

# The rupture of French historical epistemology with neo-Kantianism: Bachelard and Canguilhem in the face of Brunschvicg and Alain

*[A ruptura da epistemologia histórica francesa com o neokantismo: Bachelard e Canguilhem diante de Brunschvicg e Alain]*

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## Abstract

As well as neo-Kantianism, phenomenology and analytical philosophy, French historical epistemology also had its emergence in the context of the crisis of the sciences at the turn of the 20th century. Due to their own developments, the works of Gaston Bachelard and Georges Canguilhem broke, each in its path, respectively with the neo-Kantianism represented by Brunschvicg (in Bachelard's case) and by Alain (in Canguilhem's case). In this article, we propose to draw some epistemological, ethical, and political consequences of these two ruptures, briefly analyzing the particularities of each of the two cases.

**Keywords:** neo-Kantianism; epistemology; Bachelard; Brunschvicg; Canguilhem; Alain.

## Resumo

Assim como o neokantismo, a fenomenologia e a filosofia analítica, a epistemologia histórica francesa também surgiu no contexto da crise das ciências na virada do século XX. Por desdobramentos próprios, as obras de Gaston Bachelard e de Georges Canguilhem romperam, cada uma a seu modo, respectivamente, com o neokantismo representado por Brunschvicg (no caso de Bachelard) e por Alain (no caso de Canguilhem). Neste artigo, propomos extrair algumas consequências epistemológicas, éticas e políticas dessas duas rupturas, analisando brevemente as particularidades de cada um dos dois casos.

**Palavras-chave:** neokantismo; epistemologia; Bachelard; Brunschvicg; Canguilhem; Alain

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## 1. Introduction<sup>2</sup>

It is well known that neo-Kantianism influenced French thought at the turn of the 19th century to the 20th century in several ways. Thinkers such as Brunschvicg, Lagneau, Alain (Pseudonym of Émile Chartier), for example, were prominent in the pre-war and inter-war scenario, and their presence was noted in publications and in intellectual and philosophical circles of that time. As much as these works are, in many ways, distinct, they have in common the postulation of a necessary coordination of the conditions of knowledge in a unity of experience, differing in terms of the domains of experience analyzed and in terms of ways of thinking about the coordination of such a unity. With proposals that are also distinct from each other, some authors commonly considered as practitioners of the so-called French historical epistemology provoked a rupture with the neo-Kantianism of their masters. In this paper, I will briefly address two of these cases, with their specific differences, that offered an alternative to neo-Kantianism that rivals another strand of contemporary thought, phenomenology. In any case, like neo-Kantianism, phenomenology and analytic philosophy, French historical epistemology also had its emergence in the context of the *crisis of the sciences* at the turn of the 20th century. This paper only intends to attest that, when read together, the works of Gaston Bachelard and Georges Canguilhem, each of which investigates specific domains of rational experience (the sciences of nature and the sciences of life), constitute a field of knowledge that has original philosophical theories both in the epistemological and in the moral and political domains.

## 2. Bachelard beyond Brunschvicg's neo-Kantianism

The first of the two authors chosen here to illustrate how the rupture with neo-Kantianism by French historical epistemology occurred is Gaston Bachelard. In 1927, Bachelard defended his two doctoral theses, one supervised by Abel Rey, the other by Léon Brunschvicg. Although Bachelard's thinking matured, in accordance with his self-taught, somewhat far from university models, it is possible to find many points of contact with the philosophy of some of his predecessors, and notably of Léon Brunschvicg. As stated by Jean Wahl, it is possible to consider Bachelard "as the one who continued, although renewing in many points, the teaching of Léon Brunschvicg" (Wahl, 1962, p. 164). The assimilations that his epistemology makes in relation to that of his predecessor occur mainly in three points: 1) in the valorization of the internal progress of scientific rationality; 2) in characterizing the radicality of the difference between common experience and scientific experience; 3) in the role attributed to mathematization within the scope of scientific experience. However, while for Brunschvicg the historical transformations through which rationality passes would never affect its ultimate foundation, for Bachelard such transformations will come to be conceived as constitutive of the human cognitive capacity itself.

