

An Interpretation of the Divide, Analytical Philosophy and Continental Philosophy

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Abstract

The paper proposes the interpretative hypothesis that Analytical philosophy and Continental philosophy are two divergent epigones of Hegel's unrealized project for an alternative logic, which in the 1930s independently born as intuitionist mathematical logic. This perspective is supported by the interpretive patterns concerning the nature of these two schools and their main representatives, Quine and Heidegger, respectively. In conclusion a consideration about history of philosophy and its new perspective is added.

Keywords: Analytical Philosophy, Continental Philosophy, History of Philosophy, Classical and Intuitionist logic

Introduction

In last century philosophy split in two different schools: the Analytical one (AP) and the Continental one (CP). This paper advances the hypothesis that the AP and CP are the two divergent heirs ("epigones") of Hegel's unsuccessful project for an alternative kind of logic. After the formulation of classical logic as mathematical logic, AP assumed this assured logic as universal tool for examining problems in detail, aiming at precise and cumulative improvements. CP, by contrast, left orphan of a claimed systematic and formal way of logical arguing, persevered in the search of a new mode of thinking by empirically exploring both the entire realm of knowledge, which in the meantime was very greatly grown, and even the art.

Actually, in the same period of time research in mathematical logic developed formal systems beyond classical logic, In particular, intuitionist logic was formalized first by Heyting (1930) and then, as a true alternative to classical logic, by Kolmogorov (1932; Drago 2021). Later, the distinction between classical and intuitionist logic was characterized most precisely by the validity (or failure) of the law of double negation (Prawitz *et al.* 1968). From this perspective, the AP/CP divide can be interpreted as arising from the opposition between the assumed uniqueness of classical logic and the search for

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an alternative, now identifiable as intuitionist logic.

Moreover, since a method for recognizing intuitionist logic in both literary and scientific texts has been discovered (Drago 2009) the divide of the two kinds of logic can now be detected with considerable accuracy by examining philosophers' original texts. These two kinds of logic radically differ not only in mathematical formalism but also in natural language- and thus philosophical argumentation can likewise proceed according to one or the other.

This interpretation is corroborated by both an analysis of the main features of the two main representative philosophers of the two schools, William van O. Quine for AP and Martin Heidegger for CP and the obstruct met by the two schools to recognize the new kind of logic.

Levy's Review of the Analytical-Continental Divide

Although easily recognized, the two traditions, AP and CP, are notoriously difficult to define. AP resists characterization in terms of intrinsic philosophical commitments while CP is even harder to define, given its exploration of many domains of knowledge using a variety of methods. Moreover, "the relations between the camps [AP and CP] are characterized largely by mutual incomprehension".

From a historical perspective, it is striking that recent philosophical research has split into two almost incommunicable schools – and that this division persists without clear prospects for reconciliation. This split does not seem to arise from different answers to great philosophical questions or metaphysical problems. Rather, contemporary philosophy seems unable to reflect on itself deeply enough to identify the origins of this division.

For this reason, we must pursue a less conventional research path: to register and critically examine the philosophical opinions (*doxa*) about the AP/CP divide. One might suspect that this method cannot grasp the essential points of the issue. However, as we will see, recent developments in the history of science and mathematical logic allow us to move beyond this partiality and illuminate the deeper sources of the divide.

Let us start by quoting the opinion of Neil Levy who in 2003 wrote a clever paper about this distinction in the field of philosophical research.

"A number of writers have tackled the task of characterizing the differences between AP and CP. I suggest that these attempts have, indeed, captured the most important divergences between the two styles but have left the explanation of the differences mysterious. I argue that AP is usefully seen as philosophy conducted within a paradigm, in Kuhn's sense of the word, whereas CP assumes much less in the way of shared presuppositions, problems, methods and approaches..." (284)

Levy further opines that from the early twentieth century, the Western tradition has emerged with two divergent streams, the "Analytic" and the "Continental." Philosophers who follow each of these traditions restrict their ways of doing philosophy strictly

according to their fellow thinkers which has ultimately resulted in keeping the differences in tact. It is not surprising that the two traditions were a bit hostile. It is noteworthy that a few philosophers who were greatly acquainted with both the traditions could only see the nuances of the differences underlying them. Now, the times demand for a revisionary approach to see the divisions within philosophy.

