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# Cassirer and Kant on the Unity of Space and the Role of Imagination

**Abstract:** The focus of this paper is Cassirer's Neo-Kantian reading of Kant's conception of unity of space. Cassirer's neo-Kantian reading is largely in conformity with the mainstream of intellectualist Kant-scholars, which unsurprisingly, given his own intellectualist view of space and perception and his rejection of the existence of a 'merely sensory consciousness' as a 'formless mass of impression'. I argue against Cassirer's reading by relying on a Kantian distinction first recognized by Heinrich Rickert, a neo-Kantian from the Southwest school, between *Kenntnis* (roughly knowledge by acquaintance) and *Erkenntnis* (roughly propositional knowledge). Correspondingly, I claim that concepts and categories are conditions for *Erkenntnis* of objects as such, namely for thinking of and apprehending the pre-existing unity as an object, rather than for the 'constitution' of this very unity.

## 1 Cassirer's Place in Neo-Kantianism

Classical neo-Kantianism officially begins with Hermann Cohen's 1885 book, *Kants Theorie der Erfahrung*. Historians generally distinguish between two main schools of Neo-Kantianism. The first is the so-called Marburg School, whose great exponents are Cohen and Paul Natorp (first generation) and later Ernst Cassirer (second and last generation)<sup>1</sup>. The second is the so-called Southwest School (also known as the Baden or Heidelberg School), whose great exponents are Wilhelm Windelband and Heinrich Rickert (first generation) and then Emil Lask (second generation)<sup>2</sup>.

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<sup>1</sup> It is noteworthy that although Cassirer clearly belongs to the Marburg School, nevertheless he did not limit himself to investigating the foundations of the natural sciences, but also developed the transcendental analysis of Cohen's logic of science in the direction of a theory of culture in which science is regarded as just one among other forms of symbolization. Cassirer's intellectual development thus shows that the transcendental analysis of the natural sciences can be naturally extended and generalized to a transcendental analysis of culture.

<sup>2</sup> See Lask 1905; 1923. The sociologist Max Weber also belongs to the school. But as Beiser (2015) reminds us, Berlin also became a center of neo-Kantianism later in the 19th and early 20th centuries with Friedrich Paulsen, Alois Riehl, and Benno Erdmann.

Otto Liebmann (1912) remains the starting point of any description of neo-Kantianism. He attacked Fichte, Schelling, Hegel, and Schopenhauer and their successors as speculative dogmatists and is credited with proposing the famous mantra: “zurück zu Kant!” He believed that the fundamental ideas of Kant’s philosophy had been eclipsed by Schopenhauer and the speculative metaphysics of the German absolute idealists. However, Frederick Beiser claims that neo-Kantianism traces back to the 1790s, even before Kant’s death (1804)<sup>3</sup>. Even at the end of his life, Kant’s ideas had already been distorted. Jakob Fries, Johann Herbart, and Friedrich Beneke were proto-neo-Kantian pioneers by means their repudiation of the excesses of speculative idealism. All defined themselves as Kantians, and all called for a return to the spirit of Kant’s teachings. They anticipated, and laid down the foundations for, defining the distinguishing features of classical neo-Kantianism.

The first unavoidable question is, in which sense we must understand the famous mantra “zurück zu Kant!”? In other words, in which sense are neo-Kantians ‘Kantians’ or in which sense do they belong to the Kantian tradition? Windelband, for example, claims that Kant’s “immortal achievement” is the idea that the world is a *product* of “synthetic consciousness” (Windelband 2015). In a similar vein, Cohen claims that the “transcendental method” is at the core of Kant’s philosophy, which consists in the discovery of “the formal conditions for the possibility of experience.” The key idea can be traced back to Kant’s “Copernican Revolution” whereby he claims, “that we know a priori of objects only what we put into them” (*CPR* B XVIII). Instead of regarding a priori knowledge as dependent on the object, neo-Kantians propose that we think of the object as dependent on conditions under which such a priori knowledge is possible, namely as a logical construction. And their reason for proposing this is that the object is nothing more than a logical construct of their “transcendental method.”<sup>4</sup> Given this, the two main schools of classical neo-Kantianism are divided by two distinct concerns rather than by two different methods or views about the nature of philosophy. The Marburg School is concerned with the logic and foundations of the natural sciences. In contrast, the main concern of the Southwest School is

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<sup>3</sup> See Beiser (2015, 3).

<sup>4</sup> Two examples (chosen randomly) illustrate the point. In his main work of 1923, Cassirer states: “Physical concepts are valid not insofar as they reproduce a given rigid being but insofar as they comprise a project for possible postulations of unity” (1923, 427). In a similar vein, Windelband adds that the idea is of rejecting the commonsense view that the world is *something external to us* that we can at best hope to represent or “mirror” in consciousness. Instead, “the world that we experience is our deed” (2015, 318).

with the investigation of the theory of value and the foundations of the cultural sciences.

The second pressing question is in which sense they are ‘neo-Kantians’ rather than Kantians *simpliciter*. In this regard, there is a relative consensus in the secondary literature. To start with, every scholar agrees that the neo-Kantians emphatically reject the assumption that “synthetic consciousness” is to be understood in psychological terms. Neo-Kantians reject all forms of psychologism. However oddly it may sound today, the idea is that “synthetic consciousness” is not a mental achievement of the conceptual operations of the human cognitive apparatus.

A much more important distancing from Kant concerns the rejection and re-interpretation of Kantian notions of the ‘thing in itself’. For Kant, the thing in itself, or noumenon in the negative sense, is essentially the unknown object as it exists independently of the mind, affects our sensibility, and hence manifests to us humans in space and time as appearances or mere representations. Neo-Kantians have two distinct but not necessarily exclusive reactions. Tacitly assuming a two-world view (or two-objects view) reading of Kantian transcendental idealism, several neo-Kantians simply reject the existence of noumena insofar as they reject the existence of “another world” as something useless. Windelband, for example, says that “the thing-in-itself [is] incoherent and unnecessary” (Windelband 1911, 323). Yet, even rejecting noumena as a separate reality, several other neo-Kantians understand noumena (in the negative sense) charitably as the attempt to trace the bounds of possible knowledge. We need a negative notion of noumena to remind us that scientific research never ends.<sup>6</sup>

Yet, the third and more important distancing from Kant concerns the topic of this paper, namely the Kantian dualism between sensible intuitions and discursive concepts, or between sensibility and understanding. As every Kantian philosopher knows, this duality lies at the very heart of the *Critique*.<sup>7</sup> The majority of Marburg neo-Kantians reject Kantian dualism *simpliciter*.<sup>8</sup> More precisely, they reject the Kantian distinction between understanding and what they call “pure intuition”, that is, a seeing that is not cognitively penetrated by intellectual pow-

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5 See Windelband (2015, 323). See also Windelband 1882; 1894; 1900; 1911; 1915; 1956; 1958a; 1958b; 1980.

