

# The Art of Division and the Unity of the Idea: Leibniz as Scholar of Plato

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# § 1. Introduction

There are two interrelated exegetical moments structuring historical-philosophical inquiries the reconstruction of a philosopher's line of argumentation and its inscription into a larger tradition. Exercising this exegetical art means to see philosophers as theoretical forces re-expressing and reproducing old issues through new paradigms while attempting to capture a world in perpetual *change*.

Two main philosophical traditions have deeply shaped both the Western and the Arabic world up to our days: Platonism(s) (including Neo-Platonism) and Aristotelianism(s). Leibniz himself sees his philosophy as an attempt to conciliate these two traditions, although in principle siding with Plato, especially for epistemological and ontological matters. In an extensive paper titled "Leibniz und Plato", Thomas Leinkauf reconstructed all the Platonic *topoi* we can find re-elaborated within Leibniz's philosophical system, and argued that Leibniz's understanding of the term 'idea', as well as his *dialectic* between unity and multiplicity must be traced back to a Platonic source. In another paper engaging with an analysis of *Meditations on Knowledge, Truth and Ideas*, Leinkauf remarks that distinction of the degrees of cognition worked out in this text is a striking example of the deployment of the Platonic art of division.

The present contribution will follow Leinkauf's lead of relating Leibniz's conception of degrees of cognition in his *Meditations* (henceforth MKTI) first with the method of division and then with Plato's

<sup>1</sup> The plural is simply a reminder of the fact that I refer to a broader philosophical movement which can be traced back to Plato or Aristotle respectively, but has multiple manifestations and facets, even internal controversies.

<sup>&</sup>lt;sup>2</sup> Leibniz writes in NE 71: "This system [i.e. his system of pre-established harmony LO] appears to unite Plato with Democritus, Aristotle with Descartes, the Scholastics with the moderns, theology and morality with reason. Apparently it takes the best from all systems and then advances further than anyone has yet done."

<sup>&</sup>lt;sup>3</sup> In relation to theory of cognition, Leibniz writes in NE 48: "Indeed, although the author of the *Essay* says hundreds of fine things which I applaud, our systems are very different. His is closer to Aristotle and mine to Plato, although each of us parts company at many points from the teachings of both of these ancient writers."

<sup>&</sup>lt;sup>4</sup> See Thomas Leinkauf, "Leibniz und Plato", Zeitsprünge. Forschungen zur Frühen Neuzeit, Band 13 (2009), Heft 1/2, p. 23-45 (= Leibniz und Plato). Another classical study on the topic is: Yvon Belaval, "Note sur Leibniz et Platon", Revue d'histoire et de philosophie religieuses 55 (1975) p. 49-54. Recently other scholarly work has attempted at reconstructing the Platonic roots of the Leibnizian system, for instance Christia Mercer, Leibniz's Metaphysics; Its Origins and Developments, Cambridge University Press, 2001; and Christia Mercer, "The Platonism at the Core of Leibniz's Metaphysics: God and Knowledge", in: S. Hutton (ed.), Platonism and the Origins of Modernity: The Platonic Tradition and the Rise of Modern Philosophy. Ashgate Press 2008 p. 225-38; Alessandro Poli, In mente Dei: ragion sufficiente e platonismo nella formazione della metafisica di Leibniz, Aracne Edizioni 2010, who presented an extensive analysis of the connection between Leibniz's logical treatment of relations and the Phaedo. On the relation between Leibniz's Platonism and his criticism to Descartes' use of the ontological proof, see Walter Mesch, "Die Möglichkeit Gottes und die Kompossibilität der Ideen. Wie Leibniz den ontologischen Gottesbeweis Descartes' zu verbessern versucht, Studia Leibnitiana 49 (2017/1) p. 28-53 and 49 (2017/2) p. 177-200.

<sup>&</sup>lt;sup>5</sup> Thomas Leinkauf, "Leibniz' Abhandlung "Meditationes de cognitione, veritate et ideis' von 1684: eine Diskussion erkenntnistheoretischer Grundprobleme mit Blick auf den 'Tractatus de intellectus emendatione' des Baruch de Spinoza", in: Thomas Kisser (ed.), Metaphysik und Methode. Descartes, Spinoza, Leibniz im Vergleich, Stuttgart 2010, p. 107-124 (= Leibniz' Abhandlung).

dialectical art as exposed in *Phaedrus, Statesman*, and *Parmenides*. After having introduced the dialectical art (§3), we will go back to MKTI and argue that in this text the Platonic influence is not limited to its structure. Quite to the contrary, the dialectic art of collection and division is identified with clear and distinct knowledge in opposition to Descartes's understanding of clear and distinct knowledge as a form of pure intuition (§4). In cognizing, rational minds first apprehend a unity that is then structured through its divisions into constitutive parts or notions. If this is correct, there seems to be a missing division in the degree of knowledge as presented in MKTI. Through a comparison with other Leibnizian texts, we will define this missing step as clear and distinct *perception* of a body shape or a corporeal substance – a whole having parts and attributes (§5). This notion of corporeal substance is only a *copy* of the true idea of a substance – i.e. of a metaphysical unity – and nonetheless it is a necessary moment in the human search after truth because it fulfils the need of the rational mind to start with unity in order to comprehend multitude as ordered diversity grounded in identity.<sup>6</sup>

§2. The art of division, the Meditations on Knowledge Truth and Ideas, and Plato.

The target of Leibniz's critical essay from 1684, *Meditationes de cognitione, veritatis et ideis*, was *clear and distinct* to the reader already from the title: "Meditations" is a reference to Descartes's *Meditationes de prima philosophia*. What is presented in MKTI is not only a *pars destruens* of Descartes's theory of knowledge, and especially of his claim that the human mind achieves the highest form of knowledge through a clear and distinct perception of ideas, i.e. an intuition; the text contains also a *pars construens*, i.e. a positive and fruitful proposal Leibniz will maintain until the end of his carrier.