I shall suggest that all [the recent attempts to characterize AP and CP fail to state clearly what all could function as criteria by which to classify philosophers or their works as belonging to the analytical or the continental. It is a truism that there are not such criteria, or so I shall contend.

He lists the following set of criteria already suggested in the philosophical literature to interpret this division:

Geography:

CP [developed]...in mainland Europe... But it is evident that this approach [to explain the division is insufficient: CP] cannot refer primarily to a place, any more than analytic can be entirely synonymous with "Anglo-American".

Style

At first Levy quotes another scholar:

What distinguishes analytical philosophy from other contemporary philosophy (though not from much philosophy of other times) is a certain way of going on, which involves argument, distinctions, and, so far as it remembers to try to achieve it and succeeds, moderately plain speech... it distinguishes sharply between obscurity and technicality (Williams vi).

Then he adds:

".... [whereas it is claimed] that CP is not rigorous.... [A] counter accusation frequently heard [is] that AP is a new scholasticism, where the concern for technique overwhelms the very problems that the techniques had originally been designed to solve." (287).

"CP is more "literary" than AP is. But, according to Levy, "merely stylistic differences are superficial..." (287).

Historical Origins and Reference Points

David Cooper, according to Levy, has made a clear stance for the difference lying on this level of explanation. Cooper claims that three themes run through the writings of the most influential continental thinkers... which have no similarity with that one may find in the analytical tradition. They are, "cultural critique, concern with the background conditions of inquiry and... 'the fall of itself'" (Cooper 4)

... [surely] "the political and social philosophy is more important in the Continental tradition than in the analytic. This in turn is at least in part the result of the relative lack of specialization by Continental philosophers, among which the myriad of subdisciplines into which AP divides itself... are relatively unknown" ... (Levy 287-288)

... Cooper's second theme [is] the "concern with the background conditions of enquiry." Because Continental philosophers typically tend to be politically engaged, they are more interested in the political stakes and conditions of knowledge, and thus in laying bare the *nonrational* factors that condition knowledge. This feature of CP is one with which many analytic philosophers are especially impatient, since they see in it a confusion of the context of discovery with the context of justification, or a commission of the genetic fallacy.

[Third theme:]... "anti-scientism" of Continental thought (Cooper 10) also deserves much attention. "Continental thinkers have often objected to the hegemony of science in modern culture, insisting that it represents neither the only kind of knowledge nor even the most basic kind. Instead, ... [it is] derived... from our more primordial existence in the *Lebenswelt*..." (Levy 288-289) In contrast, and as Cooper notes, "analytical philosophy has generally proved more friendly and sympathetic to science" (Cooper 10; Levy 288-289)

History

... Simon Critchley [suggested]... two tradition attitudes of history. CP, he argues, approaches its problems "*textually and contextually*"; it holds that "philosophical problems do not fall from the sky ready-made and cannot be treated as elements in some ahistorical fantasy of *philosophia perennis*" (Critchley 353-54). Because there are no such things as the eternal problems of philosophy - no problem of universals, for example, which might be traced from Aristotle to Armstrong - problems can only be approached in their historical context. (Levy 289)

Language.

Dummett argues that AP is defined by its concern with language: "What distinguishes AP, in its diverse manifestations, from other schools is the belief, first, that a philosophical account of thought can be attained through a philosophical account of language, and, secondly, that a comprehensive account can only be so attained." (Dummett 4) But this concern with language that he finds definitive of the school is in fact neither necessary nor sufficient.... (Levy 289)

Levy shows the insufficiencies of all these criteria: none is necessary and sufficient to give a satisfying explication.

In conclusion, I think that *CP does not form a school of philosophy and that this fact is of more than marginal importance. CP is not an ongoing research program, in the sense in which AP takes itself to be. We have to account for this difference, and I think we have the explanation we seek.* (289)

The Decisive Role Played by History of Sciences in Explaining the Difference Accounting for the Differences

What then could explain the division?... the attitude of each tradition toward science would be a great starting point in order to account for this long-lasting division. For AP, as we have noted, science occupies a central position. This is true with regard both to its subject matter- AP is more often realist, even reductively materialist – and to its style. AP, in Pascal Engel's words, "mimics, the scientific style of inquiry, which proposes hypotheses and theories, tests them in the light of data, and aims at widespread discussion and control by the peers" (Engel 222). In contrast, CP is closer to the humanities disciplines and literature. Once again, this is the case with regard both to content and to form. (290)

This remark leads Levy to take a clear address:

"I suspect that... the place of science in the two traditions is the most important element in any explanation of their difference..., i.e. the formal analogy it is possible to construct between, on one hand, AP and the physical sciences and, on the other, CP and the arts." (291)

Levy suggests taking as a basis the notion of paradigm introduced by Kuhn's illustration of the historical development of science.