7 Strawson put it in this way: “the duality of intuitions and concepts is in fact but one form or aspect of the duality which must be recognized in any philosophy which is concerned with human knowledge, its object, its expression or communication. These are three directions of the same philosophical concern rather than three different concerns” (1966, 47).

8 In this regard, Sellars (1968) and McDowell (1994) consciously or unconsciously follow the path traced by the Marburg school.

ers. Again, they conceive objects as merely logical *constructions* by means of the transcendental method (the discovery of the formal conditions of experience). In contrast, the Southwest Neo-Kantians accept the duality between intuitions and concepts, but also reject the idea that intuitions are the result of things-in-themselves affecting sensibility. Moreover, they also hold that there is no pure seeing that is not cognitively penetrated by intellectual faculties.<sup>9</sup>

The fourth and equally important distancing from Kant is a direct consequence of the third, namely the rejection of the Kantian notion of ‘the given’.<sup>10</sup> According to the members of the Marburg School, what is *given* to thought is already synthesized and as such already takes a propositional form.<sup>11</sup> Therefore, neo-Kantians must embrace some form of epistemic holism or coherentism in regard of perception.<sup>12</sup> To use Rickert’s distinction (Rickert 2015), what they reject is *Kenntnis* (acquaintance). The ‘given’ always takes the form of *Erkenntnis*, that is, a propositional knowledge of truths.

The fifth distancing from Kant is also noteworthy. From the neo-Kantian perspective, Kant makes a basic mistake in conceiving of knowledge in terms of the ‘representation’ of reality. Against this, members of both schools of Neo-Kantianism insist that knowledge is formative or creative, rather than representative in character, meaning that knowledge does not simply ‘copy’ an externally subsisting reality, but instead actively shapes the objects of the reality with which it is concerned.

In the light of all of these distancings, it becomes quite clear that one of the distinguishing marks of Neo-Kantianism is what we today call “conceptualism” or “intellectualism”.<sup>13</sup> In this regard, it is noteworthy, however, that neo-Kantians

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<sup>9</sup> In this regard, Rickert has an insightful view. He recognizes the key Kantian opposition between *Kenntnis* (knowledge by acquaintance) and *Erkenntnis* (propositional knowledge), assuming that *Kenntnis* results from the intuition of particulars: “the task of *Kenntnis* is evidently to be viewed as that which has reflected as faithfully as possible what is given to us in intuition” (2015, 389). However, he accuses Martin Heidegger, his own disciple, of attempting to reduce *Erkenntnis* to mere *Kenntnis*, as if only *Kenntnis* could capture the essence of things. That is what he calls “theoretical intuitionism” (2015).

<sup>10</sup> In this sense, the neo-Kantians anticipate Sellars (1968) and McDowell’s (1994) criticism of the so-called “myth of the given”.

<sup>11</sup> Cohen, for example, claimed that thinking accepts nothing *as given*, but rather discovers in each *generation*. Taking these cues from the study of the history of differential calculus, Cohen ends up arguing that each fact is generated by thought and determined by its position in a logically necessary system. Regarding this, see also Natorp (1882a; 1882b; 1887; 1888; 1894; 1901; 1904a; 1904b; 1910, 1912a; 1912b).

<sup>12</sup> See Cassirer (1957, 11).

<sup>13</sup> McLear suggests the word “sensiblism” in opposition to intellectualism. “Sensiblism” is the claim that sensible intuition places us (or represents or presents) object independently of the

never charged Kant for not being an intellectualist. Instead, their implicit charge is that Kant is not intellectualist enough.

We can easily locate Cassirer's great contributions within this broad framework. As a member of the second generation of the Marburg School, Cassirer distances himself from Kant in all five of the ways I just described. He rejects Kant's mentalism, Kant's notion of noumena, Kantian dualism between intuitions and concepts,<sup>14</sup> Kant's notion of 'the given', and the Kantian conception of knowledge as representation rather than formation and creation. In a nutshell, Cassirer's neo-Kantianism is by far the best illustration of conceptualism or intellectualism in philosophy of mind and epistemology, namely, as a top-down account of knowledge according to which objects are 'constituted' by the 'transcendental method'.

From a systematic viewpoint, the evidence favoring non-intellectualism over intellectualism is overwhelming.<sup>15</sup> But that is not my concern here. I have two basic reasons for this. First, that would require another paper, leading me far afield.<sup>16</sup> Second, it makes little sense (at least to me) to criticize neo-Kantianism

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intervention of concepts. Intellectualism, in contrast, is the claim that our intentional relation with objects crucially depends on conceptualization of the given. See McLear (2011; 2016). I use both labels 'nonconceptualism' and 'non – intellectualism' interchangeably but meaning what McLear has in mind.

**14** Cassirer's view is that there is no "merely sensory consciousness, that is, a consciousness remaining outside of any determination by the theoretical functions of signification and preceding them as an independent datum" (1957, 8). He also goes further and insists that even space and time are on the same footing as the synthetic functions generally attributed to thought, or the understanding. Rather than passively given "intuitions", they are parts of the active, cognitive process of determination from which the object of scientific experience is born. See Cassirer (1957, 182, 412, 433, 439).

**15** On the phylogenetic scale, I assume as an empirical fact that genuinely perceptual systems appear in animal species well before belief and propositional attitudes. Although bees, frogs, pigeons, goldfish, and octopi, for example, lack beliefs and, hence, lack demonstrative concepts and singular thoughts, they have low-level visual representational systems. In fact, the best explanations of some of these low-level representational systems attribute perceptions of physical objects in space and rudimentary properties.

**16** In regard to Kantian nonconceptualism, see my papers (2001; 2004; 2010; 2012; 2013; 2014; 2015; 2016a; 2016b; 2017a; 2017b; 2018; 2019). Hanna has listed at least seven compelling pieces of evidence against intellectualism. Here they are:

(1) From infant and non-human animal cognition: Normal infants and some non-human animals are capable of perceptual cognition but lack possession of concepts. Therefore, normal infants and some non-humans are capable of non-conceptual cognition with non-conceptual content.

(2) From phenomenological fineness of grain: Our normal human perceptual experience is so replete with phenomenal characters and qualities that we could not possibly possess a concep-

in general and Cassirer in particular from a systematic viewpoint since neo-Kantianism is one of the great milestones in the history of contemporary continental philosophy and Cassirer is certainly its most influential and important exponent.

