

# The Material Conditions of Experience: The Specification of the Concept of Matter in the *Critique of Pure Reason*

[As condições materiais da experiência: a especificação do conceito de matéria na *Crítica da razão pura*]

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## Abstract

The aim of our research is to exhibit the characterization of the material conditions of experience in the *Critique of Pure Reason*. We argue that, in conjunction with the study of the formal conditions of experience, Kant indirectly addresses the problem of the material conditions. We will show how the concept of matter is specified throughout the *Critique of Pure Reason*. Kant demonstrates that, just as we possess specific formal conditions that make experience possible, specific material conditions are also necessary for experience to occur.

**Keywords:** Kant; matter; reality; force; influx; homogeneity.

## Abstract

O objetivo da nossa pesquisa é apresentar a caracterização das condições materiais da experiência na *Crítica da razão pura*. Argumentamos que, em conjunto com o estudo das condições formais da experiência, Kant aborda indiretamente o problema das condições materiais. Mostraremos como o conceito de matéria é especificado ao longo da *Crítica da razão pura*. Kant demonstra que, assim como possuímos condições formais específicas que tornam a experiência possível, também são necessárias condições materiais específicas para que a experiência ocorra.

Palavras-chave: Kant; matéria; realidade; força; influxo; homogeneidade.

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## Introduction

According to the Copernican turn, the problem of knowledge is not approached by analyzing the object, but by examining how the subject conditions the construction of experience. The subject possesses forms of receptivity (space and time) and functions of understanding (the categories). The forms of sensibility and the concepts of understanding constitute the formal conditions of knowledge. However, Kant argues that, along with the formal conditions of knowledge, there is another condition without which experience would not be possible: matter.

The distinction between form and matter is one of the pillars of the critical system. While form lies *a priori* in the mind, matter is given. The forms of receptivity are the subject of the *Transcendental Aesthetic*, and the functions of understanding are studied in the *Transcendental Logic*. The critical system studies the conditions for the possibility of experience. Therefore, one might think that matter is not the subject of the *Critique*, which deals only with the *a priori* conditions of knowledge. However, along with the formal conditions, there is a material condition without which neither experience nor knowledge would be possible. The material conditions of experience are as necessary as the formal conditions (Caimi, 1982, p. 1). While the matter given to sensibility is not a condition of possible experience, “nevertheless, without this condition, no effective knowledge would be possible” (Caimi, 1982, p. 3).

The aim of our research is to exhibit the characterization of the material conditions of experience in the *Critique of Pure Reason*. We argue that, in conjunction with the study of the formal conditions of experience, Kant indirectly addresses the problem of the material conditions. We will show how the concept of matter is specified throughout the *Critique of Pure Reason*. Kant demonstrates that, just as we possess specific formal conditions that make experience possible, specific material conditions are also necessary for experience to occur.

The research is divided into four parts. First, we will analyze the concept of matter in the *Transcendental Aesthetic*. We will examine its relationship with the concept of affection and show how matter is characterized in general, in connection with finite intuition. In this context, matter is what opposes form. It is determined as the factor that a finite intuition cannot create. Secondly, we will study how, in the *Anticipations of Perception*, Kant introduces a dynamic notion of matter based on the concept of influx. We will show that matter, understood as the real in the phenomenon, exerts an action on the senses by filling a moment of time with greater or lesser intensity. This relationship allows us to think of the properties of matter in terms of qualities endowed with degree. Matter, by filling time in a gradable manner, is not only what opposes form, but also provides the *quidditative* content, the realities of the phenomenon, with varying degrees of intensity. Thirdly, we will examine the link between matter and force. We will show how the influx of matter on the senses is explained through the concept of force: only the movement of matter can affect the sensory organs and make experience possible. Thus, a connection between influx and affection is articulated, allowing us to think about how something can become the object of experience. Finally, we will analyze the introduction of the transcendental principle of homogeneity, according to which, without a homogeneity of the given matter, experience would not be possible. In this way, we will demonstrate how the concept of matter evolves from a general concept of matter as the correlate of a general finite intuition to a more determined concept with defined traits<sup>2</sup>.

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<sup>2</sup> In this sense, we follow Cassirer's indication, according to which, within the *Critique*, “concepts become different and different, depending on the position they occupy in the progressive systematic construction of the whole” (Cassirer, 1921, p. 152).

