

## The Understanding in *Transition*: Fascicles X, XI and VII of *Opus postumum*

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### Abstract

This essay investigates the transformation of the faculty of understanding in Kant's *Transition from Metaphysical Foundations of Natural Science to Physics* drafts found in *Opus postumum*. I argue that in fascicles X and XI Kant implicitly reverses the architectonic order of sensibility and understanding. Without an account of this reversal, Kant's critique of Isaac Newton's conception of phenomena and the so called *Selbstsetzungslehre* (doctrine of self-positing) in fascicle VII fall apart. I argue that what is at stake is a challenge Kant makes to his own presuppositions and a challenge to the Kantian philosopher who wishes to stay with a strictly 'critical' Kant.

### Keywords

faculties, understanding, sensibility, architectonic, natural science, phenomena

### Introduction

The architectonic order of the faculties is a much-discussed topic in Kant scholarship, particularly the role of the understanding in *Critique of Pure Reason*. Much less discussed, however, is the architectonic position of the understanding in the *Transition from Metaphysical Foundations of Natural Science to Physics* (*Übergang von den metaphysische Anfangsgründe der Naturwissenschaft zur Physik*), Kant's last, unfinished work found in *Opus postumum*. In this essay, I seek to address this by suggesting an implicit transformation of the understanding in fascicles X, XI and VII.

The question of the transformation of the understanding is a controversial topic in *Opus postumum* scholarship, since it indicates that Kant undermines the critical edifice at the level of faculty – a major claim. Early literature on *Opus postumum* simply shrugged off this topic by appealing to the deterioration of Kant's mental state; if Kant made fundamental changes to the critical edifice we should not take this seriously, since he was

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not in his right mind. Whilst most modern literature does not agree with this tactic, most does agree that *Transition* presents no major change to the faculty of understanding. It will be such an opinion that this essay challenges. Hence, the basic questions underpinning this essay are, (1) what justifications are there for the transformation of the understanding in *Transition*; (2) if it is the case, what is the genesis of this transformation; and (3) how can we account for it in the wider context of the *Transition*?

The structure of this essay is as follows. In section 1, I investigate a paragraph mentioning the term ‘*Sinnenwelt*’ in *Critique of Pure Reason*, to suggest the conflation of the faculties, despite Kant’s attempts to keep them separate. I trace this issue back to the *Inaugural Dissertation* of 1770, exploring the faculties as they are sketched out in §23. By opening this connection I seek to show the fundamental plasticity of the understanding in Kant’s corpus, hence opening the way for the more explicit transformation in *Transition*.

In section 2, I present the main thesis of the essay. I start from a discussion of the *imponderabilis* and the observer in the experimental physics side of *Transition*. Drawing on this I plot out three stages of the transformation of the understanding: first, as a faculty of production via the act of insertion (*hineinlegen*); second, as a faculty anticipating sensibility; third, as preceding sensibility. This effectively reverses the primacy of sensibility, meaning that the understanding directly inserts content into sensibility, making experience possible. This is a radical shift away from the critical edifice.

In section 3 I show how the reversal opens a new slant on the meaning of ‘phenomenon’ in Kant’s view. This also plays into and is informed by Kant’s critique of Isaac Newton’s *Principia* in fascicle XI, which I investigate. From a more general perspective, this questions whether the observations made by physicists are direct, realist cognitions or whether we must account for observation as an act preceded by the conceptual genesis of the observer.

In section 4, I show how this reversal allows Kant to formulate the so called *Selbstsetzungslehre*, which in turn modifies the spontaneity/receptivity divide, indexing both as *actus*. My aim is to show that without an architectonic reversal, fascicle VII would simply not make sense.

In advancing this essay we gain the possibility of opening *Opus postumum* to further critical study and table a fundamental transformation to the critical edifice more generally.

### **1. A Problem in the *Sinnenwelt***

In analytic philosophy of science, questions about ‘theory-ladenness’ abound thick and fast. One thinker of this theory, Paul Feyerabend, presents a particularly stark image of the sciences in this regard. He asks a fundamental question about ‘whether experience can be regarded as a true source and foundation (testing ground) of knowledge’ in a natural science context, claiming that ‘a natural science without sensory elements’ must be possible (Feyerabend 1985, p.132). It is with this image that I think the discussion of a transformation of the understanding can be framed in relation to Kant’s work, especially

the *Transition*. For Feyerabend's question – and the whole analytic problematic around how best to account for theory and observation – is a fundamentally epistemological-ontological one, and it is precisely along these lines that the architectonic of the faculties in *Transition* unfolds. But before visiting *Transition* we must first uncover the basic problematic Kant works from, which I claim can be found in his earlier work.

In the second edition Introduction of *Critique of Pure Reason*, Kant says that the faculty of understanding forms one of 'two stems of human cognition,' the other being sensibility, both of which 'may perhaps arise from a common but to us unknown root.' (KrV A15/B29). The division of these faculties describes two reciprocal relations to representations: sensibility as the receptive faculty of intuition and understanding as the spontaneous faculty of thought and concepts. Kant tells us repeatedly that one is not possible without the other, that for experience to be possible both must simultaneously operate in the subject, and the first *Critique* is very much based on this simultaneity.

Yet a peculiar seriality emerges between the faculties in the first *Critique*, wherein sensibility precedes the understanding. One of the places this is most apparent is in the famous 'stepladder' (*Stufenleiter*) passage of Transcendental Dialectic (KrV A320/B376-7).<sup>1</sup> In this section, Kant describes sensibility and understanding as forming distinct halves of a staggered/stepped (*gestuft*) relationship whereby sensibility passes raw content to the understanding, which it organizes according to the categories. It is, in fact, the absolute receptivity of sensibility which first makes experience of the object possible and without it no experiential material could be given. The sequential theme is continued in the Amphiboly of Concepts of Reflection, which is specifically designed to keep sensibility and understanding from inadvertently crossing paths by introducing a demand for the precedence of sensibility: 'The understanding, namely, demands first that something be given (at least in the concept) in order to be able to determine it in a certain way.' (KrV A267/B322-3). The overarching reason for Kant's sequential ordering of the faculties here is to critique the rationalist metaphysics popular at the time, which consistently involves a conflation according to Kant. In this regard, the empiricist sentiment is very much emphasized, as the words of John Locke demonstrate: 'the understanding is not much unlike a closet wholly shut from light, with only some little opening left to let in external visible resemblances or ideas of things without' (Locke 1995, §17) and this perhaps acts as an historical anchor to the seriality of the faculties more generally. Both the first *Critique* and the quote from Locke put forward the assertion that the understanding *depends* on sensibility for its content, i.e., it does not create content. Broadly, this forms the architectonic relationship of the understanding and sensibility in the first *Critique*. Although they are supposed to be reciprocal and simultaneous to ward off the error of rationalist metaphysics, sensibility must serially precede the understanding.

But this seriality is not without problems in *Critique of Pure Reason* nor is it entirely un-mysterious.<sup>2</sup> The first problem is how Kant can maintain a genuinely reciprocal

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<sup>1</sup> Also see (Caygill 2007, pp.18-9).

<sup>2</sup> Deleuze notes that the 'accord between these two faculties is no less "mysterious"' just because a seriality has been introduced. (Deleuze 2008, p.19).

simultaneity of the faculties alongside this seriality; does this not represent a blatant indecision in Kant's thinking? Another is how Kant might distinguish between a simultaneity and a conflation of the faculties. With regards the latter problem, it is useful to start with a revealing passage in the Antinomy of Pure Reason, Section Nine:

Since, as we have several times shown, there is not as much transcendental use of pure understanding as there is of concepts of reason, because the absolute totality of series of conditions in the *Sinnenwelt* is itself based solely on a transcendental use of reason, which demands this unconditional whole from what it presupposes is a thing-in-itself. (KrV A515/B543, t.m).