So, what is the aim of this essay? Even when distancing himself from Kant on many different points, Cassirer never ceased to be a reader of Kant. Given this, I've selected as the focus of this paper Cassirer's reading of Kant's conception of unity of space and the role of imagination. Cassirer's neo-Kantian reading is largely in conformity with the mainstream of intellectualist Kant-scholars, which unsurprising, given his own intellectualist view of space and perception and his rejection of the existence of a 'merely sensory consciousness' as a 'formless mass of impression'. I argue against Cassirer's reading by relying on a Kantian distinction first recognized by Rickert, between *Kenntnis* (roughly knowledge by acquaintance) and *Erkenntnis* (roughly propositional knowledge). Correspondingly, I claim that concepts and categories are conditions for *Erkenntnis* of objects as such, namely for thinking of and apprehending the pre-existing unity as an object, rather than for the 'constitution' of this very unity. In the

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tual repertoire extensive enough to capture them. Therefore, normal human perceptual experience is always to some extent non-conceptual and has non-conceptual content (See Sect. III).

(3) From perceptual discrimination: It is possible for normal human cognizers to be capable of perceptual discriminations without also being capable of re-identifying the objects discriminated. But re-identification is a necessary condition of concept-possession. Therefore, normal human cognizers are capable of non-conceptual cognitions with non-conceptual content (See Sect. III).

(4) From the distinction between perception (or experience) and judgment (or thought): It is possible for normal human cognizers to perceive something without also making a judgment about it. But non-judgmental cognition is non-conceptual. Therefore, normal human cognizers are capable of non-conceptual perceptions with non-conceptual content.

(5) From the knowing-how versus knowing-that (or knowing-what) distinction: It is possible for normal human subjects to know how to do something without being able to know that one is doing it and without knowing precisely what it is one is doing. But cognition that lacks knowing-that and knowing-what is non-conceptual. Therefore, normal human subjects are capable of non-conceptual knowledge-how with non-conceptual content.

(6) From the theory of concept-acquisition: The best overall theory of concept-acquisition includes the thesis that simple concepts are acquired by normal human cognizers on the basis of non-conceptual perception of the objects falling under these concepts. Therefore, normal human cognizers are capable of non-conceptual perception with non-conceptual content.

(7) From the theory of demonstratives: The best overall theory of the demonstratives 'this' and 'that' includes the thesis that demonstrative reference is fixed perceptually, essentially indexically, and therefore non-descriptively by normal human speakers. But essentially indexical, non-descriptive perception is non-conceptual. Therefore, normal human speakers are capable of non-conceptual perception with non-conceptual content (Hanna 2008, 44). See also Hanna (2006; 2008; 2011; 2015).

first step of the B-Deduction, Kant proves that we cannot *think* of something given to a sensible intuition in general as an object without categories, while in the second step he proves that without categories we cannot *apprehend* the pre-existent unity of space **as an object**.

Even though nonconceptualism or anti-intellectualism is a controversial claim as a reading of Kant's philosophy, I am not going to defend it directly: the textual evidence favoring the nonconceptual reading of Kant is overwhelming.<sup>17</sup> My support of the nonconceptualist reading here is a case of the inference-to-the-best-explanation. The novelty of this paper is that the nonconceptualist reading provides the solution of the second step of the B-Deduction (and what makes the A-Deduction clearer).

How will I proceed? After this historical digression, where I have tried to scrutinize the relations between Kantians and Neo-Kantians and locate Cassirer's contribution, the remainder of this paper is divided into three major sections. The first one is devoted to an exposition of Cassirer's conceptualist reading of Kant's theory of intuition. From the viewpoint of a nonconceptualist reader, every statement by Cassirer about the relation between intuition and concepts is unacceptable, in particular his reading of metaphysical deduction. Here I take the side of the nonconceptualist reader.

However, the real bone of contention is Kant's concept of unity of representations.<sup>18</sup> The second section is devoted to refuting Cassirer's reading.

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**17** Hanna (2011) enlisted the following key passages:

"Objects can indeed appear to us without necessarily having to be related to functions of the understanding. (CPR A 89/B 122; emphasis added)

Appearances can certainly be given in intuition without functions of the understanding. (CPR A 90/B 122; emphasis added)

Appearances might very well be so constituted that the understanding would not find them in accordance with the conditions of its unity. ... [and] in the series of appearances nothing would present itself that would yield a rule of synthesis and so correspond to the concept of cause and effect, so that this concept would be entirely empty, null, and meaningless. Appearances would none the less present objects to our intuition, since intuition by no means requires the functions of thought. (CPR A 90–1/B 122–23; emphasis added)

That representation which can be given prior to all thinking is called intuition. (CPR B 132)

The manifold for intuition must already be given prior to the synthesis of the understanding and independently from it. (CPR B 145; emphasis added)

Concept differs from intuition by virtue of the fact that all intuition is singular. He who sees his first tree does not know what it is that he sees." (V-Lo/Wiener AA 24, 905). See also Hanna (2011, 404–403).

**18** In view of space limitations, I cannot consider Kant's conception of the 'given' and Cassirer's reading of it.

## 2 Cassirer's Intellectualist Reading of Kant

Cassirer's account of experience can be divided into two complementary phases. In his influential book (1923), *Substance and Function*, he understands the Kantian notion of experience in the sense of scientific experience. Here, he clearly follows Cohen's interpretation of the first *Critique*, *Theorie der Erfahrung*. Accordingly, perception is seen as nothing more than observation in scientific experiments.

In this regard, in *Substance and Function*, Cassirer assumes a hyper-intellectualism. First, observations are theory laden. An observation in scientific experiments can only have a determinate content if the relevant concepts of a theory (and the inferential relations between them) are represented in the particular observational content in question. But the key claim is the following. There is no duality between concepts and observations. Instead, concepts must be seen as constitutive elements of what is itself given – of what the very observation in question consists in.

In the second phase of Cassirer's argument, that is, in the third volume of his *Philosophy of Symbolic Forms*, Cassirer extended this hyper-intellectualist view of sense experience to his account of perception outside science. Consider this:

For there is no seeing and nothing visible which does not stand in some mode of spiritual vision, of ideation. A seeing and a thing-seen outside of this "sight," a "bare" sensation preceding all formation, is an empty abstraction. The "given" must always be taken in a definite aspect and so apprehended, for it is this aspect that first lends it meaning. This meaning is to be understood neither as secondary and conceptual nor as an associative addition: rather, it is the simple meaning of the original intuition itself. (Cassirer 1957, 134)<sup>19</sup>

The fundamental idea is again quite clear. First, there is no seeing without concepts. *We can see something only with 'the eyes of the mind'*. A bare sensation is nothing but an empty abstraction. Therefore, there is no given *simpliciter*. What we can be 'given' is already something sensible but conceptually determined.

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<sup>19</sup> Cassirer's claim gains some plausibility when we consider what is today called the hypothesis of cognitive penetration. The hypothesis that perception is cognitively penetrable holds that cognitive states such as beliefs, desires, and possibly other states can causally influence perceptual processing in such a way that they end up determining subjects' perceptual contents or experiences. The philosophical significance of penetrability is easy to grasp: if perception is cognitively penetrable, then what we think literally affects how we see the world. But as I said, my concern in this paper is not primarily Cassirer's own philosophy, but rather Cassirer's intellectualist reading of Kant, in particular his reading of the key Kantian concept of a unity of representations in B-Deductions.