Leibniz's critical verve addresses the Cartesian principle that "whatever I perceive clearly and distinctly in some thing is true, or may be predicated of it." The reason for rejecting the principle he puts forward is that "[...] what seems clear and distinct to men when they judge rashly is frequently obscure and confused. This axiom is thus useless unless the criteria of clearness and distinctness which we have proposed are applied

<sup>&</sup>lt;sup>6</sup> See Thomas Leinkauf, ",Diversitas identitate compensata'. Ein Grundtheorem in Leibniz' Denken und seine Voraussetzungen in der frühen Neuzeit (I)", *Studia leibnitiana* 28/1 (1996), 58-83, and 29/1 (1997), 81-102.

<sup>&</sup>lt;sup>7</sup> Leibniz addresses this very topic in other texts, like *De mente, de universo, de Deo* (1675) and *Quid sit idea* (1677?). Many scholars have focused on the denial of Descartes' pure intellection in MKTI. See Marine Picon, "Vers la doctrine de l'entendement en abrégé: élément pour une généalogie des ,Meditationes de cognitione, veritate, et ideis", *Studia leibnitiana* 35/2003 102-132. For an extensive reconstruction of the history of the reception of the text, see Stephan Meier-Oeser, "Erkenntnistheorie", in: F. Beiderbeck, W. Li, S. Waldhoff (eds.), *Gottfried Wilhelm Leibnz. Rezeption, Forschung, Ausblick.* Stuttgart 2019 (forthcoming) (= Erkenntnistheorie).

<sup>&</sup>lt;sup>8</sup> See also Leinkauf, Leibniz' Abhandlung p. 109. As far as I know, Leibniz never rejects the content of MKTI. He rather refers to it as a possible access to his theory of knowledge. The same structure of MKTI is re-affirmed in the famous letter to Sophie Charlotte "What is Beyond Senses and Matter" (1702), as I will argue presently.

and unless the truth of the ideas is established." And, indeed, the first part of MKTI is devoted to the distinction of degrees of cognition.

The text makes two major points. Cognition, Leibniz suggests, comes into degrees and we *begin* to cognize even before we perceive things clearly and distinctly. Clear and distinct cognition, furthermore, is only *one* stage in the development of our perceptual capacities and not even the most perfect one. To understand why the Cartesian criterion for truth must be rejected, I shall argue – following the structure of MKTI – that we need to shed light on the distinction between the degrees of clear and confused and clear and distinct cognitions, on the one hand, and on the distinction between the *acts* supporting them, i.e. sense-perceiving and conceiving, on the other.

To this end, we need to get acquainted both with the Platonic method of division used in MKTI and with the divisions themselves. The way of dividing the notion of cognition – as Leinkauf notices – applies the Platonic art of division and respects the ideal criterion presented in *Statesman* (287c). We start in the next section by exposing Plato's method of division and its relation to the dialectic art. Then we will return to MKTI.

## § 3. The Platonic method of division and the dialectical art

At the conclusion of their enquiry into the art of weaving – intertwining the warp and woof<sup>11</sup> – the stranger is irritated by his discourse with the young Socrates, wondering if it was neither too long nor did engage them in irrelevant details.<sup>12</sup> Stupefied by this unexpected criticism, Socrates reassures the Stranger of the worthiness of their discussion, but this does not stop him from reflecting on the just *measure* of the discourse and on the art of division – the core of the dialectical art.<sup>13</sup>

The art of division consists in the *distinction* of a genus into its species. Its aim is to make someone grasp those things that cannot be grasped through the presentation of an image or any form of sensory similarity, because only the movement of *dianoia* – reasoning – can make them known.<sup>14</sup> The dialectician,

<sup>9</sup> A VI 4 590/L 293

<sup>&</sup>lt;sup>10</sup> Thomas Leinkauf, Leibniz' Abhandlung, p. 110.

<sup>&</sup>lt;sup>11</sup> Statesman, 282 c-e.

<sup>&</sup>lt;sup>12</sup> Statesman, 283 b-c.

<sup>13</sup> Statesman, 283c-286c.

<sup>&</sup>lt;sup>14</sup> Statesman, 285e – 286c: "Likenesses which the senses can grasp are available in nature to those real existents which are in themselves easy to understand, so that when someone asks for an account of these existents one has no trouble at all—one can simply indicate the sensible likeness and dispense with any account in words. But to the highest and most important class of existents there are no corresponding visible resemblances, no work of nature clear for all to look upon. In these cases nothing visible can be pointed out to satisfy the inquiring mind; the instructor cannot cause the inquirer to perceive something with one or other of his senses and so make him really satisfied that he understands the thing under discussion. Therefore we must train ourselves to give and to understand a rational account of every existent thing. For the existents which have no visible embodiment, the existents which are of highest value and chief importance, are demonstrable only by reason and are not to be apprehended by any other means."

who masters the dialectical art, is a person capable of producing divisions which are *measured*, *ordered* and *according to the nature of the idea.*<sup>15</sup>

Measured means that a division or a discourse is neither too long nor too short, but entails what pertains to the thing and therefore provides just enough distinctions to make one grasp the truth of a subject matter. <sup>16</sup> What we find here is a principle of economy, we may gloss. Ordered means that the divisions are not random and casual; they follow an order, usually from the general to the particular, and this movement facilitates the grasping of the idea and the return to the general genus in building the definition. That the division is according to the essence or the nature of the thing simply means that it follows the natural structures and cuts in a way that "carves the thing out at its joints", to use a Platonic metaphor. Let us spend a little time on the notion of a division we may call iuxta naturae.