Thus, Bachelard will inherit from Brunschvicg the meticulous attention to the experience of the internal progression to scientific reason from the problems that it itself had posed in the course of its history, recognizing the fundamental role played by it in correcting immediate data necessarily "incomplete" or "illusory". But despite following the nuances of the examples taken from the history of science, Brunschvicg stopped at the path that he himself had glimpsed, as Lebrun anecdotes in his scathing style:

Let's consider Brunschvicg. Who could still dream, he insists, of

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<sup>2</sup> This paper reformulates excerpts from my doctoral thesis defended at the Federal University of São Carlos/Brazil in 2019, supervised by Prof. Dr. Thelma Lessa da Fonseca, funded by CAPES, entitled "Georges Canguilhem: the becoming of a thought" (in Portuguese). As a paper, it was published in the Journal *Trans/Form/Ação*: Souto, C. (2022). "A ruptura da epistemologia histórica francesa com o neokantismo: Bachelard e Canguilhem". *TRANS/FORM/AÇÃO: Revista De Filosofia*, 45(01), 69–86. <https://doi.org/10.1590/0101-3173.2022.v45n1.p69> (Original work published 02/17/2022).

prescribing to the sciences of today their categories and their methods? The philosopher's work is more modest. It will consist in analyzing – for example, taking “physics” as a sample – “the functioning of the human conditions of knowledge”. And, as such, there is no need to fear any usurpation of the scientist's territory. “One should not expect to find anything here that directly concerns history proper or the content of the physical sciences. Our task is not to know how the nature of things is made, but to say how the spirit of man is made.” What a commendable resignation... (Lebrun, 1977, pp. 132-133).

Therefore, recognizing the limitation of philosophical thought in entering the domain proper to scientific regionalization, a neo-Kantian epistemologist like Brunschvicg would follow the lesson of Kant himself in *What real progress has metaphysics made in Germany since the time of Leibniz and Wolff?*, who had already advised the philosopher to recognize that the scientist works very well without it (*apud* Lebrun, 1977, p. 136, footnote). However, even if this is apparently a confession of modesty on the part of the philosopher, by “resigning himself” to just “saying how the spirit of man is made” he insidiously restores his foundationalist claim, and he does so in two ways: by deducing *a priori* the conditions of possibility of all possible knowledge, which we would call a Kantianism of strict obedience, impracticable after the multiple developments of contemporary sciences; or by recognizing them in the plurality of constructed forms – be they scientific, artistic, mythological or linguistic. All these are figures that another neo-Kantian epistemologist contemporary with Brunschvicg – namely Ernst Cassirer – would define as “symbolic forms” – the expression of a unity of the human spirit, without giving up a certain conception of philosophy as a vocation, equally rooted in the human spirit, in raising it to the universal. This last position is the one that characterizes “neo-Kantianism”, whose exponents, in the field of epistemology in the first half of the 20th century, are Brunschvicg, in France, and Cassirer, in Germany.

Cassirer, since the essay *Substanzbegriff und Funktionsbegriff* (1910), has attacked positivist claims by targeting the naturalist concept of “substance”, arguing how modern science could only develop when it started to establish a functional correlation between scientific symbolization and empirical objects. The history of Western scientific thought would have known a rupture between the substantial conception of the scientific concept, initially developed by Aristotle, and the functional conception of knowledge, developed by science since the beginning of the modern era, radicalizing itself from Leibniz. Having defended since then that scientific axiomatization is a mode of “symbolic formation” (*symbolische Formung*) and having admitted as inevitable that the era of the great philosophies that systematized all knowledge was behind us, nevertheless Cassirer did not consider as overcome the human need for a thought that synthesized all symbolic productions: language, arts, myths, religions, and even sciences. For this, he will extend the applicability of the Kantian concept of symbol, extracted from §59 of the *Critique of Judgment*, to scientific knowledge, making it a universal operator able to shape all possible objectification<sup>3</sup>. Cassirer will later consider, in his *Philosophy of Symbolic Forms*, contemporary science as a special case of objectification in general, and more specifically as a case that appeared at a late date in the history of humankind. And as in the other cases, it will follow the progressive path that starts from the sphere of expression towards the sphere of representation. Thus, a similarity with Brunschvicg is observed, as Jean Seidengart also noted:

3 In a recent thesis, Adriano Mergulhão (2018) demonstrates how Cassirer is not truly reached by the criticism that Heidegger directs at him, demonstrating how both share the same *common ground*, since the notion of the *whole*, contained in Cassirer, would not be a mere extension of the epistemological theses of the Marburg School (present in Cohen and Natorp, who would be Heidegger's real targets), for whom mathematical objectivity would have an almost absolute primacy over other forms of scientific knowledge. On the contrary, it would be the case, in Cassirer, of the effectuation of a fundamental function, the symbolic function as such, a concept that did not exist in his predecessors. In fact, Cassirer seems to be at this point, and especially with the formulation of his *Philosophy of Symbolic Forms*, closer to Heidegger's fundamental ontology than to the Marburg School. Furthermore, regarding contemporary natural sciences, Heidegger also understood them based on their regionalization, postulating the need for a search for their unity in the fundamental ontology. See, in this regard, also: Rheinberger (2015).

Cassirer and Brunschvicg certainly remain as the last representatives of optimism (heir of the Enlightenment), in the course of the first third of the 20th century, insofar as they expressly defend the idea that there is a “progress of consciousness”, not only in the sciences, but also in the various forms of Western culture (Seidengart, 1995, pp. 768-769).

And it will be up to Bachelard to go all the way on the path on which his master Brunschvicg still have hesitated. Dagognet interprets the difference between the two epistemologists as concerning a nuance, but recognizes that the degree of difference reached by it led to an inevitable rupture. Brunschvicg knew what would have to be done with epistemology, and would even have announced it, but only Bachelard would have effectively accomplished it, entering “undeniably the living of demonstration”, forcing “the laboratory door”, entering the domain of experimental science in exercise and, consequently, making rationalism something “regionalized and sedimented”, losing the traces still perceptible in Brunschvicg of its universality (Dagognet, 1965, p. 50). It is because in the place where Cassirer’s and Brunschvicg’s neo-Kantianism still saw a plurality of levels of expression of the spirit, although these functions were not conceived as a rupture with each other; in the place where the symbolic forms would be explained by an original force of the spirit that would confer to the sensible data a value of signification; in the place where, finally, only a projection of reason<sup>4</sup> was recognized, Bachelard will recognize an experience of approximation, because for him all scientific knowledge is approximation. However, in addition to simply refusing neo-Kantianism, Bachelard will say: “We must therefore access an open Kantianism, a *functional Kantianism*, a *non-Kantianism*, in the same style in which we speak of a non-Euclidean geometry. This is, I believe, the most beautiful tribute that can be paid to Kantian philosophy” (Bachelard, 1972, [1938-1939], pp. 27-28)<sup>5</sup>.

### 3. Canguilhem beyond Alain’s neo-Kantianism

Our second example is Georges Canguilhem. Author of a singular intellectual trajectory and who only approached Bachelard’s epistemological work a little late, Canguilhem began his intellectual trajectory under the strong influence of another branch of neo-Kantianism, the so-called “School of activity” (Lagneau, Lachelier, Hamelin, Le Senne, Reininger, Boutroux and above all Alain, his first master), linked to the developments of the *Wertphilosophie* formulated by the neo-Kantians of Baden and Heidelberg (namely, Windelband and Rickert). There will, therefore, be a fundamental difference between Bachelard’s rupture with Brunschvicg and this one that will occur, according to our understanding, between Canguilhem and Alain’s specific neo-Kantianism. In the first case, Bachelard’s refutation of neo-Kantian postulates corresponded above all to epistemological criteria: what Bachelard refuted in Brunschvicg was that the expansion of understanding, carried out in order to account for recent developments in science, preserved with it the sense of a progress of reason, thus restoring the primacy of philosophy over science, which Bachelard proposed to reverse. The establishment of a “non-Kantianism” by Bachelard proposed a coordination of Brunschvicguian epistemology under a new epistemology, seeking to remain attentive to the developments of the natural sciences and evaluating the consequences of its effects for the theory of knowledge. As for the second case, since Canguilhem was under the initial influence of Alain and the “French School of activity”, which had sought to establish the unity of the experience in terms of the moral philosophy of the Second Kantian critique, the mutation that Canguilhem will produce in his own younger philosophy will come from a primarily political concern, which will not be devoid, however, of epistemological consequences.

<sup>4</sup> “Thus, from the intellectual self to the non-self that interests intelligence, there is not just a projection, there is active reciprocity” (Bachelard, 1972 [1945], pp. 175-176).