There is no intuition without concepts. The assumption that we could intuit without concepts is an “empty abstraction” or, to put it again in Sellars’s words, a myth, the so-called “myth of the given” (Sellars 1968). Thus, the extension of Cassirer’s hyper-intellectualism to the non-scientific field of perception in the third volume of his *Philosophy of Symbolic Forms* is this:

Applied to the problem of perception, this means that where we are concerned with distinguishing the world of prescientific consciousness from the constructive determinations of scientific cognition, we may look on perception itself as something relatively simple and immediate. In relation to these constructive determinations, it may appear as a simple datum, as something “given in advance.” But this by no means deprives us of the possibility, or relieves us of the obligation, of recognizing it in another context as something thoroughly mediated and conditioned. (Cassirer 1957, 10)

His idea that perception is deprived of conceptual determination is illusory. Even in the non-scientific field of perception there is always conceptual determination.

Now let us turn to Cassirer as a reader of Kant. First, he rightly claims that the objective Deduction is not only concerned with the foundation of empirical ordinary knowledge, but it “is also directed essentially toward the form of objective knowledge as we find it in the exact sciences, aiming at those principles through which the mere rhapsody of perceptions becomes a tightly enclosed unity, a system of empirical knowledge” (Cassirer 1953, 7). Yet, quoting the key passage of the metaphysical and transcendental B-Deduction (*CPR* B131– 32)<sup>20</sup>, he claims that:

The ‘I think’, the expression of pure apperception, must be able to accompany all my representations: “for otherwise something would be represented in me which could not be thought; in other words, the representation would either be impossible, or at least be, in relation to me, nothing.” (Cassirer 1957, 8)<sup>21</sup>

It seems obvious to me that on B 131– 32, Kant is not claiming that without the ‘I think’ I would not represent any object, but rather that this representation would be nothing for me, that is, a blind intuition that would not amount to cognition

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**20** B 131– 32 echoes the famous Kantian slogan: without thoughts or concepts, intuitions are blind (A 51/B 75).

**21** Kant’s original texts are a little different: “The I think must be able to accompany all my representations; for otherwise something would be represented in me that could not be thought at all, which is as much as to say that the representation would either be impossible or else at least would be nothing for me.” (B 131– 32)

(*Erkenntnis*). Quite a strong piece of evidence for this is the sentence that follows Cassirer's quote: "that representation that can be given prior to all thinking is called intuition" (*CPR* B 132). Likewise, by far the most natural and reasonable reading of the metaphysical deduction is the idea that we *derive* the categories of understanding when we *think* of the unity of representations in judgment as the reflection of the pre-existent unity of the manifold of sensible representations. For example, when "I carry a body, I feel the pressure of its weight". Now when I think of this unity between the particular body and the property "weight," I think "it, the body, is heavy" (*CPR* B 142); that is, I think of it on the basis of the categorical judgment S is P. What emerges is the category of substance: an object with one or several properties.

However, in support of his intellectualist reading of the metaphysical deduction Cassirer quotes the troublesome text that constitutes the second step of the B-Deduction:

When, then, for example, I make the empirical intuition of a house by apprehension of the manifold contained therein into a perception, the necessary unity of space and of my external sensuous intuition lies at the foundation of this act, and I, as it were, draw the form of the house conformably to this synthetical unity of the manifold in space. But this very synthetical unity remains, even when I abstract the form of space, and has its seat in the understanding, and is in fact the category of the synthesis of the homogeneous in an intuition; that is to say, the category of quantity, to which the aforesaid synthesis of apprehension, that is, the perception, must be completely conformable. (Cassirer 1957, 11–12)<sup>22</sup>

Yet, this passage echoes back to the even more troublesome footnote at B 160:

Space, represented as **object** (as is really required in geometry), contains more than the mere form of intuition, namely the comprehension of the manifold given in accordance with the form of sensibility in an intuitive representation, so that the form of intuition merely gives the manifold, but the formal intuition gives unity of the representation. In the Aesthetic I ascribed this unity merely to sensibility, only in order to note that it precedes all concepts, though to be sure it presupposes a synthesis, which does not belong to the senses but through which all concepts of space and time first become possible. For since through it (as the understanding determines the sensibility) space or time are first given as intuitions,

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<sup>22</sup> Kant's original text: "Thus if, e.g., I make the empirical intuition of a house into perception through apprehension of its manifold, my ground is the necessary unity of space and of outer sensible intuition in general, and I as it were draw its shape in agreement with this synthetic unity of the manifold in space. This very same synthetic unity, however, if I abstract from the form of space, has its seat in the understanding, and is the category of the synthesis of the homogeneous in an intuition in general, i.e., the category of quantity with which that synthesis of apprehension, i.e., the perception, must therefore be in thoroughgoing agreement" (*CPR* B 162).

the unity of this a priori intuition belongs to space and time, and not to the concept of the understanding (Sect. 24) (*CPR* B 160n; original emphasis in bold)

In this troublesome footnote, Kant reminds us that in his *Aesthetic* he claimed that unity of space and time precedes all discursive concepts, including the discursive concepts SPACE and TIME, as the form of the sensible intuition. Yet, he now adds that the unity of space and time presupposes a synthesis that cannot be given by the senses. The product of this synthesis is what he calls a ‘formal intuition’, that is, the result of the determination of the sensibility by the understanding. The question is: does this ‘formal intuition’ mean the same as the previous ‘pure intuition’? Has Kant changed his mind in-between the two editions of the *Critique*?

Cassirer’s view follows the mainstream of intellectualist readers of Kant in this regard:

For it is now the function of knowledge *to build up and constitute the object*, not as an absolute object but as a phenomenal object, conditioned by this very function. What we call objective being, what we call the object of experience, is itself only possible if we presuppose the understanding and its a priori functions of unity. We say then that we know the object when we have achieved synthetic unity in the manifold of intuition. (Cassirer 1957, 5; emphasis added)

... without the synthesis of apprehension, reproduction, and recognition, we should have neither a perceiving nor a thinking ego – there would be an *object* neither of pure thought nor of empirical perception. (Cassirer 1957, 8; emphasis added)

Now, by quoting this passage from B 162 of the B-Deduction, Cassirer is claiming that the unity of space underlies the synthesis of the homogeneous according to the category of quantity. According to this intellectualist reading, there is no difference between ‘formal intuition’ and ‘pure intuition’. In both cases, without the unity performed by the apperception according to concepts, the world of perception would be a “mere formless mass of impression” (Cassirer 1957, 8).

The careful reader must remember that in the *Transcendental Aesthetic*, Kant not only claims that space and time are the forms of sensible intuition. He also claims to have proven that space and time are pure intuitions; that is, they are not only the form of what appears to our outer and inner sense, but also immediate and singular representations of space (*CPR* A 25/B 39) and of time (*CPR* A 32/B 47), that is, immediate and singular representations of the spatiotemporal forms. In the particular case of space, Kant quite clearly claims that without any concepts whatsoever, including the concept of space, we are already able to represent an “infinite magnitude” (*CPR* B 40), the object of our outer sense.