My suggestion is this: Analytical tradition has successfully modeled itself on the physical sciences. Analytic philosophers more or less work on paradigms as what has been suggested by Kuhn, and the discipline is moving ahead in a similar way that the sciences are reproduced. CP has a quite different approach to its subject matter; a quite different model of what philosophy is (291)

Then Levy finds out many similar behaviors between paradigm-following scientists and analytical philosophers.

"AP, I suggest, is the philosophy built upon the acceptance of the work of Frege and Russell as a paradigm. Reassess the features of AP in the light of this suggestion and all these features we note suddenly fall into place... I am suggesting that the difference noted here is genuine, and that it stems from AP's being (something akin to) a normal science." (293)

[Instead]... work in CP proceeds in much the same manner as did work in physical optics prior to Newton. / In the absence of a paradigm.... We get fragmentation: the division of the discipline into rival schools. This is characteristic of pre-paradigmatic science, and it is, I have argued, characteristic of CP.... My suggested explanation of the differences between AP and CP... [:] the paradigmatic turn [of AP], and it modeled itself on normal science. (295)

After this important clarification, however, Levy encountered a problem:

... but [the above] is not a fully satisfying explanation. To achieve that, we need to go further, and explain *why* AP took the paradigmatic turn, *whereas* CP did not. (296)

... My –tentative- speculation is this: "modernity is characterized by two competing impulses, which find expression most distinctly in the natural science, on the one hand, and in modern (nonrepresentational) art on the other hand." (300) ... CP models itself on

modernist art, just as AP models itself on modern science. (301)

In conclusion, Levy characterizes AP by drawing on Thomas Kuhn's influential notion of a paradigm in the history of science. In his view, AP operates within a relatively stable and shared framework of concepts, methods, and standards — much as scientific research does within a paradigm — and thus seeks cumulative progress by refining problems and solutions within that established structure. I agree with Levy on this point: philosophy must learn from the experience of the history of science; by proposing several unprecedented theories of reality, science has also explored new paths of reasoning and argumentation which its history may reveal.

Jones' Interpretation of the Birth of the AP/CP Divide

A further analysis, complementary to Levy's, offers an important step forward along the same line of inquiry and allows us to place his insights within a broader philosophical context. Kile Jones proposes a particularly clear account of how the divide between Analytical and Continental philosophy emerged in the history of thought over the past two centuries. According to Jones, modern philosophy underwent a decisive bifurcation in the aftermath of German Idealism. On one side, a tradition took shape that emphasized clarity, logical rigor, linguistic analysis, and the close alliance of philosophy with the natural sciences — the tradition that would later be recognized as Analytical philosophy. On the other, a lineage emerged that prioritized historical consciousness, phenomenological description, existential concerns, and the critique of reason from within — the tradition that evolved into what we now call Continental philosophy.

Jones interprets this branching not as the result of a single historical event, nor as a mere divergence of style or subject matter, but as the expression of two fundamentally different conceptions of what philosophy is and what it ought to accomplish. Analytical philosophy sought precision and formal clarity, often aligning itself with the methodologies of mathematics and logic. Continental philosophy, by contrast, sought to respond to the profound transformations of culture, history, and subjectivity, exploring dimensions of experience that resisted formalization.

There were two distinct responses to Kant's metaphysical and epistemological theories: one by Hegel and much later the other by the Vienna Circle. Hegel rejected Kant's two-tiered world by advocating a strict ontological monism, while the Vienna Circle rejected Kant's synthetic *a priori* by dividing what can be known into tautologies and empirically verifiable data... (Jones 6)

Both branches, however, shared a crucial feature: they regarded logic as the essential innovation in the philosophical response to Kant. The Continental lineage, rooted in German Idealism, sought to develop dialectical logic — most notably in Hegel's project — as a dynamic and developmental alternative to Kant's static categories. The Analytical lineage, by contrast, eventually embraced classical logic, formalized in mathematical terms by Frege, Russell, and others, as the foundational instrument for philosophical

analysis.