The German noun '*Sinnenwelt*' is usually translated 'sensory world' or 'world of senses' in English, which is largely uncontested in Kant literature.<sup>3</sup> I would, however, like to draw attention to the complexity of Kant's use of the word in this context. As a noun '*Sinnen*' means 'thought' or 'meditation', and it can also be used as a verb (*sinnen*) meaning, 'to plot' or 'to devise'. Kant does not use the word as a verb so it appears that the literal translation of '*Sinnenwelt*' should be 'thought world'. Yet, the noun from which *Sinnenwelt* is actually constructed, the pluralized form of '*Sinn*', pertains to physiological sense or sensibility so is translated, 'world of senses'. I do not want to semantically contest the meaning of words, but I would like to suggest that an implicit ambiguity resides in Kant's use of the term '*Sinnenwelt*'. Although Kant uses the term in an apparently easy and relatively unproblematic way, it does not clearly mark the sequential line between sensibility and understanding. Further, if we cache the term in the original ambition of Kant's architectonic of the understanding and sensibility, as reciprocally simultaneous, the paragraph seems to lose its point. For this reason, I argue that we read *Sinnenwelt* as an indication of a tacit condensation of the two terms.

To flesh out this claim, when we consider the wider context of Kant's discussion in the quoted paragraph above, we can see how the two poles of sensibility and understanding may easily become ambiguously conflated rather than systematically simultaneous. Kant is trying to show that a totality of conditions supporting experience is demanded by reason as an unconditional whole. But this totality can only be answered by a regulative idea of reason (i.e., it cannot be given in sensibility). Yet Kant tells us that the *Sinnenwelt* contains the totality of conditions *and* is based on regulative ideas of reason. If we read *Sinnenwelt* unambiguously in the register of sensibility alone – as pure receptivity<sup>4</sup> – Kant seems to be contradicting himself, which is why he goes on to say, 'the *Sinnenwelt*, however, contains nothing like that completeness.' (KrV A516/B544, t.m). We are thus forced to introduce into the *Sinnenwelt* a dimension of the thought world, if only for a moment, and in doing so we introduce the possibility of an inadvertent conflation of sensibility and understanding, which is not explicitly laid out.

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<sup>3</sup> E.g., (Martin 1974, p.190).

<sup>4</sup> See (KrV A68/B93).

The wider historical significance of such a reading is that it propels the first *Critique* back to the rational metaphysics Kant wants to refute. The first node in this line is the conflation of thinking and sensory awareness found in Descartes' *Principles of Philosophy*, where he says, 'Hence, *thinking* is to be identified here not merely with understanding, willing and imagining, but also with sensory awareness.' (Descartes 1999, p.162). The second and perhaps more relevant node is found in Leibniz's conflation of the sensible and intelligible. Of particular note is the 1702 letter to Queen Sophie Charlotte of Prussia, where Leibniz defines three types of notion: sensible, sensible and intelligible and intelligible (Leibniz 1989, p.188). The first of these notions is 'confused,' which is explored a few pages later where Leibniz says, 'The senses provide us material for reasoning, and we never have thoughts so abstract that something from the senses is not intermixed with them' (Leibniz 1989, p.191). For Leibniz, no thought is without an element of sensibility and no sense is without an element of thought, which leads Kant to say that he 'intellectualized the appearances' (KrV A271/B327). It is this Leibnizian conflation Kant seeks to upend by introducing architectonic seriality into the order of the faculties.

It is perhaps first in *On the Form and Principles of the Sensible and the Intelligible World (Inaugural Dissertation)* of 1770 that Kant takes issue with the Leibnizian node by attempting to systematically distinguish sensibility from understanding.<sup>5</sup> The need for this clear distinction was prompted by the work of Johann H. Lambert, a Swiss polymath with whom Kant corresponded. Lambert had begun to disentangle the term 'architectonic' from its rationalist metaphysical context of ontology – as it was used in Baumgarten's *Metaphysica*, for example – to define it as a methodological tool for making systematic divisions and determining the true seriality of concepts.<sup>6</sup> The distinction at stake and the means for making it in the *Inaugural Dissertation* – a text Lambert read and praised – can be said to pervade the whole framework of the first *Critique*,<sup>7</sup> although there is a complicated movement between the two works. That being so, after reading *Inaugural Dissertation* Lambert pointed out to Kant the difficulty of systematically keeping sensibility and understanding separate from one another (Br 10:105), but Kant had already tried to account for this problem in a subtle yet innovative way in *Inaugural Dissertation*, which Lambert may have missed.

In Section 5, §23 of *Inaugural Dissertation*, Kant raises a curious problem. He talks of '*the infection of sensitive cognition by cognition deriving from the understanding.*' (MSI 2:411). This gives us a clear indication of Kant's thinking at this point: rationalist metaphysics had allowed for a disease-like understanding to infect sensibility at a devastating cost. He goes on to show, under Lockean auspices, how such an infection leads to 'illusions of the understanding,' best stated in the expression, '*metaphysical fallacy of subreption*' (MSI 2:412) whereby a shaky assumption is made based on misguided

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<sup>5</sup> See especially Section 2, entitled, 'On the Distinction Between Sensible Things and Intelligible Things in General', (MSI 2:392-8).

<sup>6</sup> See (Lambert 2009, pp.267-8).

<sup>7</sup> See (MSI 2:395) for comparison.

reasoning. ‘Subreption’ is appropriated by Kant from the Leibnizian Christian Wolff, who derived the term from a concept in Roman law denoting an act of theft through concealment. Wolff uses the term to mark the incorrect conflation of experience and knowledge.<sup>8</sup> When Kant uses the term, however, he means something like ‘tacit assumption’, as when we assume that something is the case when the actual case is concealed from us. Although the first *Critique* encrypts a general opposition to subreption, the issue seems to be transposed into the Transcendental Dialectic, where Kant redresses the term as ‘transcendental illusion’. These ‘infections’ now appear to be built-in transcendental conditions of the possibility of experience, which arise from the ‘unnoticed influence of sensibility on understanding’ (KrV A294/B350). This is the same dynamic as in *Inaugural Dissertation* but the prime influencer has now switched and when subreption is mentioned directly it is in relation to an error of judgement rather than solely understanding or sensibility (KrV A643/B671). In the *Inaugural Dissertation* the understanding does the influencing or ‘infecting’, whereas in the first *Critique* it is sensibility which intervenes. This marks a deep rejoinder in Kant’s corpus, suggesting that a reversal of the roles has occurred between the two works.

Before moving on, it is important to note that in Kant’s attempt to make the understanding and sensibility simultaneously reciprocal in the first *Critique*, he cannot help but fall back into a position of seriality, whereby sensibility precedes the understanding to avoid (a) rationalist metaphysics (dogmatism) and (b) a complete conflation (amphiboly). From a wider philosophical perspective, at stake is a challenge to the notion that sensibility and understanding can be stripped of each other or be independent in the context of the first *Critique* prompting us to follow John McDowell’s thinking, ‘that the understanding is already inextricably implicated in the deliverances of sensibility themselves.’ (McDowell 1996, p.26). The *Sinnenwelt* opens a key clue (*Leitfaden*) in this debate in that it marks a wavering stamped into Kant’s thinking. Thus, any interpretation of Kant premised on the rigid separability *or* systematic simultaneity of sensibility and understanding is put into question. This is Johann August Eberhard’s unique insight. He claims that although Kant wants to work from the basis of a complete architectonic division and seriality of the faculties, this proves extremely difficult without tacitly falling back into the Leibnizian conflation of the sensible and intelligible.<sup>9</sup> It also indicates that to understand these faculties in a way that makes sense we must be prepared to contextualize them as faculties in transition, something that Kant’s early critics such as Eberhard, did not and perhaps could not do.

## 2. The Wound Before the Blow: Fascicles X and XI

I now move on to *Transition* and how the understanding/sensibility relationship develops in fascicles X and XI which were written between 1799 and 1800. I argue that included in these fascicles is a transformative architectonic line wherein the roles of sensibility and

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<sup>8</sup> See (Sng 2010, p.79).

<sup>9</sup> See (Allison 1973).

understanding are twisted and contorted, culminating in the total primacy of the understanding. With the preceding section in mind, this should not come as a surprise to us and hence the object of this section is to explore the genesis of this modification within *Opus postumum* as well as provide a defence of its actuality.