In *Statesman* 287c the stranger says that we must divide the genus into two parts and, when it is not possible to divide into two, we must divide it according to the *natural joints* of the thing "as we would carve a sacrificial victim." The metaphor of *rational* division as *bodily dissection* occurs again in the *Phaedrus*. As in the *Statesman*, the metaphor is used in close relation to the definition of the *measure* of the discourse, this time in order to produce a contrast between the rhetor and the philosopher or *dialectician*. Let us recall the context briefly.

Phaedrus meets Socrates and – still amazed by Lysias's discourse on why one should give one's favour to a non-lover rather than to a true lover– decides to read it to Socrates, as an example of rhetorical excellence. Socrates opposes his discourse based on the division of *mania* (*erotic madness*) into a perversion of the lover and a kind of divine inspiration. Phaedrus sees the difference between these two discourses on the same topic and Socrates proposes to analyze Lysias's discourse to understand whether it was indeed well-constructed.

The two begin to read Lysias's discourse dividing it into parts, and Socrates notices that the discourse does not start with a definition providing a true beginning, but rather with the end. It sounds more like a chaotic arrangement of parts meant just to move the audience at Lysias's own convenience, and not to lead it to the *truth*. A good discourse, Socrates explains,

"[...] should be put together like a living creature, with its own proper body, so that it lacks neither a head nor feet. A speech should have an end and a beginning, as well as a middle, with all the parts written so that they fit in with one another and with the whole." (*Phaedrus*, 264c)

<sup>&</sup>lt;sup>15</sup> A lot of ink has been spilled to interpret Plato's dialectical art, which is a popular hermeneutic subject presenting challenges despite its dialogical and social forms, see Walter Mesch, "Platons Dialoge als hermeneutisches Problem", *Internationales Jahrbuch für Hermeneutik* 4 /2005, p. 27-57. It is not the aim of this paper to revise any of those interpretations, nor to offer an original one. Our aim is simply to address the largely uncontroversial main aspects of Plato's dialectic and to relate them to MKTI. For a more thorough discussion see W. D. Ross, *Plato's Theory of Ideas*, Greenwood Press, 1976.

<sup>&</sup>lt;sup>16</sup> Statesman, 286d-287b.

Only dialectic resting on divisions and measured order can make a discourse a coherent and consistent whole. A good discourse presupposes the order, measure (proportion) and natural distinction of the parts of the ideas the discourse is meant to clarify. As in a body, the head is at a certain distance from the arms, the shoulders and the feet;<sup>17</sup> likewise, the divisions we can make in a subject matter are in a measured relation to each other, referring to the essential articulations of the object of our inquiry in relation both to what pertains to the idea and to what we need to grasp of it. Dividing according to ideas is an art because it demands more than random cutting; it is the exercise of the dialectician's capacity to be guided by the unity of the idea in the distinction of its species. This exercise resembles the activity of a butcher who in dissecting animals is guided by the unity and knowledge of the structure and nature of the organic body proper of each species, as well as by the knowledge of the parts in considering the whole. In short, the dialectician is that person who sees the unity in the multitude of the divisions and the diversity in the homogeneity of the genus. For her, those moments simply constitute the same act of grasping the idea in a discursive way, even if the nature of the discourse is to be extended in time, and cannot be grasped intuitively. And indeed, Socrates affirms the interdependence of the two moments in order both to reason and speak. The work of the dialectician consists in

"...first, bringing things which are scattered all over the place into a single class by gaining a comprehensive view of them, so that one can define any given thing and so clarify the topic one wants to explain at any time. That's what we did just now, when we were trying to explain what love is by defining it first: whether or not we were right, our speech did at least achieve clarity and internal consistency thanks to this procedure." Second "[b]eing able to cut things up again, class by class, according to their natural joints, rather than trying to break them up as an incompetent butcher might. Just as, not long ago, my two speeches took the irrational part of the mind as a single type of thing, with features in common, and just as a single body has parts that naturally come in pairs with the same names (one called the part on the left and the other the part on the right), so my two speeches regarded insanity as a single natural type of thing in us, and one speech cut off the part to the left, and then went on cutting this part up until it had

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<sup>&</sup>lt;sup>17</sup> Following the metaphor, it might sound as if the measure proper of the dialectic art is a mathematical one, while, as we know from *Statesman* 284b-285c, the Stranger distinguishes between mathematical measure and *just measure*, the latter consisting in dividing "with due occasion, due time, due performance, and all such standards as have removed their abode from the extremes and are now settled about the mean" (Statesman 284e). This is very important for it is related to the notion of convenience or pertinence to one thing not as an abstract criterion; but as an art of understanding under which conditions, means, and scopes something pertains to the thing. And this may be exemplified also by the metaphor of bodily proportions: the legs of a two-meter high runner won't fit nicely on my one point sixty meter body, for they do not respect proportions. Only this flexibility of mind can guarantee that everything is distributed justly.

<sup>&</sup>lt;sup>18</sup> Statesman, 285 a-b.

<sup>&</sup>lt;sup>19</sup> As we will see in our discussion of MKTI, for the early modern period, the temporal extension of reasoning was a problem, for it was believed to be a source of errors, therefore the election of intuition as the most reliable source of knowledge.

discovered among the sections a kind of love which one might call 'on the left hand' (and which it abused as it fully deserves), while the other speech led us to the right-hand types of madness and discovered a section which may have the same name as the other, but is divine (and which it praised, once it had displayed it to our view, as responsible for all the most important benefits that come our way)." (*Phaedrus*, 265c – 266b; my italics)

The metaphor of the butcher sparked the attention of many scholars who considered it clear only at first glance and more problematic on closer analysis. In reading the example within Plato's passage, we get its meaning because we appeal to an intuitive understanding of the metaphor as distinguishing parts according to a natural order given in the organic body *as a whole* (see also *Phaedrus* 264c). The metaphor may appear particularly obscure when explained via an analysis of different interpretations of "dissecting" a body in relation to different arts and to the corresponding kinds of knowledge people had at Plato's time (the art of cooking, of butchering, or of medicine).<sup>20</sup>

