall be seen below- is supposed to be the structure of the objective reality for which such distinction stands. As to their relata, they are what, supposedly, stand for the related objectively existents, and what -according to the relation that they hold- the different categories comprise under them. In consequence, if true, the relational ‘form’ of the *factual* distinction should match or correspond (actually, as will be explained, it has to match) with the relation holding in objective reality between the things objectively existent for which the relata of *factual* distinction stands (however, we are in no position to negate that the structure of the objective reality might include other elements for which we have no ‘forms’ to represent it, such as properties that confer membership to other fundamental categories of which we have no knowledge, if not something else, also unknown to us [[21]](#footnote-21) (rationality does not suffice to explain what there is, as it forces to presuppose either an infinite succession of causal factors, and thus, of properties, and successive higher order of categories, or an ultimate order of cause, category or properties, not dependent on “other”. In both cases, though these conclusions follow from a rational need for an ultimate explanation, none of these presuppositions is rationally acceptable, as both contradict the nature of what is rational, and lesser still, explainable. So, rationality does not suffice to explain the world).

Furthermore, we have to differentiate between the concept, the distinction, and that for which the distinction stands. If *factual*, the distinctions refer to something other than themselves. The nature and property of the concept or words referring to a plurality are not those of the distinction that they name or signify; nor are the properties of the distinction itself those of whatever the distinction and its constituent relata and relations stand for. A consequence of this is, that the properties -the qualities- of the distinctions referred to by the concepts expressing these relations and categories, are not those of the objectively real that these distinctions stand for. The distinction of a tree is not made of wood, but of a mental image. However, in *non-factual* distinctions, due to their lack of an objective referent, the nature and properties of the distinction are identical to those of its distinction. In other words, this is due to the lack of correspondence of their relata with anything in the objective world or -if the relata correspond with things in the world- it is due to the lack of correspondence with the relation constituting the distinction. ‘Nothingness’, for example, is -as any *non-factual* distinction- a mere mental construct. This explains why, neither what the *factual* distinction of nothingness stands for, is the distinction itself nor the concept that denotes it.

Based on the referred different ontological relations, a distinction can be said to be of difference, similarity, property, and causality. For a distinction to be the case, it is necessary that the subject relatum stand for something other than the object relatum stands for.

If the relata were the same distinctions and stood for the same thing, there would be no possibility of distinguishing. However, one can distinguish something that seems to be one same distinction as different, if one of the relata stands for different things. For example, the expression “Venus is Venus” does not refer to a distinction besides Venus, but “Venus is the morning star”, does refers to another distinction, because it refers to the planet Venus also being what appears as the morning star: a property of Venus is distinguished.

A subject of distinction can both be and not be distinct or similar to other relata. For example, a child may be different based on his height, and not so based on the age he has, as it will be similar to the others of his age. This happens, because difference and, thus, similarity, can be towards all or a few or to just another. The difference that constitutes being, is the ones that makes the subject of distinction distinct from “all” others, while -for example- being red does not make something different from red thing.

In the same manner, the distinction of the referred ontological categories demands that we avoid mistaking that thing from which the category must be distinguished by way of the ontological relation. We must not mistake the subject relatum of a distinction of a category with its object relatum; a cause is not the effect, nor the subject of attribution its properties, nor a plurality its members.

One must not mistake the nature and property of a plurality with those of its instances. Contrary to the old *Dictum de Omni,* the universal properties of a plurality (class, set, collection, etc.) are not necessarily those of its members. For example, the ‘extension’ of a plurality –which is a property of the class or set or plurality, as a whole- is not necessarily that of its particular instances nor it is made of the same ‘kind’ of subjects of distinction. The ‘extension’ of the content of a box of chocolates can be twenty bonbons, but neither each bonbon carries twenty other bonbons, nor the box of chocolates is a bonbon itself[[22]](#footnote-22). Still further -as shall be seen- while the concept of class (which is a plurality encompassing all that has one or more particular kinds of properties in common) is an abstraction and, thus, *a priori*, its instances can be *a posteriori* and represent concrete objects. A plurality does not share the same properties that characterise an instance as a member of it: the class of cars does not have wheels, nor the class of triangles is itself a three-sided figure.

Distinctions are the subject matter of propositions and concepts; sentences and words (signs) refer to distinctions. *A proposition is a distinction referred to by a sentence.* The referents of language are distinctions, and meaning is the distinction conveyed by the expression[[23]](#footnote-23). Contrary to the doctrines prevailing in most of the XX Century regarding meaning –including Quine’s- a meaningless expression, as explained here, is just one that does not convey a distinction, whether it be under the form of a name, such as a word with no meaning or under a sentence that does not refer to all the elements of the distinction for which it stands, such as not referring to the relation or the relata.[[24]](#footnote-24)

*It should be noticed that language in its structure, reflects the structure of distinctions.* The language of logic reflects it through premises or signs standing for the relata, and logical constants standing for relations. In the language of mathematics, this structure reflects itself in the expressions of numbers, sets, and geometrical figures, standing for the relata, and the mathematical and geometrical signs of operation, for the relations. In ordinary language, sentences[[25]](#footnote-25) mirror the structure of distinctions, with names standing for relata while prepositions, conjunctions and verbs representing relations.

The rephrasing of names into a description (or definition) shows that they refer to distinctions. However, language is more than propositions; all the expressions of a language, whether propositional or not, refer to distinctions, and it is the distinction to which they refer that gives them meaning.

Even the expression “that star” which actually means “the star I am pointing at”, stands for a distinction. It refers to “the star that is not all the other stars”. In the case of “that star”, the distinction is expressed by only two terms, rather than three, as “that” refers to something holding a relation of difference with another subject of distinction.

Even commands and interjections refer to distinctions; in ‘give me that!’ an instruction to constitute the giver of the order into a holder of a general kind of relation to a particular object relatum, is made. This is the case in greetings, exclamations, or interjections; but these operate like ‘names’ of actions, feelings, or attitudes. Thus, it is wrong to say that only propositions have meaning.

In fact, though names can be defined as instructions to recall distinctions that can be identified by the language speakers with a sign or word, propositions are sort of instruction for the addressee of the speech act to mentally construct a distinction with the relations and relata pointed at by the terms in the expression. In propositions, it is the words or names what point to the particular relata and to the relation holding between them; this enables the hearer or addressee of the expression to mentally recall the distinction that these words or names stand for. Through this ‘pointing at’ it is possible for the addressee of the speech act, to identify the relata and the relations of the distinction to which the speaker refers, and, thus, to make (mentally construct) with them the distinction the speaker sought to generate in the mind of the addressee. Indeed, in sentences (the propositional), names or pronouns refer to the subject and object relata, while to ‘positive’ relations point: verbs –as the verbs *‘to be’* and *‘to have’* in any of their grammatical forms; prepositions –such as *‘by’* and *‘through’*, and *‘here’*, *‘on’* and ‘*now*’; and connectors, as are ‘*and*’ or ‘*or*’. For example, the verb *‘to be*’ refers to the relation that determines class or plurality membership[[26]](#footnote-26) of the subject of distinction; the verb ‘*to have’*, to the relation of property; and the preposition *‘by’,* to the relation of causality. *‘Here’*, ‘*on’* or ‘*now’* also refer to properties; while *‘and’* or *‘or’* to class membership; that is, to a relatum respectively being under the same particular plurality than another or not, or that it has the same or different property or cause.

As to ‘negative’ relations, these are pointed at by the denial of verbs, prepositions, or connectors, such as *“it is not”*, and, with the affirmative assertion of nothing, to ‘nothingness’. Negations are instructions given to the addressee not to consider a certain subject relatum as holding a particular relation to another relatum, or that a particular relation is not standing between two particular relata -such as a distinction not being a property or causal factor of a certain thing, or not being a class or member of it[[27]](#footnote-27). It is in this manner, through reference to distinctions or to their constitutive elements, that meaning is made and if it is a language (any language), has meaning.

In mathematics numbers or other signs standing for a quantity, are distinctions that refer to pluralities of a certain –known or unknown- extension. The possible relations of these pluralities between it-selves is based on what may take place between the extensions -such as being added, reduced, divided, squared- and how this affects the extension of the same or of a particular plurality[[28]](#footnote-28).

In sum, while linguistic reference to one’s own subjective reality is direct, reference to objective reality is always indirect. And it is indirect, regardless of whether reference is made to facts, states of affairs, events, things, or objects, or to the mental content of other minds. And this is so, irrespective of one’s own position on the major issues and doctrines of epistemology and whether mathematical or verbal,

Reference to objective reality will[[29]](#footnote-29)always be indirect, through the ‘distinction’ of it; that is, by way of reference to what the constitutive elements of the distinction represent.[[30]](#footnote-30)

As to the ontological relations and categories, as said, they are distinctions. It can be said that they are *a priori proper* distinguished since their distinction is not possible from experience nor inferable from language without an innate pre-determination to distinguish the same. The relata and the relation that constitute the same, if any, are unknown (would it be an alternative that they lack the same?).

Consequently, too, these basic relations and categories with which our judgement operates, reflect the general manner in which we conceive the constituent elements of reality in-itself. In other words, they reflect how we conceive the building blocks of our worldview. However, as shall be explained in the next chapter, these ‘ontological forms of distinction’ may not include all possible relations and categories, nor whatever it be that constitutes the nature of the objectively existent; they cannot be assumed to be the ultimate possible ontology of reality, but the mere ontology of the rational. Rationality is the process of inferencing in agreement with the ontological relations and categories, and rational is the belief that reality is structured or constituted according to them.

1. *They are distinctions of an aspect of rational reality*

*Not one of these ontological relations and categories suffices to constitute being (nor all of them). For example, if the plurality of all that there is, sufficed to be a thing, it would have to include itself, which is a contradiction (in spite of Russell’s set theory). The plurality of all there is, is not a thing, but an aspect of what there is. Rationally speaking, a thing is an individual; this is, a subject of distinction that holds all the aspects that such relations and categories stand for. It is a subject of predication, has properties, is a causal factor, is an effect.*

*In fact, objectively speaking, there is no such a thing as a mere plurality, or mere cause or effect, or mere subject of attribution or a mere property without the subject of attribution.*

*They are aspects -to give them a name- of what is rationally distinguished. As distinctions, that is as ideas -not as that for which they stand- they can be said to hold all the relations and to be classable under all the ontological categories. The sole fact that they can be subject of distinction or of discourse, does not grant them mind independent existence as individuals.*

*This is important, because, as shall be explained, objective existents must carry certain aspects to exist in themselves, but these -those that we can rationally distinguish as aspects of rational objective existents- do not suffice for an individual to exist in itself. With the ontological relations and categories of rationality, rationality cannot be explained. Rationality cannot explain itself. This forces to presuppose that there is more to reality than the rational that the mind can distinguish. In other words, that reality in itself must be para-rational; that it must carry either aspects or something else, of a nature that our intellect cannot access.*

*In other words, it is rationally necessary that the plurality of all that there is, not be an aspect but a higher order category or categories, that comprises ours. Or if a cause of all that exists, it be of an order that can lack a cause.*

*Otherwise, if all the existents have a cause, the causal factor of all cannot be caused, otherwise, it would not be the cause of all, as it would be a member of the category of cause. It must be something of an order that is a condition of all without being under the category of cause.*

*The same with properties, if properties, to be such, in turn have to have properties, ultimately either this is something that never ends which is equal to no property being such, or there is a property that is a property of all, but which is of a nature that cannot be classed under the category of property.*

*This alone -there are other arguments- shows that reality must be more than the rational, as what characterizes the rational reality is to be structured according to these ontological relations and ultimately classable under the ontological categories.*

*The ontological relations and categories are mere abstractions of particular relations and classes. They alone do not constitute an individual, at most, it can be said that they constitute the ultimate abstraction of an individual, but as shall be explain they do not suffice to constitute it. What rationally constitutes the individual are the particular relations and pluralities which are reducible to the ontological relations and categories.*

*By individual I am not necessarily referring to a person or intelligent creature, but to the subject of distinction existent in itself.*

*Though the particular relations and categories seem to suffice for the existence of individuals in-itself, they do not, as some of them cannot explain or constitute an individual or reality, that explains all.*

*It must be realized that whatever is a rational individual, that is, one holding relations and categories reducible to the ontological ones, holds two basic kinds of relations: the ones between its constituents including the ones with its causal factors of existence and distinction -which might be vaguely called internal-, and the ones towards all other existents: such as being the causal factor or innumerable effects, or being the property of other subjects of distinction, such as a soldier of Cesar’s army -that is, the external relation.*

*The point is that the particular external and internal relations constituting an individual into such or as a member of a plurality, do not suffice to explain the existence of reality in itself. Rationally, there is no cause that is uncaused, as all existents depend on other to exist or to be distinguished. So rationally there is no causality of the nature required for something to be the ultimate condition of all. Neither can the temporal be a condition of all, as is our conception of efficient cause.*

*Our ontological relations and categories are simply distinctions of what all subjects of distinctions share. A fully abstracted individual is a mental distinction, constituted by what is abstracted of all the required particular relations it must hold and the participation as instance of all the pluralities (classes) that such innumerable particular relations determine.*

*They are not distinctions of individuals existent in objective reality, but of aspects of such individuals that can be said to be the rational aspects of the same, as more than the merely rational is required for the individual to exist. In other words, these ontological relations do not suffice to structure something existent in itself, nor these categories, to comprise under them all that is required that reality comprise to objectively exist, such as an uncaused condition of all.*

1. *Universality*

These relations of difference, similarity, property, and causality, and the categories that they determine, must be judged to be the most universal and, thus, our most basic and general relations and categories. By most universal I mean, *universal proper*: that all subjects of distinction must be assumed to hold these ontological relations with other distinctions or possible relata and must be classable under all the categories that these relations determine. I am not referring to a same relation being held with all possible subjects of distinction, but, that causality holds between the father and his daughter, and of effect of his daughter with her father. In consequence, by *universality proper* is meant that all distinctions are under all and each of the basic categories that such relations determine; based on the different kinds of ontological relations held with all other things.

This degree of universality is not a property of lower orders of classes –or pluralities- as these do not comprise all distinctions but some. Only these relations and categories, and a higher order reality that be complementary or condition of the same, do not hold these relations or instantiate under these categories.

So too, the very concept of ‘Being’ is not comprised under them, because it is the highest order of abstraction. Being is a distinction abstracted of any particular relation or trait.

Thus, by universal, I do not refer to a trait that the concepts that express these categories and relations themselves carry, but to an attribute that is common to the relations and categories for which they stand. The “distinctions” of these relations and categories are not universal proper, but particular distinctions; they are mere representations of the same and not of the categories and relations themselves, as only what these distinctions stand for, are these categories and relations.

Observe that the ‘distinction’ of these relations can be classed under these categories as mere mental construct, as when -as I am doing now- the distinction of relation becomes the subject of judgement. However, they cannot be judged to be mere distinctions under the categories, because -what they stand for and comprise in objective reality- are relations and not relata. Anyhow, while any of the distinctions of these basic relations can instantiate under the most basic categories as mere representation and not for what they stand for, the distinction of these categories cannot instantiate under a most basic relation, because relations, as mere distinctions, are of a lower order to the categories; the categories are more encompassing, that is, more generic, each comprising all that there is. While the categories comprise all possible distinctions (except those already mentioned of complementary nature or condition of the same) and all our relata instantiate under all of these categories, each particular relation can only be reduced to a single ontological relation.

*Indeed, contrary to the lower (less abstract) orders of classes of relata, which in turn. and in all cases, are members of all the ontological (most abstract pluralities) categories depending on the ontological relation to which their particular relations can be reduced to, each of the lower orders of relations only instantiate under one of the ontological relations. Thus, a relation of particular causality (such as causing a scandal) is not reducible to a relation of property[[31]](#footnote-31) or of difference or similarity. When it is said that it is a property of someone to make scandals, it is not held that the relation of causality of the scandal is a property, but that a relation can be attributed to be held by an individual -as subject of distinction- with what constitutes a scandal. The relation held by a subject of distinction to another subject of distinction can act as a property that characterises it as different from all other subjects. This is due to the fact that all our distinctions, instantiate under all the different ontological categories, with exception of what may be a higher ontological order or a condition of all.*

The argument for the all-comprising universality of the categories (from now on, simply ‘universality’) and for the attribution of these ontological relations to all subjects of distinction –that is, for their possible predication to all the distinctions that we make- is that we cannot conceive the existence of a subject of distinction if it does not hold all the referred relations. The reason for this is that if difference or similarity are suppressed, the distinction would lack properties and causality, and if property and causality are suppressed there would not be difference nor similarity. Since, in consequence, the other lower relations that we can distinguish do not comprise all particular relations as these do -nor the lower orders of classes that they constitute are all-encompassing as the ontological categories-, it can be held that these relations and categories are the most universal relations and categories of Being that we can conceive.

From this entails, that these categories cannot be said to be a property of a sole particular subject of distinction[[32]](#footnote-32). Due to their universality, these categories do not provide distinction to an instance of the same, as they cannot act as exclusive properties of an individual or plurality, nor as causal factors, of any particular member. If one says that something is a causal agent or a property, or a member of one of these categories, one is not attributing to it a unique trait that enables its distinction as something different (though the trait does enable their distinction as similar to all those that hold such relation). When one says that something is the cause or the property, the question that follows is ‘of what?’ as reference is assumed to be made to a particular property or factor, such as that it is the author of the book or the beauty of the painting.

The suppression of any of these ontological relations and categories bring about the suppression of all the other relations and categories, since without these most universal relations there cannot be distinctions nor relata. The hypothetical (as it is not effectively possible) suppression of a single one of these most abstract relations carries with it the disappearance of the other universal relations (as well of all the particular relations that instantiate under them), and of all the pluralities) inhibiting the distinction of a subject, and further still, of distinctions in general, and thus, of thought and language. So too the suppression of a single ontological category brings about the suppression of all the other categories and relations, since its suppression carries that of the ontological relation.

In fact, the suppression of causality deprives of properties, and this, in turn, of difference and similarity, and, thus, of thought and language. And the suppression of properties carries with it the suppression of causality, as it implies the suppression of effects; for effects are either about a unique and or universal property.

These relations and categories are what a subject of distinction must hold to be an individual; that is, to be different and also similar, with both the unique (tropes) and universal properties necessary to the effect, as well as with the causality relations to other subjects of distinction that the relation of property requires. Thus, an individual is a subject of distinction holding these relations to innumerable different object relata, such as of causality with B, and of property with A.

