

Past Present



# About the “Parting of the Ways”: Three Roads or Four?

## Schlick’s Reviews for the *Vierteljahrsschrift für wissenschaftliche Philosophie und Soziologie* and Husserl’s Phenomenology

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1 – Between 1910 and 1916 Moritz Schlick (1882-1936) actively collaborated with the journal *Vierteljahrsschrift für wissenschaftliche Philosophie und Soziologie* founded by Richard Avenarius and then directed by Paul Barth with the help of the neo-Kantian philosopher Alois Riehl. After the publication of the essays “Die Grenze der naturwissenschaftlichen und philosophischen Begriffsbildung” (1910, 34: 121-142) and “Das Wesen der Wahrheit nach der modernen Logik” (1910, 34: 386-477), starting from 1911 he worked intensely as a reviewer contributing 30 articles of variable length, the first one of which was on Paul Natorp’s *Die logische Grundlagen der exakten Wissenschaften* (1910) and the last one being on Hans Cornelius, *Transzendente Systematik. Untersuchungen zur Begründung der Erkenntnistheorie* (1916).

These reviews<sup>1</sup> are evidence of Schlick’s ample interests, interests which ranged from publications on his own specific field of research – epistemology – to works regarding areas that nowadays we call philosophy of exact and natural sciences, but that at the time were clearly distinguished into two areas: *Wissenschaftstheorie* and *Naturphilosophie*.

Schlick deals not only with logic, the foundation of mathematics, probability, causality and the laws of nature, but also with the philosophical implications of the most recent developments of biology, and especially of physics, with particular attention to relativity theory. He also delves into the area of history of philosophy, both the ancient and (especially) the modern one, reviewing books on Descartes, Hume, Kant and Boutroux. Moreover, among the authors reviewed we can number some of the most representative philosophers of the time: Natorp, James, Enriques, von Kries, Dingler, Cornelius, Schröder, Stumpf, Driesch, Wundt. On the whole, Schlick’s reviews – often interspersed with clever and witty remarks – express interesting points of view both at a specific and at a general level. Here I am mentioning some examples.

<sup>1</sup> They were brought to the attention of scholars by Massimo Ferrari who ‘catalogued’ them and their contents in a paper published in the Vienna Circle Institute Yearbook (2003).

When reviewing the German translation of Federigo Enriques' *Problemi della scienza* – written by the then young and little known Kurt Grelling – Schlick acknowledges various merits to the Italian mathematician, but does not remain tacit over the weak points of his philosophical thought. In particular, he distances himself from Enriques' attempt to find a “physiological foundation for logical thinking” (Schlick 1911e: 268) and deems debatable his attempt at eliminating the absolute on the grounds of its being a contradictory concept (see Schlick 1911e: 267-268). On the basis of this and other critical remarks, Schlick comes to the conclusion that Enriques' work, in spite of being on the whole “highly worthy of attention”, bears a weightier relevance for its “noteworthy contributions to the logic of sciences” than for the “principles of its theory of knowledge” (see Schlick 1911e: 269).

Such view can be shared or not; it is nevertheless difficult to deny that it is a well-pondered evaluation as well as a motivated one, an evaluation that should be discussed going deeply into the theses supported by Enriques. This needs saying as many Italian scholars still display preconceived and partisan views regarding both Enriques and his ‘opponent’ Croce, without an appropriate consideration of their positions. This leads to the still continuing tendency to enmesh in essentially rhetorical discussions, most of which rest on tortuous argumentations of a ‘legalistic’ nature. Such scholars often do not even engage in an attentive critical discernment of the way in which both Enriques and Croce related to those scientists and philosophers who exercised a strong influence on their thinking (Mach and Poincaré *in primis*).

Another piece of criticism worth mentioning is the one expressed in regard to Hugo Dingler. In reviewing *Die Grundlagen der Naturphilosophie* (1913), Schlick observes that in the renewed field of the philosophy of nature we can identify three research paths: the metaphysical one (represented, for example, by Ernst Heinrich Haeckel's monism and Wilhelm Ostwald's energeticism), the one of a prevalently epistemological nature (represented by neo-Kantian thinkers such as Natorp, positivists such as Ernst Mach and empiricists such as Erich Becher), and finally the one of a preeminently methodological character. In spite of having to note some unacceptable inaccuracies in the use of fundamental philosophical terms such as “a priori”, “transcendent” and “logic”, Schlick deems Dingler's work “the purest example” (Schlick 1915a: 375) one can find in this third field of research, and this notwithstanding the fact of this book having been dedicated to Ostwald and having been deeply influenced by Mach. As a matter of fact, Schlick does not show himself completely convinced by Dingler's thesis that it is possible to see “every problem of the theory of knowledge” as “a methodological problem”; this, though, does not keep him from appreciating Dingler's ability in showing how the

solution of some particularly difficult issues (as the psycho-physical problem and the one of the freedom of the will) "can be found via a simple reflection on the scientific method" (Schlick 1915a: 375). Such ideas left a trace in the subsequent neo-empiristic discussions on physicalism and the status of the principle of causality.