By way of a brief contextual background, we must recount the structure of *Transition*. Kant aligns a priori cognition with metaphysics, which has the job of interconnecting disparate elemental, dynamic concepts (e.g., attractive and repulsive force, cohesion, density of matter) into a systematic unity Kant calls the Elementary System of the Moving Forces of Matter (*Elementarsystem*).<sup>10</sup> Metaphysics does not possess the capacity to form the empirical constituents of the *Elementarsystem*, instead it organizes empirical facts given through the activities of physics, according to conceptual principles. In other words, in so far as the *Transition* is concerned, metaphysics has been purged of all empirical content, whilst physics is conceived of in a double sense: *physica rationalis* and *physica specialis* – or in contemporary terms, theoretical physics and special or experimental physics. Kant illustrates this by distinguishing between conceptual, formal principles and empirical principles in the Xth fascicle of the *Transition*:

Physics is the doctrinal system of the moving forces of matter in so far as they are objectively contained in a natural system. It contains an absolute whole of empirical cognition of outer sensory objects (*Sinnengegenstande*), and as a science is called upon to attain the work of natural research (*Naturforschung*), whose material (empirical) principle is based on observation and experiment. The formal principle, however – how and what one researches – shall be based on a priori principles alone. (OP 22:319, p.106, t.m).<sup>11</sup>

The formal principle is called upon to provide the conceptual orientation of investigation – the ‘how’ and the ‘what’ – and experimental physics, in turn, conducts empirical, investigatory research into nature (*Naturforschung*) using the tools of experiment and observation. These tools of experimental physics form the genesis of a change in the understanding/sensibility relationship which starts in Kant’s discussion of the lever-arm or scale (*Hebelarm*).

In fascicle VIII, written between October and December 1798, Kant says that the concept of ponderability of matter, or matter’s tendency to be a significant, measurable quantity, ‘presupposes an instrument for the measurement of this moving force (of weight) in the form of a lever-arm (*Hebelarm*)’ (OP 22:138, p.46). Following this, Kant says we are also inclined to account for the ponderability of the lever-arm itself along the same lines as the matter it weighs, but that this is impossible. The lever-arm cannot possibly measure itself in the act of weighing, just as it is impossible to ‘lift oneself up by one’s own bootstraps,’ as the saying goes. Thus, if we conceive of the fact that matter can be

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<sup>10</sup> See (OP 21:181-6, pp.58-61) for a schematic of the *Elementarsystem*.

<sup>11</sup> Also see (OP 22:355, p.115).

weighed, we must introduce a mysterious ‘something’ to account for the matter constitutive of the lever-arm, which is unweighable:

Thus the ponderability (*Ponderabilität*) of matter is not a property knowable *a priori* according to the mere concept of the quantity of matter; it is, rather, physically conditioned and requires the presupposition of an *internally* moving matter which results in the immobility of the parts in contact with one another [in the lever-arm], by itself being mobile inside this matter [...] Thus, even ponderability (*Ponderabilität*) (represented subjectively as the experiment of weighing) will require the assumption of a matter which is not ponderable (*wägbar*) (*imponderabilis*); for, otherwise, the condition for ponderability would be extended to infinity, and thus lack a foundation.’ (OP 22:138, p.46).<sup>12</sup>

In this passage, Kant considers the ponderability of matter as an external, physical correlate which rests upon an internal, non-physical substrate, the *imponderabilis*. In other words, the lever-arm invokes a substratum of matter which cannot be observed but is nonetheless present as a necessary condition of the matter being weighed. Such a view was not uncommon in seventeenth and eighteenth-century natural science, where it was postulated that an imponderable, invisible fluid allowed heat to travel. The difference in Kant’s reading of the term is that he tries to establish its place in the critical edifice and in the context of *Transition* this poses a problem since it cannot be ‘written in’ to a conceptual schema, nor is it governed by the categories, nor can it be simply equated to sensibility. Hence, whilst the *imponderabilis* is the condition of possibility of the empirically determinable weight of matter, the matter of the lever-arm itself cannot be accounted for directly. It thus lies in a transitorial site; it is neither an entirely empirical object given in sensibility nor an entirely conceptual object given in the understanding.

Later, in fascicle X, written between August 1799 and April 1800, the *imponderabilis* leads into a methodological engagement, which is the point at which the understanding begins to play a role: ‘Physics is a system, but we cannot cognize (*erkennen*) a system as such unless we ourselves insert (*hineinlegen*) the manifold of an aggregate according to *a priori* principles.’ (OP 22:299, p.103, t.m and italics added). What Kant seems to be saying here is that the observer – in an experimental physics setting – actively inserts (*hineinlegen*) content which is not derived from sensibility – i.e., a priori principles. We can thus see the problematic of observation and insertion (*hineinlegen*), gleaned from experimental physics, open onto a philosophical-architectonic issue.<sup>13</sup> By venturing this route Kant intimately connects the act of insertion with the understanding, thus morphing the latter:

The understanding must therefore synthetically insert (*hineinlegen*) the elements of sensible cognition into a system of the moving forces to make an experience;

<sup>12</sup> Also see (OP 22:260).

<sup>13</sup> As Hansgeorg Hoppe notes, ‘the concept of insertion (*hineinlegen*) is the central concept of fascicle X and XI, which is at the same time clearly related to the experimental approach of physics.’ (Hoppe 1969, p.117, m.t).



hence, not *from* experience, but *for* experience and the possibility of inserting (*hineinlegen*) it into an empirical whole as a system of physics. (OP 22:316-7, m.t).

This epistemic act creates the possibility of experience by inserting content directly into sensible cognition and does not stem from the merely organizational operation of the categories, but the active, contentful intervention of the understanding into sensibility.

To account for the stakes of this reading, we may be tempted to return to the first *Critique*, where, in the second edition Introduction, Kant says, ‘we can cognize of things *a priori* only what we ourselves have put (*legen*) into them’ (KrV Bxviii). On the face of it, this is strikingly similar to the passages from fascicle X, e.g., ‘We can extract nothing other from our sense-representations than that which we have inserted (*hineingelegt*) (with consciousness of its presentation) for the empirical representation of ourselves – that is, by the understanding (*intellectus exhibit phaenomena sensum*).’ (OP 22:343, p.112). Erich Adickes reads passages like this one in a purely logical key, stating that the insertion is of a ‘categorical function’ (*Kategorialfunktionen*) (Adickes 1920, p.633).<sup>14</sup> But it is clear on a basic terminological level that these two passages differ. The second sentence claims not only that we *a priori* take out of things what we put into them via the categories,<sup>15</sup> but that we empirically take out of things only what the understanding inserts into sensibility. It is in this sense that we can understand Kant’s Latin inscription as marking a departure of how the understanding operates: ‘*intellectus exhibit phaenomena sensum*’; ‘the understanding exhibits the phenomena of sense’. The understanding can no longer be a simple organizational faculty in need of material given to it but an originary and productive-creative faculty, which does not simply inflect observation but gives rise to it.

We may still object, however, that no change occurs since in *Critique of Pure Reason* the understanding is also a productive faculty endowed with spontaneity. This is especially the case in the Transcendental Deductions where Kant considers the understanding as the spontaneous act of combining appearances to find common rules. At the beginning of the B Deduction, Kant says: ‘for it is an act (*Actus*) of the spontaneity of the power of representation, and, since one must call the latter understanding, all combination (*Verbindung*) [...] is an act of the understanding (*Verstandeshandlung*).’ (KrV B130, t.m). This is pointed up by Gottfried Martin, who emphasizes the understanding as a spontaneous power of unifying material via the categories, concluding, quite radically, that the ‘understanding *underlies* the sensible world.’ (Martin 1974, p.193, italics added).<sup>16</sup> This would mean that the evolution of the understanding is already implicitly folded into the first *Critique* and that the *Transition* does not actually change anything *per se*, but merely unfolds this implicit evolution.

Yet this perspective would ignore the fundamental differences at stake between the first *Critique* and *Transition*. In *Critique of Pure Reason* the understanding is simply not a

<sup>14</sup> Also see Smith (1992, pp.614-5) for one of the first agreements in the English literature with Adickes on this point.

<sup>15</sup> In passages where Kant uses the term ‘*hineinlegen*’ e.g., (KrV A125) he refers to the insertion of ‘unity’ or *form* according to the categories.

<sup>16</sup> Also see (Martin 1974, pp.124-5).

productive-creative faculty since it always needs material given to it, which even Martin admits: ‘Human understanding is [...] dependent on sensibility, it does not simply create its objects but has to have something given to it’ (Martin 1974, p.163).<sup>17</sup> Hence, despite Kant’s attempts at shaping the understanding into a spontaneous faculty in the first *Critique*, it essentially remains a solicitor, always trying to organize the files of its bothersome, disorganized client, sensibility;<sup>18</sup> it *relies* on sensibility for its content and this belies the productive-creative core of spontaneity.<sup>19</sup> Although this argument is by no means exhaustive, it highlights why we cannot account for the transformative arch of the understanding by simply returning to the first *Critique* as though this evolution were implicitly folded into it.