Yet it is well known that both of these initial responses ultimately proved unsuccessful. Hegel's dialectical logic, despite its ambition to overcome the limitations of Kantian thought, failed to achieve systematic precision and formal rigor, and was largely set aside by later philosophers. Classical logic, for its part, while immensely powerful and fruitful within mathematics and the natural sciences, proved too narrow and restrictive to address many central philosophical issues — particularly those concerning meaning, subjectivity, historical development, and the very conditions of knowledge.

This dual failure created a conceptual vacuum in modern philosophy, a space in which neither approach fully satisfied the demands of post-Kantian thought. It is precisely within this vacuum that the subsequent divergence of Analytical and Continental philosophy took shape — two traditions that, while sharing a common origin in the response to Kant, developed along radically different paths as they sought to address the unresolved questions left by both dialectical and classical logic.

The school of *analytic philosophy*... originated around the turn of the twenty century as G.E. Moore and Bertrand Russell broke away from what was then dominant school in British universities, Absolute idealism. Many would also include [the famous logician] Gottlob Frege as a founder of analytic philosophy in the late 19th century. (*Internet Encyclopedia of Philosophy* 1)

As a historical fact,

G.E. Moore led the attack in Cambridge, rapidly convincing his colleague Bertrand Russell [against Absolute idealism]. Moore insisted on the importance of analyzing concepts; Russell, who was a philosopher of mathematics [and logic], developed a reductionist approach to knowledge called *logical* atomism and a general focus on particular logical problems in opposition to any sort of totalizing enterprise, both of which things led him away from the Hegelians. (Jones 5)

Among the figures associated with the rise of classical logic in philosophy, Bertrand Russell stands out as the most influential, not least because of the sheer breadth and impact of his writings over a long and productive life. For Russell, mathematical logic was not merely a technical tool but a foundational reference point for philosophical inquiry, shaping both his epistemology and his conception of philosophical method.

On the other hand, we should recall that G. W. F. Hegel's ontological monism had earlier proposed a radically different approach: a new kind of logic — dialectics — intended to reformulate the historical dynamics of reality according to the principle that "*the real is the ideal and vice versa*." Hegel hoped that dialectical logic would transcend the limitations of Kant's categories and capture the self-developing movement of reality itself. Yet, as is well known, Hegel's project ultimately failed to achieve general acceptance. Over time, distrust in Hegel's logic deepened, and philosophy moved in new directions.

In the wake of this failure, as Kile Jones summarizes, philosophers adopted two main strategies in responding to the challenge left by Kant and Hegel: on one side, the embrace

of formal, classical logic as the basis for philosophical clarity and scientific rigor; on the other, the pursuit of a more comprehensive, historically and existentially grounded approach to thought that remained open to new forms of reasoning beyond the classical model:

In England [...] Russell and Ayer constructed various theories of knowledge and methods of *logical* analysis. Over the Continent, existentialism adopted many of the teachings of phenomenologists and added issues of existence, freedom angst and absurdity. (6) order of the two propositions inverted; (*Italic added*)

In conclusion, the kind of logic was a necessary element in the interpretation of the AP/CP divide.

Interpretation of the Divide Through the New Basic Divide in Mathematical Logic

Now I go beyond Levy's suggestion to refer to Kuhnian history of science by suggesting investigating about a specific branch of science, logic, which, according to the quotation of the above Section played a decisive role in the history of philosophical thinking, because Hegel introduced the doubt that classical logic was no more the unique logic.

My hypothesis is to attribute to AP a basic affiliation to classical logic, conceived mainly as an assured method for local discussions on particular subjects; or also as a sophistication of popular conception of reasoning within classical logic; whereas CP remained influenced by the perspective of a possible new logic.

Let us remark that in that period of time mathematical logic, independently from philosophers, performed very innovative steps. First of all, it was mathematized, so that each vagueness of the basic notions was resolved by a mathematical formula.

Later, some candidates for an alternative mathematical logic to the classical one have been suggested. First was modal mathematical logic (Lewis 1914); yet, it was intuitionist logic that at last received a full formalization (Heyting 1930, or better Kolmogorov 1932; see Drago 2021).