The pure intuition of space is a paradigmatic case of nonconceptual content: without the category of quantity or any other spatial concept whatsoever, the subject is able to represent an infinite magnitude, but unable to represent it *as an infinite magnitude*, that is, without recognizing what “an infinite magnitude” means in discursive terms. Kant goes beyond this and wonders how such pure intuitions are possible. It is at this moment that he introduces a further crucial concept: forms of human sensibility. We can only immediately represent a priori the forms of what appears to our outer sense and inner sense because those forms of appearances lie a priori in us as formal constitutions of our human sensibility (CPR B 41).

Be that as it may, the intellectualist/conceptualist reader has the onus of explaining why Kant characterizes the Deduction as unavoidable as follows:

Objects can indeed appear to us without necessarily having to be related to functions of the understanding. (CPR A 89/B 122; emphasis added)

Appearances could after all be so constituted that the understanding would not find them in accord with the conditions of its unity.... [and] in the succession of appearances nothing would offer itself that would furnish a rule of synthesis and thus correspond to the concept of cause and effect, so that this concept would be entirely empty, nugatory, and without significance. Appearances would nonetheless offer objects to our intuition, for intuition by no means requires the function of thinking. (A 90 – 1/B 122 – 23; emphasis added)

To begin with, a distinction must be made here between strong and weak forms of conceptualism. According to the first, sensible intuitions already involve concepts, that is, there is nothing sensible that is not conceptually determined. In contrast, according to the second, there are sensible intuitions without concepts. However, without concepts, sensible intuitions are nothing more than a manifold of sensations without reference and devoid of representational content. While the Southwest School seems to embody a weak form of intellectualism, the Marburg School clearly endorses a strong form of intellectualism. Yet, in this regard, Cassirer seems to hesitate. On one hand, he claims that there is no seeing without the eyes of the intellect, clearly assuming a strong intellectualist view and reading of Kant’s philosophy. On the other hand, he seems to admit that the existence of a “mere formless mass of impressions” (Cassirer 1957, 8) is at least conceivable.

The question now is: what does Cassirer have in mind with a “mere formless mass of impressions” (Cassirer 1957, 8)? In his own words:

For the reality of the phenomenon cannot be separated from its representative function; it ceases to be the same as soon as it signifies something different, as soon as it points to another total complex as its background. It is mere abstraction to attempt to detach the

phenomenon from this involvement, to apprehend it as an independent something outside of and preceding any function of indication. For the naked core of mere sensation, which merely is (without representing anything), never exists in the actual consciousness; if it exists at all, it is the prime example of that illusion which William James called ‘the psychologist’s fallacy’. (Cassirer 1957, 141)

The ‘mere formless mass of impressions’ is a case of what James called the psychological illusion, namely the fallacy, of reading into the mind he is examining what is true of his own; especially of reading into lower minds what is true of higher ones. That entitles us to assume that for Cassirer, Kant’s statements on A 90 – 1/B 122 – 23 show that he’s not contemplating a real metaphysical possibility (nonconceptualism), but only an epistemic possibility (namely that the world could appear to us as a “mere formless mass of impression” without categories) that must be excluded at the end of the B-Deduction. Without this assumption the intellectualist cannot make sense of what Kant states on A90 – 1/B122 – 23, let alone of the second step of the B-Deduction.<sup>23</sup> Given this, the main role of the Deduction is to show that even if it is conceivable that objects can appear to us without necessarily having to be related to functions of the understanding (the existence of a “mere formless mass of impression” (Cassirer 1957, 8), this epistemic possibility is only a conjecture to be ruled out in the Deduction.

That echoes Allison’s reading of the Deduction (Allison 2015). Allison’s assumption here is that without categories, our experience would undergo a radical phenomenological change. It would be reduced to a “mere formless mass of impressions” or, to use the famous words of William James, to a great blooming, buzzing confusion.<sup>24</sup> Why does Allison think so? Because as a conceptualist, he truly believes that the understanding is not only the power that makes us understand what is given to our senses but also the power that makes us understand that what we intuit and perceive exists mind-independently as an object. As the rule-giver for a synthesis of imagination, the understanding is also the power of creating intentional objects out of the chaotic sensory manifold given to our senses. It is as if the unification of the manifold of sensory states in accordance

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**23** According to Gomes, Kant is contemplating “a mere epistemic possibility to be eliminated later (in the Deduction) as an unreal metaphysical possibility” (Gomes 2014, 6). Gomes reminds us (2014, 6) that Kant uses the indicative “can” (können) in the formulation on A 89/B 122, as opposed to the subjunctive “could” (könnten) on A 90 – 1/B 122 – 23. The first is a stark hint signaling that he takes the possibility of objects appearing without categories as real, while the second is a mere epistemic possibility to be eliminated later.

**24** That is exactly what Strawson (1966) called the “sense-datum theory” or “sense-datum hypothesis”.

with rules were a real mental act that assembles the pieces of a puzzle to form a picture of reality.

However, the intellectualist hypothesis that without concepts our cognitive life would be reduced to a “mere formless mass of impression” lacks textual support. There are only a few passages in the A-Deduction that could, when misread, suggest Allison’s skeptical scenario. One of them is Kant’s statement on A 107 that “inner perception is empirical and forever variable”. But this certainly does not mean that without apperception and categories our introspective self-knowledge would be a chaotic manifold of sensory states. Nevertheless, the most important passage is this one:

Unity of synthesis in accordance with empirical concepts would be entirely contingent, and, were it not grounded on a transcendental ground of unity, it would be possible for a swarm of appearances (*ein Gewühle von Erscheinungen*) to fill up our soul without experience (*Erfahrung*) ever being able to arise from it. But in that case all relation of cognition (*Erkenntnis*) to objects also disappear, since the appearances would lack connection in accordance with universal and necessary laws, and would thus be intuition without thought, but never cognition (*Erkenntnis*), and would therefore be as good as nothing for us. (*CPR* A 111; emphasis added)

On a closer look, however, Kant’s swarm of appearances is not Cassirer’s “mere formless mass of impressions” devoid of representational content. Kant is clearly assuming that a swarm of appearances can fill up our souls, that is, that objects can appear to our senses without *Erfahrung* and *Erkenntnis*. Cassirer’s mistake is to take *Erkenntnis* to mean *mere representations of objects*. Instead, ‘*Erkenntnis*’ is a technical term.<sup>25</sup> *Erkenntnis* is neither the representation of objects nor the representation of mind-independent particulars. Instead, it is the realization that what we represent nonconceptually and mind-independently by the senses in fact exists mind-independently.