<sup>5</sup> For a comment on this passage, as well as on the main aspects of Bachelard’s “non-Kantianism”, see: Barsotti (2003).

As José Resende summarizes, the main characteristic of this branch of neo-Kantianism developed in Baden and Heidelberg is that:

For Baden's neo-Kantianism, unlike Marburg's, truth is a value, which implies a practical conception of judgment, so that the starting point of the investigation is simply the judgment's 'claim' to truth. Truth is not something that can be verified, but only the ultimate end of universal validity postulated in all judicative activity. All theoretical judgments, including those that make up skeptical theories, imply and are guided by such a pretension. Therefore, the starting point of Rickertian epistemology is the pretension to truth, and what is sought, the object of knowledge, is the foundation of this pretension (Resende, 2013, p. 46).

Indeed, among all the neo-Kantians of that generation, Rickert was the one who established a primacy of practical reason in the constitution of the object of knowledge. Such a proposal has its roots in Fichte, who in his reformulation of transcendental philosophy already argued for the existence, even in the theoretical domain of reason, of a practical dimension, affirming that this dimension would not be incompatible with Kant's epistemological philosophy. But Rickert (1929) goes beyond Fichte to say that not only is there a practical dimension to theoretical reason, but that there is a primacy of practical reason over theoretical reason even about the theoretical domain itself. For Rickert, as much as there is independence regarding the determination of the contents of knowledge within the scope of understanding, the conviction (*Überzeugung*)<sup>6</sup> invoked by such contents is always in the practical sphere of reason. It is about making morals the central problem of the constitution of knowledge, which will culminate in a precedence of axiology over ontology or epistemology.

In France, this aspect of neo-Kantianism was apprehended by the School of Activity, with Alain as one of its main representatives. Alain was the animator of a whole generation of young intellectuals, including Georges Canguilhem<sup>7</sup>. He maintained a periodical with good circulation, the *Libres propos*<sup>8</sup>, of which Canguilhem was one of the most assiduous contributors, having worked since 1930 on its editorial board<sup>9</sup>. Some of the texts published in the *Libres propos* had pamphleteering intentions, and even have militated in a very enthusiastic way in favor of political pacifism, which Alain continued to defend even after the Occupation in 1940. His "integral pacifism," as Raymond Aron (1933) would call it (1933), criticizing it for his servile posture, was rooted in Alain's theory of the passions concerning moral philosophy that he developed following the *Wertphilosophie*. Roughly speaking, what Alain defended in the book *Mars ou la guerre jugée* (1921), in which he critically took stock of the results of the First World War, is that wars would be like irritations of the social body that would arouse passions that would divert the human spirit of its rational nature. Canguilhem, who had adhered to this thesis during the 1920s and until the mid-1930s, will begin to distance himself from it as he perceives the rise of fascism across the European continent. Between 1934-1936, when Canguilhem was closest to Marxism, the author conducted an anonymously published empirical investigation into the conditions of the rise of fascism among French peasants (1935)<sup>10</sup>, in which he realized the effective needs of political resistance against fascism. In 1936 he published a critical review of René Maublanc's *Le pacifisme et les intellectuels*, which may have helped in his reconsideration

6 "The moral law is not a faculty of knowledge, it cannot establish its essence, namely its conviction, by itself, but this must be found and determined by the faculties of knowledge. In other words: the theoretical faculty follows its path until it finds by itself what must be approved, which, however, does not contain its criterion of correction, since this is found in the practical sphere, which is the first and highest in man, his true essence" (Rickert, 1899, p. 8 *apud* Resende, 2013).

7 On the generation of the "young Canguilhem" and the role played by Alain in its formation, see above all: Sirinelli (1994).

8 On Canguilhem's acting in the *Libres propos*, see above all: BRAUNSTEIN, 2011b, pp. 142-144.

9 For a better characterization of the influence exerted by Alain on Canguilhem, specifically in this period, see above all: Bianco (2012).

10 On the conditions under which such an investigation was conceived, see: Cammelli (2011).



of his master Alain's pacifism. Maublanc argued that pacifists intended to fight Hitler by giving in to him, underestimating Nazism as if it were just a mere nationalism among others: "Anti-fascists in internal policy, they ended up becoming pro-fascists in foreign policy" (Maublanc, 1936, p. 6).