We should also highlight the irony with which Schlick sheds a certain way of defending Kant common in that period (and that we can still hear today). He reviews Ludwig Goldschmidt's *Zur Wiedererweckung Kantscher Lehre* (1910), where the author defended "Kant's pure doctrine from attacks and misunderstandings" (Schlick 1911c: 261) and exhorted scholars to "study Kant instead of criticizing him" and not dare an "evaluation prior ensuring of having fully understood him" (Schlick 1911c: 262). Schlick approvingly quotes these admonishments, but at the same time wittily remarks that if one does not provide an "objective criterion to evaluate whether we fully understood Kant or not", the above mentioned wise request is destined to remain "hovering in the air (*in der Luft schweben bleiben*)" (Schlick 1911c: 262). This leads also to the suspicion that following good old Goldschmidt, according to whom once fully analysed "all criticisms [to Kant] are grounded on misunderstandings", can benefit "science progress" (and possibly even the "new awakening" of Kantian doctrines) to a lesser degree than well thought out criticism (Schlick 1911c: 261 f.). Such observations may be also seen as indicative of the future complicated relationship between Kant and logical empiricism. Actually, if logical empiricists (in particular Schlick, Reichenbach and Carnap) strongly criticized Kant's theory of synthetic a priori judgements, in other respects – as it was later acknowledged – they are also those 20<sup>th</sup> century philosophers who were capable of keeping alive and making most fruitful some important teachings offered by Kant.

What is striking, moreover, is also Schlick's stigmatization of the fallacy – fairly frequent in those years and today still present in some degree – of inferring what is and what is not starting from what we can or cannot define or know,<sup>2</sup> and the idea (which is superficial in his view) that we can provide a proof of realism, or at least ridicule anti-realism, observing how nature existed even before man became part of it.<sup>3</sup> This idea made itself heard again in the last few decades, for example in Michael Devitt's thought (1984/1991/1997: 238).

Schlick also frequently and vehemently criticises the old philosophy of na-

<sup>2</sup> As far as defining is concerned, we need to look at the review of Enriques (Schlick 1911e: 268). On knowing, see the reviews of Hertz (Schlick 1916d: 378) and Boelitz. In the one of Boelitz, Schlick criticises Boutroux who denied the existence and the objective necessity of becoming because they cannot be proved (Schlick 1911f: 441).

<sup>3</sup> See the review of Volkman (Schlick 1912a: 293).

ture inspired by Schelling<sup>4</sup> and warns against the bad habit of philosophizing on questions pertaining to scientific matters as well as philosophical ones ignoring the most recent acquisitions in the fields of exact and natural sciences or not looking into them deeply enough. When reviewing Max Rubner (Schlick 1913a), Karl Camillo Schneider (Schlick 1913b), Carl Stumpf (Schlick 1911g: 443) and Becher (Schlick 1916a), Rubner's conviction that no philosophical system "can go its own way" ignoring the results of modern science of nature (Schlick 1913a: 143) takes up a significant place as an evaluation criterion. More specifically, in the review on Stumpf, Schlick very favourably quotes the thesis according to which the rebirth of philosophy has to pass through its founding on natural sciences (Schlick 1911g: 443). Roughly a decade later a similar position was upheld by a younger battlefield companion of Schlick's: Hans Reichenbach. Reichenbach, in fact, collected the interpretations of the philosophical meaning of relativistic theory advanced by Einstein, himself and Schlick under the label "relativistic conception" rightly in order to highlight how such interpretations set out "not to incorporate the theory [of relativity] into some philosophical system, but rather to formulate the philosophical consequences of the theory independently of any point of view, and to assimilate them as a permanent part of philosophical knowledge" (Reichenbach 1921-22/1978: 30).

2 – Among the reviews published in *Vierteljahrsschrift für wissenschaftliche Philosophie und Soziologie* there are some – the ones chosen here and translated into English – that seem to me particularly relevant. They allow us to reach a more articulated description of the development of Schlick's thought and via this to a better focusing on the situation in which the philosophy of the first three decades of the past century found itself in. Especially the reviews of Natorp, Aurel Voss and Max Frischeisen-Köhler offer interesting inspirational points useful for reconstructing Schlick's theoretical path in the years spanning the period from the already quoted 1910 essay on the essence of truth to the 1917-1918 phase which saw him presenting his first epistemological synthesis in the short volume on space and time in contemporary physics and in the ponderous *Allgemeine Erkenntnislehre*. Furthermore, if we evaluate these same reviews in the light of the contrast between Schlick and Husserl on the problem of knowledge and intuition, they shed increased clarity on the *number* and *kind* of theoretical alternatives at play in that 'parting of the ways' that occurred in the early decades of the last century and marked the destiny of philosophy with consequences that can still be felt today.

<sup>4</sup> See the review of Schneider: "A thing of such kind is poetry, not scientific psychology" (Schlick 1913b: 145).

What clearly emerges from the three above-mentioned reviews, dating between 1911 and 1913, is that along the three ways of the 'received view' (Cassirer, Heidegger, Carnap), Husserl's phenomenological perspective presented itself as a further well differentiated path of research with its attempt at solving the problem of the constitution and knowledge of the object *integrating* the conceptual-discursive component and the empirical-intuitive one as both *internal* moments of the cognitive process. Strikingly enough, in these reviews the future author of the *Allgemeine Erkenntnislehre* (1918<sup>1</sup>) – who in the essay "Gibt es intuitive Erkenntnis?" (published in the same journal and in the same year, 1913, of the review of Frischeisen-Köhler) had already questioned the possibility of an *intuitive knowledge* – does not show such an adverse reaction to intuition as the one he displays both in his 1918 work and the following ones of the Vienna period, in particular the three lectures on form and content given in 1932 (Schlick 1932/1979). On the contrary, here Schlick develops a severe criticism of those conceptions that posit at the centre of knowledge the moment of the intellectual elaboration relegating to a second position, or totally overlooking, the role played by empirical-intuitive components. Moreover, as I shall expound later, such attitude leads him to a significant appreciation of an important aspect of Husserl's phenomenology.