Returning to fascicle X, it must be admitted that Kant does primarily attempt to stick to the architectonic seriality of the faculties but it soon becomes clear that this is no longer a viable possibility. The changed role of the understanding begins to call into question the basic critical premise that it only works with concepts:

All our cognition consists of two constituents: intuition and concept, which both lie a priori at the ground of cognition; and *the understanding is that form of connection (Verknüpfung)* of both into unity of the manifold in the subject, where, through that which was subjectively thought is represented objectively, as given. (OP 22:415, p.181, t.m and italics added).<sup>20</sup>

In this sentence the formulation of the understanding indexes two subtle changes: first, the change from an act to a form, second, from *engaging* in connection to *being* a connection. In the Transcendental Dialectic, ‘connection’ (*Verknüpfung*) denotes the standing together and linking of concepts into a nexus and is technically distinguished from ‘interconnection’ (*Zusammenhang*),<sup>21</sup> which denotes the more integral interpenetrating principle of unification or synthesis – as in the interconnection of metaphysics and physics. In the sentence from fascicle X above, the understanding is aligned with connection (*Verknüpfung*), but not only between concepts, it is now a *form* of connection between concept and intuition; it connects both into a chain. This is a curious shift, for although the understanding is a faculty of *making* connections (*Verknüpfung*) and interconnections (*Zusammenhang*) in *Critique of Pure Reason*, it is never considered as itself a mediating form of connection or interconnection.<sup>22</sup> Nor is the understanding

<sup>17</sup> This is also in line with the *Jäsche Logic*, where the distinction is made between the ‘lower faculty’ of sensibility and the ‘higher faculty’ of understanding ‘on the ground that sensibility gives the mere material for thought, but the understanding rules over this material and brings it under rules of concepts.’ (Log 9:36).

<sup>18</sup> E.g., ‘[The understanding] is always busy poring through the appearances with the aim of finding some sort of rule in them.’ (KrV A126).

<sup>19</sup> Also see (Massimi 2018, p.170) on the ‘cookie-cutter’ conception of the faculty of understanding, which I remain close to here.

<sup>20</sup> Also see (OP 22:418, p.183).

<sup>21</sup> See (KrV A643/B671).

<sup>22</sup> Although one could certainly argue that imagination occupies this role as a function of understanding, e.g., as does (Heidegger 1997, pp.62-64) and (Deleuze 2008, p.15).

considered a passage connecting empirical representation with the categories in the Deductions of the first *Critique*, where transcendental schematism – an operation of the imagination<sup>23</sup> – is vital in making formal connections. According to fascicle X it seems as though the understanding directly creates the integral connection between subjective and objective representation, or intuition and concept, which marks a widening in its field of operation.

Thus, the understanding transitions away from the conception in the first *Critique*, but there is also an internal transformation within the *Transition* itself, which we will move onto now.

In fascicle XI Kant ‘tumbles down the rabbit-hole’ so to speak, by appending a series of rapid transformations that implicitly challenge the understanding/sensibility relationship. I will quote three representative passages, which I interpret as a single trajectorial arch. I would like to add one caveat to this schematic, however; this transition should be contextualized as a problematic, especially in relation to the second transitional position. This is because in these quotations we still see elements of Kant’s previous distinctions bubbling and jostling, such that we might frame these steps as segments from a continual tension.<sup>24</sup>

1. ‘the understanding anticipates (*anticipare*) the influence on the senses’ (OP 22:509, p.150).

2. ‘the understanding cannot begin from perception (empirical cognition with consciousness), [if it is] to determine the intuiting subject into a complex of representations, as cognition of the object (*objects*). It [the understanding] contains *a priori* the formal element of a system of perceptions prior to these empirical cognitions’ (OP 22:439, p.161, t.m) and ‘The faculty of making experience is the understanding’ (OP 22:497, m.t).

3. ‘The material from which experience is originally woven is not the perception of objects [...] – not from the material sense receives – but from what the understanding *makes* from ~~the formal element~~ of the senses/intuition’ (OP 22:447, p.165, t.m) and hence, ‘The object (*Object*) is neither idealistically nor realistically given, it is, on the contrary not *given* at all, but is merely thought (*non dari, sed intelligi potest*).’ (OP 22:441, p.162, t.m).<sup>25</sup>

Whilst these phases raise many issues in connection with Kant’s corpus, I shall only home in on the issues posed to the understanding as we have explored it so far. Because of the rapid change between these phases, it will be helpful to briefly unpack them.

1. *The understanding anticipates the material given to/by sensibility.* In this formulation, the understanding anticipates or expects empirical content *before* it has been

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<sup>23</sup> See (KrV A179/B140).

<sup>24</sup> My thanks go to Stephen Howard for his helpful comments on this.

<sup>25</sup> The Latin quotation reads: ‘It cannot be given, but it can be understood’.

given to/by sensibility. In this connection, we are flung back into the world of *Inaugural Dissertation*, where the understanding ‘infects’ sensibility rather than the other way around. But by this point Kant is working with a model of the understanding as insertion into sensibility for the sake of experience. Hence, its anticipation of sensibility is not only an infection but an *indication* of the possibility of experience, or in other words, the understanding anticipates experiential material by actively inserting material into sensibility.

2. *The understanding makes and is prior to experience and empirical cognition.* This leads to the relatively small step which involves premising the possibility of experience entirely on the understanding’s creation. In this phase the understanding not only anticipates material received and given by sensibility, nor does it merely indicate the possibility of experience, it *contains* the material before the subject receives anything sensible. It seems that in this phase the understanding is uncoupled from sensibility and is no longer sequentially reliant on it to receive material, rather, the understanding now autonomously generates its own material which is the basis for experience. It is with this phase that Kant undoes the *Stufenleiter* series, ‘senses [...] understanding [...] reason’ (KrV A298/B355) and the simultaneous reciprocity wished for in the first *Critique* so that the understanding now ‘makes’ experience and precedes sensibility.<sup>26</sup>

3. *The understanding thinks the object in place of its ‘givenness’ in sensibility – the object is only thought.* In a crucial and final step Kant sees the object not as *given*, but as thought or perhaps *created*. This last phase is dubious but demonstrates a crystallization of the new understanding/sensibility relation. Kant now contends that objects are made by the understanding to such a degree that they are only thought, rather than given, hence the Latin inscription: ‘It cannot be given, but it can be understood’. Sensibility becomes entirely subordinate and reliant on the understanding as the seat of possibility, receiving only what the understanding has inserted. Hence, the object is thought instead of passively given.

From this transformative arch a major question is put to the possibility of a materialist dimension in Kant’s fascicle XI discussions. The materialist contention is compellingly argued by Jeffrey Edwards, who proposes that the ether constitutes a transcendental material condition for sensible experience (Edwards 2000, pp.163-4). But this is problematized by the preceding argument in that it would mean the understanding elementally inserts the ether, which could not then be a transcendental *material* condition, but a transcendental *conceptual* condition. This discussion leads back to a general problematic root which inhibits the entirety of the *Transition*: how material forces affect a subject that creates the concept of attractive and repulsive force prior to the empirical-sensible event itself;<sup>27</sup> and stated more generally: how the understanding determines

<sup>26</sup> Bryan Wesley Hall claims ‘we make everything ourselves’ is phrased in a purely organizational key. That is, that we simply organize perceptions emanating from the ether. This seems a weak interpretation since it insufficiently accounts for the radical thesis of the understanding ‘making’. See (Hall 2017, p.192).

<sup>27</sup> As fascicle X makes clear: ‘For experience does not come of its own accord as influence of the moving forces on sense, but must be made.’ (OP 22:320, p.107). Also see (OP 21:477, p.41 and 22:408, p.123).

material before it is given in sensibility.<sup>28</sup> In fascicle XI Kant seems clear that to answer these questions effectively we must change the order of the faculties: we only experience what the understanding makes possible to begin with, which in this case are the affections of force. So, this cannot be read in an entirely materialist sense, which rests on the architectonic primacy allotted to sensibility in the first *Critique*.