The attempt of finding the right art of dissecting in order to interpret the metaphor in an appropriate way leads, however, to an intriguing reflection: there is neither one single way of distinguishing parts of an idea and of organizing a discourse, nor is there one absolute way of dividing a genus into its species, since the dialectician cannot neglect the respective aim of the discourse in exercising her art. For Plato this does not mean that the truth regarding the idea changes with the audience or with other important parameters of the discourse, as one could expect on the basis of traditional and sophistic conceptions of rhetoric criticized in his dialogues. Quite to the contrary, the idea remains the same while, depending on the aim of our discourse or on the knowledge of the audience, the dialectician needs to pay more attention to some divisions and less to others *in order to inspire truth in finite intellects*, exactly as the art of dividing a body will change in relation to the task of the art exercising divisions.

A sculptor and a surgeon, for instance, will divide a human body in different ways; they will moreover focus on other details depending on the respective goals of their arts: representing a living body, on the one hand, saving life, on the other. The sculptor would not be a good sculptor, and a surgeon would not be a good surgeon, if they divided in the same way as a butcher. None of them, however, could pursue the divisions necessary for the exercise of their respective art without knowledge of the *nature* of the whole they are dividing. That is why the cutting must be exercised in relation to the nature of the whole body, as the division into species rests on a knowledge of the idea of the genus. Without ideas there would be no dialectic. This is exactly what Parmenides in the famous dialogue carrying his name points out to the young Socrates:

<sup>&</sup>lt;sup>20</sup> See Laura Franlin-Hall. "Il macellaio di Platone" [orig. "Plato's Joints"], in Rivista di Estetica 41:11-37 (2009); Matthew H. Slater/Andrea Borghini. "Lessons from the Scientific Butchery." in: Joseph Keim Campbell, Michael O' Rourke, and Matthew H. Slater. *Carving Nature at Its Joints*, The MIT Press, 2011.

"In view of all these difficulties and others like them, if a man refuses to admit that forms of things exist or to distinguish a definite form in every case, he will have nothing on which to fix his thought, so long as he will not allow that each thing has a character which is always the same, and in so doing he will completely destroy the significance of all discourse." (*Parmenides*, 135 b-c)<sup>21</sup>

To sum up, ideas are necessary for divisions. The method of division consists in dividing a genus into its species. The golden rule has it that the best division cuts a genus into two parts, or, when it is not possible, given the complexity of the subject matter, according to the essential or natural distinctions present in the idea, as the distinction between arms, legs, head, and other parts of an *organic* body. To divide successfully by art, the unity of the thing must be constantly present to the dialectician and the parts must be seen *as* parts when contemplating the unity.

If the dialectic is this art of gaining clarity of mind and capability of speech, no wonder that Socrates claims: "Now I am enamoured of these divisions and collections, Phaedrus, because I want to be good at speaking and thinking, and if I think anyone else is capable of discerning a natural unity and plurality, I follow 'hard on his heels, as if he were a god'." (Phaedrus, 266b).

With the dialectical art in mind, we can now return to MKTI and enquire into Leibniz's distinction of cognition.

### §4. Back to Leibniz's Meditations: dialectic as a method

In MKTI Leibniz argues that *cognition* comes in *degrees*. Cognition may be defined as an intentional state, i.e. an act of the mind directed to an object. The discourse about degrees of cognition is important because, as mentioned in section §2, it constitutes Leibniz's critical take on Descartes, based on the rejection of clear and distinct perceptions as constitutive of *cognitive states*.<sup>22</sup> To be more precise, Leibniz does not deny that for Descartes there are degrees of knowledge; what he undermines is the theory that the mind can have *intuitive* knowledge of clear and distinct ideas, even in the case of mathematical and metaphysical notions.<sup>23</sup> All the mind can achieve, Leibniz argues, is a *dianoetic* apprehension of ideas or

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<sup>&</sup>lt;sup>21</sup> See also Walter Mesch, "Einheit", in: Christoph Horn, Jörn Müller & Joachim Söder (eds.), *Platon-Handbuch*. Stuttgart 2009, especially p. 268-9, where Mesch highlights that unity comes in degrees for Plato, a fundamental idea for Leibniz as well.

<sup>&</sup>lt;sup>22</sup> For Descartes only thoughts are intentional states and the category of "thought" comprises "everything that is within us in such a way that we are immediately aware [conscii] of it. Thus all the operations of the will, the intellect, the imagination and the senses are thoughts. I say 'immediately' so as to exclude the consequences of thoughts; a voluntary movement, for example, originates in a thought." (CSM II 113 / AT VII 160)

<sup>&</sup>lt;sup>23</sup> On this point, see Stephan Meier-Oeser, Erkenntnis.

notions – a term later preferred by Leibniz<sup>24</sup> –, which rests on the mind's capacity to divide a notion into its definitional marks.

In what follows, I shall argue that clear and distinct cognition is to some extent modelled on Plato's dialectical art and inspired by Plato's texts but differs from it substantially, insofar as Leibniz distinguishes *continuous degrees* of knowledge.<sup>25</sup> Nonetheless, for both philosophers, the way in which human finite minds apprehend truths can be considered as *dialectical*. This discursive approach to truth, and not Descartes's intuitive knowledge, constitutes a clear and distinct cognition. Let us now briefly recall Leibniz's degrees of cognition, before moving forward to the implications of this theory.

The first cut divides cognition into obscure and clear. We know notions in an obscure way when we have seen things or heard poorly defined terms only once and are not in the position to recognize or understand them. Thus, an obscure cognition does not really serve as a cognition at all. This is the reason why Leibniz follows the righthand side of the division and leaves the lefthand side behind: clear cognition will be the object of further divisions.