In his review of Natorp, Schlick attacks the neo-Kantian refusal of the Kant's intuition/thought opposition. On the basis of such rejection - Schlick observes - "not just all of the twelve Kantian categories, but also the concepts of time and space" are considered as "products of pure thought" (Schlick 1911a: 256 = *infra*: 163). This allows him to assign to Transcendental Logic "an ever greater scope than" (Schlick 1911a: 255 = *infra*: 161) the one it enjoyed in the *Critique of Pure Reason*, where we can find a part (Transcendental Aesthetic) devoted to treating the autonomous faculty of pure intuition with its two forms, space and time.

Schlick considers "unfortunate" (Schlick 1911a: 256 = *infra*: 163) this neo-Kantian position (rightly called "logical idealism" [Schlick 1911a: 255 = *infra*: 162]) and even comes to the point of speaking about it in terms of "maligned" intuition (Schlick 1911a: 257 *infra*: 164). According to him, proof of this is to be found just in Natorp's work where "All the concepts employed are of such an abstract nature that the reflection cannot comprehend them at all without automatically creating intuitive images, while language proceeds completely by means of metaphors in describing them" (Schlick 1911a: 257 = *infra*: 163). So we "are ultimately left with the impression ... that here we do not by any means have the only possible and necessary tool to understand these difficult issues and that much what seems to have resulted from the original principle stems, in reality, from the intuitive images used" (Schlick 1911a: 257

= *infra*: 163). While “Kant rested content ‘discovering’ (*entdecken*) the categories” on the basis of a guiding thread (*Leitfaden*), “everything here is supposed to be developed «by way of pure thought»” (Schlick 1911a: 257 = *infra*: 163 f.). Several times Natorp rejects “as unreasonable that logic should at some point in these derivations «take refuge to the ‘given’ real (*‘gegebenen’ Wirklichen*)»” (Schlick 1911a: 257 = *infra*: 164). Thus “every reference to psychological facts, in particular to perception, is condemned, since facts are not given but rather the goals of the infinite process of knowledge” (Schlick 1911a: 257 = *infra*: 164). And Natorp scolds Kant for speaking “of an a priori sensory manifold, which transcendental logic has as its material (*Stoff*)” (Schlick 1911a: 257 = *infra*: 164).

In short, Schlick sees as the “source of almost all errors” detectable in Natorp the failing to recognise the role of intuition and the consequent “attempt to deduct everything from «pure thought»” (Schlick 1911a: 260 = *infra*: 167). According to him, it is necessary to oppose oneself to this way of surpassing Kant on the basis of the dangerous idea that “the most primal being (*das ursprünglichste Sein*) is the logical” (Natorp quoted in Schlick 1911a: 257 = *infra*: 164). For Schlick, “It is not Kant’s spirit [...] but it is Hegel’s spirit that speaks from these pages” (Schlick 1911a: 257 = *infra*: 164).

Voss’ small booklet on the essence of mathematics is blamed for an analogous undervaluing of intuition. Sharing some analogies with the position defended by Simmel in his lectures on Kant in 1903 (Simmel 1903/1905: 18-19), Schlick, even without quoting Simmel, firmly rejects another criticism of Kantian thinking that was fairly widespread in those years, namely that Kant’s conception of space and geometry had been refuted by the construction of non-Euclidean geometries. According to such criticism, the birth of these geometries showed with its very existence that the principles of Euclideanism did not enjoy that universal and necessary validity that Kant had ascribed to them when listing them under the heading of a priori synthetic judgements. Also Voss maintains this thesis. Schlick, though, accuses him of a “misunderstanding” precisely because he does not take into account that distinction between intuition and thought, unjustly discarded by Natorp and other neo-Kantians, that plays a fundamental role in Kant’s philosophy. Such distinction allows Kant to state that “the geometrical axioms are necessary for intuition but not for thought”. According to Kant, “only if they possessed the latter type of necessity would other contradictory axioms be excluded by the law of non-contradiction”. So the ‘to be’ neo-empiricist Schlick becomes an admired champion of Kant asserting that the “possibility to think mutually contradictory geometries is thoroughly in accordance with” Kant’s doctrine (Schlick 1911b: 261 = *infra*: 168).

Finally, in the third review – on Frischeisen-Köhler’s work on science and reality (*Wirklichkeit*) – Schlick has the opportunity to once again face the

problem (raised in the review on Natorp 1911a: 257 = *infra*: 164) of the relationship between thought and the 'gegebenen' *Wirklichen*. According to him, one cannot profitably discuss this topic without measuring oneself with the psychological dimension of the cognitive process, the one linked to perception, and therefore without measuring oneself with the *determined* aspect of knowledge, in other words – as Herbart had previously noted to criticize Kant's critical-transcendental conception (see Parrini 1994: 213-219) – with the character of determinacy proper of particular or specific cognitions (Schlick 1913c: 145 = *infra*: 169). Schlick sees the greatest merit of Frischeisen-Köhler's work precisely in the fact that it takes the problem of reality (*Realitätsproblem*) as a criterion to evaluate the feasibility of "the paths of the logical idealism of the Marburg School and the philosophy of value of Windelband and Rickert" coming to show that from such a perspective both roads appear to be "misguided" (Schlick 1913c: 145 = *infra*: 169).