## 1. Affection and Matter. Finite Intuition in General and Matter in General

In the *Transcendental Aesthetic*, one of the pillars of critical idealism is introduced: the reference of the mind to a given object. At the beginning of the *Aesthetic*, Kant observes:

In whatever manner and by whatever means a mode of knowledge may relate to objects, intuition is that through which it is in immediate relation to them, and to which all thought as a means is directed. But intuition takes place only insofar as the object is given to us. This again is only possible, to man at least, insofar as the mind is affected in a certain way. The capacity (receptivity) for receiving representations through the mode in which we are affected by objects, is entitled sensibility. Objects are given to us by means of sensibility, and it alone yields us intuitions; they are thought through the understanding, and from the understanding arise concepts. But all thought must, directly or indirectly, by way of certain characters, relate ultimately to intuitions, and therefore, with us, to sensibility, because in no other way can an object be given to us (KrV, A 19/B 33).

Kant associates the concept of matter with that of affection. The concept of intuition is linked to the given, in conjunction with a restriction: “for us, humans”. Human experience requires that something be given to the senses. It is not just any intellect that requires an object to be given, it is ours. Our intellect is a finite intellect, and for Kant, the finitude of our understanding means that it cannot construct experience in terms of its matter. Kant introduces here a peculiar way of conceiving finitude. From the fact that we are finite beings, it follows that we cannot construct experience materially; we need something to be given to us. In the Kantian paradigm, the reference to affection expresses the limitation of the mind in constructing experience<sup>3</sup>. Kant points in this direction in numerous passages of his work, where this finite intuition in general is contrasted with a hypothetical archetypal intuition that, in contrast to the finite intellect, does not require an object to be given to it<sup>4</sup>. The finite mind requires that something be given to it in order to construct experience. This conception of human finitude, as dependent on given matter, is a recurring theme in Kant’s work.

Although the critical system is not yet configured, in the *Dissertation of 1770* (*De mundi sensibilis atque intelligibilis forma et principiis*), this peculiar conception of human intuition as dependent on matter is already present. Kant defines sensibility in terms of receptivity. Sensibility is understood as the capacity of a subject to be affected by the presence of an object. Our intuition is sensible because “it is capable of such or such modification by virtue of the presence of an object” (MSI, AA 02: 07). Kant contrasts the finite intuition with the divine intuition. Our intuition, he notes, is not intellectual but sensible. The only way to apprehend the object immediately is through intuition. In order for something to be known, it must be given to sensible intuition. For our type of knowing, matter must be given to us. Therefore, the intuition of the human mind is passive. Passivity appears, as it will in the *Aesthetic*, associated with the incapacity of the finite human mind to produce the matter of its representation. The matter must be given so that the mind can be affected by something. Matter is what is given to sensation (MSI, AA 02: 08). This finite intuition, to which the object must be given in order to have a singular representation, is contrasted with divine intuition. This is characterized as the principle (*principium*) of objects, and it is precisely by being able to be the causal principle of objects that it can be perfectly intellectual. For sensible intuition, the senses are precisely what confirm the existence of the object. This is why Kant calls the knowledge of phenomena *verissimo* (*cognitio verissima*) (MSI, AA 02: 12); for it is thanks to them that we have reliable testimony of the presence of the object. The truth of apprehension derives precisely from its caused character, that is, from its genesis in sensible affection, which guarantees its reference to

<sup>3</sup> That is to say: “since the mind is finite, it cannot create objects by merely representing them” (Caimi, 2022, p. xx).

<sup>4</sup> Dieter Heidemann (2019) studies the Kantian concept of ‘intuition in general.’ Human intuition is a peculiar type of finite intuition. ‘Intuition in general’ includes other types of intuition, such as that of God or any other being. Kant uses this notion to highlight the peculiarities of finite intuition (Heidemann, 2019).

the real. The senses “testify to the presence of an object” (MSI, AA 02: 13).