Clear cognition can be divided into *clear and confused* and *clear and distinct cognition*. Examples of the former are sensations, like smells, colors, tastes. When we have a clear and confused sensation of the color red, for instance, we can *recognize* the color when we see it. Despite recognition, the nature of the sensation is such that does not allow to *distinguish* further parts or aspects in it. Red appears homogeneous *and* simple to us: it cannot be further divided, a limit proper of the nature of sensations that makes them *per se* not definable. On the other hand, the mind has *clear and distinct* cognition of those things which are complex and therefore liable to distinctions in parts or conceptual intensions. The notion of gold, for instance, can be divided into a genus, i.e. *metal*, and a specific difference, *atomic number 79*, to use a contemporary example. Since the notion can be distinguished into intentional marks, knowledge of this type not simply allows to recognize golden things, but also to *define* it in a way that does not depend only on sensory information: while a blind person cannot know what red is because knowledge of red rests on a perception of red things, the blind person can have a notion of gold, or of a geometric figure and of anything definable through clear and distinct marks.

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<sup>&</sup>lt;sup>24</sup> According to some scholars, Leibniz prefers the word "notio" or "conceptus" to "idea" when talking of the human mind because notions or concepts correspond to what the mind can grasp of a certain essence, while the term idea refers to the complete essence or idea of a thing. See Martha B. Bolton, "Leibniz's Theory of Cognition", in: Brandon Look (eds.), *The Continuum Companion to Leibniz*, London/New York 2011, 136-58.

<sup>&</sup>lt;sup>25</sup> As Leinkauf notices, this idea of continuous degrees, as well as the kind of degrees Leibniz distinguishes have their roots in some authors from the 16<sup>th</sup> century, and in Spinoza's *Tractatus de intellectus emendationis*, see Thomas Leinkauf, Leibniz' Abhandlung fn. 3. I do not want to deny this influence; I just would like to point to the fact that a more substantial Platonic connection is at stake in MKTI.

<sup>&</sup>lt;sup>26</sup> From now on, I will follow the text of MKTI based on its critical edition in A VI 4 A 589-90 and on its English translation in L 290-1.

<sup>&</sup>lt;sup>27</sup> Martha Brandt Bolton, "Leibniz and the Limits of Perception", in: Breger [et. al. eds.], Einheit in der Vielheit, Vorträge des VIII. Internationalen Leibniz-Kongresses, Hannover 2006, 94–100.

Again, we keep on dividing the righthand side of our distinctions: clear and distinct knowledge can be inadequate or adequate. It is inadequate, when the concept entails notions which are again clear and confused. Gold, for instance, is constituted by the clear and confused notions of colors or its insolubility in acqua fortis, that is by properties of gold which are merely observational, and rest on intentional marks related to the senses. All empirical concepts – which are acquired by observation, like in the case of natural kinds – are subject matters of an inadequate clear and distinct cognition, i.e. they rely on a form of symbolic cognition or an apprehension of definitions via their expressions through words or other characters. The cognition is adequate when it is dividable only into clear and distinct marks. This requires notions that can be reduced to primitives, i.e. simple and not further analyzable notions. In contrast to simple sensations, however, the primitives constituting adequate notions are ideal or intellectual simples, since they can allegedly be grasped through intellective intuition, rather than sense perception. Also sensory notions, like red or green, are simples, but they are not of the same kind of the primitives constituting adequate knowledge. Intellectual primitives are like mathematical units, i.e. ideal or imaginable simples, that can be the object of the intellect and the imagination, or so one might think (more on this soon). This ground of adequate notions on ideal primitives is the mark of distinction between distinct and adequate knowledge, this latter exemplified by numbers because numbers can be broken down into units. This kind of knowledge, however, remains symbolic when it rests on the use of signs or other expressions diagrams or figures – like in the case of 100000 or a chiliagon – because the totality of single units or sides cannot be grasped at once without the symbols.<sup>28</sup> Thus, even in adequate cognition we deploy signs instead of the idea, and this suggests that not even when dealing with mathematics and geometry our mind proceeds with the certainty given by pure intuitions. For Leibniz it is a general truth that without any recourse to symbolic expressions human minds could not think of complex notions.<sup>29</sup>

The last degree of knowledge is intuitive and adequate, when all the marks composing the notions can be grasped at once without the use of symbols. This last degree amounts to perfect knowledge and would consist in an *intuitive* grasping of the idea. But Leibniz doubts that the human mind can ever reach this form of knowledge – maybe even for simple primitives. Therefore, the human mind rests on degrees that are *discursive and symbolic*. The union of a multiplicity of conceptual marks depends on its expression through definitions and their composition into a discourse by means either of characters, or of a language. Having displayed the distinction of degrees of cognition, we can now notice a similarity to the dialectical movement as presented by Plato in his dialogues. The first cut distinguishes a minimum requirement for

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<sup>&</sup>lt;sup>28</sup> Leibniz often uses the expression "uno obtuto" as a special mark of grasping a notion via a sort of symbolic intuition, A VI 4 A 595: "Magni momenti est in Cogitando totam Cogitabilium quae nostris mentibus observari crebrius solent, varietatem, uno obtutu complecti posse."