Moreover in 1968 researchers of mathematical logic recognized in the failure or not of the double negated law the deep separation between the two major kinds of mathematical logic, i.e. intuitionist and classical logic (Prawitz and Melmnaas 1968; Dummett 1977; Troelstra and van Dalen 1988; Tennant 1990). In addition, recently it was proved that intuitionist logic may be recognized by an analysis of the natural language of (also scientific) texts through the occurrences of double negated words and doubly negated propositions (Drago 2023). This last fact allows applying the logical divide to the texts illustrating philosophical arguing. Unfortunately, the validity of intuitionist logic began to be recognized by logicians' community in the '60s.

Let us now apply these novelties for interpreting the divide AP/CP.

Without doubt AC was a radical innovation with respect to the British strong tradition of Absolute idealism, because it chose as an apparently solid basis the logic which recently had received a mathematical formalization overcoming the ancient syllogistic.

Of course, philosophy did not have to depend on mathematical logic, but under its global light it could operate on local questions suggested by reality. Later, Vienna circle suggested an even more important role of classical logic; it tried to put formulas of classical logic as the basis of physical science. It failed because the physical formulas cannot be circumscribed by logical formulas which are merely tautological in nature. This result confirmed AP's traditional attitude to leave logic as a mere premise to philosophy, to which solely pertains the task of adequately investigate philosophical questions.

On its part, CP, after the failure of Hegel's attempt to found an alternative kind of logic, persisted in trying to discover a new way of arguing and possibly a new kind of logic.

In what does [philosophy today] consist, if not in the endeavor to know how and to what extent it might be possible to think differently? (Foucault 8-9).

CP explored all fields of knowledge, art included, by applying the method which is alternative to AP, i.e., to mainly consider new fields of knowledge and specifically global questions. The psycho-analysis (of Freud and Lacan), not recognized as a scientific theory by many philosophers of science, was one of the more promising field for Continental philosophers. Hence, CP appeared to analytical philosophers as too informal philosophers, unable to achieve assured results.

In conclusion, my hypothesis is that in both responses to Kant, philosophers' main concern was the kind of logic to be adopted. This question generated a deep division in the history of 20th century philosophy.

Search of Corroborations of The Previous Interpretative Hypothesis

A corroboration of the above interpretation is obtained by referring to the characteristic features of both traditions.

AP is usually characterized by: conceptual clarity, precision, rigor, argumentation, logical analysis, formal (logical) methods, technical style, linguistic and logical analysis of language, thought experiments, empirical grounding, problem-solving approach. On the other hand, CP is usually characterized by: broad cultural, social and historical context of philosophical arguing, interpretation, hermeneutical and existential approach, meaning, holistic exploration, experience cultural synthesis, inter-disciplinarity, literary style, metaphysical style.... It is apparent that the two lists suggest that logic plays an important role, although not decisive, in characterizing each tradition.

One may further characterize the two traditions in the following way. The characteristics that usually are attributed to AP seem appropriate to its attribution to classical logic because it is characterized by a resistance to imprecise or cavalier discussion of broad topics for rather adopting mathematical precision (within the dominant classical logic) and thoroughness about a specific topic (a piecemeal approach), so that it mainly focus on the subjects which may present ambiguities (language, meaning) through methods of arguments and proof which are similar to those used in classical logic and by leaving apart the historical origins of the questions and by holding in abeyance broader,

systematic questions. In short, AP analyzes local questions through classical logic.

Instead, CP assumes that past scientific methods are inadequate to fully understand the conditions of intelligibility and investigates general problems by looking for a new way of thinking. As a fact, continental philosophers were unsuccessful; it is then not surprising if a commonly recognized definition of their method of investigation was never achieved.