The analysis of this issue extends also to his epistolary writings. In his correspondence with Marcus Herz from February 21, 1772, Kant raises the problem of how a representation can legitimately relate to the object it represents. This question reappears in the same terms in the *KrV* (Pelegrin, 2022)<sup>5</sup>. In the letter, Kant observes that this problem arises for a peculiar kind of intellect: for one that is neither fully creative nor fully receptive. Our understanding, insofar as it is not a creative understanding, depends on a given matter. In a fully ectypal (passive) understanding, the correspondence between the subject and the object is explained because the subject’s representation is an effect of the affecting object, which is the cause of that representation. If cognition were archetypal, the object would be created by the act of representation, since the archetypal intellect is the one whose intuition is the foundation of things. The *intellectus ectypus* is limited to receiving information. The objects are the cause of its representations (Br, AA 10: 130). For our intellect, the problem arises of the relationship between the representation and the represented. The human intellect is neither fully ectypal (a passive receiver of a given matter) nor fully archetypal, materially creative of the objects of its experience. If the intellect were fully archetypal, it would be the creator of the object *materialiter*, and consequently, its representations would necessarily correspond to the real. If it were fully ectypal, it would simply reproduce the received information. In this case as well, the relationship between the representation and the represented would not be a problem. For our intellect – which produces concepts that, hypothetically, might not match what is given – the problem arises of how to endow representations with content that depends on what is given, but does not fully result from matter. Also in his correspondence with Marcus Herz from May 26, 1789, Kant revisits this dichotomy. He notes that understanding, which gives rules to intuition, cannot be the creator of the material aspect of phenomena. Objects, as appearances (and not things in themselves), depend on the mode of intuition and also on the mode of bringing the manifold under a single consciousness. A finite cognitive faculty depends on intuition, and to depend on intuition is to depend on a matter from which knowledge can be generated. Therefore, Kant concludes, human reason can refer to the object only through intuition, as it cannot create the material aspect of experience (Br, AA 11: 54).

As we can see, this is a peculiar way of conceiving finitude<sup>6</sup>. Finite intuition in general requires a given matter. The concept of matter is introduced to delimit the nature of finite intuition in general. In this way, intuition in general delimits a concept of matter in general, as that which the finite intellect cannot create. Therefore, in the set of definitions introduced in the *Aesthetic*, the concept of matter appears as opposed to form:

That in appearance which corresponds to sensation, I term its matter; but that which so determines the manifold of appearance that it allows of being ordered in certain relations, I term the form of appearance. That in which alone the sensations can be posited and ordered in a certain form, cannot itself be sensation; and therefore, while the matter of all appearance is given to us *a posteriori* only, its form must lie

<sup>5</sup> Some commentators argue that, in this letter, Kant anticipates the developments of the critical system. For Ernst Cassirer, this letter marks the birth of the critical system (Cassirer, 1921, p. 135). Mario Caimi associates this aspect with the Great Light of 1769. He argues: “The ‘Great Light’ of 1769 gave Kant the conviction that content can only be received, not created by thought” (Caimi, 2001, p. 59).

<sup>6</sup> The study that Jakob Sigismund Beck made of this section in his *Erläuternder Auszug aus den kritischen Schriften des Prof. I. Kant, auf Anrathen desselben* (1793) offers an indication in this direction. Reading the first lines of the *Aesthetic*, Beck observes: “the content of intuition is given and is not produced by itself. Intuitions are, for example, the representations of external objects that we receive by being affected, and their content is given. By contrast, the representation of God, although it may also seem to be completely determined, is not a pure intuition, since its content is not given, but made (or produced)” (Beck, 1793, p. 8). Beck opposes human understanding to that of God. God’s mind produces the object, a finite mind requires a given matter. In this way, the Kantian turn ‘at least for us humans’ – introduced in the second edition – is taken up by Beck as ‘... on the contrary, for God’ (Beck, 1793, p. 9). As Roberto Torretti notes, philosophers have marked the features of cognitive finitude in various ways. The reference of the mind to affection is a peculiar way in which Kant marks the limitation of the finite cognitive subject. Torretti highlights how this aspect distinguishes Kant from authors like Leibniz or Descartes. Kant has a peculiar way of understanding the limitation of the human mind: associating it with affection (Torretti, 2006, p. 127).

ready for the sensations *a priori* in the mind, and so must allow of being considered apart from all sensation (KrV, A 20/B 34).

Matter corresponds to sensation, and sensation is “the effect of an object on the representational capacity, insofar as we are affected by it” (KrV, A 19/B 34). The question is what affects the mind. We do not know what is given, but we do know what it produces: sensation. Sensation is the result of affection. For Kant, matter is “that which corresponds to sensation.” Therefore, while form is “ready *a priori*”, “matter is given to us” (KrV, A 20/B 34), and matter remains as the residue of that which the finite mind cannot provide. The finite human mind contributes the formal elements of experience, but does not produce experience *materialiter*. Thus, in the *Aesthetic*, along with the characterization of the notion of finite intuition in general, the concept of matter in general appears as that which the finite mind does not contribute.