Schlick also approvingly quotes the criticism applied by Frischeisen-Köhler to the "basic theory of the Marburg School, that objects pose an infinite task for cognition and are only determined by thinking". In Frischeisen-Köhler's view this thesis is to be considered erroneous because the object and the sensation itself "«must already possess a degree of determinacy prior to the act of cognition»"; otherwise cognitive activity would have no task to perform. Schlick then adds that it is "very remarkable ... the *phenomenological* proof [emphasis added] that the sensual world (*Sinnenwelt*) has its own inherent laws, «which we can retrieve by means of thinking but which do not for this reason appear dependent from the laws of thought or even derivable from them» (p. 97 ff.)" (Schlick 1913c: 145 = *infra*: 169).<sup>5</sup>

I stress again that such observations are contained in a text that appeared in the same issue of the same journal in which Schlick published an essay ("Gibt es intuitive Erkenntnis?") aimed against Husserl and the possibility of an intuitive type of knowledge. This complex attitude from his side is particularly meaningful in the light of the conclusions I will draw later on and therefore I shall deal with it again when speaking of the developments of Schlick's philosophy first in the *Allgemeine Erkenntnislehre*, and then in the Vienna phase. For the time being, I would like to conclude this overview of the articles translated here by briefly looking at the last two: the one on Richard Herbartz (*Prolegomena zu einer realistischen Logik*, 1916) and the one on Johannes von Kries (*Logik. Grundzüge einer kritischen und formalen Urteilslehre*, 1916). In both cases the relevant themes are different from the ones highlighted so far. We no longer find at their

<sup>5</sup> On the developments of this set of problems in the Vienna years, see Schlick 1932/1979: 356-360, and Parrini 1994: 213-219.

centre the debate on the neo-Kantian attempt at reabsorbing the intuitive moment in pure thought, and thus transcendental aesthetic in transcendental logic. At this point one of Schlick's main problems, which becomes a crucial topic in the *Allgemeine Erkenntnislehre*, is giving an account of the formation of those "absolutely precise" concepts that are characteristic of logical-mathematical disciplines and mathematical physics (Schlick 1918/1925/1974: 29). To tell the truth, this problem already started appearing in the 1911 review of Gerrit Manoury's *Methodologisches und Philosophisches zur Elementarmathematik* (1909) brought as an example of how the "point of view" of "radical empiricism" had been "abandoned by the contemporary philosophy of mathematics" (Schlick 1911d: 265). The increased centrality of this theme, though, leads now Schlick to coming closer to neo-Kantianism and concretizes itself in giving added value to the abstract-conceptual aspect of knowledge. This is testified by his last two reviews. Both date back to 1916, the year in which Schlick is about to publish *Raum und Zeit in der gegenwärtigen Physik* and the *Allgemeine Erkenntnislehre*. In the latter, fundamental work of his he introduces the method of implicit definitions as a way to build absolutely exact concepts, sides such definitions with coordinative conventions in order to establish a connection between the level of abstract concepts and the level of experience, elaborates the conceptions of knowledge as coordination and of truth as unique designation, and indicates in empirical verification (to which he had already given relevance in the review of Frischeisen-Köhler (Schlick 1913c: 147 = *infra*: 171) the criterion to establish such unique designation in the case of synthetic assertions in general and scientific theories and hypotheses in particular.<sup>6</sup>

In reviewing Herbertz' book, Schlick discusses the issue of the confusion between "the problem of reality (*Wirklichkeit*)" and the problem "of the knowledge of reality" (Schlick 1916d: 378 = *infra*: 172), a confusion that – as I said above – sometimes degenerates into the fallacy of denying the reality of something on the basis of the fact that this something is not knowable. With such discussion Schlick now aims at establishing some firm points that have reached full maturity: (i) the criterion of reality in its full sense has to be seen in perception (*Wahrnehmung*); (ii) the principle of contradiction can be considered as a criterion of truth only for analytic judgements; (iii) the "adjectives" 'true' and 'false' have to be applied "not to facts, but only to judgements that are coordinated (*zugeordnet*) to the facts"; and (iv) "the principle of non-contradiction is not a law of reality (*Wirklichen*), as Herbertz would like to claim (p. 5), but a rule that every coordination has to follow in order to be

<sup>6</sup> See also the concluding pages of the small volume on space and time in contemporary physics: Schlick 1917/1979: 266-267.

unambiguous" (Schlick 1916d: 380 = *infra*: 174). To put it succinctly, as already remarked by Kant (see Parrini 1994: 198-203), for Schlick too the principle of contradiction is not a *positive* criterion to establish the truth of synthetic judgements or our hypotheses and theories, but a purely *negative* criterion; in other words a *sine qua non* condition that such judgements, hypotheses and theories have to satisfy in order to be susceptible of truth, or in Schlick's conception, of an unambiguous coordination with the objects of experience.