It is difficult to pinpoint the exact moment when Canguilhem's rupture with Alain occurred, a rupture that did not erase certain traces of heritage that will remain throughout his whole work<sup>11</sup>. But there are at least two levels at which an ongoing transformation is clearly perceptible. At the political level, there was a clear break with pacifism; and at the philosophical level, there will be a refusal of the possibility of a unification of the experience. As for the two levels, the work *Traité de logique et de morale*, published in 1939 in co-authorship with Camille Planet<sup>12</sup>, already bears witness to a new consolidated position. In Chapter VIII of the first part, when the authors approach the theme of "theoretical systematization", there is a clear relativization of such systematizations, in the sense of an unlimited opening to the force of new "technical devices" or new phenomena that will also require new mechanisms of analysis, experimentation, action and, therefore, new epistemological postures. And as for the political field, that is, practical, and its necessary primacy, the *Traité de logique et de morale* culminates with a section precisely dedicated to the theme of pacifism, where the position defended by Alain is severely criticized, where the authors say that pacifism may end up being just a verbal contestation of war.

This work, which is part of a tradition of materials written by teachers to be used by their own students as a method, sought to constitute an example of what the authors would like the books used in the classroom in secondary education to be<sup>13</sup>. Sharing Alain's censure of the "Manuals" for "choking" the student's understanding<sup>14</sup>, the option for the title "Treatise" was consistent with the proposal to present, not a cut compilation of the philosophers of the past, but a cohesive text, in which the relationship between the parts and the whole had been thought through in all chapters and in all themes, with a notable effort at systematicity. And, in fact, this book, despite having been conceived as didactic material to be used in high school, goes far beyond the common descriptions or presentations of philosophers' theses, presenting true positions that denote a reflective and conscious writing of its objectives, not only didactics, but also epistemological and political. Divided into two parts, the *Traité de logique et de morale* begins with an analysis of the different logics present in philosophical systems, then moving on to an examination of scientific knowledge that starts from mathematics, passes through the natural sciences until it culminated in the moral sciences. Having insisted on a qualitative difference between the life sciences and the mathematical or mathematizable sciences, Canguilhem and Planet find examples of such a philosophical stance regarding the specificity of the life sciences in Bergson and Claude Bernard, the latter hailed for his contributions in the field of experimentation in biology (Comte will also appear, but especially in the second half, referring

11 See the summary provided by: Braustein (2011a).

12 Under the guidance of René Le Senne, Camille Planet, a high school philosophy teacher, wrote his two doctoral theses in which he defended a pluralist philosophy of values. Both these were rejected by the committee, which contributed to his leaving philosophy and dedicating himself to the activities of a painter and pianist. With a more speculative vocation than Canguilhem, it was, however, Planet who influenced the latter to resign his post in Toulouse in order not to serve Marshal Pétain. An admirer of the *Wertphilosophie*, Planet was also one of Canguilhem's sources of inspiration in the moral field. For a presentation of the *Traité de logique et de morale*, as well as a breakdown of the relationship between the two co-authors, see: Roth (2011).

13 One cannot fail to mention here the role that Canguilhem would play during most of his life in educational institutions as a professor, as president of the Agrégation jury, as inspector general of philosophy in France, and from 1955 onwards as president of the Institut da Rue de Four succeeding Bachelard, in addition to having directed dozens of theses and academic works. For some interventions in this sense, see: Canguilhem (2015 [1952], 2015 [1953] and 2015 [1991]), and the text by Patrice Vermeren (2020). Regarding the period of formation of the thought of Canguilhem and his contemporaries, see above all: Ferte, Jacquard & Vermeren (2013) e Sirinelli (1994).

14 Alain's influence as an educator, defender of a certain teaching model that aims to "raise man above any institution, prepare man to judge all values" (Canguilhem, 1933, p. 296), and that competes term by term with the military model of obedience and dogmatism is one of the traits he inherited from his master, who will never be extirpated from Canguilhem's thought.

to the moral and social sciences). At the end of the first half of the work, there is a chapter on “theoretical systematization” and then another on the “value of science,” where philosophy is assigned the task of valuing scientific research.