But there is, nonetheless, something stubborn and irrational in this reversal as when F.H. Bradley spoke of a world where ‘Death would come before birth, the blow would follow the wound, and all must seem to be irrational.’ (Bradley 1916, p.215). That is, Kant essentially seems to be arguing for the precedence of the (non-categorical) conceptual over the sensible, which cannot square up to the critical edifice by any measure. It requires an immense amount of unpacking to try and switch from the standard critical perspective, based on traditional causality, to a more fluid perspective, which leads some commentators to profoundly question this thesis.

Frederick Beiser is explicit about not believing the faculties to change in *Opus postumum*. His argument runs as follows. After detailing the fluidity of the understanding and sensibility, he goes on to question whether this constitutes a ‘*transformation* or *revision*’ of the faculties (Beiser 2008, pp.195-6). He answers in the negative, claiming that Kant retains his ‘old dualisms’, or his ‘continuing allegiance to the distinction between understanding and sensibility.’ (Beiser 2008, pp.197-8). Understanding must still rely on sensibility, otherwise Kant’s whole critical architectonic is jeopardized; he would have to account for a modification to the theory of space set out in *Transcendental Aesthetic* as well as revise the schematism and perhaps even the *Deductions*. Furthermore, there are textual elements in *Opus postumum* which seem to contradict this thesis, showing Kant’s allegiance to the *Stufenleiter* rendering of the faculties. How should we account for these moments?

My retort is that Kant works out of a changed notion of architectonic, an architectonic building-site of transition, which allows for confluences that would otherwise result in error, but this is still tacit in Kant’s thinking, he has not yet formalized it. Thus, Kant does not abolish the critical *distinction* between the two faculties (he remains faithful to their difference) but he tends towards reversing them for the simple reason that later fascicles depend on this, such as fascicle VII, written directly after fascicle XI. For, as we will see in section 4, without the reversal of the faculties the *Selbstsetzungslehre* falls apart.

Further, Kant is playful with the relationship between the faculties, sometimes insisting on the precedence of the forms of sensibility (space and time), sometimes on the precedence of the understanding (especially the synthetic unity of apperception). But as stated above, if we fail to note the changed methodological space within which Kant works, we fail to note the micro-transformations taking place, one of which is that made to the understanding. Hence, although sometimes Kant appears to restate the *Stufenleiter* formulation of the faculties, we must place this in the wider context of transformation occurring in fascicle XI, and indeed in the whole *Transition* site. This can explain the lead-

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<sup>28</sup> This is effectively identical to Kant’s critical question of how synthetic a priori cognition is possible.

up to fascicle VII, where, one of the concluding thoughts of fascicle XI is taken to its extreme: that the ‘material element of sensible representation lies in perception, i.e., in the act through which the subject affects itself and becomes an appearance of an object for itself.’ (OP 22:502, p.146 t.m).<sup>29</sup>

### 3. A Problematic of Phenomena

We can also conjecture a wider problematization around Kant’s notion of ‘phenomenon’ here. Phenomena in the first *Critique* were supposed to pertain to objects given through sensibility, divorced from any conceptual engendering, but in light of the architectonic reversal this no longer seems possible. A further issue is how this problematic is expressed in Kant’s discussion of Newton’s Book III of *Mathematical Principles of Natural Philosophy* (*Philosophiae Naturalis Principia Mathematica*), for one of the main themes of fascicle XI is a critique of Newton’s magnum opus.<sup>30</sup> I claim that Kant’s interrogation of the sensibility/understanding relationship questions Newton’s famous ‘deduction from the phenomena,’ but ultimately questions the assumptions about phenomena in *Critique of Pure Reason*.

In *On the Ground of the Distinction of all Objects in General into Phenomena and Noumena* in the first *Critique*, Kant connects phenomena with the empirical and sensible (KrV A248/B305nC) and noumena with abstractions of sensibility by the understanding (KrV A255/B311). After showing the impossibility of having one without the other, Kant connects the two terms to the conceptions of *mundis sensibilis* and *mundis intelligibilis*.<sup>31</sup> The former, *mundis sensibilis*, pertains to the ‘sum total of appearances,’ which is intuited (this is correlated to theoretical astronomy, ‘which expounds the mere observation of the starry heavens’), and the latter, *mundis intelligibilis*, pertains to the interconnection (*Zusammenhang*) of appearances which is thought (this is correlated to ‘contemplative astronomy’ such as Newton’s laws of gravitation). The latter makes ‘an intelligible world representable’, or, a world of understanding something phenomenally given (KrV A256-7/B312-3). So here, Kant’s theorization of the place-holder of phenomena is quite bound up with Newton’s use but in a very peculiar way. By aligning Newton’s phenomena with *mundis intelligibilis*, Kant effectively places them in the register of noumena, obviously a contradictory move, since Newton could not have ‘deduced’ his theory from noumena. So what does Newton say about phenomena?

To begin an exegesis of what this term means in Newton’s system, we must start with the basic methodological premise that Newton claims to have no metaphysical edifice in his work, since he is not engaging in formal questions of *how* we know, but with the

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<sup>29</sup> I am in agreement with Lehmann in foregrounding the aspect of the subject as an appearance here: ‘The subject posits itself not merely as *cogito*, rather as an object in appearance, as psychophysical subject, as an organism.’ (Lehmann 1969, p.409, m.t). Also see (Basile 2013, p.135-7) for an overview of Lehmann’s understanding of the *Selbstsetzungslehre*.

<sup>30</sup> See (Caygill 2005, p.33). See (Tuschling 1971, p.91) for a list of references to the ‘Newton-Polemik’ in *Opus postumum*.

<sup>31</sup> *Sinnenwelt* (world of senses) – see section 1 of this essay – and *Verstandeswelt* (world of understanding), respectively.

mathematical foundations of *what* we know via the content of scientific observation and experiment.<sup>32</sup> It is in this sense that he ‘present[s] principles of philosophy that are not [...] philosophical but strictly mathematical’ (Newton 1999, p.439), and that these are ‘deduced from the phenomena’ (Newton 1999, p.589) rather than from hypotheses. Hence, trying to locate a direct philosophical vocabulary of phenomena in the framework of *Principia* would seem like a futile exercise, but their difference from hypotheses suggests an indirect clue as to what this might look like.

Newton meant many things by the term ‘hypothesis’ which Alexandre Koyré has usefully catalogued. Koyré demarks an early use of the term by Newton as ‘a fundamental assumption or supposition in a theory.’ (Koyré 1965, p.264). This is the general sense of the term in the seventeenth century, whereby one can develop a hypothesis to justify a more general theory. It is not in this sense, however, that Newton is against hypotheses later in his life but a narrower definition with connotations of fictionalization or unscientific presumption for the sake of a theory – of which Descartes and Leibniz are the chief targets in Newton’s mind. In this narrower definition, hypotheses present a feigned (*finjo*) framework upon which no science can be based.<sup>33</sup> In Book III of *Principia* hypotheses are contrasted with the rules of philosophical reasoning (*regulae philosophandi*) and the phenomena from which wider mathematical propositions can be deduced. We know this contrast is great because, as Koyré points out, the first edition of Book III listed nine ‘hypotheses’, whilst the second and third editions replace these with the three then four ‘rules’ respectively, and the six ‘phenomena.’<sup>34</sup> With this change we are given the entry point into a more broadly philosophical perspective than other sections of the *Principia*. What are the rules of philosophical reasoning and the phenomena? Are we to assume that phenomena are empirical receptions given in sensibility and rules the categorical strictures placed upon this content? That is, can we read a critical epistemology into these terms?

That there is an epistemology in Book III is a difficult claim to stake, but this does sometimes seem a suitable description and has been discussed in some of the (non-philosophical) Newton literature.<sup>35</sup> In Rule 3 for example, Newton claims that based on evidence gleaned from experiments on particular bodies, we can conjecture about all other bodies like them. That is to say, the rule acts much like an epistemological-categorical generalization: ‘The extension of bodies is known to us only through our senses [...] but because extension is found in *all* sensible bodies, it is ascribed to *all* bodies universally.’ (Newton 1999, p.441, italics added). The ‘all’ in this sentence indicates something akin to the critical model of the understanding as a function of conceptualizing inductive connections, interconnections and combinations distended from sensible content. So far this is a model which seems to conform to the traditional Kantian critical edifice.