Since the *KrV* investigates the *a priori* conditions of knowledge, and matter is given *a posteriori*, the problem of material conditions might seem not to be part of the critical investigation. One could think that this aspect of the phenomenon is irrelevant to the *KrV*, which deals with the formal conditions of experience and not with the material conditions. In the *Transcendental Aesthetic*, Kant studies the forms of sensibility, space and time. In the *Transcendental Logic*, in its analytical part, Kant shows that we have pure concepts of understanding and that these concepts, which are conditions for the possibility of experience, are legitimately applied. One might argue that the problem of matter does not concern the critical system, which focuses on the formal conditions of experience. However, the problem of matter, introduced in the *Transcendental Aesthetic*, reappears in the *Analytic of Principles*; more precisely, in the *Anticipations of Perception*<sup>7</sup>.

## 2. Matter and Influx

In the *Anticipations of Perception*, Kant introduces a new approach: the anticipation of the content of experience. On one hand, Kant argues that matter provides the qualitative content and is, therefore, the real of the phenomenon. On the other hand, matter affects the mind with varying degrees of intensity. The influx of matter is not homogeneous but graduated.

In the 1787 edition, the principle of the Anticipations of Perception states that “in all phenomena, what is real, as an object of sensation, has intensive quantity, that is, a degree” (KrV, B 207)<sup>8</sup>. Kant calls this principle an anticipation. However, every principle is in some sense an anticipation with respect to experience<sup>9</sup>. In fact, Kant referred to other principles of the understanding as anticipations<sup>10</sup>. The anticipations of perception anticipate in a peculiar sense: they allow us to delimit the *a posteriori* conditions of knowledge. The issue here is not merely the possibility of anticipating the form of phenomena, but also its content (Cassirer, 1921, p. 191).

The anticipations determine the phenomenon in relation to matter, and the matter of

<sup>7</sup> Some interpretations of the schematism argue that, in this section, Kant addresses the problem of the relationship between concepts and the concrete objects given to intuition (Caimi, 2013, p. 157). However, even in this interpretation, the problem is not that of matter, but the forms of the transcendental determination of time. Similarly, certainly, some passages of the deduction address the problem of the relationship between the concept and given objects. However, even here, it is not the problem of the material aspect of the phenomenon, but rather the *a priori* constitution of the conditions for the possibility of objectivity in general.

<sup>8</sup> On the differences between the two formulations (the first edition and the second), see: Longuenesse (1998a: 319) and Klemme (1998: 262).

<sup>9</sup> “Any knowledge by which I can know and determine *a priori* what belongs to empirical knowledge can be called an anticipation” (KrV, A 267/B 209).

<sup>10</sup> For example, the analogies of experience are also rules “through which we could anticipate experience” (KrV, A 217/B 264).



the phenomenon cannot be provided by either the forms of sensibility or the concepts of the understanding. Matter is the *a posteriori* condition of experience that provides the content of the phenomenon. The mind provides the concepts of the understanding and the forms of intuition, but the material content is given to it. The material content provides the reality of a quality and is, therefore, the real in the phenomenon<sup>11</sup>. The quality that constitutes matter, which forms the *quidditas* of the phenomenon, is received by sensation.

Reality is the *quidditas* of the phenomenon because it indicates the marks that constitute it. The marks that make up phenomena must be distinguished from mere determinations of a concept. The marks provided by matter are given by sensation. Reality is a positive attribute. From a logical standpoint, realities are conceptual marks, which express an affirmative judgment (KrV, A 246/B 302). An affirmative judgment is a positive predication. A reality is a positive predicate of a concept (Log, AA 09: 103)<sup>12</sup>. However, in the case of the reality of the phenomenon (*realitas phaenomenon*)<sup>13</sup>, the marks are provided by matter, and therefore, they are not mere noumenal attributes but indicate an actual being in time, signifying not only a positive attribute but something that exists<sup>14</sup>. Reality indicates being in time with a specific property. The marks of the phenomenon, its realities, are provided by matter. Thus, Kant defines matter as “the real in space” (KrV, A 413/B 440). In this way, one can distinguish the content of a concept from the matter of the phenomenon, as content given by sensation.

Matter, as the reality in the phenomenon, exerts an influx on the senses by filling a moment in time; therefore, it possesses an intensive magnitude<sup>15</sup>. Phenomena do not present just determinations, but rather contain determinations of different degrees, since the influx of matter on sensation varies in intensity<sup>16</sup>. Each apprehension, considered in isolation, fills only one instant, and each instant can be more or less full depending on the intensity of the matter’s influence on sensation. In other words, what affects the senses can change in terms of quality, and the same quality can have different intensities. Thus, just as a moment of time can be more or less full – meaning that the reality of the sensation “can fill more or less of the same time” (KrV, A 143/B 182. The intensity of the quality can vary until it disappears, or it can increase from nothing, with an infinite number of intermediate instances. Limitation allows for the

11 Definitions of matter in this direction are: “the transcendental matter of all objects as things in themselves” (the ‘thingness’, reality) (KrV, A 143/B 182), “what is real in sensation” (KrV, A 166/B 208), “the reality in space, that is, matter” (KrV, A 413/B 440). “The matter of all appearance is sensation, and what corresponds to it is real” (V-Met/Mron, AA XXIX: 829). Also: “In every experience, something must be sensed, and this is what is real in sensible intuition” (MAN, AA 4: 481).