### 3 The Nonconceptualist reading of the B-Deduction

Let me now provide you with a sketch of the B-Deduction in light of my nonconceptualist reading of Kant. The starting point must be the exact statements on A 89/B 122 and A 90 – 1/B 122 – 23 taken as a real metaphysical possibility. However, independently of any concepts, we do not experience a “mere formless mass of

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<sup>25</sup> See Rickert, 1888; 1896; 1899a; 1899b; 1900; 1902; 1907; 1909; 1910; 1911; 1913, 1914; 1921; 1924a; 1924b; 1926; 1928; 2015.

impressions” devoid of reference. Instead, we mind-dependently directly represent (*kennen*) mind-independent particulars, albeit without knowing that they exist mind-independently. The first thing to note is that if this really is Kant’s starting point, Cassirer’s assumption that on A 89/B 122 and A 90–1/B 122–23 Kant is not contemplating an epistemic possibility to be ruled out later makes little sense. Moreover, since according to nonconceptualism we do possess direct access to objects, it makes little sense to assume that for Kant the relation to object is always mediated by a synthesis according to concepts.

Let us remember why the Deduction seemed necessary to Kant. Since we do not possess an *intellectus archetypus*, there is no direct link between the categories of the understanding and our sensible intuition: the understanding cannot create an object, which means that its concepts can be empty. Likewise, sensibility cannot make sense of what it represents, which means that it can represent blindly. That is the problem with the Deduction: since categories are not conditions of the nonconceptual representation of objects by sensible intuition and vice-versa, how can we prove that categories apply to the object nonconceptually represented by the senses? How can we prove that objects nonconceptually represented by the senses fall under categories? In the face of the heterogeneity of intuitions and concepts, the transcendental Deduction requires a *tertium quid* (third or intermediate term) that links categories to the appearances of the sensibility: cognition (*Erkenntnis*) or the possible experience of objects.

In the first step of the B-Deduction, this *tertium quid* first assumes the form of the transcendental apperception. If mind-independent objects could indeed be represented nonconceptually by sensible intuitions without necessarily having to be related to functions of the understanding, then “something would be represented in me that could not be thought at all, which is as much as to say that the representation would either be impossible or else at least would be nothing for me” (CPR B 132).

But the pressing question is: why does the B-Deduction need a second step? Let us take a further look at the passage of §24:

The pure concepts of the understanding are related through *the mere understanding to objects of intuition* in general, without it being determined whether this intuition is our own or some other but still sensible one, but they are on this account mere forms of thought, through which no determinate object is yet *cognized*. (CPR B 150; emphasis added)

In the first step of the B-Deduction, the *tertium quid* that links the categories of the understanding to objects nonconceptually represented by the senses is the propositional thought that those objects represented by the senses exist objectively or mind-independently. Thus, concluding the first step of the B-Deduction,

I could think of those objects represented by the senses only as existing objectively or mind-independently, e. g., by judging that bodies are heavy if I think of them according to categories. For, as Kant put it in his *Prolegomena*, categories are just “the condition for determining judgments as objectively valid” (*Prol*, §39, AA 04: 324). According to the example provided by Kant, my categorical judgment that bodies are heavy can only be objectively true or false if I *think* of bodies as material substances in space and heaviness as one of their properties (*CPR* B 142). Until now, Kant has proven (if anything) that the nonconceptually directly represented objects of a sensible intuition in general must fall under categories whenever I *think* about them and make judgments about them.

Now, according to Kant, the new *tertium quid* is the so-called figurative synthesis or synthesis speciosa “as an effect of the understanding on the sensibility” (*CPR* B 154). Now, if intellectualists have the problem of making sense of Kant’s statement on A 90 – 1/B 122–23, the non-intellectualist finds an insuperable obstacle in the role of the imagination in the B-Deduction. For one thing, for non-intellectualist readers, every synthesis of Kant’s must be nonconceptual and as such independent from categories. Indeed, in the transcendental B-Deduction, Kant places imagination under the control of the understanding. In § 24 Kant refers to a pure and a priori synthesis of sense representations, which he names figurative synthesis, or alternatively, transcendental synthesis of the imagination, and states that this synthesis of the imagination is an “effect” (*Wirkung*) resulting from the action of the understanding on sensibility, meaning with this that the transcendental synthesis necessarily conforms to concepts of the understanding (*CPR* B 152). Commenting on the parallel passage of the A-Deduction, Cassirer is clear in this regard:

Yet this transcendental function of the imagination is not grasped in its core even where an attempt is made to reduce it to apperceptive rather than mere reproductive processes. True, this seems to constitute a decisive step beyond any sensationalist foundations, for apperception not only signifies the apprehension and subsequent synthesis of given impressions but also represents a pure spontaneity, a creative act of the spirit. (Cassirer 1957, 159)

Moreover, even in the metaphysical deduction, Kant seems already to subordinate the syntheses of imagination to the understanding. In this regard, Cassirer states:

The same action which imparts unity to the different representations in a logical judgment also gives to the mere synthesis of different representations in an intuition a unity which, expressed in general terms, is the pure concept of the understanding. The categories on which the system of mathematical and physical cognition is founded are accordingly the same as those on which our concept of the natural world rests... *This right is grounded in the supposition that every synthesis – even the synthesis which makes objective perception,*

*the perception of 'something' possible – is subordinated to the pure concepts of the understanding.* (Cassirer 1957, 11; emphasis added)<sup>26</sup>

If Cassirer is right, then (i) Kant's doctrine on imagination in the first edition does not seem to be coherent with his doctrine in the second edition, and (ii) even in the first edition, there seems to be a contradiction between the metaphysical and the transcendental Deductions: while in first Kant claims, according to Cassirer, that every synthesis is subordinate to categories, in the A-Deduction he seems to admit the possibility of apprehension and reproduction without recognition through concepts.<sup>27</sup> The easiest way to deal with these incongruent scenarios consists in claiming that Kant simply realized that his A-Deduction was a mistake: there is no apprehension without concepts. Yet, for some reason he missed the opportunity to revise the metaphysical deduction.

However, the revision had to go deeper. If the claim that objects can appear to us in space and time without necessarily having to be related to functions of the understanding is metaphysically impossible, why did he write his *Transcendental Aesthetic*? Longuenesse (1998) is the only conceptualist reader who is coherent in this respect. She clearly sees that if Kant's statements on A 89/B 122 and A 90–1/B 122–23 are metaphysically impossible, we face the challenge of rereading the *Transcendental Aesthetic*. Now, considering that Kant rewrote his Deduction several times and his Refutation dozens of times, why did he never rewrite his *Transcendental Aesthetic*? Pace Longuenesse (1998), any reading of the second step of the B-Deduction that entails a rewriting of the *Transcendental Aesthetic* is self-refuting.