In the review of von Kries – a philosopher not yet sufficiently acknowledged for his worth, though something is changing thanks to the attention given to his relationship with Reichenbach on the one hand and Max Weber on the other – some of the key ideas of Schlick's new conception of knowledge already emerge rather clearly. He appreciates the clarity with which von Kries reconsiders the distinction between 'matters of fact' and 'relations of ideas' (a bulwark of Schlick's mature philosophy, dating both to his Vienna and pre-Vienna phase) (Schlick 1916e: 381); he underlines the role that the author assigns to the idea of "interpretation" (*Interpretation*) as a connective tool (more or less indirect) between real judgements in their generality and that part of theirs "that refer to the immediate experiences of the thinking subject" (von Kries quoted in Schlick 1916e: 381 = *infra*: 175); he also affirms that reality judgements for which such tracing back to judgements of the second kind is not possible have to be considered "transcendent (*transzendent*). They are meaningless (*sinnlos*)" (Schlick 1916e: 381 = *infra*: 175).

Nevertheless, all these meaningful consonances do not keep Schlick from distancing himself from the reviewed book. Differently from von Kries, he does not believe that the above mentioned conceptions necessarily lead to "phenomenalism, i.e., to the view that extra-mental objects (things-in-themselves)", that certainly exist, "cannot be grasped at all" (Schlick 1916e: 381-382 = *infra*: 175). Referring back to the conception (then exhaustively illustrated in the *Allgemeine Erkenntnislehre*) that knowing consists in establishing a coordination between concepts and judgements, on the one hand, and objects on the other, Schlick considers the thesis of the unknowability of things-in-themselves as a consequence of the traditional but inadequate ideas of knowing as a form of representation and of truth as a mirroring of the known object. There is no ground for the existence of this thesis, though, when we adopt a new point of view according to which knowing is a form of designation and truth nothing more than a coordination or univocal designation. A true judgement is no longer something that corresponds to the object, if, by this correspondence, we want "to mean sameness or similarity" between the level of our representations and the one of objects: truth is only an unambiguous coordination between facts and judgements (Schlick 1918/1925/1974: 61).

This conception initially leads Schlick to adhere to a realist position in the light of which known objects, for their being designated objects, are qualified as transcendent and even denominated things-in-themselves. One needs to pay utmost care, though, not to misinterpret the sense of this move of his and not trip up on the inappropriate terminology used. Schlick does not intend to revive a form of metaphysical realism via the rehabilitation of Kant's thing-in-itself; he – like his mentor Max Planck – is only concerned to distance himself from Mach and avoid the dissolution of a body in a complex of sensations.<sup>7</sup> In a review of Cornelius published in the same year, 1916, he himself specifies that the objects he speaks about have to be intended not as “the unknowable thing-in-itself”, but as “the empirical knowable thing-in-itself” (Schlick 1916f: 386). We should nevertheless admit that on this point neither in his reviews nor in the *Allgemeine Erkenntnislehre*, Schlick achieves the needed clarity of expression and appropriacy of terminology. He continues speaking of the objects of knowledge as things-in-themselves, though in a sense different from Kant's (in other words, without referring to the notion of absoluteness), attracting to himself Carnap's rightful criticism as expressed in the *Aufbau*. Only after such criticism he convinces himself to abandon the old terminology and moves without any uncertainties and verbal ambiguity towards empirical realism – that empirical realism of a neo-positivist kind expounded in the Vienna period essay “Positivismus und Realismus” (1932) and prefigured in the above mentioned specifications contained in the review of Cornelius.<sup>8</sup>

3 – In the first three of the reviews here translated it is possible to see a testimony of Schlick's initial reactions on a crucial theme such as the relationship between the conceptual-discursive level and the empirical-intuitive one. In the review of Frischeisen-Köhler such reactions led him, as we could see, to ascribe an important merit to phenomenology: the comprehension that a specific ‘lawfulness’ independent of thought pertains to the world of the senses and that such specific ‘lawfulness’ is essential to explain that determined character of particular cognitions which the neo-Kantian approach does not seem able to give account of.

<sup>7</sup> Some critical remarks on Mach and Avenarius can be found in more than one of the reviews published in *Vierteljahrsschrift für wissenschaftliche Philosophie und Soziologie*, for example in the one of Enriques (Schlick 1911e) and the one of Friedrich Raab (Schlick 1916b). The problem of realism is of crucial importance also in the review of Frischeisen-Köhler (Schlick 1913c).

<sup>8</sup> On this question, see Parrini 2002, chapters 5 and 8. Chapter 5 (“Ontological Neutrality”) is a reworked Italian version of the paper “With Carnap Beyond Carnap. Metaphysics, Science and the Realism/Instrumentalism Controversy” in *Logic, Language, and the Structure of Scientific Theories*. Proceedings of the Carnap-Reichenbach Centennial. University of Konstanz, 21-24 May 1991, ed. by W. Salmon and G. Wolters, University of Pittsburgh Press - Universitätsverlag Konstanz, Pittsburgh-Konstanz, 1994).