Moreover, one may easily verify that the six Levy's criteria for distinguishing the two schools may be interpreted in terms of the above hypothesis concerning the logic. "i) Geography". Indeed, Anglo-Saxons persisted in classical logic, while CP, linked in the good and evil to Hegelian tradition, was independent from it. "ii) Style". Surely, the style of classical logical shapes the form of AC, while CP, not being able to determine its own logic, is not rigorous. "iii) "CP is more "literary" than is AP." According to Levy "merely stylistic differences are superficial..."; but to have or not a logic is not a superficial difference; rather, here Levy was superficial because in the traditional philosophical context a rejection of classical logic unavoidably relegates philosophy to make use of literary style. "iv) "Historical origins and reference points". Levy comments: "This line [of underlining that AC's "systematic explanation of language is conducive to a scientific approach", while "CP [has a] conception of language that cannot be systematic"] is promising, but it awaits further development." The development suggested by the above hypothesis is to specialize "AC's scientific approach" into classical logic's approach and CP's unsystematic approach as due to the lack of the wanted logic. "v) History [absent in AC and basic for CP]." Levy comments this criterion as follows: "This too is an explanandum, not an explanation." Again, the above hypothesis easily attributes this difference to the basic role played within AP by classical logic, which excludes a global approach, and the basic role played by history in CP. "(vi) Language [as a prominent subject of AC]." Being assured the logical arguing, in AC the natural language is conducive of imprecision and hence has to be accurately studied. This imprecision is not a problem for CP which explores many different subjects with the aim to obtain a new global result, i.e., a new logic.

In addition, Levy suggests his hypothesis of attributing to AP a paradigm constituted by Frege Russell works, leaving as an open problem to explain why AP took the paradigmatic turn, whereas CP did not. (296). The above hypothesis explains the decisive role played by classical logic, enjoying a millennial tradition and moreover translated into mathematical logic, in structuring AP in a paradigm, i.e., why "AP was (something akin to) a normal science". (293) In conclusion it is clear because it is possible to think that "CP models itself on modernist art, just as AP models itself on modern science [rather, logic]". (301)

One more corroboration to the hypothesis comes from (Mou 2013) analyzing the divide AC/CP through the two most representative philosophers, respectively Quine and Heidegger. Mou has no difficulties in characterizing Quine's attitude through the logical language of classical logic; he suggests a formal representation of Quine's thinking

through the existential quantifier (Mou 315). On the other hand, he is unable to represent Heidegger's thinking in a formal way (of course of classical logic), Mou rather recalls his use of analogies. Notice that an analogy means: "It is not false that it is..."; this proposition is not equivalent to the proposition of classical logic: "It is equal..."; being the meanings of these two propositions different, the law of double negation fails. This failure, as stated in the above, is the characteristic feature dividing intuitionist logic (and almost all non-classical kinds of logic) from classical logic (Prawitz et Melmnaas 1968; etc.). In conclusion, since an analogy pertains to intuitionist logic, Heidegger implicitly made use of the new logic, the intuitionist one.

In conclusion, the kind of logic was a sufficient element for interpreting the AP/CP divide.

Now we recognize in the above hypothesis the solution of Levy's challenge:

CP does not form a school and that this fact is of more than marginal importance. CP is not an ongoing research program, in the sense in which AP takes itself to be. Account for this difference, and I think we have the explanation we seek. (289). (Italics added)

The Obstructions

The attribution of a geographical location, the Anglo-Saxon world, to AC is also justified without doubt by Bertrand Russell, i.e. its more prominent representative philosopher, who opposed to a suggestion of an alternative to classical logic. Rather, he pursued the goal of examining all questions (the scientific ones also) with the spirit of having achieved the last word from his arguing according to classical logic. Also, Karl Popper manifested his rejection of any alternative to classical logic. He correctly studied the alternative kinds of logic resulting from all possible variances of an implication (Lejewski 1974) but he concluded the impossibility of reasoning in an alternative logic, because he (wrongly) maintained that each non classical implication inside a context of classical logic is "absorbed" within this context. He also reacted to the surprising birth of non-classical logic in quantum mechanics (Birkhoff and von Neumann 1936); but late, in 1960; and he supported the idea that this "proposal is untenable" (Haak 38). Not lesser strong was his opposition to Hegel's dialectics and its Marxist's versions. His influence on post-war Anglo-Saxon philosophers on this point was so strong that also his "deviant" followers, as Imre Lakatos and Paul K. Feyerabend, never questioned his tenets on logic. In the early 20th century the birth of intuitionist logic (since 20's) did not had influence on AP philosophers. It is then not surprising the title *Deviant Logic* of a book written in England on the various kinds of logic (Haack 1974).