<sup>&</sup>lt;sup>29</sup> For a detailed exposition of cognition symbolica and the degrees of knowledge, Meier-Oeser, *Die Spur des Zeichens. Das Zeichen und seine Funktion in der Philosophie des Mittelalters und der frühen Neuzeit.* Berlin/New York 1997 p. 402-15 and Matteo Favaretti Camposampiero, *Filum cogitandi. Leibniz e la conoscenza simbolica*, Milano 2007.

knowledge: recognition. Therefore, obscure cognition does not allow for recognition even if the mind perceives something. Even if minds cognize before knowing, the most basic form of knowledge begins with recognition and memory. There is more to knowledge than simple recognition though; a cognizant mind can bring distinctions to bear on nature and consider, for instance, the differences between a piece of gold and one of silver. These distinctions are not simply based on observational marks of empirical phenomena; they are, in other words, not only the result of sense perceptions, but also rely on determinations belonging to the *nature* or *idea* of a species (conceived as part of a genus). Only conceived as instantiations of an *ideal nature*, genus and species can undergo the ideal cutting proper of reason. Only as ideal can both silver and gold, for instance, be identical with respect to the genus metal, and differ insofar as they possess different specific properties.

If our analysis is correct, Leibniz not simply exercises the Platonic art of division to capture the nature of cognition and knowledge against the Cartesian conception. In MKTI he rather endorses it *both* as a specific method of distinguishing the idea "cognition" *and* as *the* criterion for a clear and distinct apprehension of truth. Clear and distinct knowledge simply consists in our capacity of articulating one idea into its constitutive *joints* according to an *order* dictated by the nature and unity of the notion at stake. The further degrees of knowledge, indeed, are not different from clear and distinct knowledge with respect to the method of acquiring them, i.e. analyzing and synthetizing. They are only more *distinct* or *adequate* in virtue of the *nature* of the ideas involved.

From this last observation it follows that the way of distinguishing degrees of cognition in MKTI is established in compliance with the *nature* of *ideas* that can be possible objects of the mind. As for Plato's butcher, it is both the *nature* of the object and the *task of the art* that determines collection and division as constitutive of thinking and speaking. If truth rests, then, on the distinction and union of terms in a definition, the method of truth cannot but be dialectical. How *accurate* or close to the idea's joints our divisions can be depends, in addition, on the *kind* of ideas involved: imaginable or intellectual notions allow for more adequate knowledge than empirical notions. Therefore, Plato's influence on Leibniz's theory of knowledge is not only a simple way of exposing the subject matter of MKTI, but more substantial, as Leinkauf correctly observes.

#### §5. Clear and distinct perceptions and clear and distinct thoughts

The nature of the idea to be divided – whether empirical, like in the case of natural kinds, resting on sensory knowledge, or ideal because depending on the mind's own modes of cognizing – determines to which degree of knowledge human minds can aspire. Every knowledge acquisition of empirical concepts has an *intrinsic* and *unremovable* degree of opacity because here the mind necessarily needs observations to

prove the possibility of an idea<sup>30</sup>, and observations, for methodological and organized they may be – like in the context of experiments –, rest on hypotheses drawn from collections of sensory data and expressed through notions which mostly are not distinct, but only clear and confused.

Notions like mathematical numbers or geometrical figures, on the other hand, do not hinge upon scattered observations; because mathematical inductions can be proven by means of something higher coming from the intellect: unity provided by identity.<sup>31</sup> Thus, the reason why we can know anything with absolute certainty in mathematics and geometry rests on the imaginable or ideal nature of those notions. What makes ideal or imaginable notions more suited to dialectical divisions than empirical notions? The answer to this question can be found in other texts of Leibniz, the Letter on What is Independent From Senses and Matter (to Sophie Charlotte, June 2, 1702 - A I 21 220-40) and Elements of Geometry of the Duke of Burgundy (to Sophie, October 31, 1705). Especially in this latter text, Leibniz says something very interesting. Ideal or imaginable notions, as he puts here, present a basic advantage over empirical one: while in the former we know wholes before the parts; in the latter wholes are constituted of parts and are therefore derivative.<sup>32</sup> (Wholes are ordered unities for Leibniz.) In other words, in ideal entities the unity – even if constitutively made of parts, like a pentagon is made of lines and points – comes before the parts; therefore, in dealing with ideal notions we first cognize the unity, as it is pointed out in *Phaedrus* 265d. Since this unity is ideal, it has in se all virtual divisions we can make. On the contrary, the unity or sameness of empirical notions in the first place must be constructed by the mind, an operation Leibniz called "mathematization of the natural world". 33 What he means is an individuation of perceptible wholes (bodies) combined with their comparison and reunion into similarity classes that make us catch a glimpse into the nature of a thing.<sup>34</sup> Only this operation allows to fix the nature of empirical notions – for instance using names as signs of general notions of natural kinds, like gold, silver, lion - and then attributing to them

The fact that the unity is not given and must be constructed through observations over space and through time is a non-negligible difference when it comes to carving things out "at their natural joints." This difference between the type of unity or the relation of wholes and parts characterizing empirical notions, on the one hand, and ideal notions, on the other, lies at the core of the distinction between distinct inadequate and adequate knowledge. It is not a distinction concerning the method of their acquisition,

conceptual marks that make them of one kind rather than of another.

<sup>&</sup>lt;sup>30</sup> MKTI A VI 4 591/L 292.

<sup>&</sup>lt;sup>31</sup> Leibniz often repeats that induction cannot provide absolute certainty, as in the Letter to Sophie Charlotte we are about to analyze, A I 21 334. On the point of identity as a source of a higher degree of knowledge, see David Rabouin, "Analytica Generalissima Humanorum Cognitionum. Some Reflections on the Relationship between Logical and Mathematical Analysis in Leibniz", Studia Leibnitiana 45/1 2013 p. 109-13.

<sup>&</sup>lt;sup>32</sup> The brief will appear in the forthcoming edition of A II 4. An English translation can be found in Lloyd Strickland (ed.), Leibniz and the Two Sophies: The Philosophical Correspondences, Toronto 2011. (= Two Sophies)

<sup>&</sup>lt;sup>33</sup> A I 21 339.