Such acknowledgement is one of the numerous components of Schlick's complex attitude toward the phenomenological movement, an attitude that starting from the pages on Husserl in the previously mentioned 1910 essay on the essence of truth, changed and became more articulated over time ending up condensing and consolidating itself in a series of reasons for approval as well as criticism. As for the reasons of approval, Schlick does not only ascribe to phenomenology the merit of having contributed to bringing to light (in harmony with the budding logical empiricism deeply influenced by Frege's, Russell's and Wittgenstein's ideas) the inadequacies of logic's and mathematic's psychologistic conceptions. Since the *Allgemeine Erkenntnislehre*, he adds other important acknowledgments to this general merit. For example, Schlick observes how Husserl's theory of concepts rightly underlines that "in the thinker's consciousness, thinking of a concept takes place by means of a special experience that belongs to the class of contents of consciousness which modern psychology in the main calls 'intentional'. This term is applied to experiences that not only are there in consciousness but also contain a reference to something outside themselves" (Schlick 1918/1925/1974: 22). In Schlick's opinion, one cannot deny that the phenomenological school contributed in a fundamental way to the study of these intentional acts, and these contributions are comparable to those provided by Karl Stumpf, Oswald Külpe and their followers (see Schlick 1918/1925/1974: 23).<sup>9</sup>

Criticism, though, carries more weight than approval and leads Schlick to express an overall judgement that on the whole is more negative than favourable. His functionalistic and nominalist conception of concepts is in strong contrast with Husserl's theory according to which the formation of concepts presupposes a particular intuition, the eidetic or essence intuition (*Wesensschau*). Schlick criticises eidetic intuition and continues doing so also after retracting the accusation of Platonism that, because of a misunderstanding, he had originally moved to Husserl. More specifically, he criticizes Husserl's thesis connected rightly to that type of intuition about the existence of synthetic a priori judgments of a material kind that lay at the basis of material regional ontologies constituting the specifications of a formal ontology based on the laws of pure logic. In Schlick's view a similar thesis has to be considered even more unacceptable than Kant's theory of synthetic a priori judgements. Husserl was wrong not only in joining the notion of a priori to the one of synthetic (as it happened in Kant), but also in disjoining at the same time the notion of a priori

<sup>9</sup> In the review of Alfred Lehmann, though, Schlick observes that in studying psychological facts the author speaks in terms of "higher or lower probability" and that this "prudent way" of expressing himself is "in a beneficial contrast with the pretenses of phenomenological analysis" (1916c: 373).

from the one of form. He therefore makes a double mistake: to Kant's error of uniting synthetic and a priori, he adds the one – not committed by Kant – of disjoining a priori and formal. Kant, summing it up, was wrong in supporting the existence of synthetic a priori judgements, facing thus the refutations of the successive scientific developments, but did not make the added mistake of ascribing to them a material *vs.* a purely formal character such as the one owned by the principles of general logic and the analytic judgements that can be reduced to them (see Parrini 2012: 104-109).

What's more, Schlick ends up defending a conception of knowing as coordination that expels from it the intuitive moment and leads to a very fierce debate against those philosophies that purport the possibility of some kind of intuitive knowledge. Placing himself in indiscriminate opposition (and not without falling into dangerous misunderstandings) to both Bergson and Husserl as well as to the Russell's distinction between 'knowledge by acquaintance' and 'knowledge by description', he affirms that knowledge (*Erkenntnis*), differently from acquaintance (*Kenntnis*), is a relational process requiring as well as "the knower", the thing "that is known" (the object of knowledge) and the referral to a conceptual framework that allows us to specify "*as which*" the thing known "is known" (Schlick 1932: 320, 323). Intuition, instead, is a relation between an experiencing subject and something that is directly experienced; it is being acquainted with something which is there (for example, the greenness of a leaf I am perceiving). Therefore it has nothing to do with the cognitive relation. As he says both in the *Allgemeine Erkenntnislehre* and (almost 25 years later) in *Form and Content*, the most essential feature of knowledge is that in "knowing there are always two terms: *something* that is known and that *as which* it is known. In the case of intuition, on the other hand, we do not put two objects into relation with one another; we confront just one object, the one intuited" (Schlick 1918/1925/1974: 82). For Schlick, thus, "intuition and conceptual knowledge *do not at all strive for the same goal*; rather, they move in *opposite direction*" (1918/1925/1974: 82, emphasis added). Intuition is a form of identification or "immediate awareness" (Schlick 1932: 318) that has to do not with the cognitive activity, but with what in German is called *erleben* and in English *to enjoy*; and "when we lose ourselves in the enjoyment of the blue sky, there is 'blue' and nothing else" (Schlick 1932: 323).

In the literature on this topic scholars have frequently paid attention to the disagreements between Schlick and Husserl regarding the existence and the epistemological status of the so called materially a priori propositions. Considerably less attention, though, has been paid to the different characterizations that the two philosophers gave of the ways, the objects and the nature of knowledge, a topic that comprises the crucial problem of intuition and the