On the other hand, CP maintained the lesson received from Hegel's, i.e. a distrust in the uniqueness of ancient logic. This distrust was confirmed by the failure of the greatest attempt of the 20th century to explain science through classical logic, i.e. neo-positivism. Yet, Hegel's logic, pursued in more or lesser variants by Marxists, resisted to all attempts to give it a reasonable consistency. Do not forget that these attempts have been supported

by a strong political movement in the World (Marxist one) and after 1919 by great and powerful states (USSR, DDR, Poland). Moreover, the suggested logico-philosophical systems resulted to be artificial with respect to the main verification this philosophy expected, i.e., the historical events. These philosophers wavered between the triumphalism of having already achieved a universal tool for reasoning and the disappointments caused by the unexpected historical developments of the political and social reality, in particular the decisive denials received from the new developments of theoretical physics. Therefore, CP's survival was due to the efforts of the philosophers searching a new way of thinking in a broader contest than Hegel's one, that of the new fields of knowledge (psycho-analysis, then feminism, ecology, etc.). It is not a case that a prominent continental philosopher became Martin Heidegger, who investigated overall, not the philosophy of the knowledge of the world, but the analytics of Dasein. But all continental philosophers were unsuccessfully in their ultimate collective target; no one obtained a new way of reasoning differing from both classical logic and Hegel's dialectics.

Yet Hegel's dialectic was based on the "negation of the negation", which amounts to a doubly negated proposition; hence the distance between his dialectics and intuitionism was not great; and we have seen that Heidegger reasoned through analogies that implicitly pointed to intuitionist logic. Therefore, it was not impossible for CP to achieve its collective goal.

In conclusion, the main obstructions to recognize the new kind of logic were given by the logical insufficiencies of the two schools.

But an obstruction resulted also by the scientific development. A great opportunity for a great advancement was the discovery of a non-classical logic within the most advanced physical theory, quantum mechanics. By ignoring the birth of intuitionist logic, no other decisive result could be helped by continental philosophers. Yet, this logical discovery was at all unproductive, because research along 90 years for recognizing in the formal result of a well-defined kind of logic is still unsuccessful. This new logic, if qualified semantically, would have played, because scientific, the role of the most assured outcome of the long search for a new logic. This unsuccessful research for giving semantics to such logic was the greatest misfortune for CP. Owing to this misfortune CP persisted as a stubborn attempt to accurately define its broad kind of research. This fact proves that the development of philosophy depended also on the development of science.

Conclusion

In the above necessary and sufficient evidence has been accumulated for showing that the divide AP/CP was based on the solutions given to the existence of an alternative logic to the classical one.

The past failure to recognize the logical origins of the AP/CP divide is understandable. On one side, leading analytical philosophers rejected the idea that there could be any alternative to classical logic; on the other, many continental philosophers encountered

significant obstacles in engaging with the new developments in mathematical logic.

Thus, in 20th century philosophy there arose two different approaches. But also, in the ancient time at its origin in Western world philosophy split according to the great difference between Plato and Aristotle. Also, at beginning of modern time the philosophy split in empiricism and rationalism. Hence, the split of philosophy into AP and CP is not surprising; it represents a constant feature of the entire history of Western philosophy. Each splitting means that the efforts of the philosophers were unsuccessful to achieve a higher vision, unifying the two into a synthesis of previous views. In modern times Kant gave the illusion to have achieved it, but his synthesis was overcome by the next developments of both philosophy (Hegel) and science, mainly through the modern physics. At the bottom, a split of philosophy means that the collective work of philosopher lacks an essential component of philosophy, respect to which the philosophers rallied in the two opposed parties.

Levy's taking advice from the categories (in particular, paradigm) recently invented in history of science by Thomas S. Kuhn. Levy suggested that the AP originated by assuming a paradigm, whose basic component according to the appraisal of Jones was logic. Levy's suggestion exits out a self-sufficiency attitude that modern philosophy persisted to maintain along centuries (precisely after Leibniz). This attitude was comforting for a philosopher because it led to feel himself at the center of the universe of the knowledge and as enabled to offering the solutions of questions about everything. However, science is not a simple juxtaposition of a plain hypotheses to experimental data, but it builds a new way of reasoning which along four centuries built through its several theories which transformed not only the perception of reality till up to influence our thought categories. The hypothesis of present paper suggests that the development of science, in particular logic, effectively changed our thinking and arguing, so that philosophy has been influenced by it.

However, if philosophy will recognize the relevance of the alternative logic to the classical one, i.e., intuitionist logic, it will start to reason through a plurality of logic through which it will have a full control of the discourses on all subjects, even those of modern science in its most advanced results.

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