12 This definition of the concept of reality is formulated in Baumgarten’s *Metaphysics*. Baumgarten defines reality as a true affirmative determination: “Things that, when determining, affirm something (the marks and predicates) are Determinations one is positive and affirmative (§34, 10), which, if true, is Reality the other is negative (§34, 10), which, if true, is Negation (Baumgarten, 1779, §36). It is interesting to note the distinction between the concept of reality and that of determination. Realities are not mere determinations but rather true affirmative determinations. Therefore, realities, as true affirmative notes, “serve to ground and to produce a cognition” (V-Lo/Wiener, AA 24: 836). In this sense, as Anneliese Maier explains, a reality always has a real ground: “realities only produce realities and only derive from realities. For to have a real ground or a real consequence is itself a reality” (Maier, 1930, p. 91).

13 As Giovanelli explains: “The Anticipations of Perception restrict the meaning of the category of reality solely to phenomenal reality, that is, to the reality corresponding to sensation. The anticipations attribute an intensive quantity to this reality, and only to this reality.” (Giovanelli, 2011, p. 24). Thus, the concept of reality is restricted: “Realities in the phenomenon are not, in general, the positive predicates of the *phaenomenon*, but rather solely those specific moments given by sensation, of an intensive-qualitative nature.” (Maier, 1930, p. 105).

14 In this sense, the matter of the object “testifies to the real existence of a real object”, since “only an empirical object can provide matter to the categories through sensible intuition.” (Caimi, 2014, p. 65).

15 Intensive magnitudes are those syntheses of the homogeneous in which the whole precedes the part. These quantities are determined by limitation. The part is obtained from the totality. Examples of intensive magnitudes are: taste, moment of gravity, color, heat, weight (KrV, A 169/B 211), luminosity (KrV, A 175/B 217), resistance (*Widerständigkeit*) (Refl. AA 18: 663), and even consciousness (Prol. AA 4: 307). Lorne Falkenstein analyzes the difficulty posed by the variety of examples provided by Kant (Falkenstein, 1995, p. 126ff.).

16 This reference to this material conditions has led some scholars to interpret these aspects as an indication of Kant’s commitment to realism (Bennett, 1966, p. 172; Guyer, 1987, p. 184; Falkenstein, 1995, p. 367n; Stephenson, 2015, p. 509) and to Hume’s empiricism (Torretti, 1967, p. 439; Giovanelli, 2011, p. 9).

determination of the variation of a reality, and thus, the real fills a single moment with varying intensities. In this way, intensity allows for the distinction of quantitative variation within the same quality. The quantity in the variation of intensity of reality is degree: the quantity of the quality (Prol. AA 04: 307). Intensive quantity enables the expression of the variation in intensities of the same reality. It allows one to distinguish one sensation from another of the same type (Prol. AA 04: 309). Two representations can be identical in their realities while varying in intensive magnitude. For Kant, the variation in the determinations of the representation is insufficient to explain the distinction between one object and another and, consequently, to account for experience. Likewise, the variation in extensive magnitude is insufficient to explain the qualitative diversity of experience, as it does not allow for a sufficient differentiation in the intensity of sensations, which underpins the possibility of having differentiated representations. Certainly, it is conceivable to have an experience in which there is no variation in intensity, but this would not be a human experience. As Böhme argues, without this assumption of variation in intensity, experience would not be possible, and experience is a heuristic factum, something that must be explained (Böhme, 1974, p. 245)<sup>17</sup>. For our experience to be possible, it is necessary to explain the difference between representations that present the same reality, which are distinguished from every other by their intensive magnitude. The variation in intensity depends on the force with which matter affects the senses. This influx of matter is explained through the concept of force.