role of experience. An important exception is constituted by an essay by Roberta Lanfredini, "Schlick and Husserl on the Essence of Knowledge" (2003). It shows how the criticism moved by Schlick to Husserl on this theme is based on misunderstandings, starting from the erroneous conviction that for Husserl there is an *opposition* between two types of knowledge: a conceptual, discursive knowledge and an intuitive one. For Husserl, instead, knowledge "is the result" of the *integration* "between two components", the conceptual component and the intuitive one (Lanfredini 2003: 49). Moreover Schlick does not take into consideration the capillary articulation of Husserl's epistemological thought of which are integral part notions and distinctions that do not appear neither in his own thought nor in the one of other logical empiricists. I am referring, for example, to the notions of motivational links (*Motivation, motivieren*) (Lanfredini 2004: 171, 2006: 91-93; Parrini 2012: 90-91), intuitive filling, significant intention, filling intention (Lanfredini 2003: 47), intentional *morphé, hyletic* experiences, noesis and noema; or also to distinctions such as the one between communicability on the one hand and expressibility and comprehensibility on the other (Lanfredini 2003: 44-47); between experiencing (*erleben*) an 'immanent' content and apprehending (*auffassen*) or perceiving a 'transcendent' property or object; not to mention the sophisticated description Husserl gives both of intuition (that according to him cannot be superficially reduced to the notion of identification as it happens in Schlick) and the cognitive process, apropos of which he systematically evokes the distinction between the level of an abstract and conceptual meaning, of an 'empty' intentional act (Lanfredini 2003: 53), and the two distinct levels of filling intuition and intuitive filling.

I cannot look in detail into this set of problems (see Parrini 2012: 96-104). Be it enough here to observe that it is via an apparatus of distinctions and conceptual articulations such as the ones just mentioned that Husserl developed a conception of the cognitive process aimed rightly at satisfying a strong need experienced by the young Schlick: the realisation of an *integration* between the conceptual component and the intuitive one, an integration that in the early 1910s he deemed seriously compromised by the neo-Kantian rejection of the dualism between sensibility and intellect (present instead in Kant). As we saw, in the years following the reviews of Natorp, Voss and Frischeisen-Köhler, Schlick too orients himself toward a conception that widens the distance between the level of experience and the level of the absolutely precise concepts of exact sciences. He certainly does not go as far as to reabsorb the empirical-intuitive moment in the conceptual-discursive one as shown by the fact that in the passage from the first to the second edition of the *Allgemeine Erkenntnislehre* we see the accentuation of his concern to establish a connection between the level of

theory and the level of experience via the delving more in depth into the notions of coordination and coordinative convention. This idea, though, is developed in a general theoretical context increasingly anchored to the thesis, already present in the 1913 essay “Gibt es intuitive Erkenntnis?”, that there is an opposition, and not a cooperation, between intuition (regarding the enjoyment of life) and conceptual elaboration (regarding the level of knowledge).

Husserl, on the other hand, after the *Logische Untersuchungen* goes more and more in search of a description of the cognitive process in which its purely structural and formal component and its intuitive, qualitative and experiential one could go not, as it happens in Schlick, “in opposite directions” (1918/1925/1974: 82), but toward the same goal: the full realization of knowledge. For both philosophers knowing is a form of recognition (*erkennen*, not *kennen*), but for Husserl “recognizing necessarily implies an act of intuition – in other words, an act of perception or imagination” (Lanfredini 2003: 50-54). Only by recognizing in the intuitive experience an “integral part of knowledge” it is possible to explain the possibility of a “determined knowledge” (Lanfredini 2003: 50, 53), that determined knowledge which in the review of Frischeisen-Köhler Schlick had mentioned as a problem that the neo-Kantian conception could not solve rightly because it had done with the intuitive aspect of knowledge to the full advantage of its logical-conceptual dimension.

It seems to me that this tortuous and intricate story can add a brush stroke to that fresco of the relationship between logical empiricism and phenomenology that in the last few years has progressively become richer and richer, as well as shed light, partly a new light, on the ‘parting of the ways’ that affected European philosophy in the early decades of the 20<sup>th</sup> century. In recent years many works have shown the influence of Husserl’s thought on logical empiricism especially regarding Carnap’s conception of the constitution and foundations of logic and mathematics. Other publications have brought again to the fore some figures (Oskar Becker, Gustav Bergmann and Felix Kaufmann) that since the times of the Vienna Circle had felt the need to move between neo-empiricism and phenomenology. Besides, some philosophers are trying to show that in Husserl’s phenomenology we can find useful tools to face some classic problems of analytic philosophy in a new and more satisfying way.<sup>10</sup>

<sup>10</sup> For example, Rosado Haddock observes (maybe excessively, but not without any reason) that “Husserl did not die in 1891, as many analytic philosophers seem to believe, and they could profit much by reading Husserl’s *opus magnum*, *Logische Untersuchungen*, as well as some of his other masterpieces from *Ideen zu einer reinen Phänomenologie und einer phänomenologischen Philosophie I to Erfahrung und Urteil*. At least they should learn that there was a so-called continental philosopher who had more to say about issues typical of so-called analytic philosophy than some of the foremost analytic philosophers” (2012: 67). See furthermore *A Companion to Phenomenology and Existentialism*, ed. by H. L. Dreyfus and M. A. Wrathall, Blackwell, Oxford, 2006.