It cannot be argued that some of these relations constitute the subject of distinction while others don’t, as all must be deemed constitutive of it. Non-constitutive relations can only be predicable of a non-relationally constituted entity -if any- since the relations it would hold to other subjects of distinction (according to our ontological relations and categories) would not be essential to its existence or distinction; that is, would not constitute its nature.

The relations held between the relata to which all other relations can be reduced, are these universal relations. While these relations constitute the relata into instances of the said universal categories, the particular relations constitute particular categories or classes of relata; these in turn are reducible to the referred ontological categories.

In other words, under these ontological relations instantiate, and to them are reducible, the different particular relations. Under the categories that these relations determine, all possible relata are included, except those that be the condition of their existence.

These incorrigible relations are the highest orders of relations that we distinguish because, the categories that they constitute, comprise all possible distinctions that we can make.

Indeed, in like manner that the distinction of 'Being' refers to all existents, each of these categories supposedly encompasses 'all existents’. *Supposedly*, because ‘Being’ may encompass entities not comprised under our categories if there are others of a higher order of reality to ours, or not relationally structured, as would be a condition of all.

However, each category only comprises all distinctions based on one of the incorrigible relations that we can distinguish. While under ‘Being’ all things that we distinguish instantiate regardless of the relations that they hold to other existents -for the concept of ‘Being’ refers to a reality deprived of what enables distinction-, under each of these categories everything participates based on the relation that each subject of distinction holds towards other distinctions, including between the factual and non-factual. Therefore, while ‘Being’ is universal relative to all existents, whether these existents be objectively existent or not, the ontological categories are universal only relative to what holds the universal relation that determines them. However, since all our distinctions hold these different relations –exception made of those mentioned that might be a condition of the same- they are universal regarding all the referred distinctions (even the concept of nothingness instantiates under them, but only as a non-factual distinction and to the lack of objective existence of that for which it stands).

In effect, under the category of cause, instantiate -are members- all the possible subjects of distinction based on the relations of causality that each holds to a particular object relatum; and under the relation of causality instantiate all the particular relations that bring about an effect (or a determination of properties) such as writing a book, running a marathon, or doing one’s duty); that is, all the particular relations of dependence on others for existence or for holding a certain property instead of another.

Observe that the distinction of nothingness cannot be true, for truth is a correlation between a mind independent existent (which includes the content of other minds, besides our own) and our distinction of it.

Each of these categories comprises all possible distinctions, and every subject of distinction is under all and each of these supreme classes that we can distinguish. In consequence, no subject of distinction can be thought to be just a member of one of the categories alone, such as only a ‘one’ or an ‘other’, nor solely a plurality, or merely a property or subject of attribution, or barely a cause or an effect (Thus a condition of all cannot be under any category). Thus, too, each subject of distinction is supposed to hold *all* the basic relations but each with different object relata, based on the basic relation to which is reducible –abstractable- the different particular relations holding between the subject relatum and its different object relata. The relation of painting towards a portrait is only reducible to that of causality, but the painter as subject of distinction is not just a causal factor of the painting, as she also holds relations to her family, has the property of being tall, etc. Thus, it is wrong to say that ‘a subject of predication cannot be a predicate’ of another distinction.

For example, Juana and Belen are unique individuals each, and members of the plurality (class) of ‘girls’; but they also are two different pluralities, each respectively constituted by their own bodies, history of life, ideas, concerns, etc. And though they are subjects of attributes (holders of properties) such as of beauty and intelligence, Juana and Belen are also qualities of other subjects of distinction, as -e.g.- with them it is possible to individuate their respective schools or families, as when one says: 'the school to which Juana assists' or 'the brothers of Belen'. Moreover, they are both causal factors and effects, such as the cause of their grandparents’ love, and the end-result of their respective genes and upbringing[[33]](#footnote-33).

Moreover, when one says that number is the extension of sets and, thus, a property of a kind of plurality, one is not ruling out that number is under the other ontological categories. The distinction of ‘number’ –as all distinctions- is, first, that of something different from all other things; and then too, similar, and thus, a member of a class of things, such as an instance of the class abstractions of pluralities. But it is also a plurality under which instantiate all possible quantities (extensions). Likewise, a number is a property of pluralities, such as the extent of a box of chocolates, as well as the cause of mathematical judgement, and the effect of pluralities being constituted by more or less instances. The reason we generally judge numbers as merely being properties, is due to their unique trait of referring to the extensions of pluralities.

In fact, the traits with which we characterize a distinction as an individual are not the properties that constitute something under the ontological category of one or entity (unique) but under all the other ontological categories. What might be called the properties of ontological categories do not deliver distinction, the same those that can be said to be properties of ontological relations. The reason is that all our distinction have them, except a condition of all.

In sum, all subjects of distinction are classable under all these categories, regardless of the particular relation or category emphasised or considered to distinguish the same.

When it is said, for example, that numbers stand for the different extension of pluralities, we are not excluding numbers from holding all the properties that they have to hold to be under classes ultimately reducible into the ontological categories, by classing and stressing the trait of extension we are just pointing to the unique property of the plurality that makes numbers different from all other things. Moreover, we are selective as to what constitutes a set in our distinction of number, such as that, what is constitutive of the extension of the box of chocolates are the chocolates and not the paper cups in which each is placed.

Allow me to clarify that what number stands for is not a convention, as think some of the holders of the idea that these kinds of relations and categories are hypotheses or conventions on how to split reality. Extension cannot be negated of pluralities; it is of the essence of pluralities to be constituted by entities holding a relation of similarity based on one or more properties. Plurality –as shall be explained below- is an incorrigible concept, as well as it is also incorrigible the existence of different pluralities, not based on the extent of their extension but on a particular trait of what they encompass, such as being of a lower order to what is called a genus, or whose constituent instances have a different substance or shape, are material or abstractions, etc., as is the case of classes, sets, kinds, types, etc. A convention (in this case) can only be the name or sign assigned to refer in language to a number. In those pluralities that comprise a diverse collection of members, it is also a convention what is taken to constitute the number. For example, as said, of a box of bonbons, what is taken as an instance to determine the extension of its content are the bonbons, and not the small paper cups in which they rest.

These ontological relations and categories are the most abstract distinctions that we can intellectually access before the abstraction of the distinction of ‘Being’ is arrived at. ‘Being’ is the ultimate or highest possible abstraction that we can make. The abstraction of ‘Being’ stands for what is deprived of all properties (causal factors, class membership, etc.). *There are no other higher orders of categories or relations that we can make or conceive between the abstraction of these categories and the distinction of ‘Being’*. The proof is factual. Whatever is conceived as a higher order -as results from any intent to overcome this limitation- is reducible to our basic ontological categories, and thus to an order lower to them. While these relations are our highest abstractions because they relate the relata of all our possible distinctions, the categories are such because they comprise all possible subjects of distinctions.

This explains why these universal and most abstract relations and categories are ontological proper, in the sense that they apply to all beings, except -if any- to those that be complementary to them, or, else, a condition of the same.

As a result, a subject of distinction is what we become aware of as holding said ontological relations with other subjects of distinction and falling under all these ontological categories. This is the reason why these relations and categories determine the most basic kinds of distinctions that we can make, as there are no other more generic classes of pluralities that we can distinguish than they. We are not aware of higher orders of relations to those that constitute them. To explain what a cause is, for example, the only possible answer requires reference to cause. There are no higher order of relations and categories available to us to explain what causality or a cause is. The same happens with properties.

It also follows, that these basic relations and categories being universal, can be deemed to be the structure of all our distinctions -exception made of those, if any, that be complementary or a condition of the existence of that for which they stand- for they are what all our distinction share in common, and somehow appears to support them.

*Because of this universal nature, these ontological distinctions provide a unified vision of the world. That is, of reality being one and not a plurality of independent non-related realities.* If only lower orders of categories or classes to these were the highest orders that could be distinguished, we would have no manner to correlate and link the particular classes or categories into a whole, and we would lack knowledge of what is common to them all. Moreover, there would be no remedy to this since these ontological relations and categories –as will be explained- are *a priori* givenand cannot be inferred from the empirical if judgement has not previously contributed them to the distinction.

All the theories that deny these ontological distinctions in all or in part, or which hold that some are subsumable into the others, certainly contest what I hold and here present. However, as will be shown in the next subsection, these ontological relations, and categories, as much as the distinction of Being, are incorrigible. Any possible objection to this trait of universality would derive from a mistaken conception of cause and causality, which asserts that abstractions lack causal powers; that only objects can hold this trait. However, all our distinctions, regardless of their nature, are a cause to those other subjects of distinction that they relate by way of causality. Causality does not require of an energy or power that a subject of distinction has to have. The energy can be in the mind of an observer, as when one says that the cause for his love of philosophy was Plato´s dialogues, or of literature, the beauty of a poem. Causality is simply something *sine qua non* something else does not exist. It is that on which a subject of distinction depends for being such; that is, for its difference and similarity; in other words, that on which depend its unique and universal traits We cannot deny causality to anything that exists[[34]](#footnote-34). It is ridiculous to hold that abstract objects cannot be causal factors because they lack causal powers.

The wrong idea that abstractions are acausal originates in Locke, who held that causality has an empirical basis and that the empirical basis for it comes ‘from our own felt powers as agents’[[35]](#footnote-35). This theory is due to a mistaken conception of causality. Locke is wrong in this. Causality is a distinction that we make because we are programmed to distinguish (our physical traits and organs, presuppose it) that a particular exists, or has certain traits and not others, because of the existence of other existent things.

Berkeley[[36]](#footnote-36) adopted Locke’s doctrine of causality, which Hume accepted and used, as it served his theory. Berkeley attacked the doctrine of ‘abstract ideas’ as existing in themselves, on the argument that ideas are inert, and thus, cannot act on our senses (he held that only spirits are active). To him, perceived ideas were individual entities with no power or agency included in them. So, since an idea or object of thought cannot produce an alteration in, or on another, as no power or activity is perceived in them, they must be causally inert (so there -he argued- must be some other cause for their continual succession, arising and disappearing, which is God, the ultimate source of ideas and their connections). [[37]](#footnote-37)

It is surprising that this theory of the acausality of abstractions is still held. However, as just explained, it is totally unfounded[[38]](#footnote-38). *Causality is not based on powers, but in dependence on others.* The theory of acausality is grounded in the wrong understanding that a cause has to have a power to bring about an effect. The argument is that abstractions lack powers (they are abstractions) and thus, cannot bring about an effect. However, as said, cause is simply what results from a relation where one of the relata cannot exist without the other a relation of co-exitence. There cannot be love for mathematics, if there is no such discipline, but it is not necessary that, in order to be causal factors of mathematical love, numbers be endowed with a physical power to cause you to love mathematics.

It is correct to say that abstractions do not act on our sense organs, that they are not sensable, that is, of a nature that cannot be sensed. However, this cannot be interpreted in the sense that what is not sensable is inert. Besides, though it can be said that objects act on our senses, the truth is that it is not them that bring about the sensation, but the photons which they emit and act on the nerve terminals of our sensory organs. The immediate external factor of experiencing the same, are the photons impinging on the nerve cells. The objects themselves are one more in the order of chain of causes prior to their sensation. In tactile sensations, the object may not do anything to cause it, as the sensation results from the electric charges originating in the nerves of the skin, upon contact with an object. The theory that some things, like abstractions are causally inert is contrary to common sense.

## *d. Incorrigibility[[39]](#footnote-39)*

The prevailing stance today is to consider these ontological relations and categories, hypotheses, or conjectures about the structure of the world, if not just fictions, rather than descriptions of facts. That is, to judge these relations and categories not to be absolute, but rather social constructs or advantageous manners -for a class or group- of splitting reality, if not posits of theories about reality (Putnam), or just helpful conceptions for deriving verifiable scientific statements or norms.[[40]](#footnote-40)

In other words, their objective reality is rejected, and they are regarded as one of the many possible manners in which the mind puts together or constructs a phenomenal (mental representation, such as an image or a sound) reality. However, these relations and categories are incorrigible. They cannot be in any manner supressed, merged, incremented, or reduced nor in any way modified or altered. Even the just mentioned proposed explanations of the ontological relativist, that these ontological relations and categories are conventions, cultural posits, hypothesis, conjectures, imaginary conceptions, fictions, imposition of power groups, etc., presuppose them; for example, conventions presuppose causality and effect, properties, presupposes classes of things, pluralities, causality, individuals; the same with all the other relations and categories, for all our judgments presuppose them.

By incorrigibility, I do not refer to these distinctions being undeniable, as this is a property common to the existence of all distinctions once made. In fact, of a distinction one can deny that it is factual or not, true or false, new or old, or who made it, but not whether it exists or not. *By incorrigibility, I mean the impossibility of questioning without contradiction that their distinction matches with that for which they stand as existents in objective reality.* In other words, by incorrigible is meant that, in true factual distinctions, the structure that they represent as being held by something in objective reality, cannot be denied to be the structure of what they represent as existent in the objective world. Thus, by incorrigibility is held, that these basic relations and categories cannot be denied to ‘match’ with the structure of the objective world that we distinguish. It is also meant that this matching is a fact of these relations, even if the perceived objective ‘things’ for which the relata stand, merely corresponds with how they are perceived or represented (such as sound with sound waves).

Moreover, each of these categories and relations, whether consciously or unconsciously, complement the others in a manner that not a single one of them can be, neither in part nor in its entirety, altered, subsumed into another, reduced, or suppressed, without negation of the others and of the very possibility of distinguishing. Nor are there any possible gradients of them for us, as would be the case if, through maturation from birth, the intellect started with a partial or incomplete conception of these and over time they became the specific ones we think with[[41]](#footnote-41). Indeed, neither relations are suppressible without terminating with the distinction of these categories, nor these categories can be suppressed without implying the negation of relations. Still further, if one could suppress these categories and yet preserve the lower orders of classes -which is not possible as already explained-, the unified vision of the world that they provide would be lost[[42]](#footnote-42); as we would distinguish the highest particular orders of classes, as unconnected pluralities of realities, unable to distinguish the elements in common among them.

It might be contested, that both property and causality are different constitutive elements of the subject of distinction since a subject can be distinguished by the causal factor of its existence –such as in, “Francis and Marc are sons of Florence”- and so, that both cause and property could be reduced to one category, or each subsumed into the other. However, the relation of causality is not that of property because each of these relations relates a same subject of distinction to different object relata. Although the subject of distinction is the same for each relation, the object relatum is different with each type of relation. This explains why Russell was wrong in holding that there is no such thing as classes, simulating discourse about them by contextual definition, reducing them to attributes[[43]](#footnote-43).

Besides, none of these relations and categories, as any plurality that they are, can be instantiated or classed under itself, for it would be both the subject and object relata. In such case, the subject relatum would not be different nor similar since, in what regards difference, the object relatum to which it has to be different would be identical to it; and, as to similarity, because the object relatum to which it must be similar, would be identical without the least content of difference with the subject relatum. Consequently, there would be no possible difference or similarity if a subject relatum is its own object relatum. The nature of what the concepts of plurality refer to, is not identical to that of its members. Thus, contrary to what is usually accepted as possible, a plurality cannot be a member of itself (and so too, neither a property its own subject of attribution, -that is, of distinction- nor a cause, an effect of itself) as is wrongly assumed to be possible in Russell’s Paradox that a set of all has to be a member of itself) *Distinctions imply alterity and the categories only refer to what a subject of distinction is relative to others, and not with respect to itself.[[44]](#footnote-44)*

My personal opinion is that in Russell’s paradox we have a clear example of the limits of rationality. The limits are observable when either the answers cannot be but tautological or contradictory, as is the case of a set of all being a member of itself.

From this entails that by incorrigible must be understood the impossibility of denial of the mind independent objective existence of entities, classes of things, properties, and causal factors. That is, that these relations and categories exist in-itself in the objective world. However, we can only assume that they apply to a mere aspect of reality, for, as shall be explained ultimately reality cannot be explained with them. And, lesser still, neither with an ultimate condition, since -as shall be explained- a condition of all cannot be dependent on these ontological relations nor fall under these ontological relations.

It might be argued that there are other incorrigible distinctions, such as that of the ‘ego’. However, these are only unquestionable relative to certain particular distinctions, so not truly incorrigible as the basic relations and categories are. The basic relations and categories are incorrigible relative to all the distinctions that can be made according to these ontological relations and categories. But not of a condition of the same, that is, of a condition of the existence of reality. That is, only in all possible rational worlds, since these relations and categories are those of what we say to be a rational reality, for it is these ontological relations and categories of our ontological scheme and the principles of judgment that they determine, what constitutes rational judgment. Then, by possible rational worlds, I mean any rational reality, or rational aspect of a para-rational order, regardless of how it is structured, and not just to what Lewis defined by such[[45]](#footnote-45).

Though, by being incorrigible, it is meant that the ontological relations and categories are undeniable in all possible worlds, it is not meant that all reality is merely rational as the distinction of these relations and categories structure it for us, but that all subjects of distinction –exceptions made of the ultimate condition of all- can be attributed these basic categories and relations, without contradicting the nature of the objective world. *It is this what forces to presuppose that the rational world, is an aspect of the para-rational nature of reality. The fact that rationality must be applicable in all possible worlds, but lacks the ground to stand alone, makes necessary to suppose that it is an aspect of a para-rational reality, except of the para-rational nature of an ultimate condition of all.*

The same is the case of lower orders of relations and categories. The fact that the ontological are undeniable does not mean that other -such as the lower orders- do not exist or are incorrigible. Our ontological relations and categories admit particular relations and classes reducible to them or, alternatively, they also admit the thought (hypothesis) of a higher order into which they itself be reducible.

It may be argued that some lower order categories, such as that of number, are also incorrigible proper. Although ‘number’ is undeniable relative to pluralities, it is not undeniable relative to all possible distinctions, since not everything is an extension of a plurality, and neither causality nor property, are themselves a number -though numbers can act as causal factors and properties, so number is not properly incorrigible (nor a basic ontological category proper).

It might still be argued that the distinction of ‘time’ is incorrigible, as there cannot be efficient causality without it; or else, that it is incorrigible but not objectively existent -that as argued St. Augustine of Hippo time does not exist- because the present is the passage from what non-is any more to what non-is yet, this is, from a non-existent to a non-existent. In the *first* place*,* time is not ‘incorrigible’ proper, as it is only undeniable relative to our sensorial representations of past, present, and future, and not so regarding the most basic abstractions, irrespective of it being presupposed by efficient causality. In the *second* place, it is wrong to say that time does not objectively exist; as it suffices that, its distinction, match with a part or minimum of objective reality, to be a factually true distinction relative to that with which it matches. Moreover, time could well be an aspect of a higher spatial dimension, of which we can only perceive a minimal part; that is, it could be a simplified manner of mental interpretation of a more complex spatial reality unperceivable by us, or something unconceivable by us.