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<sup>32</sup> See (Caygill 2005, p.38).

<sup>33</sup> See (Koyré 1965, pp.34-5).

<sup>34</sup> See (Koyré 1965, pp.262-3) and (Newton 1999, p.440).

<sup>35</sup> For example, (Kerszberg 2012, p.530) discusses ‘two epistemological strategies’ at play in the deduction from phenomena.

But a problem emerges when trying to map the faculty of sensibility onto Newton's phenomena. To take the first two examples:

Phenomenon 1: *The circumjovial planets [satellites of Jupiter], by radii drawn to the centre of Jupiter, describe areas proportional to the times, and their periodic times – the fixed stars being at rest – are as the 3/2 powers of their distances from that centre.* (Newton 1999, p.443).

Phenomenon 2: *The circumsaturnian planets [satellites of Saturn], by radii drawn to the centre of Saturn, describe areas proportional to the times, and their periodic times – the fixed stars being at rest – are as the 3/2 powers of their distances from that centre.* (Newton 1999, p.444).

These phenomena constitute a series of inferences, describing mathematically the behaviour of physical, celestial bodies. Within the descriptions of the phenomena Newton includes a table which collates all the observational data that goes toward making up a single phenomenon, from the observations of Giovanni Alfonso Borelli to the observations of Giovanni Domenico Cassini. The importance of observational data for verifying phenomena, or even simply describing them, tells us immediately that for Newton phenomena are not 'given' in empirical sense-impressions but are constructed from inherently conceptualized statistics of observation. The phenomena Newton works with are strictly numerical documentations of the times and distances of elliptical orbits and hence are resistant to alignment with sensibility or the critical conception of the faculties more generally. As much as the term 'phenomenon' in the modern context has become generally intertwined with a relation to sensibility (perhaps no thanks to *Critique of Pure Reason*), this is simply not so in the *Principia*. There are no sensible correlatives in Book III, only mathematical correlatives, which seems an entirely purposeful intention of Newton, who, as I have quoted above, claims he only engages in principles of mathematics which form a foundation on which to base natural philosophy.

Kant picks up on this complicated situation in fascicle XI by raising the issue of the title Newton chose for his 'immortal work'. The problem Kant has is that a mathematical principle cannot properly lie at the foundation of a *philosophy* of nature, just as a philosophical principle cannot lie at the foundation of a *mathematics* of nature; both occupy separate territories and would need to be put through the rigorous building-site of transition in order to find their intermediary concepts (*Mittelbegriffe/Zwischenbegriffe*), before transitioning from one to the other (OP 22:488-9, p.138). Kant takes this problematization to an extreme, suggesting two new branches: 1. 'Philosophical principles of natural science' (*scientiae naturalis principia philosophica*) and 2. 'Mathematical principles of natural science' (*scientiae naturalis principia mathematica*) (OP 21:238, m.t). Between August and September 1798, in fascicle IV, Kant hints at the problematic implicit in Newton's methodology,



What are called the *mathematical* foundations of the science of nature (*philosophiae naturalis principia mathematica*), as expressed by Newton in his immortal work, are (as the expression itself indicates) no part of the *philosophy of nature*. They are only an instrument (albeit a most necessary one) for the calculation of the magnitude of motions and moving forces (which must be given by observation of nature) and for the determination of their laws for physics. (OP 21:482, p.43).

Hence, in Kant's mind it is absurd to engage in a *mathematical* foundation of natural philosophy, since it acts merely as the instrumental calculation of moving forces (phenomena), not their grounding principle. Accordingly, Newton made a fundamental – not to mention *architectonic* – error by engaging in an amphiboly of two different territories without explaining the transitorial principle for doing so. In fascicle XI Kant claims that vis a vis this confusion, the *Principia* 'assumes' gravity 'for the sake of the system' (OP 22:455, p.125),<sup>36</sup> which means it engenders the definition of a conceptualized phenomenon against a sensible phenomenon. Thus, a non-empirical – conceptual – gloss must be given to Book III, wherein it does not unfold according to phenomena understood in the register of sensibility, but in the register of the understanding. But as I have argued above, Newton had already mapped out this criticism by claiming only to engage in mathematical principles.<sup>37</sup> Hence, it is Kant's theorization of phenomena which is changed from *Critique of Pure Reason*, not Newton's. It may well be that the object of critique in fascicle XI is Newtonianism but the direct result is a critique of the *Critique*.

What differs with both Book III *and* the first *Critique*, however, is the changed role of architectonic wherein the forces – as phenomena – genetically stem from and are posited by the subject. Book III did not come close to suggesting this and it dramatically differs from *Critique of Pure Reason*. In a sense, what Kant does with the concept of phenomena is place it on the site of transition, turning it into a mid-way point, not quite a pure hypothesis, not quite a pure sensible item but *inserted* via the understanding, nonetheless:

The first principle of representation of the moving forces of matter is not to regard them as things in themselves but as phenomena, according to the relation which they have to the subject – as they affect our sense, or as we affect our sense ourselves. [It involves] inserting the formal element of sensible representation into the subject in order to progress from the Axioms of Intuition, the Anticipations of Perception, etc. to experience – that is, *for* experience as a system, not as derived from experience. Consequently, [it amounts to] oneself founding such a system *a priori* – composing it synthetically, not deriving it analytically from the material

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<sup>36</sup> Friedman traces this problem of assumption to *Metaphysical Foundations*. See (Friedman 1994, pp.149-50).

<sup>37</sup> Adickes suggests that Kant missed this due to the peculiar English use of the term '*philosophia naturalis*' (natural philosophy), which is equivalent to '*Naturwissenschaft*' (natural science) (Adickes 1920, p.159n1). But it seems unlikely, since the two terms in German or English were not explicitly separated in the seventeenth and eighteenth centuries. Even in Newton's hands the terms were still obscure, although some argue that he set in motion their separation and the eventual supersedence of natural philosophy by natural science in the nineteenth century. See (Maxwell 2017, pp.30-58).

element of empirical representation. Hence, it is this principle of form – not the *material* which moves the senses (*Sinnenbewegende Stoffe*)<sup>38</sup> – which provides *a priori* the basis for the possibility of experience (by the rule, *forma dat esse rei*). (OP 22:300, pp.103-4, t.m).

In other words, Kant’s notion of phenomenon in *Transition* diverges from an immediate sensible element which affects the subject externally to reflect the fact of its intermediary concept (*Mittelbegriff/Zwischenbegriff*) status, sandwiched between both sensible and conceptual elements without clear boundaries between them. In this sense Kant’s phenomena are more like Newton’s in Book III (although still very different) than his own in the first *Critique*.<sup>39</sup> Further, this underscores the architectonic transformation of the faculties in the *Transition* project more generally as well as beyond the remit of Kant studies.

From a more contemporary perspective, whilst the experimental physicist may argue that they merely observe brute facts,<sup>40</sup> the transformation in fascicles X and XI suggests this can no longer be maintained since ‘to observe’ necessarily indicts the chain of genesis of the subject stemming from the understanding. This throws up an extremely *modern* perspective of physics as W.H. Werkmeister points out: ‘It is a fact [...] that in the *Opus postumum* Kant developed ideas that are strikingly similar to principles and conceptions of modern physics and quantum mechanics.’ (Werkmeister 1980, p.127). The transformation of the understanding ties a Gordian knot between observer and observed, between phenomenon and subject – an unwitting anticipation of the wave function collapse in the Copenhagen theory of quantum mechanics. It is in this spirit that I claim we should read Kant when he quotes the scholastic saying, ‘*forma dat esse rei*’ (‘form gives being to the thing’) throughout fascicle X.<sup>41</sup>

Hence, in as much as the experimental physics side of *Transition* is intimately bound up with the observation of phenomena, the meaning of ‘observation of phenomena’ takes on a new, richer significance emboldened by the understanding. When a subject observes an experiment, the observation cannot be considered passive nor primarily received through sensibility but engendered by the understanding and the conceptual. Kant’s whole line of argumentation in fascicle X and XI is premised on the implicit reversal with the understanding as the root from which all possibility grows, or in Burkhard Tuschling’s words, ‘We cannot understand nature, the world and its objects, as absolutely independent entities but only as products of the synthesizing activity of our understanding’ (Tuschling 1989, p.210). Only we must now extend the understanding beyond solely engaging in synthesizing material. In this way Kant comes close to Christoph Lichtenberg’s view that, ‘in observing nature, and especially the order found in

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<sup>38</sup> Literally, ‘sense-moving material’.