### 3. Matter, Influx and Force

The way in which matter exerts an influence, introduced in the Anticipations of Perception, is specified in the *Metaphysical Foundations of Natural Science* (Friedman, 2013, p. 107). Matter, unlike geometric figures, does not simply occupy a space, but fills it. Matter fills a space through its motive force. Kant distinguishes between filling a space and occupying a space. Geometric figures are extensive, they occupy space. To occupy a space is merely to cover an extension, “to be present in all the points of this space” (MAN, AA 04: 496). Matter fills a space not by its mere existence, but by resisting other matter from occupying the space it occupies<sup>18</sup>. The resistance that matter exerts to prevent another matter from penetrating its space is the cause of a movement in the opposite direction. Matter offers resistance and causes the movement of the other body to decrease or cease; that is, it suppresses the attempt of the other matter to occupy the place that the first fills (MAN, AA 04: 499). Matter offers resistance by virtue of its motive force. Therefore, the ability of matter to fill a space is its motive force. Due to this motive force, matter fills a space<sup>19</sup>. There are two motive forces: attraction and repulsion; for in a straight line, the movement of the points is either one of separation or one of approach (MAN, AA 04: 499)<sup>20</sup>. Through the repulsive force, matter opposes the invasion of

<sup>17</sup> This responds to Bennett's objection. Bennett argues that Kant “does not provide arguments for the impossibility of a world in which nothing is ever dim or intermediate, in which there is only one level of pain, for example, and only three degrees of saturation for each color” (Bennett 1966, p. 172).

<sup>18</sup> Kant distinguishes between dynamic resistance and mechanical resistance. Dynamic resistance manifests when matter resists the reduction of the space it occupies. In this sense, dynamic resistance is understood as occurring “when the space of its own extension must be reduced”. On the other hand, mechanical resistance refers to the opposition matter presents “when it is displaced from its place and set in motion” (MAN, AA 04: 496).

<sup>19</sup> The relationship between force and matter in Kant bears a close analogy with the one proposed by Baumgarten. In both cases, force is the concept that articulates the transition from form to matter (§§280-296). In his *Metaphysics*, Baumgarten explains how matter fills space through force. Matter is an extension to which a resisting force (inertia) is attributed (§295). For Baumgarten, the resisting force is a primary (passive) force. The matter to which a motive force is attributed is the one that, in addition to its resistance to movement, has the active capacity to generate motion and produce affection. Motive and resisting forces are specific senses of the concept of force within the *Metaphysics*. The general sense is the reason for the connection between a substance and its accidents (§§197-204).

<sup>20</sup> It is necessary to take into account the dependence of the dynamic conception of matter on that introduced in Phoronomy. According to Phoronomy, “Matter is what is mobile in space” (MAN, AA 04: 480), and the object of

other matter, being the cause of their movement in the opposite direction (MAN, AA 04: 497)<sup>21</sup>. The repulsive force causes the parts of the body to move apart from each other. Therefore, “the force of an extended body by virtue of the repulsive force of all its parts is a force of extension” (MAN, AA 04: 497). The second constitutive force of matter is the force of attraction. This force causes other matters to approach the matter in question. The force of expansion causes the parts of matter to tend to separate without limit. Space, for its part, cannot limit that expansion. Therefore, if matter contained no other motive force to limit it, it could not be contained by any boundary, and thus, matter itself would lose its determination, as it would lack the necessary limits to be considered matter in a determined space. Therefore, matter demands forces of attraction. Thus, matter fills space by virtue of two fundamental forces: repulsion and attraction. In this way, force constitutes the very essence of matter<sup>22</sup>.

Force, as the foundation of movement, allows for the affection of the senses. According to Kant, “the basic determination of something that is to be an object of the external senses had to be movement, because only in this way can these senses be affected” (MAN, AA 04: 476). Matter can only exert an influx on the external senses if it acts upon them. If matter did not move, there would be no influx on the senses and, therefore, no experience would be possible. For experience to occur, there must be affection. If matter did not move, there would be no affection and, therefore, no experience. Only movement allows something to appear to the senses in general. For this reason, movement is the only condition by which something can become an object of external senses. Thus, thanks to the capacity of matter to move, something can become an object of experience. The sensed stimulus is the correlate of the movement generated by matter. Sensation is the effect caused by matter when it moves due to the motive force and affects the senses. Thanks to this movement, there is affection and, with that, sensation; because “without this movement, that is, without the stimulation of the sense organs, which is its effect, no perception of any object of the senses takes place, and therefore no experience” (OP, AA 22: 551)<sup>23</sup>.