How can a close comparison between Husserl and Schlick contribute to enlarge and deepen this fresco? It seems to me, for example, that a more detailed reconstruction of the evolution of Schlick's thought – a thought that strongly influenced other logical empiricists – shows the problematic nature of the thesis purported some years ago by Barry Smith, according to which European logical positivism "is a part of the exact philosophical heritage of Brentano. More specifically, it is a reflection of the interplay of the intellectual and institutional influence of Brentano and his school with developments in logic and in the philosophy of physics inspired by Russell and Wittgenstein and by Mach and his successors in Vienna and Prague" (Smith 1989: 39). Certainly the tormented relationship with phenomenology documented by these reviews somehow reinforces Smith's interpretative framework because Husserl's thought has an undoubtedly Austrian matrix. At the same time, though, the strong distance that Schlick ends up taking from the phenomenological framing is an added proof of the weight that in the formation of his thought and logical empiricism in general was exercised by completely different traditions such as Kantism, Poincaré's conventionalism, the epistemology upheld by the German philosophers Helmholtz and Hertz and the 19<sup>th</sup> and early 20<sup>th</sup> century developments of exact and natural sciences.

The reviews here selected also allow us to make an interesting comparison with the 'parting of the ways' proposed by Michael Friedman in his 2000 volume *A Parting of the Ways. Carnap, Cassirer, and Heidegger*. This 'parting of the ways' symbolically took place in the course of the Davos meeting in 1929, a meeting that saw the delineation of a *three pronged* parting: the way developed by 55-year-old Cassirer, opened by the 1910 volume *Substanzbegriff und Funktionsbegriff* and culminated in the *Philosophie der Symbolischen Formen* (1923-); the way of hermeneutic-existential ontology inaugurated in 1927 by 40-year-old Heidegger with *Sein und Zeit*; and finally the way of the budding logical empiricism represented by 38-year-old Carnap present at the meeting after the publication, rightly the year before, of his masterpiece *Der logische Aufbau der Welt* (1928). In drawing this philosophical 'map' Friedman effectively explains that an essential component of the debate was its "neo-Kantian background" (Friedman 2000: 25), and more precisely the fact that both the neo-Kantian schools of the time – the Baden one, represented especially by Rickert, and the Marburg one, whose main representative was Cassirer – in spite of not having the same ideas regarding the relationship between logic-conceptual level and empirical-intuitive level, at least agreed on one point: the refusal of the "dualistic conception of mind characteristic of Kant's own position: the dualism, that is, between a logical, conceptual, or discursive faculty of pure understanding and an intuitive, non-conceptual, or receptive faculty of pure sensibility" (Friedman 2000: 28).

This point, as we saw, is also well documented by the criticism that Schlick aims at neo-Kantianism in his first reviews. These reviews, though, conjointly with the contrast between Schlick and Husserl on intuition, also show that in delineating the ‘parting of the ways’ it is impossible to focus the attention only on the three main figures of the Davos meeting. Essentially, Friedman introduces Schlick to discuss his relationship with Carnap (Friedman 2000: 121-127). As far as the phenomenological address is concerned, he limits himself to considering the role that Husserl plays within Heidegger’s and Carnap’s philosophy to remark how the very neo-Kantian rejection of “the idea of an independent faculty of pure intuition” is a feature “that associates the neo-Kantians with Husserlian phenomenology and, in particular, with the polemic against psychologism of the *Logical Investigations*” (Friedman 2000: 28; see also: 66-67, 93 n. 128). Thus he underlines the affinity of Husserl’s thought with Frege’s for having shown that the psychologistic conception of logic cannot be supported and that not even mathematics requires Kant’s faculty of sensible intuition (Friedman, 2000: 147). Moreover Friedman points to the fact that “Husserl’s notion of ‘essential intuition’, unlike Kant’s conception of pure intuition, is not associated with a distinction between two independent faculties of the mind, a logical or a discursive faculty and a sensible or non-discursive faculty” (Friedman 2000: 66).

Nevertheless – as shown by Schlick’s passage from the positions expressed in the reviews of Natorp, Voss and Frischeisen-Köhler to the increasingly marked polemic against the cognitive value of intuition – the space occupied by Husserl’s thought in the philosophy of the early 20<sup>th</sup> century cannot be limited to the influence exercised on Heidegger and to that criticism to psychologism that makes him akin to neo-Kantianism and the emerging neo-empiricism. Another crucial junction of the parting of the ways was the conception of intuition and its role in knowledge; and on this point Husserl’s philosophy sought and indicated its own way, a way that was different both from the one that ended up prevailing in Schlick and logical empiricism and the one that characterized the two neo-Kantian schools.

Marburg School and Baden School (or Southwest School) no doubt held different ideas regarding the possibility of “maintaining a complete divorce between” the logical realm and the psychological realm, and on the “relationship between the realm of pure logic and the ‘pre-conceptual’ manifold of sensation” (Friedman 2000: 29-37). However, neither in these two variations of neo-Kantianism nor in the most representative formulations of logical empiricism can we find an attempt to integrate intuition and concept such as the one we find in Husserl’s phenomenological view of knowledge. In other words, along the ‘ways’ that ‘came to blows’ in Davos, neo-Kantianism (Cassirer), logical

empiricism (Carnap), and the ontological-hermeneutical current (Heidegger), we need to ascribe full legitimacy to a fourth way 'represented' by Husserl and phenomenology. This for not only the deep influence that Husserl exercised on the formation of Heidegger's thought (as we always knew) and Carnap's (as it emerged only recently), but also and especially because phenomenology, as originally devised and developed by its creator, showed itself in all respects as a fourth option endowed with its autonomous theoretical consistency and capable of challenging the most recent developments of analytic philosophy.

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