<sup>39</sup> I am in agreement with (Friedman 1994, pp.230-1) on this point.

<sup>40</sup> The now classic example is (Kuhn 2012, pp.25-8) where three descriptions are given to account for ‘fact-gathering’.

<sup>41</sup> See (OP 22:318, p.105; 22:322, p.108; 22:355, p.115).

nature, we are always only observing ourselves.’ (Lichtenberg 2012, p.113). Building on such a sentiment in fascicle XI, Kant races to an extreme point in fascicle VII and the *Selbstsetzungslehre*, which I now turn to.

#### 4. The *Selbstsetzungslehre* and Fascicle VII

Most of fascicle VII discusses ‘self-positing’ (*Selbstsetzung*). Exactly what this means for Kant and how it plays into the evolution of the understanding shall be the focus of this section.

As a preliminary starting point, it is worth noting Kant’s methodological use of the term ‘positing’ (*Setzung*) in his 1763 essay *The Only Possible Argument in Support of a Demonstration of the Existence of God*. Kant tells us that positing involves positioning relations, and hence defines the concept of combination (*verbindungs begriff*) (BDG 2:73). This constitutes a ‘relative’ element or the epistemological side of the act of positing as opposed to the ontological, which Kant describes as ‘absolute positing’, an attribute of God. More importantly, in the next sub-section Kant goes on to state that ‘a distinction must be drawn between what is posited and how it is posited’ (BDG 2:75). Although in 1763 Kant had not developed clear distinctions of methodology, the difference between ‘what’ and ‘how’ in the act of positing hints at a distinction between the practical and theoretical in Kant’s later corpus. Indeed, these two sides return in the *Selbstsetzungslehre*, written some 37 years after the *Only Possible Argument*, playing an important role in differentiating the theoretical-epistemological (‘how’) discussions from the practical-moral (‘what’) discussions of self-positing. In the following, I investigate the theoretical-epistemological (‘how’) side of fascicle VII. This brief departure is a reminder that Kant is not introducing a new concept, he is transforming an old concept, whilst sticking to its original methodological underpinning.<sup>42</sup>

In a letter to Johann Heinrich Tieftrunk of November 5, 1797, Kant refers to the act of positing (*setzen*) as ‘the *a priori* condition of apperception’ (Br 12:213), pointing up the link between apperception and positing, claiming that ‘positing, as a function of the mind, is spontaneity and, like all functions of self-consciousness, is a spontaneous synthesis (*zusammensetzen*) and therefore a function of unity.’ (Br 12:213). This is a good place to start, since three years later Kant begins writing on self-positing in a much more sustained, radical way. Thus, I will start with the Transcendental Deductions to better understand the role of apperception, before moving on to the *Selbstsetzungslehre*.

Although there are voracious disagreements over the divergencies of the two Transcendental Deductions, we may say that both share the contention that transcendental apperception constitutes a synthesis.<sup>43</sup> In schematic terms, transcendental apperception is

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<sup>42</sup> Alongside Eckart Förster, I disagree with Adickes when he says that Kant only engages in a repetition of Fichte’s ‘extreme idealism’ by adopting the popular discourse of ‘*setzen*’ (Adickes 1920, p.668). The term had already been theorized in Kant’s work long before. See (Förster 1989, pp.217-8).

<sup>43</sup> To pick two examples, the A edition reads, ‘the original and necessary consciousness of the identity of oneself is at the same time a consciousness of an equally necessary unity of the synthesis of all appearances in accordance with concepts’ (KrV A108); and the B edition reads, ‘it is only because I can combine a

the identity or synthetic unity of the subsisting ‘I think’ which accompanies and unifies all representations of objects in sensibility into a singular self-conscious experience (KrV B131-2). In its role as a unifier, Kant theorizes that apperception precedes the empirical content of objects: ‘no cognitions can occur in us, no connection and unity among them without that unity of consciousness that *precedes all data of the intuitions*’ (KrV A107, italics added). And in the B edition Kant is even more direct:

The synthetic unity of consciousness is therefore an objective condition of all cognition, not merely something I myself need in order to cognize an object (*Object*) but rather something under which every intuition must stand *in order to become an object (Object) for me*. (KrV B138).

Transcendental apperception, then, is the condition of possibility of *all* cognition, through which sensible objects must pass to become ‘objects for me’. But it is only this in so far as it unifies the field of disparate empirical material into a singular experience according to the categories. That is to say, Kant sticks to the architectonic ordering of the faculties peculiar to the first *Critique*: simultaneous reciprocity and *Stufenleiter* seriality.

The importance of the faculty of understanding in this regard cannot be downplayed, however. Indeed, Kant notes that ‘the synthetic unity of apperception is the highest point to which one must affix all use of the understanding’ (KrV B134). The ‘highest point’ pertains to the various stages in the A Deduction: (1) synthesis of apprehension in intuition – aligned with sensibility; (2) synthesis of reproduction – aligned with imagination; and (3) synthesis of recognition in the concept – aligned with the understanding (KrV A98-110). Via the categories, the understanding organizes the material synthetically and ‘legislates’<sup>44</sup> over sensibility, which is combined in transcendental apperception. This is a contested area of Kant scholarship<sup>45</sup> and there are many perspective we could take, but we at least get a sketch of a relationship between the faculty of understanding and transcendental apperception, that the latter has its root in the former.

Returning to the motif put forward in section 2, another important factor is Kant’s identification of the spontaneity of transcendental apperception with the understanding, which he states clearly in the B Deduction: ‘this representation is an act of *spontaneity*, i.e., it cannot be regarded as belonging to sensibility.’ (KrV B132).<sup>46</sup> But what is spontaneous about transcendental apperception, if all it can do is unify – and ‘legislate’ over – sensible content? To table an answer it seems obvious to return to the understanding as the act of combining appearances to find their common rules and form through the categories, as Kant does in the A Deduction (KrV A127), but this would water down the much stronger

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manifold of given representations *in one consciousness* that it is possible for me to represent the *identity of the consciousness in these representations* itself’ (KrV B133-4).

<sup>44</sup> See (Deleuze 2008, pp.13-5).

<sup>45</sup> See (Gardner 1999, p.145 and pp.158-9) and (Martin 1974, pp.192-3).

<sup>46</sup> Also see (KrV A126).

thesis that spontaneity involves production and creation.<sup>47</sup> We see this notion emerge at the beginning of Transcendental Logic, where Kant uses the term '*hervorbringen*' to describe the spontaneity of understanding, which is translated 'bringing forth' but should be appended by the terms, 'to generate', 'to spawn' or 'to produce'. This productive-creative aspect of spontaneity does not seem at stake in the Transcendental Deductions, however, especially not in connection with transcendental apperception and the understanding, which remain organizational.

Zooming out to the *Selbstsetzungslehre*, we initially find a similar line of thought to the Deductions. For example, midway through fascicle VII Kant says, 'The faculty of representation proceeds from the consciousness of myself (*apperceptio*), and this is a merely logical act, an act of thought, through which no object is yet given by me' (OP 22:79, p.187), which is to say, self-consciousness, or apperception, is a pure '*ens rationis*' or concept without an object, a logical act, or act of the understanding combining disparate material. Further, in a deleted passage from the same section of fascicle VII Kant gives us further information about the *Selbstsetzungslehre*'s methodological *raison d'être*, which also resonates with the Deductions: 'what is thinkable (*cogitabile*) requires an object (*dabile*), namely, something which corresponds as intuition to a concept' (OP 22:79, p.187). Determining the giveable (*dabile*) object corresponding to the thinking/thinkable (*cogitabile*) subject is hence the task of the *Selbstsetzungslehre*.<sup>48</sup> It seems that Kant is staying within the bounds of the first *Critique* here, as Edwards suggests, 'one could, it seems, justifiably maintain that the description of theoretical self-positing does nothing more than refine the presentation of the a priori anticipation of the form of possible experience already offered in the first *Critique*.' (Edwards 2000, pp.168-9).