Thus, we find in the *Anticipations* an enrichment of the concept of matter, and with it, what provides the *a posteriori* condition of knowledge. First, matter provides the quidditative content, that is, the sensory determinations that constitute the specific reality of the phenomenon. Second, matter affects the senses with varying degrees of influx. The influx gives rise to variable degrees in sensation. These degrees show that sensory affection is not homogeneous, but modulated by the intensity with which the real fills time. Now, in order to understand exactly what this influx exerted by matter on sensitivity consists of – and how it is possible for the real to manifest itself with different intensities – it was necessary to introduce the concept of force, which allowed for the explanation of affection. Thus, matter provides heterogeneous determinations that allow us to explain the variability of determinations in phenomena. Furthermore, it is explained that the qualities of the phenomenon can present themselves with different intensities. The variation in

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Dynamics is motion as a quality of matter. In fact, each of the chapters of the *Metaphysical Foundations* considers an aspect of motion. Kant argues: “The concept of matter must therefore be subjected to the four already enumerated classes of concepts of the understanding (in four chapters), in each of which a new determination is added. The fundamental determination of something that is to be an object of the external senses must be motion, because only through it can these senses be affected. In relation to motion, the understanding guides all other predicates of matter that belong to its nature. Thus, natural science is, in its entirety, either a pure or an applied doctrine of motion”. (MAN, AA 04: 476).

21 Thus, we could understand force as predicable of causality (KrV, A 82/B 108). The action of force is the action exerted by matter and is, therefore, a causal principle.

22 In this regard, Carrier (1990) refers to an ontological preeminence of force over matter. In the same direction, Gastón Giribet argues: “the statement that matter requires forces indicates that force comes first, as the condition for the existence of matter” (...) “the existence of matter must be subordinated to that of force, as Kant asserts that force is the condition for the existence of matter” (Giribet, 2024, p. 218).

23 Certainly, it is necessary to maintain the distinction between the treatment of matter in the KrV and its treatment in the *Principles* (Jáuregui, 1997, p. 83). However, the influence of matter in the *Anticipations* is explained in terms of force, even within the KrV, “we know the substance in space only through the forces acting upon it” (KrV, B 221). The dynamics of the influence of matter through its force is explained as we have outlined.



intensity depends on the force with which matter exerts an influx on the senses. Therefore, for experience to occur, matter must provide a varied quidditative content with different degrees of intensity, which depend on the variation in the force with which matter affects sensitivity. Now, Kant introduces another requirement that matter must satisfy for experience to be possible: homogeneity.

## 4. The Homogeneity of Matter

In the Appendix to the Dialectic, Kant formulates an additional condition for experience to be possible: the given matter must be sufficiently diverse to allow for the formation of empirical concepts.

All our representations are either intuitions or concepts. Concepts in general are universal representations that refer to the object mediately, “through marks that can be common to many things.”<sup>24</sup> Pure concepts arise from the understanding and are, therefore, essentially empty. Empirical concepts, in contrast to pure concepts, are formed through a process that involves three stages: a) comparison, b) reflection, and c) abstraction. In the case of empirical concepts, the starting point is the comparison of given singular objects. These given objects present a variety of marks. From these singular representations, certain marks are detected as belonging to certain objects, but not to others. Through abstraction, the marks that are common to all the considered objects are extracted. From these common marks, a universal representation is generated – a representation by common marks<sup>25</sup>. Kant illustrates the formation of empirical concepts with the example of the formation of the concept of a tree. The process starts with the perception of particular trees. For example, we have a fir, a willow, and a lime tree. First, they are perceived as singular objects. Then they are compared, and both differences (size, color) and similarities (trunk, branches) are observed. Through a negative process of abstraction, the differences are discarded, and only the common marks are retained, thus forming the universal concept of tree (Log §6. AA IX, 94-95: 592). Matter presents a heterogeneous content that allows for the distinction between trees and similar marks that allow for the formation of the empirical concept of a tree.

Now, in order for the formation of empirical concepts to be possible, it is necessary to introduce a principle that guarantees that matter is not so heterogeneous as to prevent the formation of concepts. That is, by hypothesis, matter could be so diverse that concepts could not be formed at all. Kant argues:

If among the appearances which present themselves to us, there were so great a variety - I do not say in form, for in that respect the appearances might resemble one another; but in content, that is, in the manifoldness of the existing entities that even the acutest human understanding could never by comparison of them detect the slightest similarity (a possibility which is quite conceivable), the logical law of genera would have no sort of standing; we should not even have the concept of a genus, or indeed any other universal concept; and the understanding itself, which has to do solely with such concepts, would be non-existent. If, therefore, the logical principle of genera is to be applied to nature (by which I here understand those objects only which are given to us), it presupposes a transcendental principle. And in accordance with this latter principle, homogeneity is necessarily presupposed in the manifold of possible experience (although we are not in a position to determine in *a priori* fashion its degree); for in the absence of homogeneity, no empirical concepts, and

<sup>24</sup> “A perception that refers only to the subject, as a modification of its state, is sensation (*sensatio*); an objective perception is knowledge (*cognitio*). This is either intuition or concept (*intuitus vel conceptus*). The former refers immediately to the object and is singular; the latter, mediately, through a characteristic that may be common to many things. The concept is either an empirical concept or a pure concept.” (KrV, A 320/B 377).