Nevertheless, it must be observed that time as is distinguished to be, depends on an observer with mental records of past events.

# *A Priori Proper*

In the same manner than the traits already addressed, this is a trait of both the distinction of these ontological relations and categories, and of what they stand for. Of the distinction, because it originates in an non-sensorial *a priori* determination to make it; and on what these ontological relations and categories stand for, as they stand for something of a non-sensable nature (not accessible by the senses), which appears not to be relationally constituted, as happens to the relations to which they refer.[[46]](#footnote-46)

In fact, these ontological relations and categories can be said to be information about the world which inaccessible via sense experience; that is, which –due to its non-sensable nature- is neither acquirable through the senses nor inferable from experience, and yet essential for true distinction of objective reality to be possible. The knowledge that they provide and constitute is innate, actually derives from a pre-set disposition to distinguish according to them.

I will call this *a priori* the ‘*a priori* *proper’* or ‘*the true* *a priori*’ to differentiate it from a common conception of the *a priori*, which deems to be *a priori* those distinctions that being inferred from an empirical fact, can be made without previous validable experience. Such is the case of the example *‘Bachelors are unwedded men’*, which, properly speaking, is based on empirical knowledge of language, and inferred from it, and, thus, though anterior in time, is not *a priori* *proper* but *a posteriori*.

Although empiricism has denied the Kantian fixed and universal *a priori*, it accepts today that there are certain principles and rules, which must be available to the intellect prior to judgement for judgement to be possible. However, empiricism attributes these to conventions (Logical Empiricism) or deems them to be -as does Putnam- a relativized *a priori*; or the core of a holistic net of purely empirical knowledge (as suggests David Stump[[47]](#footnote-47) regarding Quine’s empirical holism); or else, constitutive empirical elements[[48]](#footnote-48). However, that knowledge requires of innate *a priori* structures, as argued, among others Chomsky and Konrad Lorenz[[49]](#footnote-49), cannot be negated.

An *a priori proper* is necessary for judgement to be possible and is necessary that it be innately set. The fact that it be innately set, must not surprise us. We are born with an enormous amount of *a priori proper* information. That is, with information that cannot originate or come from experience as it is not of a sensable nature. It ranges from the one that determines biological functions that presuppose innate information about the world, to the one which predisposes to a particular social conduct as well as to certain beliefs, such as in the existence of external reality and of the self or the ego, in the stability of nature, and -according to Diego Colombek[[50]](#footnote-50)- in the existence of God if not of the “I”, as something independent of our body[[51]](#footnote-51). Our physical structure alone, such as our limbs, hands, and fingers, imply the existence of a reality independent of our body and mind, constituted by individuals, pluralities, classes of things, properties, and cause and effect. This *a priori* makes available information essential for both individual and social behaviour and includes the basic ontological categories and relations with which judgment operate (*for all relations are of non-sensable nature, but inferable from a priori rules of judgment).* It includes lower order of classes and relations (of lesser universality) such as ‘number’, and ‘forms of sensitivity’ with which the mind ‘shapes’ sensations -as are colours, aromas, tactile impressions, sounds, images, and the succession of experiences, in change and motion[[52]](#footnote-52), if not also the notion of space. Notion that Kant judged to be a form of intuition.

The idea that space is an *a priori* given manner of representing the reality in which we physically exist, rather than what actually there is in-itself, is not one that must be discarded without further thought, since the idea of space is not-empirically given. Space as we distinguish it to be, is not sensed. It, as all the manners that our intellect represents what it senses, are just practical -least costly in energy- manners to have a working representation of reality. It can be said to be triggered, as the other sensations, by the action of photons in our sensorial organs, as a response to images or sounds, or other sensory experiences. In fact, we distinguish three-dimensional space in a two-dimensional photograph, and we lack awareness of mind external spatial dimensions in a pitch dark, soundless, motionless environment. It is our mind that attributes such higher dimensionality to the image in the picture, in the same manner that it is our mind that turn the different reflections of light acting on our ocular nerves into images.

But even if space existed as dimensions, if it happened to be the case that space in itself is actually made of infinite number of dimensions, to the point that ultimately there is no space, would an observer endowed with the faculty of perceiving them all, forcibly judge the three-dimensional quantum phenomenon of the parallel action of two distant photons as being at a distance?[[53]](#footnote-53)

So too, thebasicrelations and categories (under which the mind comprises all the relations and pluralities of existents) appear to be given in a pre-established manner, embedded at the level of the unconscious, as instructions for sensation and judgement. Most probably, they are genetically determined. These instructions simply indicate how to interpret what is sensorially given and infer from the distinctions to which its interpretation gives place, new distinctions. They are information about the world that the mind contributes to sensations in order to generate distinctions, and, based on them, infer otherdistinction os a non-sensable nature (either because they are as yet not-sensed or because it is not possible to access them sensorily). We become consciously aware of these relations and categories, by way of abstraction, through rational-discursive judgement of what judgement has already put into the distinctions that it makes. And it is their distinction by inference from what the mind contributes to the distinctions, that generates awareness of the same, that is, of both these relations and categories.

In sum, the *true* *a priori* character of the relations and categories results from the fact that:

* + 1. *They cannot come along with experience or be derived from it:* it is not possible to have experience of them nor that they be inferred from experience. F*irstly,* because they are abstractions and abstractions cannot be sensed. S*econdly,* because abstraction is made classing a subject of distinction into a higher class (more abstract one). Therefore, in order to infer them it is necessary that they be available for classing before inferencing the same. However, these relations and categories are the highest possible orders of relations and classes that we can distinguish, so they cannot be available through inference from experience if they are not available a *priori.*
    2. *The sensable -what is of a nature that can be sensed- (and this includes any kind of convention, core of empirical network, or relativized a priori) cannot be distinguished without them*, so they must be prior to possible experience, and, consequently, given *a priori.* It might be held that, initially, they may be constituted in a provisory manner in our mind, and gradually adjusted with the feed-back derived from experience –as could be a relativized *a priori.* However, what might be adjusted is only their application (such as better determination of what is a property and what a cause), and not the basic manner of splitting reality that they determine. Bear in mind what I said above, about the consequences that a minimal alteration of these relations and categories brings about. Their lack deprives of any possible knowledge; moreover, I dare say, of awareness.
    3. *We can ask for which, what, why or how,* before we become aware of these relations and the categories that are necessary to answer such basic questions. This, too, is an indication that we are innately and ‘unconsciously’ *a priori* *proper* pre-ordained to inquire for these relations and categories, and, thus, to recur to these question-concepts, in order to infer them. Let me observe, that if we lacked the intellectual possibility of accessing these ontological relations or categories, these questions would not be possible with the lower orders of categories alone.

In effect, these relations and categories are only identifiable by way of deduction from what has been already contributed by judgement in the act of abstracting. Their deduction is based on the implicit premises *a priori* constituted by the very relations and categories on which judgement is established. Without these premises, these distinctions cannot be made, and least of all their abstraction arrived at, as there is no manner to become aware of the same prior to their deduction, as they cannot be inferred without an innate predisposition to do so according to them.

In fact, their abstraction is not reached by way of suppression of unique and universal properties from the sensorially distinguished, as is usually held. This would be an almost endless process and, even so, impossible to conduct without *a priori* *proper* instructions. Otherwise, how would we know what to suppress of distinctions in order to class them into a higher order of pluralities? Abstracting is the mental act of bringing a subject of distinction under the higher order class into which it can be classed. However, as just said, this classing requires that both the properties and the higher order plurality or category be mentally pre-determined or determinable for the classing to be possible. It is the same with reducing or reduction. That into which they -or anything- are reduced, must be available to judgment before their reduction is made.

The deduction of these relations and categories usually starts with the search of what can be said of all things, asking of the subject of our act of abstraction, *‘what it is’*, or *‘why’* or *‘how’.* That is, seeking either to class the subject of distinction into a more general and more encompassing class or, else, trying to specify the class or properties of its constituents, until the constitutive elemental particle or causal factor is arrived at. While it is thought that it will be actually arrived at the ultimate constituents of matter if an elemental simple particle (though this is certainly questionable) is identified, it is arrived at the most abstract categories when further abstraction only delivers the distinction of 'Being'. An example of the last is when, to the questions of *'And what is this?*’, the sole possible answer is: ‘*It is Being or existent or entity'*. This is so, because we lack the higher classes, basic elements, or causal factors to proceed and progress with the abstracting. In like manner, we can deduce the most basic relations when one cannot further identify a relation under which the particular relations are reducible other than as ‘Being’. The *a priori* determination is also a requirement for our conception of ‘Being’, that is, of our idea of unity of reality; it too, cannot be inferred without predetermination to deduce the same, for ‘Being’ is the ultimate abstraction that can be attained.

The *a priori* *proper* nature of these relations and categories further results from the fact that they cannot be (i) defined nor (ii) empirically negated. In effect, to define is to put in propositional form a distinction according to the different ontological relations held by what the relata of the distinction stand for. Thus, to define is to specify the difference and similarity, and thus, the properties and factors that determine the identity of the subject relatum. Now, the distinction of these basic *a priori* *proper* relations and categories is not classable, nor their constitutive elements or factors –if any- identifiable. They can only be stated in a proposition as a subject relata holding a relation to relata of an equal or lower order to that of their referent For example, it can be said of “cause” that it is a “factor“ (for there is no available higher order to them under the concept of ‘Being’, and the same happens when we seek to define these relations) or it can be said that a cause is what brings the tree down. In the first case, we have a tautology because the words cause and factor have the same meaning; and, in the second, what we have is just an exemplar, that is, an ‘example’ of an instance of cause. However, a relation to a relatum of a higher order of abstraction to them -as is needed to define their class- cannot be identified and thus, is inexpressible. This impairs the completion of the identification of causality, as well of all the other ontological relations and categories.

Consequently, these relations and categories, as all the *a priori proper,* can carry a name, but its distinction cannot be stated in propositional form, which makes them undefinable and, thus, too, unexplainable[[54]](#footnote-54). *They constitute the structure of our picture of the world; what the picture must have in common with the world to be a representation of it, which itself, ‘cannot be represented’[[55]](#footnote-55)-where ‘representation’ can be identified with ‘defined’,* as we cannot have an idea of what they are, that is, to what class they belong*.* This is exactly the opposite of what happens with *a posteriori* distinctions, which have to be definable or propositionally expressible, if true.

As to (ii) above, there is no manner to negate the *objective nature* of a distinction whose *constitutive* relation and object relata (being of a higher order) are not identifiable, as happens with what being *a priori proper* as it is of a nature not grounded in experience and universal and incorrigible. Only the sensible or the fictional (which is shaped with memories of ‘forms’ –component elements- of former particular sensations and relations, without the supposed proper external sensorial stimuli) can be questioned and deemed false; for this very reason, these *a priori* *proper* relations and categories, cannot be judged to be fictional nor to originate in social conventions.

It could be argued, that if these categories are tautologies[[56]](#footnote-56), -as results from any intent to ultimately explain or to define them- that they are meaningless[[57]](#footnote-57), and do not constitute knowledge; or that, if at best they can be exemplified, that they are undefinable proper, and so too, meaningless.

However, they are not meaningless as they refer to a distinction that we cannot deny being objectively true without intrinsic contradiction. Their tautological and apparent unexplainable nature results from their undefinable character ‘*with our Ontological Scheme’*. If meaningless, even the postulates and laws of the natural sciences would be meaningless, for the postulates and laws of the natural sciences are ultimately, grounded on them as primary premisses of all our judgments.

It is wrong to think ‘that *a priori* reasoning cannot establish anything about the nature of reality’, as was held by logical positivism and analytic philosophy[[58]](#footnote-58). These categories and relations, though *a priori* contributed by the intellect, carry cognitive content of reality. They are information neither acquired from experience nor inferable from experience. Experience alone only enables sensations of which we cannot have conscious awareness without these *a priori* *proper* relations. It is these relations that make distinction possible, and without them, there is no knowledge.

Indeed, the source of our knowledge is not just the senses; it includes this *a priori* *proper* given. *What is called empirical knowledge –the one constituting the natural sciences- carries an enormous a priori proper content.* It carries this *a priori* content as much as it carries the one constituted by the *forms (such as colour, odour, sound, taste, tactile impressions) with which the intellect responds to sensorial stimulus and assigns a* shape (among the possible forms that it can deliver) to represent our sensorial experiences*. While the first can be called “forms of judgment” the last can be said to be “forms of sensitivity*”. These *a priori* *“forms of sensitivity”* are those of our sensorial representations -such as colour, tact, taste, odour, sound, and time and even space[[59]](#footnote-59) -because we don´t sense space- and the ontological relations and categories are “forms of judgement”, as it is these that judgement contributes with to the sensed according to how the sensations are given. Kant is right that it is ‘synthetic *a priori* judgments’ what make up experience[[60]](#footnote-60).

What must be observed is that not only the forms of judgment constituted by the ontological relations are *a priori,* but also those of sensitivity. And that in the same manner that the forms of the relations match with the mind independent relations, of what is distinguished, those of sensitivity, though they do not match, they correspond with those of the thing of reality in itself to which the distinction refers. Moreover, as I explain in the next chapters, in the same manner that the forms of sensitivity do not deliver a total representation of what the senses access, but only an aspect, the forms of judgement deliver a mere aspect of what one thing is to all other existents and to all.

Following the Scholastic *Dictum de Omni*, it could be argued that if what is predicated of a class is predicable of its members, and that if the distinction of ‘Being’ and of these categories is *a priori,* then, all that we distinguish with them is also *a priori.*

And indeed, it is, for their distinction constitutes knowledge, and the knowledge of the world that is generated with them is not sensorily given but inferred. *Our knowledge of the world is, properly speaking, a priori and cannot be validated by pure empirical means.* The empirical validation required to such end demands that the sensed be interpreted and assigned a relation to become a distinction and thus, knowledge. However, the sensorial nature of the relata and the order in which they are experience is empirical, as it is delivered by means of sensations or inferences from these (e.g., that one precedes the other, in causality). Anyhow, the *‘form’* assigned to the sensorial impressions is *a priori proper*, as it is a predetermined response of the mind to a sensorial stimulus.

As shall be explained below, the fact that our distinction properly speaking must be said *to be a priori, is not an obstacle for our knowledge of it to correspond or even match in part with reality in itself. Moreover, due to their incorrigible character of these ontological relations and categories, which is not the case of the forms of sensitivity, the mind is forced to accept their nature to be objectively mind independent existent. Which explains why our knowledge is not precisely phenomenal as Kant held.*

However, though the categories will be determined and predicated *a priori,* since all our distinctions are comprised under them, the categories will include more than the *a priori* *proper* relations of the distinctions. This is so, because the sensations that constitute the relata of the *primary* distinctions are also under them, and these carry components *a posteriori* given, that is, information about the world which is empirically given and enables to determine the relations that must be assigned between the empirical subject of distinction and the object relatum. In fact, one can predicate of a class or plurality to hold particular relations of difference and similarity, and of property and causality, but the predication of difference of a *primary* distinction is *a posteriori* of the mere sensations.

Because of their *a priori* *proper* nature, our knowledge of these relations and categories is direct or intuitive. What is *a priori* given to us is not conceptualised knowledge of them. We are not born with conscious awareness of these ontological relations and categories. Our rational (not-instinctive or subconscious) awareness of them must be drawn from what judgement puts into the distinctions; that is, not just from what is of sensable nature of the distinctions that we make. Moreover, the potential of judgement to identify when they apply to the sensorially given -actually, to the sensorial representation-, or in the inference when missing, and in the construction of fictions of reality, such as falsities and fantasies is also *a priori proper* given. This faculty of judgement follows a pre-set or pre-established program (I would say biologically fixed) to the effect. For example, In the distinction of ‘Being’ what is *a priori* given is a certain innate predisposition to judge that whatever can be sensed or thought of, has something in common with all other possible subjects of distinction. From this it is possible to infer that the multiplicity of sensations and distinctions constitute a plurality under which all distinctions participate. The same applies to the *a priori* *proper* relations and categories.

Such a pre-set *a priori* program is a Criterion of Judgement that follows the *a priori proper* nature of these relations and categories, and neither originates nor is derivable from experience (in the same manner that there is an innate set Criterion of Sensitivity, to assign a form of sensation to a sensorial stimulus, such as an image upon impingement of light in the retina, or of odour upon molecules acting in the olfactory cells).

This program of judgment provides the intellect with information regarding the structure of reality in itself (in similar manner, that the sensorial program allows to represent in different colours different substances).

The information it delivers makes possible interpreting sense experience in a manner that enables knowledge of the objective reality structured according to these relations and categories. What we call rational knowledge. That is, first, knowledge of the relations to which the particular relations holding belong, and thus of what is it that constitutes difference, or of what constitutes a class, or of when the relation is of causality and when of property. And, secondly, it delivers information about the basic kinds of things that exist; that is, of the categories, as these are determined by the ontological relations. Moreover, it also leads to information about the whole of reality, as they enable to infer that reality cannot just be related by relations reduced to these basic relations nor all that exists fully classed under the ontological categories.

This program of judgment leads our intellect to ascribe these relations and categories to the entire reality that we sense or that we infer from distinctions already made or conceived, even to the one that might complement it or be a condition of it –if such higher order reality exists- though it does not apply to it. Such is the case when God is attributed judgment according to our ontological relations and categories, or even judged to rationally exist based on arguments grounded on these ontological relations and categories. Any ultimate condition of rationality, as must be a God, cannot be but of a para-rational nature, if not something else unexplainable or non-understandable by us.

This pre-set program primarily refers to the principles that apply to the determination of when these ontological relations apply. This program includes, not only the principles of ‘proper’ judgement, that we know of, such as that of identity and non-contradiction, but others too, that –as yet- have not been formalised[[61]](#footnote-61), and which –at the unconscious level- are applicable to pluralities, properties, and causality. These other principles set a limit to the application of the principle of identity and, in consequence, are appropriate to explain out some old paradoxes. Without these other principles the mere strict application of the principle of identity leads to monism and other incoherencies, such as Hegel’s denial of the principle of noncontradiction, or to the belief in the possible existence of ‘nothingness’; or that a class can be an instance of itself, or a property can be its own subject of attribution, or a cause the effect of itself, as happened to Parmenides.