I claim that although its methodological ambition is similar to the Deductions, the *Selbstsetzungslehre* is fundamentally different because it is premised on the reversal effected in fascicles X and XI and hence the understanding is the origin of one's self as an object. This brings to light the productive-creative spontaneity of the understanding and with it the altogether new thesis of the *Selbstsetzungslehre*: to be self-conscious *is* to posit one's self as an object.<sup>49</sup> The emphasis is thus on explicating the specific act whereby the subject makes itself into an object *for* sensibility since this machination cannot be 'derived from a sense-object, but determines the object by its [the subject's] *a priori* act, [through which] it is the owner and originator of its own representations.' (OP 22:82-3, p.189, t.m). We can see here how the possibility of the subject as object is indexed in the spontaneous act of self-generative creation; no longer is the subject with apperception given reciprocally with sensibility, nor is it reliant on sensibility, but via the understanding it creates the very possibility of sensibility: 'The understanding begins with the consciousness of itself (*apperceptio*) and performs thereby a logical act. To this the

<sup>47</sup> What (Ellis 2017, p.139) calls 'absolute spontaneity'.

<sup>48</sup> In Förster's words, it tries 'to show how the I as mere object of thought (*cogitabile*) can become an empirical object given in space and time (*dabile*).' (Förster 2000, p.103).

<sup>49</sup> 'Consciousness of itself (*apperceptio*) is an act through which the subject makes itself in general into an object.' (OP 22:413, p.180). 'Consciousness of myself (*apperception*) is the act of the subject to make itself into an object (*object*).' (OP 22:89, m.t). Also see (OP 22:98, p.196).

manifold of outer and inner intuition attaches itself serially, and the subject makes itself into an object in a limitless sequence.’ (OP 22:82, p.189). What’s more, by reading the architectonic reversal of understanding and sensibility into *Transition* before the advent of fascicle VII, we can understand Kant much more clearly when he writes things such as, ‘That there is something else outside me is my own product. I make myself.’ (OP 22:82, p.189). If we were to read these sentences from a strictly ‘critical’ perspective, they obviously indicate a major contradiction along Berkeleyan subjective idealist lines. But if we read them as logical consequences of the architectonic reversal, that is, in the transitional context from which they arise, we get a much clearer perspective on what Kant might mean. Kant is saying that the possibility of the subject’s empirical content is premised on the understanding producing – or, indeed, conceptually *inserting* – this content in the first place, and that this content – the object – is therefore made by the spontaneous, apperceptive act of the subject. But what then happens to receptivity?

In the Transcendental Deductions receptivity is defined in opposition to spontaneity as an act, but this is changed in fascicle VII, where receptivity must also be considered an activity.<sup>50</sup> If the understanding precedes sensibility and makes experience possible through a self-positing act, then receptivity, the defining feature of receiving sensible impressions, must also be made into an act. But how does this active conception of receptivity not abolish what Hall calls, ‘genuine receptivity’ (Hall 2017, p.188), and is the relation between spontaneity and receptivity not completely undermined here? As Kant himself states in the November 5, 1797 letter, the question is, if the subject posits itself as object, ‘from where does the manifold of sensation come, what in it is the *merely empirical* aspect of sensation? [...] what are these objects that affect sensibility?’ (Br 12:215-6, t.m).

Unless by ‘genuine’ we mean ‘passive’ I do not think this thesis abolishes genuine receptivity. Receptivity is still a feature of sensibility in fascicle VII, but it is not premised on a conception of affectivity which lies permanently open like a black hole, rather, it forms an active affectivity of openings and closings; a kind of leaping out to take hold of content. But then we are led into the second question, does this not reduce receptivity and spontaneity to the same definition? This question marks the radical departure Kant makes from the first *Critique* to *Transition*, for in the latter he does not want to define spontaneity and receptivity solely on whether they are acts but also by their relation to forces. Hence the distinction between spontaneity and receptivity is not undermined, nor do they become conflated and subsumed under the same definition, rather, they are deferred to a different set of definitions involving two interconnected ways of being affected by forces. This is in keeping with the new dynamical theory of matter Kant develops in *Opus postumum*. So, although there is a change in so far as receptivity becomes an act, it retains its characteristic distinguishing feature as bound up with sensibility, only deferred to the

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<sup>50</sup> ‘The representation of apperception which makes itself into an object of intuition contains a *twofold act*: first, that of positing itself (the act of spontaneity); and [second], that of being affected by objects and interconnecting (*zusammen*) the manifold in representation to *a priori* unity (the *act* of receptivity).’ (OP 22:31, p.173, t.m, italics added). Also see (OP 22:28) and (OP 22:466, p.132).

context of force. But this opens even more issues, now to do with Kant's 'critical' conception of space.

According to Tuschling's 'subjects at stake' (Tuschling 1993, p.160), space – which was an a priori form of sensibility in the first *Critique's* Transcendental Aesthetic – undergoes a revision in *Opus postumum* precisely along the lines of the change made to the role of apperception in *Selbstsetzungslehre*. Keeping with the general 'productive' thematic of fascicle VII, Kant says space becomes a form 'which we ourselves make (*machen*)' (OP 22:76, p.185), that is, if the first empirical content is made via the apperceptive subject, then it must also make space, since it is in space that the subject must encounter itself as a body. Space is hence no longer an empty, pure form of sensibility, but a continuum of posited affective forces – a plenum – pressing upon the body of the subject, which ties fascicle VII into the *Elementarsystem* that Kant had been working on for many years before. Although this indicates significant departures from fascicle VII, it is important for tracing out the wider consequences the transformation instigates.

One way to make sense of the modification made to space is given by Förster. First, he claims, 'Space must [...] be represented, not merely as a form of intuition, but as something existing outside me, as something empirically given. It can be this only if it is filled with moving forces'. Second, 'for there to be experience of any particular object in space, the object's moving forces must affect the subject'. And last, 'The moving forces of matter cannot be given to the subject by being passively received. They are recognized only by the subject's reaction, as forces with which we interfere' (Förster 1989, p.230).<sup>51</sup> Rather problematically, this suggests an empirical realism with regards to space, something which Kant argues against throughout *Opus postumum*, but it nonetheless shows how the possibility of being affected by forces through space is premised on the activity of the subject. For the subject to be experientially affected by forces it must *intervene* by itself emanating forces. In this connection, the self-positing subject transforms space into an '*act* [...] of the power of representation positing (*setzen*) itself' (OP 22:88, p.193, t.m). Hence when Kant says, 'The position (*position*) of something outside me, itself first commences from me, in the forms of space and time, in which I myself posit (*setze*) the objects of outer and inner sense' (OP 22:97, p.195)<sup>52</sup> it comes preloaded with such a modification. Space becomes filled with activity, first with the spontaneous act of understanding and then the receptive act of sensibility. A shift from space as a pure form of sensibility to space which is premised on proliferating affective forces and the dual active capacities of the self-conscious subject is thus at stake. Accordingly, to be affected is cached in the capacity to affect, but the wider implication is that the whole structure is grounded in the original act of the understanding, which can only be the case if it precedes sensibility;<sup>53</sup> space is the subject's power of spontaneous, theoretical self-positing given in representation.

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<sup>51</sup> Förster references a passage from fascicle IV in support of this reading: 'The concept of primordial motive forces is not taken from experience, rather it must lie *a priori* in the activity of the mind, and of which we are conscious in moving.' (OP 21:490, m.t).

<sup>52</sup> Also see (OP 21:38)

<sup>53</sup> In a passage from fascicle X, but written around April 1800 (during Kant's writing of fascicle VII) Kant is clear on this: 'Our sensible intuition is, initially, not perception (empirical representation with

### Conclusion

Ultimately, what the transition through fascicles X, XI and VII shows is an inherent experimental playfulness in Kant's methodological approach. He is willing to put his previous distinctions through radical twists and turns, which often result in some peculiar concepts and ideas in *Transition*, such as the *Selbstsetzungslehre*. But we must always situate transformations like this primarily on the architectonic site of transition, for it is here that Kant is able to play with concepts in an experimental way in an attempt to find their interconnections and points of contact. We should take this approach as a prompt, both to engage with Kant in this process of thinking by setting his work within a larger set of transitions, but also to challenge our own assumptions about what Kant's system of philosophy actually is.

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consciousness), for a principle of positing oneself and of becoming conscious of this position precedes it' (OP 22:420, p.184).



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