<sup>25</sup> A thorough study of the theory of the formation of empirical concepts can be found in Wang 2021. Weijia Wang defends the chronological sequence of the acts of comparison, reflection, and abstraction (Wang, 2021).

therefore no experience, would be possible (KrV, A 653/B 681).

Thus, Kant argues that the possibility of forming empirical concepts presupposes a certain homogeneity in the content of the phenomena and, consequently, in the given matter. If the objects given in experience were so absolutely distinct from one another that no similarity could be found between them, empirical concepts could not exist. For this reason, Kant asserts that the logical principle of genera presupposes a transcendental principle of homogeneity: without a certain similarity between the sensible data, there would be no possibility of experience or knowledge<sup>26</sup>. In this sense, “the uniformities presented by the empirically given are themselves conditions for the possibility of experience” (Jáuregui, 2014, p. 81)<sup>27</sup>. Certainly, the principle of homogeneity is a regulative principle of the understanding, not a constitutive one, and Kant does not propose that regularity is simply given. However, the homogeneity of the given is a condition for the constitution of experience that is irreducibly material (Jáuregui, 2014, p. 84)<sup>28</sup>. The matter given to sensitivity must meet this condition, which transcends the general concept of matter proper to the Transcendental Aesthetic.

## Conclusion

We have shown that throughout the *Critique*, the notion of matter is specified to indicate the conditions that the *a posteriori* content must satisfy for experience to be possible. In this way, we move from a general concept of matter to a notion enriched with well-defined features.

Thus, the general notion of matter introduced in the *Aesthetic*, as the correlate of a finite intuition in general, proves insufficient to explain how experience is possible. Experience requires material conditions, the determinations of which are specified throughout the *KrV*. Matter provides the quidditative content of the object, allowing us to distinguish one object from another. Without diverse material content, it would not be possible to distinguish one object from another, and consequently, experience would not be possible. The given matter must be sufficiently diverse for us to distinguish objects and for experience to take place. The variation of the given matter is a condition for experience. Likewise, the matter varies in intensity. Each moment may be more or less full according to the intensity of the influx. The influx of matter into sensation is not homogeneous. The variation in intensity is a datum that is only revealed *a posteriori*. Without this assumption, it would not be possible to explain a necessary condition of experience: the variation in degree. This variation in degree is only possible because matter exerts degrees of influx due to the force it exerts on the senses when it moves. Finally, matter must be sufficiently homogeneous to guarantee that there is no empirical chaos.

Thus, we have shown how the concept of matter, as a condition of the possibility of experience, is developed and enriched throughout the *Critique of Pure Reason*. We move from a general notion of matter, introduced in the Transcendental Aesthetic, to a more specific conception. Experience does not only require matter in general, as the correlate of a finite intuition in general, but a matter with well-defined features: with varied quidditative content,

<sup>26</sup> As Hernán Pringe explains: “For a coherent use of understanding to be possible, it is necessary not only that categorical subsumption is verified, but also that a condition, which cannot be guaranteed *a priori*, is met: that the matter of the phenomena (which can only be given *a posteriori*) is sufficiently homogeneous for the understanding to discover certain common features in the phenomena, from which empirical concepts can be formed, and thus subsume the given objects under them” (Pringe, 2015, p. 34). Hernán Pringe demonstrates that, according to Kant, knowledge of the effective reality of objects requires the homogeneity of sensible data, and consequently, regulative principles. He shows that “the conditions of empirical legality are, in turn, conditions for the predication of the existence of determined empirical objects” (Pringe, 2015, p. 24).

<sup>27</sup> “Although the homogeneity of the sensible data is not a constitution of objectivity in general, it is a condition for the construction of objects in particular and, consequently, for effective experience” (Jáuregui, 2014, p. 92).

<sup>28</sup> “That cinnabar always appears as red does not depend on the pure forms under which it appears, but on the fact that it presents itself through similar sensations” (Jáuregui, 2014, p. 87).

capable of exerting different degrees of influx, and sufficiently homogeneous to guarantee the possibility of the formation of empirical concepts.

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