That something be an instance of itself is contradictory, because it presupposes that one is both an instance and a plurality of the same thing.

Because of this, said Criterion of Judgment constitutes the Ontological Scheme on which our Conceptual Scheme is grounded. In other words, such Criterion sets the principles and rules that apply for a true determination of the relata to which a relation holds, or for the true determination of the relation that is held by the relata in a distinction, and, thus, in the very process of reasoning. This criterion prescribes, among other things, *‘what is to count as objective in our experience’[[62]](#footnote-62)*. On it are based the principles and rules of logic and mathematics. The relations and categories that constitute the same, are the fundaments of the logical forms in propositions, and so too, the foundations of the numerical relations in mathematical operations. The principles and rules of mathematics and logic are just inferences, conceptualizations, and systematisation of the principles and rules of this innate Criterion of Judgement that respectively apply to each of these manners of distinguishing. The disciplines of logic and mathematics are rules and principles of this Criterion. They are the rules and principles so far identified and conceptualised for a process of judgement that leads to true distinctions.

Let me add, that the *a priori* *proper* difference between mathematics and logic is in what is taken as subject of distinction, and the kind of properties that are related. While in mathematics the relating of spatial and non-spatial pluralities (classes, sets, collections, etc.) is based on extension -which is a property of ‘*pluralities*’, regardless of those of its members- in logic, the relating is based on the universal properties of the ‘*members*’ of the plurality. So, while logic generates knowledge based on the nature of the instances of pluralities –such as those of the members of a class-, mathematics delivers cognition, based on the property of extension of the pluralities as a whole. These properties of extension of the pluralities are not the same properties of its instances (examples of properties of pluralities is the case of number being cardinal, or a class having a limited extension of members). Therefore, while the first is based on the attributes and causal factors of the instances, the second is only grounded on their extension. Ultimately, knowledge requires a combination of both. *Knowledge of the mere extension is useless if the content of the plurality is unknown; and knowledge of the content is of no value without awareness of how the extension determines the content and the particular relations.* It is in this manner that other differences and similarities are identified; and that those unknown causal factors and properties of the content are discovered.

The problem with logic, is that the conceptualization of the principles and rules of judgement -as said- so far made (primarily those of identity, contradiction and third excluded) omits considering the other principles that rule the application of all the ontological relations and categories[[63]](#footnote-63) besides that of individual, which derive from the application of the principle of non-contradiction to these basic distinctions. This has led to most of the paradoxes of philosophy, and thus, to these principles being judged questionable.

## *Irreducibility*

There are two ways in which one could say that a distinction is reducible. The first, referring only to its constituent parts or factors, which is by way of identifying its causes (the causes -formal, substantial- according to Aristotelian philosophy). The second, by classing the subject of distinction into a higher class, which is called ‘abstracting’.

Though, supposedly, the incorrigible nature of these ontological relations and categories, as well as the distinction of “Being”, comprise this trait, allow me to address the same for further clarification of the issue.

Regarding the first, it happens that for the first manner to be possible it is necessary that the relations, and thus, too, the categories, be reducible to their components; but they lack such or we rather ignore them (cannot access them), so reduction via their components is not possible.

In fact, if it be said that the components of these ontological relations and categories are the lower orders of relations and classes, ultimately, either matter would be infinitely dividable into an infinite succession of lower orders of relations and relata, or else, matter would end up being a simple, which is not reducible to a distinction of “Being” formed by relations and categories.

As to reduction by way of classing, it is necessary that the higher class or category into which a subject of distinction is to be reduced, be identified *prior* to the act of classing. This is not possible with these basic relations and categories, because there are no known higher orders to them available to judgment. Though they may be placed under ‘Being’, this is not classing, since Being is not a class. A class is a particular plurality, that is, one that solely comprises some distinctions. Although an ontological category comprises all possible subjects of distinction, it does not comprise all possible distinctions, but only those constituted by an ontological relation, regardless of the fact that all our distinctions, with the exception of a condition of all, hold all the ontological relations.

It might be argued that these ontological relations and categories can be reduced to the relata and relations that constitute them. However, as already explained, any intent to this effect derives in tautologies. For example, if we want to define the constituents of relations, the most we can say is that relations are what we distinguish to exist among relata, or that a relation is what one entity is to another. The same happens with the categories: there is no manner to reduce them into something other; we might class the name assigned to the same but not that for which they stand.

These ontological relations from our perspective, are non-relationally constituted; so even if the relata falling under them are relational in nature, they cannot be explained but saying that they are what one thing is to another which delivers a tautology. Of the ontological relations, we only know when they apply but not what they are.

## *Non-sensable*

As already said, the referred ontological relations and, in consequence, the categories of “Being” that they determine, cannot be accessed by experience. They are of a nature not conveyable by way of sense-impressions*.* There is no capacity in us to sentience the same nor the particular relations comprised under these; relations are not sensed but inferred[[64]](#footnote-64). Moreover, they are not inferred from what is sensory given, but from the distinctions that we make of sensorial impressions; that is, from what judgement itself has already contributed to the distinction.

The position of a star relative to other stars is not an observation of the relations among those stars but what enables to determine the existence of the relations and their kind.

The point is, that if the basic relations were not given to us *a priori*, there would be no possibility with our cognitive system of determining the particular relation, and thus, of making distinctions. Moreover, we would not be capable of distinguishing the very relations.

From an evolutionary perspective, it could be held that there was a natural selection that gave those who could distinguish these, a clear competitive advantage of effectively and economically acting in the world, not depending on chance for their actions to correspond with mind independent reality. *In other words, there would be no knowledge if nature or evolution had not endowed our intellect with information about reality that cannot come or be extracted from experience, and which is necessary to complement our sense-impressions to have a valid picture of the world.*

In fact, regardless of these basic ontological distinctions, being abstractions, neither they nor the particular relations that we can distinguish are experienced. One does not sense the relations of the sides of a triangle but infers it from the nature of the triangle; one can observe that A is in a different position in space than B, but this alone does not inform us of the relation holding between the same. In fact, it is the major task of science to discover the relations holding between the subjects of their study, such as the relation of sounds in music, or points, lines, and bodies in geometry. It is a result of such study that it is discovered that there is a certain relation that demands that something be in relation to something else that is ignored.

## *h*. P*rimary premises of judgement and ultimate factors of explanation*

These relations and categories being the most basic relations and categories that we can conceive, constitute the most manners in which a subject of distinction must be judged to be relative to another; that is, based on the kind of basic relations to which are reducible the particular relations that it holds. Thus too, they are our ultimate explanatory means. These relations and categories are primary determinants of the process of judgement and our most basic premises, those on which all our judgments are grounded. They refer to the different manners of co-existing that we can identify, and so too, they are our ultimate means of explanation, and, consequently, the limit to understanding and rationality.

### *They are the fundamental premises of judgement.*

In fact, a premise is a distinction taken by judgement as a relatum to relate with another distinction, based on the properties or causal factors of the same (for the purpose of identifying a third relatum or relation). These ontological relations and categories work as our most primary and fundamental premises of all our judgments. All our judgments presuppose them.

Any conclusion regarding a particular distinction implies a previous judgement about it. This is reached through the successive questioning of ‘*Why?’*; that is, of which judgment fundament each successive premise, until one arrives at the premise on which the entire line of reasoning is grounded. It is then that the basic judgement that is based on these relations and categories, is reached.

*These fundamental or fundamenting premises are not concepts held at the unconscious level. They are rather set as mental structures of some kind. Any judgement can be reduced to these basic premises, ending up in the principles of judgement that govern our thinking, and ultimately, in the principle of non-contradiction and identity. Judgement is structured and operates –that is, distinguishes- according to them (for example, that an effect is not the instance of its cause, as this is what characterises a plurality, but not something that does not exist without the first).*

Judgement serves the purpose of identifying the relations held by a subject of distinction and the categories to which belong what is given to the intellect as sense impressions. That is, to infer from the determination of the relations and categories, what is not sensorily experienced, such as a particular relation or a, as yet, ignored possible subject or distinction. These basic relations (and categories) are, thus, essential conditions of experience; without them, there is no possible thought nor judgement. Both logical and mathematical thought, are established on them (and not mathematics in logic, as was mistakenly believed by Logicism[[65]](#footnote-65), nor logic and mathematics reciprocally in each other).

These relations and categories cannot be suppressed without terminating with the possibility of thought, language, and knowledge[[66]](#footnote-66) and their acquisition. Language and knowledge are not possible without them. There cannot be empirical knowledge without them, in particular, the relations with which judgement constructs their distinction since such relations are reducible to the ontological ones. Moreover, first, judgement expands knowledge through property attribution, which enables distinguishing difference and similarity, and, secondly, by way of causality attribution, judgment explains to what owes its properties and existence, the subject of distinction.

In classing, this is done by way of ascribing to the subject of distinction being classed, other properties and causal factors shared by the instances of the plurality under which it instantiates, or of the very plurality in mathematics; and this is so, both in deduction or induction, in generalising or particularising.

As to causal determination, it is made identifying that to which owe -that is, depends on- their composition the subject of distinction and its composites.

### *(ii) Regarding the Ontological Relations and Categories being ultimate explanatory resources*

These ontological relations and categories comprise all the kinds of things that we can say about something. They are our ultimate explanatory resources. They refer to all the ultimate kinds of things that can be known of reality with our intellect. They are all that can be thought or said about these very ontological relations and categories.

Moreover, if we arrive at the conclusion that our perceivable reality is incomplete and a higher order reality exists, we have no manner of saying anything about its nature besides what these ontological relations and categories enable us to distinguish, and so, to cognize.

*These ontological distinctions comprise all that we can become aware of.* Even of things of which people feel very familiar with -as is for the vast majority a deity, space, and time, or even matter- we cannot know their properties nor their causal factors. In fact, of most of our distinctions we cannot discern the ultimate causal factors, nor all their unique and universal properties. We cannot ultimately know what we are, why we exist and why existence is as we experience or distinguish it to be.

*There are two possible sources of explanation,* *and all end with the knowledge provided by classing under these categories, and thus, to what classes belongs the subject of distinction, and which are its causal factors in the Aristotelian conception (substantial, formal, efficient, and final cause).*

The *first* source of explanation is from defining the class or classes to which the subject of distinction belongs based on its universal properties; the *second* source of explanation, is by way of causal determination, that is, through the identification of the causal factors of the properties that make it a unique individual and those that make of it a member of a plurality and, thus, enables its classing under it. Our system of cognition generates knowledge and understanding through the identification of the relata (actually of the object relatum), but also requires identification of the relations. Moreover, the identification of the relata is not possible without awareness of the relation that constitutes them in subjects of distinction. *To explain something is akin to defining it.* Explaining is analogous to determining the relations and relata that constitute the difference and the similarity of a subject of distinction; it is identifying the unique and universal properties and, thus, the classes to which the subject of distinction belongs, as well as the constitutive elements of the same (the efficient, and even the final causal factors of its properties). Moreover, I say ‘of its properties’, as it is these that, as a whole, constitute the subject of distinction; that is, which, in turn, are the causal factor of the individual object (very much as trop-theorists hold). It is the joint or collective effect of its properties, or rather the end-result of the relations between all its properties among themselves and the world, that ‘makes’ the individual. A thing is not just its internal properties or the composition of its parts, it is also the result of the relations it holds with the rest of the things in the world, and even with the record of past events (for example, to judge something physical, as being spatially separated from other objects, a material object must hold spatial relations).

These ontological relations and categories, being the highest possible order of abstraction to which we have intellectual access before arriving at the abstraction of ‘Being’, are our ultimate factors of explanation. They are ultimate factors of cognition (i) by way of classing, and thus too, (ii) by way of causal determination, as ultimately, causal determination is employed to class the subject of distinction, in order to know what it is.

As in all disciplines, and so too in mathematics, knowledge (whether it be by way of generalisation or specification, or by deduction or induction) is partially achieved classing an individual or a plurality into a higher class. Through classing, it is possible to conclude that the individual or plurality also carries, or might carry (hypothesis), the other universal properties held by members of the higher order plurality. For example: ‘this metal melts at about 900° so it must be bronze, because it melts at such temperature; or if the colour of bronze once cooled is yellowish, this metal, if bronze, once cooled should be yellowish”). This is done primarily, based on those properties that are known to be a condition or an effect of said property, or properties of the properties (such as ‘if a cow gives milk, it probably has a calf, and if the calf is healthy, the milk is most likely nutritious’). The lesser related is the attribution to the properties that constitute the class, the more hypothetical is the knowledge it generates, as in ‘the picture at the entrance of the house is in black and white’, it cannot be held that all the pictures in the house are in black and white’. Another example is that matter is made of sub-atomic particles held together by basic atomic forces, so matter can be classed under what is the effect of such forces.

As to knowledge by way of the determination of its constituent factors, or rather by determination of its properties, these ontological relations and categories are, as just said, the ultimate explanatory source. In fact, there are no higher orders to causality that can provide an explanation of what causality is, and least of all, the possibility to identify the ultimate efficient and final cause.

## *j*. *They constitute an Ontological Scheme*

Due to the above-mentioned traits, these relations, and categories, jointly with the distinction of ‘Being’, constitute an Ontological Scheme, of which they are its fundamenting elements. This Ontological Scheme of ours, comprises other categories and relations (such as those of the objective or of the necessary and contingent), which, though judged universal, are not precisely so. These last are relations and categories that only hold some of the traits here listed of the most basic relations and categories. This Ontological Scheme, in turn, constitutes the basis of, and is the most primary determinant, of what can be included under our Conceptual Scheme, as there are other factors that shape the last, such as social and cultural ones.

*k. They constitute rational thought, rationality, and stand for a rational reality.*

Reasoning according to the principle of non-contradiction has been the rule of proper judgment, of what is called rational judgment. Moreover, such judgment is characterized by classing for the identification of “what something is”, and thus too, for the identification of properties, as well as for determination of causal factors.

It is assumed that such judgment generates information of the world in itself as has been proven since the birth of science. This has been verified by experience. That in the right-angled triangle the square of the hypothenuse is two times the square of the legs of the triangle, is a verifiable fact that confirms the power of rational judgment to generate knowledge of the world.

It is judgment according to the nature of the ontological relations and categories that delivers logical and mathematical judgment. To judge according to our ontological scheme, is to conclude -e.g.- that it is not true that the whole class of birds is a member of the class birds, or that whatever it be that something depends upon for existence -that is for being and, thus, for being different and similar- is itself. Or that what makes something different or similar, is not what makes it different or similar. Or that two plus two be the same as six minus two, and so on.

In other words, rational judgment presupposes that reality is rational in nature. That the laws that determine the identification of a cause or an effect, of identity and similarity, are the laws that rule the relations and classes of things in the world in-itself. One may doubt that this be real, as has been done by sceptics, but it cannot be denied without having to presuppose the true nature of it, as explained above, due to their incorrigible nature.

Moreover, since any order of judgment that does not agree with rationality is judged to be irrational, it is held that all reality must be of a rational nature. As has been here explained this position presupposes that there are no possible higher ontological orders to those that we can distinguish. However, higher ontological orders would not deliver an irrational proper conclusion, though from our rational perspective they would appear to be contrarian to reason.

If there are manners of being where something can be what it is not, according to our logic, such existent would be an irrational from our rational perspective, but not so from the higher order perspective.

It must not be concluded that all the irrational is a meta or para-rational reality, as neither the rational nor its negation can be such since its negation is also based on a rational judgment of negation of rationality. A meta-rational -if there is such thing, is something that cannot be judged to be in any manner within or contrarian to rationality.

1. **Causal Factors of Objective Knowledge**

This chapter explains that the ontological relations and categories are *a priori* information about the world in-itself, which makes possible *a priori* objective empirical knowledge of reality. All our knowledge of the world, in spite of the empirical component of our distinctions is *a priori proper*, since, what constitutes knowledge not just the relata, but the relations, and though the particular ones that apply are determined via empirical data, ultimately, the basic relations to which they are reducible are *a priori*, though non-empirically true.

Knowledge of reality in-itself is a complex of empirically given relata, and particular relations reducible to the ontological, and what can be inferred from the distinctions that they constitute. It is neither awareness of sensations, nor mere awareness of possible relations. It is awareness of distinctions.

The ontological relations and categories are the common elements that conform our overall worldview. There is no possible knowledge -whether abstract or concrete-, including the one generated by the hardest of the natural sciences, without the same. All our knowledge is constructed with them.

The incorrigible nature of these relations and categories transcends experience, as they cannot be denied to be holding (that is, to exist in-itself) in the objective world. They constitute the transcendental that fundaments our knowledge of the objective world; and this, in spite of all the reasons given since Hume and Kant to hold that such transcendental is not possible. By objective reality, I refer to reality independent of our perception or conception of it; to what exists in-itself.

indeed, their “factually true” nature is such that they cannot be in any manner denied to respectively stand for categories and relations existent in objective reality. If we had direct knowledge of reality, we would observe the world (or rather –as shall be seen- the aspect of the world, to which we have intellectual access) as things holding these basic relations and being under the categories that these relations determine. Due to their role in distinction, it cannot be denied that they enable knowledge of reality in itself from sensory impressions and sensory distinctions, and that the world in-itself is related and split according to them.

It is the determination of the lower order of relations and lower order of classes under which instantiate the particular subjects of distinction, what generates or constitutes, knowledge of particulars.

* 1. *True in all possible rational worlds*

Because of the incorrigible nature of that to which these ontological distinctions refer, the factuality of the distinctions standing for these relations and categories must be judged true in all possible worlds. Actually, in all possible rational worlds, if any of a para-rational nature, whether their rational nature be a mere aspect of a para-rational reality or a fully, self-sustained rational reality. *I am not referring to the distinctions as an act or creation of our intellect, but to what the distinction of these ontological relations and ontological categories represents as existent in the objective world.*

We cannot think of a rational reality devoid of these relations, that is, with a structure differing or contrarian to the one that they constitute, exception made of a complementary one or higher order of reality that be a condition of it, which would then be of a para-rational in nature. It must be assumed that all rational reality holds these relations and is under these categories. Accordingly, it must be considered that, the structure that they constitute, must be judged true and ontologically proper, and applicable to all entities –exception to those entities that are a condition of what these relations and categories stand for, whether of a complementary or higher ontological genus.