However, the obstacle is removed when we bear in mind that what is in question in the Deduction is not the possibility of *representing objects* or the possibility of *representing what is subjectively given to the senses as existing mind-independently*. Instead, what is in question is the possibility of *Erfahrung* and of *Erkenntnis*. In the first step of the B-Deduction, Kant states that categories are necessary for *thinking* that something given to an intuition in general is an object. Yet, *Erkenntnis* requires more than thinking. It requires intuition. Thus, in the second step, this *Erkenntnis* requires that the sensible form of the *apprehension* of something given to our senses as something that exists objectively or mind-independently is subordinate to categories. This is Kant's figurative synthe-

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<sup>26</sup> Kant's original texts are a little different: "The same function that gives unity to the different representations in a judgment also gives unity to the mere synthesis of different representations in an intuition, which expressed generally, is called the pure concepts of understanding" (CPR B 104–5).

<sup>27</sup> In this scenario, the synthesis would be possible, albeit "in vain" (CPR A 103–4).

sis, defined metaphorically as “an effect of the understanding on the sensibility” (*CPR* B 154).

The key phrase for making sense of the footnote is what Kant emphasizes in boldface: “as an object”. Kant must provide the grounds for natural science and geometry. Without showing that categories are conditions for the sensible apprehension of objects as objects, natural science and geometry would be groundless. That is what in the second step he calls *formal intuition* (in opposition to pure intuition), that is, the sensible apprehension of a pre-existing unity *as a unity (as an object)*. From this, it follows that: (i) formal intuition and pure intuition are different concepts, (ii) Kant never changed his mind about the role of the imagination, and (iii) even though the sensible apprehension of space as an object requires that the synthesis of the homogeneous is determined by the category of quantity, we can apprehend unities without categories.

Kant’s main argument of the second step of the B-Deduction can be formulated in a very simple and persuasive way. The first premise is the factual one according to which we do in fact apprehend space as existing mind-independently (figurative synthesis). The second is conditional: we do apprehend space as a mind-independent particular *if* we represent it as a homogeneous magnitude according to the category of quantity. Now, by applying *modus ponens* to both premises, we are entitled to conclude that the category of quantity applies to space and a fortiori to everything in it.

This insight also provides an easy reading of the troublesome footnote. What Kant had in mind with “space, represented **as an object** as is really required in geometry” (*CPR* B 160n, Kant’s own emphasis in bold) is not space as the intentional object of our outer sense, neither is it space as a particular existing mind-independently. Instead, what he meant is the apprehension of space as something existing mind-independently. Likewise, “the formal intuition that gives unity of the representation” (*CPR* B 160n) is not a replacement for pure intuition, the representation of the form of intuition, but rather the apprehension that the representation of space is as a mind-independent object.

## Bibliography

References to Kant’s works are given in the German Academy edition: *Gesammelte Schriften*, herausgegeben von der Königlich Preussischen Akademie der Wissenschaften, 29 vols. (Berlin: 1902–1983; 2d ed., Berlin: De Gruyter, 1968, for vols. I–IX). They are indicated as follows: abbreviation of the title of the work, followed by AA., volume, and page. For the *Critique of Pure Reason*, the references are shortened, in keeping with current practice, to the pagination of the original edition indicated by A for the 1781 edition and B for the 1787 edition. All translations in

this essay are taken from P. Guyer and A. Wood's translation of *Kant's Critique of Pure Reason* (Cambridge: Cambridge University Press, 1998)

Allison, Henry E. (2015): *Kant's Transcendental Deduction. An Analytic-Historical Commentary*, Oxford.

Beiser, Frederick C. (2015): *The Genesis of Neo-Kantianism*, New York.

Cassirer, Ernst (1923): *Substance and Function*. Chicago and London: Open Court.

Cassirer (1957): *The Philosophy of Symbolic Forms. Vol. 3: The Phenomenology of Knowledge*. Translated by Ralph Manheim. New Haven and London: Yale University Press.

Cohen, Hermann (1877): *Kants Begründung der Ethik*, Berlin.

Cohen, Hermann (1889): *Kants Begründung der Ästhetik*, Berlin.

Cohen, Hermann (1902): *System der Philosophie, Erster Teil: Logik der reinen Erkenntnis*, Berlin.

Cohen, Hermann (1904): *Ethik des reinen Willens*, Berlin.

Cohen, Hermann (1966): *Die Religion der Vernunft aus den Quellen des Judentums*, Darmstadt.

Cohen, Hermann (1977): *Logik der reinen Erkenntnis*, in: *Werke, Band V*, Hildesheim, Zürich, New York.

Cohen, Hermann (1984): *Das Prinzip der Infinitesimal-Methode und seine Geschichte*, in: *Werke, Band V*, Hildesheim, Zürich, New York.

Cohen, Hermann (1987): *Kants Theorie der Erfahrung*, in: *Werke, Band I.3*, Hildesheim, Zürich, New York.

Gomes, Anil (2014): *Kant on Perception: Naive Realism, Non-Conceptualism, and the B-Deduction*, in: *Philosophical Quarterly*, 64 (254), pp. 1–19.

Hanna, Robert (2006): *Kant, science, and human nature*, Oxford.

Hanna, Robert (2008): *Kantian Nonconceptualism*, in: *Philosophical Studies*, 137 (1), pp. 41–64.

Hanna, Robert (2011): *Kant's Non-Conceptualism, Rogue Objects, and The Gap in the B Deduction*, in: *International Journal of Philosophical Studies* 19 (3), pp. 399–415.

Hanna, Robert (2015): *Cognition, content, and the a priori: A study in the philosophy of mind and knowledge*, Oxford.

Lask, Emil (1905): *Rechtsphilosophie*, Heidelberg.

Lask, Emil (1923): *Rechtsphilosophie*, in: *Gesammelte Schriften, Band I*. Freiburg, Leipzig. Liebmann, Otto (1912): *Kant und die Epigonen: Eine kritische Abhandlung*, Berlin.

McDowell, John (1994): *Mind and World*, Cambridge.

Natorp, Paul (1882a): *Descartes' Erkenntnistheorie. Eine Studie zur Vorgeschichte des Kritizismus*, Marburg.

Natorp, Paul (1882b): *Galillei als Philosoph*, in: *Philosophische Monatshefte* 18, pp. 193–229.

Natorp, Paul (1887): *Über objektive und subjektive Begründung der Erkenntnis*, in: *Philosophische Monatshefte* 23, pp. 257–286.

Natorp, Paul (1888): *Einleitung in die Psychologie nach kritischer Methode*, Freiburg, Leipzig.