<sup>&</sup>lt;sup>34</sup> In NE 323, Leibniz writes that notions of species are "possibilities inherent in the resemblances."

for the method of knowledge always is dialectical. Insofar as intuition is not available to the human mind, division or distinction of conceptual marks is the essential characteristic of clear and distinct knowledge, both in its inadequate and adequate form. Even perfect knowledge for Leibniz has to be a capacity to conceive of the unity in the multitude and of the diversity in the unity, but in such an intimate way that there would be no opacity between the idea and the mind, a perfect "adaequatio intellectus et rei". Intuition, therefore, is no form of mere simplicity;<sup>35</sup> and this is the basic reason why apprehension of simple notions does not count as an act of perfect knowledge. Divisions, however, were scattered if we had not the capacity to conceive of the whole nature of the thing that needs to be divided. How do we conceive of the nature of empirical concepts, then?

More precisely, if the analysis conducted so far is correct, there is a missing division of cognition in MKTI, one that Leibniz in other contemporary texts calls clear and distinct perception. What suggests arguing for this missing step is the observation that in the degrees of knowledge we found in MKTI there is a rather abrupt transition from sense perception to thought. This transition is abrupt because it is not explained by any mediating step, as one would have to expect given Leibniz's endorsement of the principle of continuity: nature proceed in continuous degrees and does not make any leap.<sup>36</sup> If we follow MTKI, cognition up to the degree of clear and confused cognition is perceptual, and from the degree of clear and distinct cognition is intellectual or dependent on thought. Is this not a leap to be avoided? Leibniz must maintain that there is a substantial difference between clear and confused sense-perceptions, and clear and distinct thoughts. One way to frame the distinction is to point to the ordered complexity of the latter - relating terms into a sentence in form of definitions expressed by language - and the lack of this complexity in sensation – the sensation of red is simple. Another way of framing it is to point out that, according to Leibniz, animals perceive, but do not think; so there must be a substantial distinction between sense-perceiving and thinking. And yet, if cognition comes in degrees, there must be a continuous transition from perception to thought.

I think that there is a way of escaping these difficulties, if we consider that there is a missing step in MKTI, clear and distinct perception. This step is different in kind from clear and distinct thought, when considered from the viewpoint of the act involved, but it differs only in degree of clarity when considered from the viewpoint of the notion involved. Therefore, knowledge is continuous in degree, and this view is consistent with the idea that it can be provided by different faculties. And indeed, we find this idea in the letter to Sophie Charlotte (1702), where Leibniz presents the same degrees of knowledge, but articulates them from the point of view of different kinds of acts grasping different kinds of notions (of

<sup>&</sup>lt;sup>35</sup> See Leinkauf, Leibniz' Abhandlung, p. 110.

<sup>&</sup>lt;sup>36</sup> Larry M. Jorgensen, "The Principle of Continuity and Leibniz's Theory of Consciousness", Journal of the History of Philosophy 47/2 p. 223-48.

the senses, of the imagination, and of the intellect), the combination of which results into different *degrees* of knowledge, reflecting the divisions of MKTI:

"There are therefore three grades of notions: *the sensible only*, which are the objects assigned to each particular sense; *the sensible and intelligible together*, which belong to the common sense, and *the intelligible only*, which are characteristic of the understanding. The first and second are both imaginable, but the third are beyond the imagination. The second and third are intelligible and distinct, but the first are confused, although they are clear or recognizable."<sup>37</sup>

As we can see, Leibniz reproposes the same degrees of cognition presented in MKTI, but this time he adds a division missing in the earlier text. After clear and confused notions of sense perceptions, tastes, colors, etc., he mentions clear and distinct notions of the *common sense*, like shape and size. These notions are combined by the imagination into *wholes*: the result is sense perception of bodily shapes having a size.<sup>38</sup> Wholes as they are apprehended by the imagination are nothing more than shapes of bodies we find in nature or we imagine as natural: trees, dogs, men, chairs, tables, unicorns. This detection of unities in perceptual appearances allows for comparison of beings, apprehension of their similarities, and therefore individuation of the common kind to be divided into species. These wholes are not ideal, like geometrical figures or mathematical numbers; but *they are made ideal by the mind* which, in neglecting differences among actually perceived bodies, apprehends similarity among wholes that serves as simplified expressions of being's nature. Since they are simple and ideal, they can be the object of the intellect and thus of thought.<sup>39</sup> Again, it seems to me that the way in which knowledge proceeds is to conceive of a unity that may be distinguished into its proper "joints" depending on the nature of the notions and the act involved. Even if this degree of cognition seems to be missing in MKTI, it is defined by Leibniz in a short text of the same year of MKTI (1684) *On distinct perception*:

"We perceive in a distinct way that thing whose parts or attributes we perceive as pertaining to it, e.g. when a man, of which we perceive the face, shows up, and we simultaneously think the face pertains to this man. Otherwise, when we direct our eyes to a crowd, we perceive men, and the faces of them appear singularly, but confusedly. And when we hear water flowing from a distance, in fact we hear the noise of many waves, thus there is no reason why we hear one rather than the other; and, if there were none [i.e.

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<sup>&</sup>lt;sup>37</sup> Lloyd Strickland (ed.), Two Sophies, p. 240 / A I 21 340.

<sup>&</sup>lt;sup>38</sup> A I 21 339: "Comme donc nostre ame compare (par exemple) les nombres et les figures qui sont dans les couleurs avec les nombres et les figures qui se trouvent par l'attouchement, il faut bien qu'il y ait un sens interne ou les perceptions de ces differens sens externes se trouvent reunies. C'est ce qu'on appelle l'imagination".