It cannot be assumed that all reality is structured according to them -that is, according to our ontological scheme- since they do not suffice for an explanation of reality, and force to presuppose a higher class of ontological order than the one that they constitute or a condition of all of some other nature.

As a result, ontological relativism in any of its kinds regarding the reality accessible with these ontological relations and categories, must be rejected[[67]](#footnote-67). The incorrigible nature of these ontological relations and categories, forces to exclude the possibility of an ontological order of the same level, differing from the one that they stand for, nor that there be a culturally dependent ontology not reducible to it. It is a trait of these relations and categories to be, properly speaking, ontological. This incorrigibility only applies to the aspect of reality that is rational, that is, not a complementary or higher order reality, if any (more abstract or more encompassing of reality, nor to any reality that be the condition for the objective existence of what they represent).

Although the true factuality of what is referred to by the concept of ‘Being’ has not been denied or put in doubt in philosophy but by strong scepticism, the objective existence of these categories, and, so too, of the relations that determine them, is still questioned, if not outright negated, since Parmenides. Among others, Nominalism has denied the factuality of universals; Hume rejected the objective reality of causality[[68]](#footnote-68); Kant disaffirmed our possibility of asserting their objective nature[[69]](#footnote-69); and Bradley argued for the negation of relations[[70]](#footnote-70). However, as explained by Konrad Lorenz[[71]](#footnote-71) and Chomsky, it is *a priori* structures that make possible knowledge of the world, and this is what they precisely are. Moreover, contrary to Kant, *it is these a priori structures that make possible true empirical cognition of the world and are themselves knowledge of the structural aspect of the reality that is accessible to us.*

Though some adopt a realist approach regarding these ontological distinctions without discriminating between worlds with identical or different manners of existing, they often reduce or subsume their factuality into properties, or deny one or more of these categories. And this is done to the extent of pure trope ontologists[[72]](#footnote-72) proposing a one category ontology[[73]](#footnote-73) for the world in it-self. However, although it could be accepted that objective reality is sort of one, and that what is distinguished of it depends on the observer’s cognitive capabilities, we cannot conceive an objective reality outside of the Ontological Scheme that these relations and categories constitute, in contradiction with the same. Only a complementary or higher order of relations or categories is logically admissible.

As explained, the main argument for their incorrigibility is, that it cannot be thought or said that there are no properties in the objective world, without having to appeal to the use of a distinction standing for properties in thought and speech in the objective world; nor can be held that there is no causality, without having to presuppose an objectively existent causal factor of the negation of their factual existence. It cannot be thought or said that they are not objectively existent, without having to suppose the objective existence of the relations whose existence is questioned. If the presupposed relations were false, the questioned relations would be true, as we would be thinking or formulating a false negation.

Additionally, since these relations and categories determine all our distinctions, the assertion that they are non-objectively existent would imply that the particular relations (such as that of the particular properties), as well as the particulars under these categories, are fictions of the intellect. This would carry with it the denial of the objective existence of the mind –which relates according to these relations and is also under these categories. This would imply the very denial of the non-factual that it delivers, and therefore, on the rejection o the very contradiction of the fictional character of these basic distinctions.

Further still, it can be said that the denial of the objective existence of what their distinction stands for is a proposition empty of cognitive content, neither true nor false, nor hypothetical nor conjectural, but meaningless, as it cannot follow from the basic premises of judgement that these ontological distinctions determine. These premises can be inferred[[74]](#footnote-74) from the ontological relations and categories as principles of judgement; that is, as principles that there is difference and similarity, property, and causality, and that in no way they are fictional or questionable. Though their negation may agree with more immediate premises, their negation cannot be deemed meaningful, as it disagrees with these fundamenting primary premises of relations and categories, on which all the following and more immediate premises must be grounded to be meaningful.

Still more, the denial of the true factuality of these ontological distinctions, delivers a worldview not admitting of alterity or co-existence in objective reality. Thus, as happened to Parmenides, the rejection of their truth character relative to the nature of objective reality, leads to the absurd that even the mental is outside of all possible reality and, consequently, alien to the mind itself; so, it becomes necessary to attribute to it a special intermediate nature between ‘being and non-being’, which is also contradictory.

I am not saying that, as abstractions, these categories and relations exist, separate from the particular relations and the objects that instantiate under them in the objective world and, lesser still, that they are concrete objects. What I say is, that there are particular relations in the objective world, and that, if we could have direct knowledge of the same, we would be able to mentally abstract (i) from the particular relations and particular things, these ontological relations, and categories -this is, that we could abstract these basic ontological relations from the particular relations held between objective things; and (ii) the ontological categories, from the particular pluralities of things or objects that these relations constitute in objective reality.

In other words, that if such hypothetical direct abstraction of objective reality were possible (e.g., through experience), it would be so because there are distinctions that we would be able to make, which are like those of the representations that we shape with our indirect knowledge of the world in itself.

Allow me to add, that when the relation of class is attributed to a factual subject of distinction, what is being said is, that in the objective world there is a plurality whose instances are those that hold one or more of the same relations of property to one or to many particular object-relata. For example, that all triangles hold a same or similar relation to three sides, or that all cats hold the same relation to a certain segment of their genome, or that red objects have a relation to a particular degree of wavelength of light.

Because of this, the objective existence of classes cannot be denied, as it would mean that there are no such things in the objective world as subject relata holding a same relation to a particular relata, which would make of objective reality an indeterminable infinite, and there cannot be possible distinction of determination without shared qualities. This attribution -in particular of the subjective relation to the factual or objective relation- cannot be interpreted as if all the kind of reality that we attribute to objective reality is all the reality that objectively exists, or that the objective reality is just as results from our ascription to it of our ontological relations. If there are other higher orders of reality, it would be the case that what we truly distinguish as a class or property, constitutes an aspect of something more complex. And it would be a *minimal view, because if explainable according to higher orders of relations and categories, our reality would be one of an infinite of successive higher orders of realities. And if explainable by a reality of a nature not structured according to our categories, it would be infinitely different from what we can rationally distinguish as existent in itself. So rationally speaking, rational reality is infimal.*

*In such attribution, what in order to be true has to match* with the objectively existent, are the ontological relations and categories to which the particular relations and the particular relata can be reduced. This must be so, even if the particular relata or the distinction, only correspond with that for which they objectively stand, as happens with colours, which only correspond to light waves.

At the expense of being repetitive, let me say that because of the above-mentioned traits, these ontological distinctions enable the intellect to generate limited true knowledge of the world; of the sensed and of what is not sensed[[75]](#footnote-75).

In the *first* place, they make possible to bridge the gap between the mental and objective reality. They thus, overcome the problems that:

1. if the mind contributes to cognition with essential *a priori* elements, as Kant held (Critique of Pure Judgement, B312), we can have no certainty on how the world is in it-self (that is, as it is independently of what we distinguish of it); and,
2. that if knowledge exclusively originates in the senses, as held positivism, verification of any kind, does not suffice to fully validate the objective existence of what is sensorially given, as there is no way to validate verification as an unquestionable basis for knowledge of reality.

In the *second* place, these relations and categories make possible inference, as there is no possible judgment without them. They, thus, enable knowledge of what is of a sensable nature but not yet sensed (e.g., the inference that matter emits photons, or other detectable sub-atomic particles), and from it, and from the *a priori* given, of what is not of a sensable nature.

Indeed, it is the incorrigible objective factuality of these relations and categories what enables the mind to construct from the sensorially given[[76]](#footnote-76), true factual representations corresponding with the objective reality.

The sensorial relata constitute ‘appearances’ – that is, ‘phenomena’ in Kant’s words- due to the fact that the sensable forms (colour, motion, taste, sound, tactile feelings, odour) with which they are sensorily represented, are *a priori* set responses to stimuli on our sense organs. But contrary to Kant, they are ‘appearances’ only in the sense that these sensorial responses -though corresponding with their mind-external factors- do not match –that is, are not identical- with the properties of the objective factors themselves. Nonetheless, each of these sensorial constructs representing objective factors of the sensorial stimuli, are part of a distinction whose relation, in its most abstracted form, must be supposed to be necessarily coincident or, rather, identical (due to its incorrigible character) with the relation held by such objective factors.

Consequently, the factual distinctions represented by the relata –thought not matching with that for which they stand, but only corresponding with it- constitute an image of objective reality, and are not, properly speaking, ‘phenomena’. Wittgenstein observed the need for something in common between the representation or image and the thing in it-self, though he did not show that these things in common had to be relations [[77]](#footnote-77). In fact, it is the sharing of the same relations by the representation or image of the factual with the objectively distinguished, what makes possible to have a true picture of the world.

Indeed, for ‘a picture’ to be a true representation of reality, it is necessary that there be identity between the relations and categories to which are reducible the relations and the relata standing for things in-themselves. And, secondly, it is necessary that there be certain similarity between the particular relata and particular relations of the picture, with those of the objective world; that is, that the particular relata and relations of the picture share some traits -as could be the colour or the form of an object, or the distance between the personages. For example, a representation of Romeo and Juliet in the balcony would not correspond with the objective world if Romeo were depicted as being alone or drinking wine with his friends, or loving someone else, or Juliet being the mother (The first two examples refer to relations, and the second to a relatum).

In other words, the fact that these ontological relations (and, thus, too, the ontological categories that they determine) match with objective reality (with reality in it-self), makes possible knowledge of the sensable world by way of correspondence; that is, by way of similarity, such as of the particular relation of its material components. *In correspondence, what is perceived is not what is in itself as is sensorially represented by our intellect, but what our intellect constructs with its sensorial response to the stimuli -stimulating factors- of mind independent reality.*

As a matter of fact, it is through inference that difference and similarity of what is sensed is determined, and it is through it, also, that from the classes and properties of what is sensed, inference to the non-sensable can be made. Moreover, it is by way of inference too, that the correspondence between the conclusions on the non-sensed and objective reality can be ‘logically’ validated based on the incorrigible nature of these relations and categories. This is what makes possible to have knowledge, e.g., that, what appears as a star in the night sky, is actually a galaxy.

It is also through inference from the incorrigible nature of the ontological relations, that we can transcend the ‘forms of sensitivity’, and acquire from the sensed, knowledge of what the forms of sensitivity that constitute the sensable relata, stand for. That is, it is by way of inference that knowledge of the factors of the external sensorial stimuli -such as of a particular colour being the effect of the action of a certain degree of light wave- is made. If it were not for this capacity of judgement to transcend what is distinguished in experience, we would not be capable of predicting what is not observed or observable, whether it be the existence of sub-atomic particles, or the presence of an animal hidden in a cave. *Further still, it is also by way of inference, that it is possible to acquire additional a priori knowledge from the one that the a priori proper directly provides, that is, from the non-empirically given. Such as, that the ontological relations (and ontological categories) stand for the structure of objective reality (actually of an aspect of it: the rational one).*

This capacity of inference to yield true knowledge of what being objectively existent is not sensed, either because as yet has not been sensed, or because it is of a non-sensable nature, as already said, consists either in identifying from two relata the relation holding between them, or from a relation and a subject relatum, identify the object relatum, or, from an object relatum and a relation, the subject relatum. This is possible provided that the object and the relation hold the necessary properties to the effect. For example, one can know who was the knight that yielded the standard at a certain battle, if the banner carries his coat of arms and there is testimony that the vey knight held it in his hand.

This capacity of inference is such regardless of whether it be made through induction or deduction, either from experience or from the *a priori* proper, or from both. But, as exemplified, it depends on the availability of the properties that make it possible, as inference is not possible without identification of properties. The determination of a causal factor require of identification of its properties and of the properties that it had to have, in order to be the cause of the event. Such as -among others- that the event have the property of being posterior to the cause, and the cause, anterior to the effect, or that the effect and the cause be in the proper place, that both be real (if factual), etc.

In sum, these ontological relations and categories are “forms” *a priori,* andneither an obstacle to objective knowledge nor mere linguistic or social conventions whose supposed factuality is fictional, if not just senseless. They are a *sine qua non* requirement for attainment of knowledge of the world. They alone enable knowledge and understanding of the world. They make possible the generation of knowledge from sensory impressions, or through inference from the sensory distinction that they constitute. Because of this, anti-realism –such as Kantism, Verificationism, and Idealism- must be left for whatever lies beyond the rational reality that these ontological distinctions enable to cognize.

* 1. *The Ontological Relations and categories are truths of fact necessary for knowledge of objective reality.*

Contrary to what has been thought since Kant, that these categories do not yield knowledge of the objective world but only serve to put order in the manifold of our experiences, they do generate knowledge of the world in itself, and are factually true. In other words, what these ontological relations and categories stand for, is objectively true information about the world, and, as distinctions that we make, they are truths of facts, that is, of objective reality.

Now since this knowledge is actually knowledge of relations, it is knowledge of the relations holding between the things for which the relata of true factual distinctions stand for in the objective world. Thus, it is also knowledge of how the objective world can be split under the categories of ‘Being’ that these relations determine.

If one considers that relations are not sensed and must be deemed information about the world that cannot originate or come along with experience, it must be said that if not *a priori* given, we would be totally blind to objective reality, regardless of the sensorial-impressions we may have of it. Without the *a priori* information that they provide, and with which judgment delivers distinction, it is not possible to distinguish, and thus to interpret the sensorially given, not to have understanding; this is, awareness of the relations of property, causality (either as cause or as effect), etc., held by the subject of distinction.

In fact, they are *a priori proper* information about the world that is necessary to complement what is provided of it by sense experience. Sensations are incomprehensible, without the capacity to distinguish one sensation from another and what the sensations stand for, as well as how, that for which the sensation stands, can relate to each other.

## *c. They are both truth of facts and factors of objective knowledge*

As already said, these ontological distinctions are not just true of a non-sensable aspect of objective reality, but as such they are factors of both objective *a priori proper* and empirical knowledge. They provide a *priori proper* knowledge of elements of identity matching with aspects of objective reality; that is, of that of which they are identical. They enable to extract knowledge by correspondence from the empirical; that is, knowledge of similarity, by way of sharing some properties in common with the objectively existent. Furthermore, they can be factors of objective *a priori* knowledge by way of inference from *a priori* *proper* premises, or from a synthesis of *a priori* and empirical premises.

In effect, because of their incorrigible character these ontological distinctions constitute direct knowledge of the world, as they must match with an aspect of reality that is not of a sensorial nature; that is, of what something is to another at the highest level of abstraction. It must be assumed that the knowledge they convey is of a non-sensable aspect of the world, which can only be known if given *a priori*, as it is not empirically accessible.

This *a priori proper* knowledge also constitutes the means by which it is possible for the intellect to generate knowledge from sensorial impressions. As Wittgenstein well observed, in order for a picture to correspond with reality, it is necessary that it have some element in common with it. These ontological relations are such element in common. However, the correspondence of the relata with whatever they stand for of objective reality, as well as the correspondence of the particular relations holding among the sensorial relata, are empirically determined; so, their validation as objectively being the particular relata and relation that holds, requires of empirical verification.

Without these ontological categories, as Kant already explained the sensorial-impressions would be a manifold of incomprehensible visual, auditory, tactile, and olfactory sensations. Thanks to the relations constituting what the empirical true distinction has in common with objective reality, it is possible to acquire objective knowledge by correspondence of what has brought about the sensorial impressions, that is, of the physical relata. Nonetheless, this knowledge is knowledge by correspondence, because our sensorial organs assign a form or manner of representation to the impression (the “form of intuition” in Kant, though not exactly it) of the sensed object. It shares a certain relations with it that makes it similar, e.g., the relations between the intensity of the light wave and the colours. For example, our intellect assigns to a sound wave of a particular degree, a particular sound, and so too, an image to the action of light waves in the visual nerves, etc. (Observe that in all cases the sensorial-impressions are nothing but biochemical responses of the brain to the action of electric charges; that is, of photons in our sensorial organs).

1. **Limiting Factors of Objective Knowledge**

This chapter refers to the fact that the knowledge of the world made possible by these sensorial and ontological forms, is limited in both nature and extent. They are of such a nature that if there is more reality beyond them, it is not accessible with them. The forms of sensation do not allow -for example- to imagine how would an objects under higher orders of spatial dimensions look or act on our senses. While the distinction of these relations is under the categories that they determine, and thus, not-explainable by them, that for which these ontological distinctions stand for is not comprised under them, and there is no higher order that we can access to explain the same.

Indeed, though these ontological relations (and the ontological categories that they determine) enable knowledge of the world, they do not suffice to explain ‘what is reality’ and how it is possible, nor what they themselves are. They cannot be explained neither by classing into a higher order of plurality, as are explained the facts of the world that we distinguish, nor it is possible to explain them based on their constituents, as we have no manner to identify one that is not comprised under the same or reducible to them, and thus, tautologic. If we assume that reality is explainable, they constitute an epistemic constraint to our possible knowledge. Though not necessarily the sole constraint, as there could be other factors that obstruct our distinction of other orders of spatial dimensions and of time, or which could hinder awareness of other non-sensible existents. Chomsky and McGinn[[78]](#footnote-78) are right in holding that there are cognitive constraints and that the problems of philosophy are due to limits set by our mental structures. As Wittgenstein observed, logic (what these *a priori* proper ontological distinctions constitute) limits our possible knowledge of reality. It is these ontological relations and categories that leave out of our cognitive reach the Fundament of the world of which we can say nothing, except -in his words- that it is the subject of the Mystical[[79]](#footnote-79). In other words, that what the logical structure of language forces us to presuppose, is an inexpressible reality beyond logic which fundaments the world and constitutes the mystical. *This was the ultimate subject of Wittgenstein’s Tractatus*[[80]](#footnote-80). The ontological relations and categories certainly constitute a limit to a possible explanation of the problems of philosophy, and of others, such as the theological of ‘*Why is there evil, if God is all powerful and Supreme Good?*’ However, not all the problems of philosophy mentioned by McGinn are due to this epistemic limitation, nor is nature hiding its true character to us, for we do access a true reality with these ontological relations and categories even if it just be an aspect of the overall that there is.

These ontological distinctions do not enable a different source of knowledge, and thus, different kinds of it, in the same manner that it is not possible as objects without appealing to the “forms of sensation”. The ontological relations and categories only make possible different degrees of knowledge depending on the aspect of the reality whose distinction they enable. In fact, true knowledge can be of mere difference or mere similarity, or of both difference and similarity. Knowledge of mere difference is the one that can be had of what can be distinguished as existent but not what it is –that is, to what it is similar- very much as happens with primary distinctions; such would be knowledge, for example, of the existence of a higher ontological order reality, if any. As to knowledge of mere similarity, it is, e.g., the one we can have of space, of which we cannot (as yet) distinguish a particular section of it from another. In what regards knowledge of both difference and similarity, it is the one that we have of the physical, since we distinguish of it, not just its differences, but also its similarities.