- Natorp, Paul (1894): *Religion innerhalb der Grenzen der Humanität*, Freiburg, Leipzig.
- Natorp, Paul (1901): *Zur Frage der logischen Methode. Mit Beziehung auf Edmund Husserl's Prolegomena' zur reinen Logik*, in 6 Bänden, pp. 270–283.
- Natorp, Paul (1904a): *Allgemeine Psychologie*, in *Leitsätzen zu akademischen Vorlesungen*, Marburg.
- Natorp, Paul (1904b): *Sozialpädagogik: Theorie der Willenserziehung auf der Grundlage der Gemeinschaft*, Stuttgart.
- Natorp, Paul (1910): *Die logischen Grundlagen der exakten Wissenschaften*, Leipzig, Berlin.
- Natorp, Paul (1912a): *Allgemeine Psychologie nach kritischer Methode*, Freiburg, Leipzig.
- Natorp, Paul (1912b): *Kant und die Marburger Schule*, in: *Kant-Studien* 17, pp. 192–221.
- Pereira, Roberto (2001): *Referência e Juízo in Kant*, in: *Analytica*, 6, pp.79–117.
- Pereira, Roberto (2004): *Conteúdos não-conceituais Kantianos*, in: *O que nos faz Pensar* 28, pp. 25–50.
- Pereira, Roberto (2010): *Nem conceitualismo nem não-conceitualismo*, in: *Manuscrito* 33 (2), pp. 467–495.
- Pereira, Roberto (2012): *Disjuntivismo em Kant*, in: *Aurora*, 24, pp. 129–155.
- Pereira, Roberto (2013): *What is Nonconceptualism in Kant's philosophy*, in: *Philosophical Studies* 164, pp. 223–254.
- Pereira, Roberto (2014): *Nonconceptualism*, in: *Compêndio em Linha de Filosofia Analítica*, pp. 1–32.
- Pereira, Roberto (2015): *Relativizing the Opposition between Content and State Nonconceptualism*, in: *Abstracta* 8 (2), pp. 17–30.
- Pereira, Roberto (2016a): *The Constitutional View*, in: *Principia* 20 (2), pp 165–177.
- Pereira, Roberto (2016b): *Combining the representational and the relational view*, in: *Philosophical Studies* 137, pp. 255–269.
- Pereira, Roberto (2017a): *Nonconceptualism or de re Sense: a new Reading of Kantian Intuition*, in: *Abstracta* 10, pp. 45–64.
- Pereira, Roberto (2017b): *A nonconceptualist reading of the B-Deduction*, in: *Philosophical Studies* 174, pp. 425–442.
- Pereira, Roberto (2018): *Misunderstanding the role of Concepts in Kant*, in: *Kant-e-Prints*, pp. 6–25.
- Pereira, Roberto (2019): *What Kant Has to Teach Us About What Mary Learns*, in: *Borderless Philosophy* 2, pp. 257–276.
- Rickert, Heinrich (1888): *Zur Lehre von der Definition*, Tübingen.
- Rickert, Heinrich (1896): *Die Grenzen der naturwissenschaftlichen Begriffsbildung: Eine logische Einleitung in die historischen Wissenschaften*, Tübingen, Leipzig.
- Rickert, Heinrich (1899a): *Fichtes Atheismusstreit und die Kantische Philosophie*, Berlin.

- Rickert, Heinrich (1899b): Kulturwissenschaft und Naturwissenschaft, Tübingen, Leipzig.
- Rickert, Heinrich (1900): Psychophysische Causalität und psychophysischer Parallelismus, in: B. Erdmann et al. (eds.): Philosophische Abhandlungen. Christoph Sigwart zu seinem siebenzigsten Geburtstage, Tübingen, Leipzig, pp. 59–87.
- Rickert, Heinrich (1902): Die Grenzen der naturwissenschaftlichen Begriffsbildung. Eine Logische Einleitung in die historischen Wissenschaften, Tübingen, Leipzig.
- Rickert, Heinrich (1907): Geschichtsphilosophie, in: W. Windelband (ed.): Die Philosophie im Beginn des 20. Jahrhunderts. Festschrift für Kuno Fischer, Heidelberg, pp. 321–342.
- Rickert, Heinrich (1909): Zwei Wege der Erkenntnistheorie. Transcendentalpsychologie und Transcendentallogik, in: Kant-Studien 14, pp. 169–228.
- Rickert, Heinrich (1910): Vom Begriff der Philosophie, in: Philosophische Aufsätze, Tübingen, Leipzig, pp. 3–36.
- Rickert, Heinrich (1911): Lebenswerte und Kulturwerte, in: Logos 2, pp. 131–166.
- Rickert, Heinrich (1913): Vom System der Werte, Tübingen, Leipzig.
- Rickert, Heinrich (1914): Über logische und ethische Geltung, in: Logos 19, pp. 182–221.
- Rickert, Heinrich (1921): System der Philosophie. Erster Teil: Allgemeine Grundlegung der Philosophie, Tübingen, Leipzig.
- Rickert, Heinrich (1924a): Das Eine, die Einheit und die Eins. Bemerkungen zur Logik des Zahlbegriffs, Tübingen, Leipzig.
- Rickert, Heinrich (1924b): Die Probleme der Geschichtsphilosophie. Eine Einführung, 2. Aufl., Heidelberg.
- Rickert, Heinrich (1926): Kulturwissenschaft und Naturwissenschaft, Tübingen, Leipzig.
- Rickert, Heinrich (1928): Der Gegenstand der Erkenntnis. Einführung in die Transzendentalphilosophie, 6th ed., Tübingen, Leipzig.
- Rickert, Heinrich (2015): Knowing and Cognizing. Critical Remarks on Theoretical Intuitionism, in: S. Luft (ed.): The Neo-Kantian Reader, New York, pp. 384–395.
- Sellars, Wilfrid (1968): Science and metaphysics. Variations on Kantian Themes, New York.
- Strawson, Peter F. (1966): The Bounds of Sense, London.
- Windelband, Wilhelm (1892): Geschichte der Philosophie, Freiburg.
- Windelband, Wilhelm (1894): Geschichte und Naturwissenschaft. Rede zum Antritt des Rectorats der Kaiser- Wilhelms, Strasbourg.
- Windelband, Wilhelm (1900): Platon, Stuttgart.
- Windelband, Wilhelm (1911): Die Geschichte der neueren Philosophie in ihrem Zusammenhange mit der Allgemeinenkultur und den besonderen Wissenschaften, Leipzig.
- Windelband, Wilhelm (1915): Präludien. Aufsätze und Reden zur Philosophie und ihrer Geschichte, Band I, Tübingen.
- Windelband, Wilhelm (1956): History of Ancient Philosophy, New York.
- Windelband, Wilhelm (1958a): A History of Philosophy, Vol. I, Greek, Roman, Medieval, New York.
- Windelband, Wilhelm (1958b): A History of Philosophy, Vol. II, Renaissance, Enlightenment, and Modern, New York.
- Windelband, Wilhelm (1980): History and Natural Science, in: History and Theory 19, pp. 165–185.

Windelband, Wilhelm (2015): Introduction to A History of Philosophy with Special Reference to the Formation and Development of its Problems and Conceptions, in: S. Luft (ed.): *The Neo-Kantian Reader*, New York, pp. 299–313.