<sup>&</sup>lt;sup>39</sup> Also A II 4.

no waves], surely we would hear none. In any case, this perception is confused." (A VI 4 A 58, my translation)

It is worth to notice, that the act of distinguishing parts and of distinguishing attributes is assumed as of the same kind. There is a difference in distinguishing a property, like the red of the apple, and a part, the peal of the apple, as Leibniz often suggests. 40 Nonetheless, if we think of the whole as a *simulacrum rerum* – an image or copy of the nature of the thing used by the mind to achieve a better knowledge of the idea – the perception of a whole as the shape of a kind of body may play the cognitive role of providing a provisional unity the mind can exploit to achieve more stable knowledge of notions. The shape enclosing qualities and parts characterizing a being is used to detect likenesses among concrete perceived beings and to collect them in similarity classes which are then the object of nominal definitions constituted by connections of observable properties characterized that class of things and that are sufficient to distinguish one class of things from another class of things. 41

The basic property of wholes – as opposed to sense perceptions, like colors – is to be not only perceivable, but also liable to divisions. If the sensation of red cannot be further divided, this has its reason in the nature of our senses which are not "strong enough" to present all the minute components of that sensations. In order to consider it through an analogy, perceiving is like looking at a pointillist picture: if you are far enough, you will see a homogeneous coloured surface filling up the shape of the object, and you won't make out its many discrete points; if you are close enough, you will conversely see the points, and miss the shape. To explain it, Leibniz often points to the use of a microscope, allowing for more detailed observations of what may appear us simple. Contrary to simple sensations, a clear and confused *perception* is a perception of a whole *which is liable to distinctions*, because the parts it is made of are distinguished enough to become objects of the mind, as in the case of a crowd. Looking at the crowd, one might not be capable of distinguishing and recognizing which face belongs to which body, although one always has the potential of getting closer to it, taking the individuals one by one, and attributing a face to each of them.

The conclusion of the text we are analyzing brings us back to the Letter to Sophie Charlotte:

"A perception is distinguished (distincta) in this way, insofar as we attribute something similar to our substances, we indeed know we are the subject of various attributes, so in a similar way we consider

<sup>&</sup>lt;sup>40</sup> A VI 3 174-5 "aliud est dissipare partes, aliud est distincte considerare".

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<sup>&</sup>lt;sup>41</sup> See MKTI A VI 4 A 590/ L 292: "This gives us, too, a means of distinguishing between *nominal definitions*, which contain only marks for discerning one thing from others, and *real definitions*, through which the possibility of the thing is ascertained." <sup>42</sup> Sensible notions are indeed composed of minute perceptions (NE 53). They are so complex, but they appear simple to our senses. See also A VI 4 A 592.

objects as if they were certain substances or thing (res). And a distinct perception is that which is done with a judgment without negation or affirmation. A thought is a distinct imagination." (A VI 4 A 58)

In the letter to Sophie Charlotte, Leibniz writes that a clear and distinct notion results from a combination of sensible and intelligible notions. Although this letter seems to suggest that with the term "intelligible notions" Leibniz has in mind only notions of the common sense, shape and size, what Leibniz says before that passage read in comparison with this text makes me draw a more careful conclusion and to prefer another interpretation. In the letter, Leibniz writes that the notion of "myself" adds something to the idea of sensations, and this self leads us to the knowledge of a substance. Some scholars read the passage as claiming a self-reflective act on the mind's own perceptions, which makes the mind aware both of the object of the perception and of itself thinking this object – as "I think of red". When the mind performs this sort of act, the mind thinks. This reading, they suggest, is in tune with Leibniz's theory of self-reflection as essential to thought.

The role of *myself* actually meant in the text *On distinct perception*, however, seems to be in contrast to this reading, since Leibniz at the end even maintains that a "distinct imagination is a thought", stressing that a clear and distinct perception cannot be a clear and distinct thought, and yet he writes that it rests on some form of self-knowledge. Moreover, Leibniz claims that the judgment is done "without negation or affirmation", i.e. without any form of explicit propositional thought. Both observations lead me to think that the unusual attribution of the substance status to complex things is a *default* attribution based on the fact that we have immediate acquaintance with our own body through perceptions. Our own body appears to have various attributes or parts, all of them belonging to a bodily "myself". There is no sort of higher-order reflection implied in this attribution, but rather the assumption that things are similar to us insofar as we perceive them as having a body, just as we do perceive ourselves. So, in this passage Leibniz has in mind only corporeal substances, but not real substances. He only refers to a first apprehension of a unity, a *copy* of what will not be a corporeal substance, but a true metaphysical point apprehended in a self-reflective act on someone's true self.

More work should be done to back up this last interpretation, a defense that for reasons of space cannot be included in this contribution. What I proposed here, therefore, should be taken as a possible way of reading the passage.

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<sup>&</sup>lt;sup>43</sup> Christian Barth, Intentionalität und Bewusstsein in der Frühen Neuzeit. Die Philosophie des Geistes von René Descartes und Gottfried Wilhelm Leibniz, Frankfurt am Main 2017.

#### §6. Conclusion

MKTI subscribes to Plato's dialectical method in order to point out, against Descartes, that, alas, the human finite mind, though endowed with a *nons* and intellectual power, can hardly escape the realm of finitude or materiality and rise to the realm of pure ideas while embodied. It can however turn the cage into a comfortable home by transforming its constitutive limits into its best resources if it exercises the method of divisions properly and if it comprehends the dialectic between unity and multitude. The only kind of knowledge we can reach is through the dialectical method; if our power increase in certain knowledge domains, this depends on the nature of the notions or ideas involved: when the ideas are intellectual or imaginable, the mind has the resources for more distinct knowledge.

Interpreting the text through the lenses of Plato's dialectic was the key to find a division missing in MKTI: clear and distinct perception. This division is present in other texts, like the letter to Sophie Charlotte, and is closely defined in a short text titled On distinct perception. The analyses offered here were meant to make a first step towards a revision of Leibniz's theory of cognition capable of accepting a distinction in kind between sense-perception and thought, while at the same time remaining consistent with Leibniz's commitments to the principle of continuity and to the degrees of knowledge.

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