However, in the same manner that we cannot sense what does not acts on our senses, on our sensory organs, we cannot have this last kind of knowledge of anything constituted by something other than the possible relata and relations that we can distinguish under our ontological categories. Of what is not sensable to us we can only have sensorial awareness if it acts on sensory objects that act on us, that is, if there is indirect action. Such is the case of neutrons in the generation of light and the extent of what can be distinguished depends on the extent of such effects. Of a reality of a higher ontological order -if it exists- we can only have knowledge of difference. It would be a noumenon, to use Kant’s terminology. A noumenon to us would be a subject of distinction whose existence we know of but which we also know not to be related according to our ontological relations nor classable under our ontological categories. It would be a totally unknown if it were not a subject of distinction. It would be the mystical of Wittgenstein or the meta or para-rational reality to which I have referred (that is, the one beyond our rational powers of cognition). We know of this Wittgensteinan Mystical or Fundamenting Reality, from what we infer to be the necessary conditions -according to our Ontological Scheme- for the existence of our basic relations and categories and what instantiates under them. Attribution of these relations and categories to the noumenal makes of it a phenomenal reality -in Kant´s terminology- but would not make of the noumenal a ‘phenomenon’ in reality in itself, as in no manner these ‘forms of judgement’ correspond with the nature of such meta or para-rational reality.

In sum, these ontological relations and categories are not explainable with our system of cognition nor with the worldview that they structure.As has been already explained, *we cannot reduce them to their constituents, nor class the same into a higher category.*

It might be contested that these ontological distinctions can be explained by classing them under ‘Being’, which is a higher order of abstraction to our categories. But, by reason that ‘Being’, as already said, is the ultimate abstraction, it does not provide distinction, as there is no attribute added with its predication other than that of mere existence; so ‘Being’ is not a higher class nor an explanatory order.

As a result of all this, our system of cognition cannot explain the world past the scant conception of the physical nor past the scant understanding that these relations and categories deliver. There is a limit to the extent and kind of reality whose cognition they make possible.

1. **What the Ontological Relations and Categories Force to Presuppose**

The subject matter of this chapter is to explain that not only a higher order of meta or para-rational explanatory reality must be assumed to be the case, but that reality is meta-or para-rational.

* 1. *A rational reality cannot exist by itself.*

Rational reality, this is, the one constituted by these ontological relations and categories does not suffice to structure reality. Rational reality presupposes a cause external to it. But such cause cannot be in turn dependent on infinite causal factors, as rationally speaking, this would in turn require that there be an infinite line of successive causes, and thus, no cause at all. The causal power of each causal factor in the line of successive causes would depend on the previous cause. In consequence there being a sole cause not depending on another delivering causal power, there would be no causal factor proper. What about the line or sequence? Would it deliver causality? No. This is clearer to understand if by cause reference is made to what something depends on for existence (or for being different or similar). It cannot be said that reality owes its existence to a causal chain if such causal chain ultimately lacks causal power. If there is a chain of causes there is a dependence of each cause on the existence of a previous cause, but since such dependence would be infinite, because there is no final cause in which all the factors of causality on the line depend, there is no cause at all. So, though rational reality, can be assumed to exist *in* itself, it cannot be assumed to exist *by* itself. It is not rational that rational reality exist by itself. A para-rational reality must be presupposed which does not depend on another reality to be.

Moreover, causality is not just a requirement for reality to be an existent, but also for its own constitution: rational things or objects, seem to be constituted or conformed by others. In Aristotelian terminology the existence of rational reality *by* itself would require an infinite of substances of substance, and thus of properties of properties, and difference of difference and, so too, infinite similarities of similarity, and causality, infinite causes of causes.

And if the substantial cause were not constituted by another substance or substances, it too would depend for existence, in something of a para-rational nature.

Moreover, infinite, rationally speaking, presupposes time, and thus in change or variance that is constant creation of new possible subjects of distinction. On what ground can it be said that ultimately there is time?

In such case it would be necessary to ask if an infinite can be all existents or if all existents can be infinite.

* 1. *The ontological relations and categories must be assumed to stand for the relations and classes of an explainable reality.*

Though from the perspective of our Ontological Scheme it is not possible to conclude that reality is a cause of itself or uncreated, nonetheless, we cannot conceive that reality lacks a reason for its existence.

Though the ontological relations and categories themselves are unexplainable to us -since being *a priori* given they are not *relationally* constituted, and we cannot explain what is not of a relational nature- they cannot be judged to lack an explanation. Besides, though these categories are non-relational to us, all the reality comprised under them is relational, and thus, presupposes an explanation in order to exist; so, it cannot be assumed, according to our Ontological Scheme, that the ontological relations and categories explain them, for lack higher orders of relations and categories to class them under, our relational reality lacks an ultimate explanation.

* 1. *Their inexplicability forces to presuppose the objective existence of a para-rational explanatory order of reality.*

These ontological relations and categories form a relational reality[[81]](#footnote-81). As said, an explanation of the same, that is, an explanation of that for which they stand -and thus, of all that we comprise under them-, theoretically requires a non-relationally constituted or non-structured reality. According to our Ontological Scheme-, a relational explanation would logically demand, as said, an infinite order of successive higher classes, though these would never end up explaining anything, or else, it would require of an infinite of lower orders of composites and causal factors that, for the same reason, would not deliver an ultimate explanation[[82]](#footnote-82)).

Moreover, not everything can be deemed to be of a relational nature, as this would presuppose –from our constrained rational perspective- that reality as a whole is dependent on a relation to something that is a mere distinction without objective referent, and thus non-existent. In fact, if all reality were relational, it would not be ultimately explainable. The relational nature of the “Worldview” that these relations and categories deliver, demands that reality be explainable; and this is so, because whatever is relational, presupposes particular relations to which it owes its existence. Nevertheless, since the relational cannot be ultimately explained by a relational reality, its explanation requires a non-relational or unstructured explanatory reality. But such non-structured explanatory reality is not available to our intellect nor understandable with the mental structures posed to our mind by the Ontological Scheme. Thus, though we can infer the objective existence of such ultimate explanatory reality as a condition for the existence of these relations and categories, and of the reality comprised under them, we can only infer its existence.

Our conception of the world and system of cognition, being relational, cannot provide understanding of what the very Ontological Scheme demands for something to be understandable. *Thus, although through inference mere sensation can be transcended, it is not possible to transcend any reality with whose structure our Ontological Scheme does not match.*

It could be argued that these relations and categories need not be explainable; that, as Nelson Goodman says, they are ‘self-explanatory concepts’; or standing for ‘self-explanatory’ primitive constituents of the world, such as the concept of person, according to Strawson[[83]](#footnote-83); or of ‘meaning’ to Kripke[[84]](#footnote-84). Nevertheless, we cannot conceive these distinctions to be *rationally true* if they are self-explanatory, and we lack the cognitive means to conceive them as para-rationally true.

A self-explanatory reality would only be a reality that is not objectively relational; that is, which does not owe its objective existence to components of it, that is, to others. It would be a reality characterized by properties that -in turn- lack properties, that is, unidentifiable with properties) and, thus too, a reality whose properties have not been determined by a causal factor external to it. The properties it holds would have had to be assigned to it by the very uncreated subject itself.

By way of classing explanation is provided as other properties, including higher orders properties are made available to the intellect (those of the class itself, or of instances of such class that carry them) which might explain lower order properties. If something is red, the identification of what makes (causal factor and property) it red, that is, the property of…. and the factual cause that assigns such property to the subject of distinction is identified. It must not depend on property, and thus, in causal factors to differ. What about the property of existing? It cannot be a property, for all subjects of distinction, carry the same, independently of whether their referent exist or not.

The reason for this is that, if self-explanatory, it would force to presuppose that it lacks causality, which must be assumed to be contrarian to the incorrigible nature of causality, an undeniable relation held by things in-itself. What is more, since they force to presuppose to be standing for objective existents, we cannot assume that the objective reality that they stand for is also self-explanatory, and so, too, uncaused, when we know that the immediate objective reality that we distinguish with these relations and categories is subject to causality, and thus, dependent on objective causal factors. According to our Ontological Scheme, a self-explanatory objective reality would have to be a member, a property, and a cause, of itself, and, in consequence, it would not be a possible subject of distinction to us. Lacking similarity, it would not be an individual, as we understand individuals to be, and thus, would be of a kind that cannot be distinguished by us, as it would not be grounded on properties, as we rationally understand properties to be, and it is property that makes similarity possible.

Therefore, regardless of whether these ontological relations and categories match with the objective reality or not, their explanation requires an order of reality or manner of existing of a higher order of ontological relations and categories or of a different manner of being and, thus too, of cognizing.

I refer to the logical need for an order of reality, as would be the plurality of what David Lewis excludes from his multiple world thesis, and calls, worlds with a categorical difference. That is, ‘*differing in the manner of existing’[[85]](#footnote-85)*. In other words, it would demand a plurality of realities structured by relations and categories of an order or level higher to ours (more abstract and more encompassing) which ultimately is not rationally constituted. In other words, it would require para-logical grounds for its existence.

It is, thus, a logical imperative according to our Ontological Scheme that a higher order reality that be a condition, exist. A higher order reality that be in our manner of seeing the world or the world as we conceive it to be, but for the world to be as it is in-itself. This knowledge of a higher order reality is inferential. It entails from the *a priori proper* nature of our ontological relations and categories, which does not admit the conception of anything that does not owe its existence to something else, except to what is a condition of it.

The only alternative to the above would be if reality ultimately were of an absolutely non-explainable nature. But then it would be necessary to collate that it is of a higher order nature to the rational. Thus, in any case, an explanation of why there is being or why it is not explainable, must appeal to the existence of a reality of a para-rational nature.

* 1. *Reality in-itself is meta-or para-rational.*

As already said, from a rational perspective, the explainable or non-explainable nature of reality forces to presuppose the meta or para-rational nature of what explains all, and of reality itself.

If explainable, because what is explained cannot -rationally speaking- exist as a part separated of what explains it, and if non-explainable, because then reality would lack any grounds. If explainable, what explains are properties of what is explained, and these must be in the thing. An efficient external causal factor would be an exception, but it cannot explain something if it has constituted no properties in the thing, as it would not be such without the effect.

The rational does not suffice to exist by it-self. We cannot separate the rational from the para-rational, as the rational would not stand by itself if it depends on a meta-rational nature to be. A part is something that can stand by itself without the totality. It must then be assumed, that -from our rational perspective- reality -properly speaking- is para-rational in nature, even the rational one.

A reality -the rational reality- merely constituted according to our Ontological Scheme would be unexplainable and unable to exist all by itself. This leads to conclude that the nature of even the rational empirical reality must be para-rational, and that the “rational” empirical reality is a mere aspect of reality in itself. (Our physical reality depends on energy, which appears to be of para-rational nature).

In other words, it can be said that the empirical proper, is also meta or para-rational. Further still, it is rational to hold that practically all reality -including the empirical is metaphysical in nature if the para-rational is of a nature that is not physical as we understand the physical. The empirical is part or the entirety of what is rational, but the rational cannot exist without the para-rational. It is then reasonable to hold that the para-rational though holding elements of matter or energy, would be metaphysical for us, as it would not be a material reality as we distinguish the physical to be.

That reality be para-rational -from our rational perspective- implies that “what there is” must be of a nature by far different from what appears to us according with our ontological scheme of relations and categories and the principles of judgement that they determine.

On the same grounds, such explanatory order would not have to disagree with our basic ontological relations and categories of ‘Being’, but in no need of matching in any aspect with these ontological relations and categories of ours.

Thus, as said at the start, in the same manner that we came to accept that we are not the centre of the universe, it is about time that we intellectually mature and meekly acknowledge that our epistemic powers –and excuse the comparison- are closer to those of an oyster than to those of an angel. Our intellect is unable to cognize but a minimum of reality, and lesser still, to explain or understand reality.

To begin with, it seems necessary to presuppose the existence of such intellectually inaccessible immediate higher order of reality. Moreover, as just said, it is necessary to judge all reality -including the rational, the one constituted according to our ontological relations and categories- to be meta-rational. That is, to be of a para-rational nature, of which the rational reality is not a part, but a mere aspect of it. A higher order nature for reality, might explain many physical events of which, as yet, we have no explanation[[86]](#footnote-86). An example of these unexplainable events are those that take place against all odds or seem to be contradicting the laws of physics and logic, as are judged to be the quantic.

An immediate higher order of physical reality alone -such as multi-spatio-dimensional reality- could explain many phenomena, and not just quantum mechanical ones. As already said, it could be conjectured -extrapolating what is observable in geometrical figures of one, two or three spatial dimensions- that an almost infinite number of higher orders of spatial dimensions could shorten the distance from one point of space to another, to practically nil. As happens with the circle, that if it is in three spatial dimensions is a sphere, and the distance of one point of the perimeter to another point opposite to it, is reduced, because the length of the diameter of the sphere (or simply a circle) is shorter than the length of the perimeter. If this were the case, it could explain phenomena apparently faster than the speed of light (provided that the theory about the speed of light hold, for faster phenomena seem to have been already observed or validated). In such case, if space and time are intimately related, there would neither be time. Moreover, one could conjecture that, because of the lack of extension, there are no objects at the ultimate highest order of spatial dimensions, or at least, objects with physical dimensions, though they would exist under lower number of spatial dimensions, and thus, too, under a different ontological structure or a different kind of space. Moreover, time could be explained out as a spatial dimension of a kind, of which, -as the Flatlander with the dimension of width- we are unable to distinguish in its entirety.

Following with this, one could ask is there is not a minimum of space or a minimum of time, or different kinds of time for each dimensional order. For example, that there be the time of our three-spatio temporal reality, and a different time -or even something else that our reality does not have- under a reality of a higher order of spatial dimensions, or even, more precisely, that something other than time, or a higher order of time, where -e.g.- the future already exists, or further still.

One has to be blind to the many strange premonitions that some individuals have which are difficult to explain if time were just as we distinguish it to be, with past present and future, where the past no longer exists and the future as yet is not, and where the present is the passing from the past to the future, as explained Augustine. If neither the past nor the future objectively exist, there is no manner to explain the present as a passage from one to the other. It can be explained if the nature of time is purely subjective, that is, if it is a record of something that no longer exists becoming a record of that something that as yet does not exist. But even this -properly speaking- is not rational. The fact that we can distinguish such passing does not mean that the distinction of time is rational, nor that it is as we distinguish it to be.

To hold that everything is temporal because there is time and -according to what we distinguish-, nothing seems to be a non-temporal reality -as Bergson did- is a poor solution to the problem of “Being”. To start, because the explanation of it cannot be rationally given, without contradiction.

Our Ontological Scheme is appropriate for our adaptation and survival in a three-spatio-temporal dimensional reality as ours; it is intended to enable distinction of reality from the given in sensation, ‘within’ this world. It does not serve to interpret a higher order reality nor to explain why our three-spatio temporal reality exists. To give a poor example –for it is given according to our Ontological Scheme, that is, following the principles of rationality- it could be the case that in a higher realm of spatial dimensions, a cause is as much the factor of its effect as the effect the factor of the existence of its causal factor.

Nonetheless, our perceivable reality cannot be assimilated in any manner to a higher order reality. The so appalling cosmos of billions of galaxies that we perceive is probably insignificant relative to all that exists outside our intellectual grasp. It suffices to suppress the mental conception of a sole ontological relations or categories to realise the exponential loss of content brought forth to our worldview, and how much this ‘view’ is altered in nature. From this reflection it is possible to collate how much an additional order of basic relations and categories to the ones we have, could enrich, expand, and alter our idea of reality. Only, then, we can come to realise how much might be missing of our worldview. It is then that we have a minimal idea of how much more reality must truly exist, as higher orders of pluralities seem to be necessary to explain our immediate world.

The possible knowledge that the *a priori proper* enables to generate from what is sensed, seems to be knowledge of one of many kinds of realities that objectively exist or of the many realities that one sole reality can deliver, depending on the cognitive powers of the observer. As illustrated with the example of the Flatlander, though reality is just one, it must be assumed to be far more complex and richer in content than we can distinguish of it. It must also be assumed that it presents different aspects, depending on the cognitive capability of the observer. So, while we can only perceive a fleeting three spatio-dimensional reality originating in a ‘singularity’ (thought this too is now questionable), a better endowed observer might distinguish, e.g., as being a static reality in five-spatial dimensions, without beginning nor end. A variant of this possibility is, that what determines the content or richness of reality of which the observer can have awareness, is not due to her overall cognitive capability, but exclusively dependent on the cognitive *a priori* contribution of the observer: of what the observer can interpret or put into his sensations. In the first case, objective reality would be of an incommensurable content –not to say infinite-. With the other alternative, the objective content of reality could be minimal and there could be more or less reality, depending on the epistemic powers of the observer. If the latter were the case, what to us is a minimal and incomplete relational world, to a meta or para-rational observer could appear as a complete, non-relational reality. Moreover, relative to the cognitive powers of such para-rational observer, reality would be of a wealth of content not the least imaginable nor conceivable by us. Anyhow, what matters is, that, not just the common-sense conception, but the current and very scientific idea of what there is, though true for a rational aspect of what there is, is intrinsically deficient.

Via inference from the *a priori proper*, the unexplainable nature of reality commands a view of reality with a plurality of objectively existent higher orders of reality of different manners of ‘Being’. That is, a view of worlds with ‘categorical differences’ -that may or may not include higher numbers of spatial dimensions- in order that our reality be explainable. Further still, what makes reality explainable must be rationally assumed to ultimately be of a non-rational nature to avoid an infinite sequence that cannot deliver an explanation. The understanding of it would demand a radically different manner of cognition to ours, such as the capacity to cognise something of a non-relational nature.

In effect, our idea of the world must include a condition of all, what, as already said, in Wittgenstein’s words, gives sense to the World -the Mystical[[87]](#footnote-87); I prefer to call it a Fundamenting Reality, which -according to our categories- must be a causal factor of non-relational nature. However, this Fundament must be a ‘corrected’ version of what is generally considered a deity, as its values and powers must be well beyond those that are attributed rationally to it, that is, to what we conceive as existent with our Ontological Scheme. This Fundamenting Reality would have to be a reality of which we are in no condition to make any judgement about, and least still, of which we are in no position to question its existence, that is, of not accepting as possible.

The sole fact that we are forced to presuppose such Fundamenting reality to be of a non-relational nature –that is, non-existent by other-, and in no manner according to our categories- so far exceeds the nature of anything that we can conceive, that it far surpasses what we can think is possible. However, it has to be possible and constitute a reality, simply, because there is existence rather than nothing.

# FINAL WORDS

This work shows that Kant was right in his observation that there are elements in human knowledge that do not originate in experience. But not only with elements. The mind through sensations, feelings and emotions with which it dresses some idea or external or internal stimuli, delivers awareness of things and values, such as beauty. The forms of sensation also deliver awareness of how things are. And emotions, such as mystical experiences, deliver awareness of a reality superior in all, to what we can conceive.

These elements of knowledge are *Firstly*, (i) the sensations with which the intellect brings forth upon sensorial stimuli. They seem to be practical manners of generating awareness of the physical world. These sensation range from three-spatiality, time, and motion, to colour, taste, etc. To the point that, maybe, reality, as was explained, properly speaking might be ultimately spaceless; (ii) Feelings, which are also a preset response of the intellect to a thought or to certain unconscious perceptions, such as the fear of the dark, or that of love, in some cases, they are of indication or awareness of something external to us, and are an element that comes along with certain knowledge; and (iii) emotions, they are a response to awareness of something sublime, such as of love, perfection, the divine; thought emotions do not constitute knowledge, they contribute with an intense sensation, which can be judged to be a clear indication -for example- of the existence of something sublime; the emotions brought forth by a musical composition by musicians as J. S. Bach, can be judged to be proof that God exists. *Secondly*, the relations that the intellect contributes with, which are reducible to the ontological relations and categories. These ontological relations and categories which seem to be the structure of the world, may too be practical manners of conceiving reality, and it should not surprise us if ultimately reality is neither structured by them nor under the categories that they constitute. (These relations and the categories that they determine, are those of rationality, as they constitute the basis for logical and mathematical judgment)

That the physical cannot be as is sensed, is already proven since Locke. And that ultimately reality must be of a nature beyond what these relations and categories of rationality -what I call para-rational- constitute, is quite evident from a rational perspective, as it is with these that reality is explained and do not suffice to fundament nor explain reality in itself. It must be acknowledged that reality is para-rational.

In other words, it is here held, that the mind operates, firstly, with *a priori* instructions to construct sensations or non-sensorial ideas of objects, with sensory forms. And secondly, that it provides innate information about certain universal elements of reality -relations- that constitute the structure of rational knowledge.

It is also shown that neither the forms of sensation nor the conceptual with which the world is structured and, explained or understood, suffice to explain what there is, as it is only applicable to a minimal aspect of reality.

We are extremely naïve regarding our cognitive faculties. We must meekly acknowledge that our epistemic powers are minimal. The sole fact that there is existence rather than nothing is so amazing that there is no manner to think something more astonishing than it. Reality is so far beyond what can be rationally conceived and explained, that reality must be acknowledged to be para-rational. The sensations with which the intellect responds to sensorial stimuli or even gives shape to ideas of images (only those can be given to these) are practical manners of presenting or conceiving physical objects. The structures imposed to judgment about what there is by our ontological distinctions constrain our possible knowledge to what, most likely, is an insignificant aspect of what exists. Our intellect constructs our knowledge of the world, and it does so in a manner -the rational- that, though matching in the relation- its representations of the sensable impressions only corresponds -do not match- with things in themselves.

Humankind cannot negate that there can exist other spatial and temporal dimensions. It must accept that there is more to perceptual reality than what is of an empirical nature. Moreover, the nature of our ontological scheme is such that it forces to presuppose such para-rational reality. Further still, the ontological scheme determines our conception of reality to such point that even our perceptual-forms of representation follows it and confines the idea of physical spatio-temporal world that it delivers.

This constraint is such that, if we had the metaphorical opportunity of getting out of ‘Plato’s cavern to see reality at its fullness, we would be totally unable to observe it. We would not notice it to differ from the shadows reflected in the wall; if noy still believing ourselves to be shut in the cave, unaware of being out in the open. Reality cannot be merely rational. *Existence requires that its nature be para-rational.*

Due to the epistemic constraint to which we are subject, it does not make any sense to aspire attainment of an ultimate explanation of reality[[88]](#footnote-88). The mere fact that reality is way beyond what can be rationally explained makes no sense to seek an answer to the question of *‘Why is there Being rather than nothing?’[[89]](#footnote-89),* or *-regardless of the natural explanation for it- ‘Why is nature as we distinguish it to be?’ Why is reality not different from what it is?*

What can possibly exist or be is unimaginable. And what all things are in themselves, even the most insignificant of objects, if they are para-rational properly speaking, what we cannot know of them is incommensurable.

Such answers are outside the reach of our intellect and in no manner achievable by the natural sciences, regardless of the candid belief of many cosmologists and physicists. Wittgenstein was quite right in implying that the knowledge of existence of such reality is only accessible through what is called mystical experiences, that is, with a kind of inner sensorial awareness of something sublime that is not-rational. An awareness that some might have in greater degree than others and which, explains why there are quite a few that abandon secular life and the pursuit of material joy for religious beliefs.

But what matters is that our ontological distinctions force to presuppose not just that reality is para-rational, practically magic, but that this, in turn, implies the existence of an unconditioned condition of all. Condition so inconceivable by us, that to attribute unlimited intelligence and supreme powers to it, or even to assert of it that it is of an unconditioned nature, is probably akin to predicate of it the most insignificant and secondary of its faculties. Its powers must be assumed to be para-rational, that is, beyond the rational. And such, that in spite of the miseries of life, the most reasonable attitude in life, is to judge that our existence obeys to a knowledge and values infinitely loftier than the most sublime we can ever dream of, even if we were the most insignificant of what there is. If something -whatever it be- can exist by itself, it is not possible to hold that it lacks any of the faculties it is a condition of, and that these could range from a supreme consciousness or knowledge of all, to the possibility of infinitely gratifying itself for its own existence.

Moreover, after all this on what grounds can we deny that all those *a priori* beliefs that we are innately endowed with, such as of the existence of supreme intelligence, life after death, supreme justice, are not real? How can we know, for example, that we are not already dead and paying as a consciousness for our faults in a former life? This was my father comment in seeing the troubles and suffering in the world, the vain pursuits, and the fleeting pleasures. I accept that it was an ironic comment of his, but it is more plausible than its blunt denial. Human pursuits pale further than mankind can think, as we become conscious of the insignificance of our cognitive powers. Such is our blindness to what there is, that it does not make any sense, in light of our irrelevance, to expect human happiness beyond the laws of moral. Pascal´s wager is the most reasonable approach.

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1. Ontological Categories, Clarendon Press, Oxford, 2005 [↑](#footnote-ref-1)
2. Abbott, Edwin A., *Flatland, A Romance of Many Dimensions*, First Edition 1884, reprinted by Classic Fiction Series, Digireads.com Publishing, 2016. According to what the Flatlander scientists could tell us, Mr. Abbott gave a false report about Flatland and Flatlanders; Flatland, properly speaking, lacks thickness and Flatlanders cannot perceive the geometrical shape of a square, circle, triangle, or of pentagons, but from the side and depth of their perimeter as well as only the sides of the lines constituting the perimeter of other Flatlanders. Women do not move their backs from right to left or left to right but up and down since, from inside Flatland there is no width; all Flatlanders have two eyes –but one above the other- to have in-depth vision, and, most importantly, they cannot conceive width, so –in her opinion- the romance of Many Dimensions, would be a total fiction. [↑](#footnote-ref-2)
3. I do not agree with Bergson’s (neither did Russell) explanation of time nor with his idea that *‘the human intellect distorts the nature of time representing it to itself in spatial terms’* (Timothy L.S.Sprigge, *The God of Metaphysics*, OUP, 2005, Chapter 3, p. 96/97); actually, I think it might be the inverse. [↑](#footnote-ref-3)
4. For example, we represent two-spatio-dimensional geometric figures as if space were perfectly plane, though space in-itself is curbed. This might be the reason why the theoretical diagonal of a square and Pi, is an irreducible fraction p/q. [↑](#footnote-ref-4)
5. Hawking, Stephen. *The Grand Design*, Bantam Books, NY, 2012 [↑](#footnote-ref-5)
6. It might be said that -unfortunately- this is the case of those who suffer total memory loss. But not precisely, since generally some memory of past events is retained. [↑](#footnote-ref-6)
7. Observe that this distinction presupposes that of change and temporality, and so too the other ontological relations and categories. [↑](#footnote-ref-7)
8. Allow me to observe that the maximum speed that an object can travel through our 3D space is not determined by space, but by the energy with which it has been emitted. If this maximum speed were dependent on the energy of the source of emission alone, the mass of an object going beyond the speed of light, would not be due to motion, but to the degree of energy that sets it in motion. Can it be said that energy is what brings about motion? That change is due to motion in a composite -as are material objects- appears to be the case, but of motion of its components. Is all the existing energy that of the big bang? But what is energy ontologically speaking? All physical reality is simply energy, according to quantum physics. [↑](#footnote-ref-8)
9. For systems of categories, see Westerhoff, Jan, *Ontological Categories*, Clarendon Press – Oxford, 2005. [↑](#footnote-ref-9)
10. Plurality is the category contrarian to that of one. It might be argued that to such category applies Russell’s argument, and that plurality (understood as everything, all that exists) would be an instance of itself, which is a contradiction. Plurality can be said to be what exists and yet is not distinguished as an individual, but whose trait is to differ from what is distinguished from all existents, that is, from the individual or particular pluralities. As explained in footnote 43, all cannot be a member of itself. All is a member of the category of all, just as a distinction or concept that we make, but not as that to which it refers. All does not admit of something other than what itself, and if all is a member of itself, it would presuppose, that it is and that there is something other than all, since an instance must differ, -that is, it must not be- from the plurality under which it instantiates, otherwise it is not an instance of it. [↑](#footnote-ref-10)
11. It is a class only if it comprises as members all the subjects of distinction with the same property and not just some of these. [↑](#footnote-ref-11)
12. The human intellect is programmed to inquire for the cause, that is, for “on what something depends on to exist and to exist as it is”. It implies that the program of judgment constituting rationality -as shall be explained below- presupposes that everything to which the intellect has access, has a cause; that is, is dependent on other for its difference and similarity. The construction of a cause of itself, or uncaused condition of all, is a departure from what the innate program of judgment leads to presuppose, upon the search of a first cause. [↑](#footnote-ref-12)
13. It can be said that with‘Which?’ is inquired of the individual, that is, of the subject; that ‘What?’ serves to inquire less specifically for an individual, and mainly for a class; while by ‘How?’ is asked for a property and causal factor. The property asked for can be of the factor of causality –such as ‘his strength’- or that of something else, such as ‘the power of the engine’, or, even, a property of a property as in ‘the cut of her red dress’. With ‘Why?’ it is asked of the causal factor of an effect, whether it was already caused or may take place. Other terms, such as ‘with’, if constitutive of a question, can refer to an inquiry about an individual, a class, or a property or a cause. [↑](#footnote-ref-13)
14. That the immediate subject matter of thought and judgement are ‘distinctions’, was ‘the main issue of metaphysics in early Chinese philosophy’Chad, Hansen, *Metaphysics in China, A Companion to Metaphysics*, p. 315/316, edited by Jaegwon Kim and Ernest Sosa, Blackwell Reference, Blackwell Publishers, 1995. [↑](#footnote-ref-14)
15. Western Philosophy remained the study of the thing in itself as late as the XVII century until Descartes when it turned over to ‘ideas. Although in the XX century with the ‘linguistic turn’ philosophy moved over to the analysis of language, because it is through language that reference to ‘things’ is made; from language with Michael Dummett philosophy veered to ‘thoughts’, and as of late, to ‘concepts’ (Williamson, Timothy, *The Philosophy of Philosophy*, Blackwell, 2007, Introduction, Chapter I, and *The Linguistic Turn and the Conceptual Turn*, p. 11 and 14). [↑](#footnote-ref-15)
16. I am in no condition to assert “of which we are sub-consciously aware”. [↑](#footnote-ref-16)
17. A sense perception is awareness of the external world that is only inferential of difference. Classification is a form of inference, which follows that of distinction. Inference and sense perception must precede the inference if the classification is by way empirical inference. [↑](#footnote-ref-17)
18. The first to hold the indirectness between objects and phenomena was Hermann von Helmholtz, as he says in his, *Handbuch der Physiologischen Optik*, published in 1867, were he explains that the sensations are sort of mere signals of reality, that our cognition of the objective is indirect, through mental constructs. [↑](#footnote-ref-18)
19. ‘*The Platonic riddle of nonbeing, that nonbeing must in some sense be, otherwise, what is it that there is not?’* cited by Willard Von Orman Quine, *On what there is*, Review of Metaphysics (1948). Reprinted in 1953 *From a Logical Point of View*. Harvard University Press, who arrives to the erred conclusion that then, nothingness, is an objective existent and that there is no difference between the objective and the subjective. This also serves to understand why Quine’s relativism is not possible. As E.J Lowe in his *The Four Category Ontology,* Oxford University Press, 2006, Chapter 12, Section 12.3, p. 195/198, ‘Quine is in favour of a minimalist ontology, or rather of a no-category ontology, not of a one-category’ ontology as pure trope ontologists are.’ Quine is, in E.J. Lowe’s opinion, an anti-realist, nihilist metaphysician, jointly with Dummett and his ‘amorphous lump ontology’. Quine’s relativism, for Prof. Lowe, is a contingent matter determined by cultural and psychological factors, according to which it is not possible to know what the content of reality is, for there is no privileged way of doing so independently of language. [↑](#footnote-ref-19)
20. There has to be something in common with reality for the distinction to be representative of it. Likewise, Wittgenstein, *Tractatus*, Prop. 2.16, 2.161, 2.17, 2.171, to 2.2 but I suggest reading from 2.1. [↑](#footnote-ref-20)
21. As explained below, reality cannot be merely rational, that is, just structured by our ontological relations nor only classable under our few ontological categories. Rationality does not suffice to explain why there is being rather than nothing. This explanation is not just an issue of empirical information: but of what the human mind is geared to distinguish. [↑](#footnote-ref-21)
22. This enables to define cero, not as nothingness or something contrarian to what there is, but as a plurality that does not hold the instances that constitute a particular extension, but as a plurality of other things. Such as the extension of a box of chocolates empty of bonbons, which exists as a container or as a plurality of other elements, such as of the paper cups on which bonbons are placed. [↑](#footnote-ref-22)
23. Though since Frege, meaning and reference generally are not judged to be the same thing, my opinion is that if the expression is properly made, they are the same. There are many theories of meaning. The earliest definitions of meaning defined it as a relation between signs and objects. See, Modrak, Devorah,[Aristotle's Theory of Language and Meaning](https://www.amazon.com/dp/0521103983/ref=rdr_ext_tmb), CUP, 2001. An alternative position is that meaning is a relation of the sign with ideas, or thoughts, whether these be mental representations or mental acts of some kind. Truth-theories of meaning, which considered meaningless the expressions that are not true, prevailed at the start of the xx century, and led to Quine attacking the very notion of meaning in *‘Two Dogmas of Empiricism’*. The problem with the truth-theories of meaning is that expressions referring to fictions are considered meaningless, which though useful to defend empiricism, is absurd. What I point out here is that the meaning of words, concepts, and propositions, or of any other expression, are the distinctions to which these refer depending on the language employed. [↑](#footnote-ref-23)
24. One could say that the difference with a tautology, is that the tautology is not meaningless, but just states of a subject relatum to be what it is, thus providing no additional information about it. [↑](#footnote-ref-24)
25. For a view of current and new theories on propositions,see*New Thinking about Propositions* by Jeffrey C. King, Scott Soames, and Jeff Speaks, OUP, 2014. [↑](#footnote-ref-25)
26. Wittgenstein is wrong in Prop. 3.323 of the *Tractatus*. It is clear to me that the word ‘is’ has only one established meaning. It points to plurality membership, such as, class. [↑](#footnote-ref-26)
27. In other words, contrary to Hume and Logical Positivism (Heath, P.L., *Logical Positivism,* The Concise Encyclopaedia of Western Philosophy and Philosophers, edited by J.O. Urmson & Jonathan Rée, Routledge, 1995, *p.183/184)* the relations are referred to by what are called logical terms, as this is the function played by verbs, prepositions and grammatical connectors in propositions. [↑](#footnote-ref-27)
28. It can be said that mathematics is the science that studies the relations between pluralities based on the extension of its instances, or in geometry, the study of spatial entities based on their spatial relations; mathematics is then, also, the science that studies the use of the extensions of pluralities for the distinction of reality based on how one entity relates to another based on the extension of its constituents. [↑](#footnote-ref-28)
29. Chomsky, Noam, *Nouveaux horizons dans l'étude du langage et de l'esprit*, Stock, 2005, p. 110, that there is no relation of reference between words and things. [↑](#footnote-ref-29)
30. Mediated reference terminates with the issues and incongruence that derived from directness of reference, such as to a factually non-existent, as in the example ‘the present King of France’ which refers to a non-objectively existent and has led some to the erred conclusion that only propositions have meaning (e.g., L. Wittgenstein, Tract., Prop. 3.3, 3.314). [↑](#footnote-ref-30)
31. Although it can be used as a property -e.g.- to identify who made the scandal. [↑](#footnote-ref-31)
32. If it be the case that higher orders of categories beyond these do exist, then, these categories and relations of ours, would just be a property of the reality that we distinguish with them. [↑](#footnote-ref-32)
33. This applies to objects, which cannot be excluded as causal factors on the argument held by the advocates of the Causal Redundancy Theory, that they cannot be categorised as causes, as Annie Thomasson observes in her book *Ordinary Objects*, OUP, 2007, p. 4. [↑](#footnote-ref-33)
34. Except to the condition of all, but then we attributing to this Supreme Condition a para-rational nature, for it is not possible to rationally deny this condition or attribute to it an irrational nature [↑](#footnote-ref-34)
35. Cit. opus, pag.24 [↑](#footnote-ref-35)
36. Grayling, A.C, *Scepticism and the Possibility of Knowledge*, Berkeley’s Argument for Immaterialism, page 8 onward, Continuum UK, 2008. [↑](#footnote-ref-36)
37. Cit. opus, pag. 21 [↑](#footnote-ref-37)
38. Berto, Francesco; Plebani, Matteo (2015-01-29). Ontology and Metaontology: A Contemporary Guide. Bloomsbury Publishing. Kindle, (Position 220) [↑](#footnote-ref-38)
39. The term “incorrigible” is here used in the sensed defined by Simon Blackburn in his dictionary of philosophy (Blackburn, Simon, *The Oxford Dictionary of Philosophy*, OUP, 1996, definition of incorrigible) *‘A proposition is incorrigible if it cannot be corrected, that is, it is not possible that belief in it should be found to be mistaken…’* [↑](#footnote-ref-39)
40. Here applies the instrumentalist conception proposed by Pierre Duhem in *La Théorie physique. Son objet et sa structure* (1906). According to it, science does not describe reality beyond phenomena, but it is an appropriate instrument for prediction. [↑](#footnote-ref-40)
41. The instinctive behaviour of new-borns, such as in breast feeding, forces to presuppose that causality, difference, and similarity, and so, too, properties are innately determined. [↑](#footnote-ref-41)
42. This, too, would be the consequence of suppressing the distinction of ‘Being’ or ‘existent’, as then, the world would be conceived as a plurality of different disconnected realities, each under a different category, holding no relation in common among them. [↑](#footnote-ref-42)
43. W.V. Quine, *Ontological Relativity and other assays*, Columbia University Press, New York, 1994 (reprint), p.101. [↑](#footnote-ref-43)
44. It is nonetheless worth considering where the logical mistake is in Russell’s argument. One could be that set is only an aspect of an individual, so it cannot be an instance of a plurality, as these are constituted by individuals, for only they carry properties. If the class of all things were a member of itself, the class of all things would add to what there is all that there is, and all of what there would have a subset of all that there is, and so on the subsect would carry a sub-sub-set, and so on, infinitely. Another alternative is that the absurd that a class of all sets cannot be a member of itself is due to the fact reality is not rational, but para-rational, that the explanation of it is grounded on a para-rational nature of reality that we cannot intellectually access. A third alternative that occurs to me is that when speaking of pluralities or sets, we are actually referring to something of which there cannot be an all or totality. The fourth, is that the set of all sets is an impossible because such plurality cannot be a set, as it would have to be of a higher ontological order, it would not carry the properties necessaries to be defined as a set, for example, because there is no higher order of plurality into which it can be instantiated. Moreover, it would be an ontological category, the one of plurality. The last would further validate the hypothesis that reality cannot be explained rationally. That a para-rational reality is necessary to the effect, one where pluralities of a different nature are possible, if not something else. A set of all sets cannot be properly speaking a set, for the simple reason that it will not carry the properties that characterize all the sets to be under it, or simply because, what characterizes such set is that all sets instantiate under it. And if it is an ontological category, the one of plurality, as would be the case, it would apply to it what is explained in this book. Consequently, the category of plurality cannot be a member of itself because it comprises all possible existents. And to be a higher class, the plurality cannot be similar to all in all or some aspects, but only of a few. Other arguments, that occurred to me later: the class of all classes cannot be a member of itself, because what would determine membership to is mere existence, and existence cannot be a property. The same applies to the set of all sets, but the property in common to the instances is that of plurality, but plurality cannot be a property under set, because it is not a property, since all our distinctions must be judged to be such. [↑](#footnote-ref-44)
45. Lewis, David, On the Plurality of Worlds, Blackwell Publishing, 2007, p. 2. [↑](#footnote-ref-45)
46. Konrad Lorenz, *cited opus*, holds that the concepts *a priori* of understanding (for example the representation of space) originate in the mechanisms of natural selection. [↑](#footnote-ref-46)
47. David J. Stump*, Conceptual Change and the Philosophy of Science, Alternative Interpretations of the A Priori,* Routledge, Francis and Taylor Group, New York and London, 2015, Introduction. This also applies even to Jean Piaget theory of how the structure of the intellect evolves and constructs these ontological structures (as well as others). [↑](#footnote-ref-47)
48. As Jean-Michel Besnier explains in ‘*Les Théories de la Connaisance’*, Presses Universitaires de France, 2005, Paris, p. 81, 82, 87, empiricism must accept a sort of a Kantian *a priori* or a constructivism in the manner of Piaget’s. He cites Gerard Edelman, *Biologie de la conscience*, Paris, Odile Jacob, 1992, who holds that learning is possible because we are hard wired to the effect; that is, genetically conditioned to do it. [↑](#footnote-ref-48)
49. Chomsky, Noam, *The Principles and Parameters approach* (P&P); and Konrad Lorenz, *L'envers du miroir: Une histoire naturelle de la connaissance*, Flammarion, Paris (1975) ; Peter Carruthers, Stephen Laurens and **Stephen Stich**, *The Innate Mind*, Oxford University Press; 1 Volume (2005) and 2nd. Volume (2007). [↑](#footnote-ref-49)
50. Golombek, Diego, *Las Neuronas de Dios*, Siglo XXI Editores Argentina S.A., Bs. As., 2014. [↑](#footnote-ref-50)
51. The idea that the “I” or “self” as something independent of our body, is probably *a priori proper* too and this *a priori* may be a basis for the belief in the soul and afterlife (as serve to such end the so-called near-death experiences). Since very early age -between four and six-years- if a child is told that he would not exist if their parents had not existed or died young, the child generally respond, that then he would have been someone else.

    There are many other strange things that might be an indication of previous life, or genetically inherited memories. My grandson Francisco, at the age of one and a half, used to cry every time that he heard the song *“Ah, vous dirais-je, Mamam”.* This was the only melody of the many he heard that brought about such reaction in him. He had a book that made it possible to reproduce diferent melodies just pressing a button, which he repeatedly did, crying with tears every time he heard this particular one. It was a cry that started softly, as if it brought forth a sad reminder as the melody progressed.

    The same can be said of other things that cause us a strange reaction. Buttons are an example. I know of many who find them so disgusting that it is not possible for them even to speak about the same without feeling great dislike -and to great extent this happens to me. At this moment, in talking about them I feel a strange dislike.

    Another strange example of what might be *a priori*, is my fear of light houses; when I am near to them, I feel a strange feeling of dislike; I cannot say that this is inherited memory of someone of my ancestors that wrecked, but I certainly have a great-great-grandfather that went through such experience, when the ship on which his family was travelling to the US from France was wrecked at night not far from the port, on the coast.

    Another case, in my youngest son, Michael, who when a child was afraid of being at the foot of high walls and still feels dislike for them. I always thought that an ancestor of his had suffered severely from the defenders of a castle or city whose walls he was trying to scale or break. There are so many amazing things, that we should not be surprised to inherit certain fears as genetic information about reality, if not being an “I” that went through a previous existence. But the last will be harder to accept if it is confirmed that there is intelligence in other worlds. Would the “I” be the same for all? [↑](#footnote-ref-51)
52. We can include the universal innate rules of grammar to which Chomsky refers (Chomsky**,** Noam, *On Language*, *Reflections on Language (reprint)*, The New Press, 2007, p.135 onwards, and Chomsky, Noam and Mukherjee, Nirmanlangshu, *The Architecture of Language*, Oxford India Paperbacks, 2006, p.50/60). These rules, as explained above when I refer to language and distinctions, are basically determined by our innate ontological criterion of judgment. [↑](#footnote-ref-52)
53. It might be said that quantum phenomena is an issue of matter and its relationship with space, if not also, with time. [↑](#footnote-ref-53)
54. Kant, Immanuel, *Critique of Pure Reason*, cit. edition, A245 [↑](#footnote-ref-54)
55. Wittgenstein, Ludwig, cit. op., prop. 2.172 ‘*The picture, however, cannot represent its form of representation; it shows it forth’*. [↑](#footnote-ref-55)
56. Kant, Immanuel, *Critique of Pure Reason,* cit. edition, B302. [↑](#footnote-ref-56)
57. Carnap, Rudolf, *The Elimination of Metaphysics through Logical Analysis of Language,* 1932, trans. Arthur Pap, in A. J. Ayer (ed.), *Logical Positivism*, The Free Press, NY, 1966, 60–81. [↑](#footnote-ref-57)
58. Hancock, Roger, *History of Metaphysics,* Gale’s Encyclopaedia of Philosophy, p.299. [↑](#footnote-ref-58)
59. As just said, the existence of time and space is inferred from our record of sensorial impressions. Nonetheless, their distinction is *a priori proper,* and *a priori proper* determined*.* None of these are perceived, but, upon the inference of difference, such as between succession of sensations. Indeed, the sensorial representation of motion is triggered by the mind upon certain factors, such as the succession of images at a certain speed. This is the way in which motion is produced in a film, with succession of individual images. We must be open to the possibility that something similar brings about the idea of space. [↑](#footnote-ref-59)
60. Caygill, Howard, *Introduction* to the cited edition of Kant’s Critique, p. xvii. [↑](#footnote-ref-60)
61. These principles serve to avoid that it may be wrongly concluded that a subject of cognition be judged to be that from which it differs or that to which it holds a relation of similarity, such as respectively being the other things, or a class or cause or the property of itself. [↑](#footnote-ref-61)
62. Walsh, William H, *cit. op.,* p. 303; Wolfgang, Carl, *Frege’s Theory of Sense and Reference*, Cambridge University Press, 1994 - the truth of empirical judgments requires an appeal to facts, while the *a priori* judgments appeal to laws that neither need nor admit of proof. Another conclusion which I hold that can be arrived at is, that, due to the incorrigible nature of the *a priori proper*, the lack of possible empirical validation of such *a priori* information about the world, does not deprive of true character, nor admits judging the inference from it as being hypothetical or conjectural, if inferred with strict logic or mathematics. *This confirms the value of philosophy as the study of the innate a priori information about the nature of reality, if not too of morals. In other words, it is the science about the nature of reality from the study of the innate information about the world, without which there cannot be rational thought (mathematical or logical) nor language.* [↑](#footnote-ref-62)
63. Properly speaking, the principles are rules of judgement needed by the intellect to be capable of delivering sensorial distinctions and conclusions (distinctions) about the world corresponding with objective reality. Being rules, the first one must be that of non-contradiction, which forbids conclusions contrary to identity, and this is, what the principle of identity and third excluded refer to. However, the principle of non-contradiction applied to the denial of the basic categories, shows that they cannot be in any manner negated (as has been said, they are as much incorrigible as the distinction of ‘Being’). From the application of non-contradiction to our categories, other principles can be inferred, which not only show the truth character of these categories and relations but also what must be understood by each of the same; for example, that a class cannot be a member of itself, nor a cause, its own effect, nor a property its own subject of attribution. This alone solves most of the paradoxes in philosophy and enables a definition of change not contradictory with identity. [↑](#footnote-ref-63)
64. There are exceptions, as is the case with those of love and hate. Though the relation itself is not sensed, the love or the hate can even be chemically transmitted or communicated. However, the relation itself is not observed. It can be inferred from signs of affection or hate but is not observable. [↑](#footnote-ref-64)
65. The theory of Gottlob Frege adopted by Bertrand Russell and Alfred North Whitehead, that mathematics is grounded in logic and thus, in part, if not entirely, reducible to it. [↑](#footnote-ref-65)
66. Observe, that one of the main themes of Ludwig Wittgenstein “*On Certainty”,* is that there are some things which must be exempt from doubt in order for human practices to be possible. [↑](#footnote-ref-66)
67. Quine is coherent in believing in the possibility of new ontologies, whether these be delivered by science or not, because in his opinion, the conceptual scheme -and, thus,these categories and relations- are -in his opinion- cultural posits, that serve as a tool for predicting future experiences in the light of past-experiences. (W.V. Quine, *From a Logical Point of View,* *Nine Logico-Philosophical Essays*, Harvard University Press, Revised edition (1980), *Two Dogmas of Empiricism)* However, Quine is wrong, due to their incorrigible and *a priori* nature, science cannot deliver anything other than ontologies of a lower order, such as of stuff or its constituents. In no manner the natural sciences can identify or invent an ontology as that of our Ontological Scheme nor of higher ontological level of abstraction to them; nor can science deliver a diverse ontology which acts as ‘form of judgement’ or one playing the other essential roles in cognition played by it. [↑](#footnote-ref-67)
68. As to Hume’s negation of substance, it is not precisely a denial of the ‘subject of attribution’ but rather of its nature; that is, as the immutable within things with which Aristotelian and Scholastic Philosophy sought to explain variance. [↑](#footnote-ref-68)
69. Kant, Immanuel, *Critique of Pure Reason*, Translated by Norman Kemp Smith, Palgrave Macmillan, 2007 and, *Prolegomena*, Open Court Publishing Company, 1996 [↑](#footnote-ref-69)
70. F.H. Bradley, *Writings on Logic and Metaphysics*, edited by James W. Allard and Guy Stock, section 1, Appearance and Reality, Relation and Quality, p. 124, point 21 (relations are appearances). [↑](#footnote-ref-70)
71. Konrad Lorenz, cited op. [↑](#footnote-ref-71)
72. Williams, D. C., 1997 [1953], *On the Elements of Being I*, Mellor and Oliver, 1997, 112–124: 3–18; Mellor, D. H. and A. Oliver (eds.), *Properties*, Oxford: Oxford University Press, 1997; Maurin, A.S. 2010, *Trope Theory and the Bradley Regress*, *Synthese*, 175(3): 311–326. [↑](#footnote-ref-72)
73. L. A. Paul, *A One Category Ontology***,** UNC-Chapel Hill: lapaul.org/papers/Paul-OneCategory. pdf · PDF file [↑](#footnote-ref-73)
74. Personally, I do not think Parmenides denied sensible objective reality; as he says in Fragment 9 (Scott**,** Austin**,** *Parmenides, Being, Bounds and Logic*, Yale University Press, 1986, Appendix, *On Nature*.) sensable things are not contrarians to ‘Being’, as they do not carry along ‘nothingness’. He just probably denied them the same status as ‘Being’, as somehow did Spinoza, and held that it was a general mistake to use the same words to denote ‘Being’ and “the existent” in speaking of physical reality. [↑](#footnote-ref-74)
75. Lorenz, Konrad, cit. op. [↑](#footnote-ref-75)
76. For arguments for knowledge of objective reality see Lowe, E.J., *The Four Category Ontology,* Oxford University Press, 2006, Chapter 1, p. 4; and Putnam, Hilary, *Reason, Truth, and History*, Cambridge University Press, 1981,Chapter: *Brain in a Vat.* [↑](#footnote-ref-76)
77. *Tractatus*, Prop. 2.16, 2.161, 2.17, 2.171, to 2.2 but I suggest reading from 2.1. [↑](#footnote-ref-77)
78. Both McGinn, in his *Problems in Philosophy,* *Limits of Inquiry,* Blackwell Publishers, 1994, p.2, and Noam Chomsky, whose *Reflections in Language*, NY Press, 1975, p.25. [↑](#footnote-ref-78)
79. *Tractatus*, Prop 6.41 to 7 [↑](#footnote-ref-79)
80. *Tractatus Logico-Philosophicus*, Routledge, Reprint of 1992, Prop. 2.18, 5.61, 6.124, 6.41, 6.42, 6.432, 6.44, 6.52, 6.522, 4.12, 6.42, 6.4312, 6.44, 6.522). According to Bertrand Russell -last part of his Introduction to the Tractatus, p. 23- ‘*...the part upon which he himself would wish to lay most stress’ was to fundament the inexpressible, that Wittgenstein considered to be what gave sense to the world, moral and ethics.* [↑](#footnote-ref-80)
81. In Wittgenstein’s words: an accidental world, which needs of a non-accidental reality (let’s call it so) that gives sense to it but lies outside of the world, and of which propositions cannot express anything higher (Prop.6.41, 6.42). The argument for such higher order reality is the existence of the structure that cannot itself be put into words. The inexpressible –says Russell, in p. 21 of the Tractatus- ‘*contains, according to Mr. Wittgenstein, the whole of logic and philosophy’*, and in p. 19 ‘*the metaphysical subject does not belong to the world, but is a boundary to the world.’* In P. 18, he says *that the boundaries of language to Wittgenstein indicate the boundaries of my world*. For Wittgenstein it is not possible to say anything about the world as a whole. Whatever can be said, has to be about bounded portions of it (P. 17); and (P. 16), there is no way by which we can describe the totality of things that can be named, of what there is in the world. [↑](#footnote-ref-81)
82. There is a general tendency in science to seek reduction of phenomena or events as a way to explain reality, since knowledge acquisition is in all cases by way of classing. However, neither reductionism into a higher order class nor into elemental constituents, will explain reality. In order for reductionism to be of value as a final explanation of all, a non-reducible reality and manner of cognition is ultimately required. [↑](#footnote-ref-82)
83. Strawson, P.F., *Individuals, An Essay in Descriptive Metaphysics,* Routledge, 1993, Chapter 3. [↑](#footnote-ref-83)
84. Kripke, Saul Aaron, *Naming and Necessity*, Wiley-Blackwell; 1991; first published by Harvard University Press, 1980. [↑](#footnote-ref-84)
85. Lewis, David, On the Plurality of Worlds, Blackwell Publishing, 2007, p. 2. [↑](#footnote-ref-85)
86. Hudson, Hud, *The Metaphysics of Hyper-Space,* OUP, 2005. [↑](#footnote-ref-86)
87. The inexpressible was a consequence of Wittgenstein’s conclusion that the picture or language of the world can only have sense if there exists an inexpressible reality for us which fundaments the same, which is the mystical (See Tract. 6.41, 6.42, 6.4312, 6.44, 6.522). The reason why Wittgenstein opts to call such reality Mystical, probably originates in his belief that it is the reality of which one only has access through inner, if not plain mystical experiences. [↑](#footnote-ref-87)
88. Such as Lowe, E. J., *‘Why is there anything at All?’* *Proceedings of the Aristotelian Society,* 1996, 70: 111–120; and Rundle, Bede, *Why is There Something Rather than Nothing?* OUP, 2004. Inwagen, Peter, *Being, Existence and Ontological Commitment*, Metametaphysics, edited by David J. Chalmers et al, p. 473. [↑](#footnote-ref-88)
89. Heidegger, Martin, *¿Qué es metafísica? / What is metaphysics?* Editorial Alianza, Spain, 2014, question for closing sentence; originally by Leibnitz in *Essais de théodicée* (1710)*.* [↑](#footnote-ref-89)