In this first part, the authors criticize philosophies that tend to judge the value of science pejoratively, or that end up reducing it to a mere value among others, not recognizing the originality of the value of science among other values. The coauthors qualify scientific truth as a value rather than a fact; on the other hand, it is not just any value, since science is the only discourse committed to the veridiction judgment. This does not make it superior to other judgments, but makes it undeniably distinct, and it is according to this distinction that science must be judged amid other values. Taking the case of William James’ pragmatism, for example, Canguilhem and Planet (2011 [1939], p. 798) recognize the merit of having reversed the classical order between ontology and axiology, which would have allowed two important advances in the theory of sciences: 1) a replacement of the problem of scientific truth from its meaning and value in relation to life, and not in relation to the mere epistemological criteria of a universally valid logic; 2) a change from the submission of science to judgments of existence to judgments of value. However, as Jacques Bouveresse rightly observes in a comment on this passage from the *Traité*, what Canguilhem and Planet criticized in pragmatism is that, by establishing use, interest or utility as a criterion for evaluating the truth, what would have been missed is the very difference of the scientific rationality, thus losing any condition to make an adequate judgment about its value among other values<sup>15</sup>. And it is only by assuring science of its irreducible role in the construction of truth that philosophy will also be able to recognize for itself another, equally irreducible, role: that of a synthesis or a normative judgment in relation to the plurality of values. And since utility, existence and scientific truth are values between values, the authors recognize the need for a reflective discipline that can take care to establish a judgment about these values, a role that will be attributed precisely to philosophy, this “reflection on unknown material”, as Canguilhem will say in *On the normal and the pathological*. Indeed, the theme of values permeates the entire text, and the opposition between fact and value constitutes the *leitmotiv* of this treatise:

If the word value has a meaning, it is insofar as it designates the opposite of the fact. By confessing the impossibility of fixing once and for all what the Good is, in fact, and what, in fact, human destiny is, we see in this very impossibility the essence of moral value. The moral value is to create unity where it does not exist (Canguilhem & Planet, 2011 [1939], p. 922).

In the second half of the book, the moral problem is broadly analyzed, and the text is ended with political questions that refer the reader directly to the exteriority of the events of that very time and the relationship between rationality and effective history. We follow here Xavier Roth’s instigating comment when he states that the inversion between intuition and understanding, which Canguilhem lends to Bergson but reconfigures in an original way (thus bringing Bergson closer to Alain’s axiological philosophy), allows one not to abandon the reflective task of philosophy *versus* science. Roth seeks to demonstrate from this how Canguilhem, after the transformations suffered in the second half of the 1930s, formulates a philosophy whose originality would reside in an opening to the outside (the political field, medicine, the historical becoming) that would, however, preserve the main elements of the moral theory inherited from neo-Kantianism from Alain and Lagneau and from the so-called “French School of Activity”. Nevertheless, since this opening to the outside is guided by a preconceived philosophical project, it is nothing more, as the commentator states, than a “means

<sup>15</sup> “According to them [Canguilhem and Planet], pragmatism did not truly recognize, but only glimpsed, that the real problem of values goes beyond that of scientific truth and what we can reproach him with is not to have not concluded by the obligation to reestablish the right of the most different ‘experiences’ (metaphysical or religious) to be regarded as equally valid, but to have concluded only that, and to have thereby authorized every belief which satisfies the one who judges, at a given moment and for a useful time, to be adopted as having an equal value to the beliefs that, like those of science, can claim a form of truth that cannot be reduced precisely to utility” (Bouveresse, 2011, p. 45, footnote).

of validating, through experience, certain philosophical intuitions” (Roth, 2010, p. 40). Roth is led to conclude that “Canguilhem never renounced the transcendental project” and “that his philosophy of life resembles an original treatment of the ‘conserved transcendental project’” (Roth, 2010, p. 218). In this sense, by affirming it, Roth – who has the merit of having clarified very revealing points of the philosophy of the first two decades and Georges Canguilhem – intends to refute the famous Foucauldian appropriation of Canguilhem and French historical epistemology made in his final text “La vie: la science et l’expérience” (1985). He reproaches Foucault for not taking into account the specificities of each author who would have been illegitimately linked by him to a same affiliation (Canguilhem, Koyré, Cavaillès, Bachelard, all in affiliation to A. Comte’s positivism)<sup>16</sup> and for considering as predominant in them the aspect of rationality, not having paid attention to the fact that the concept, at least in Canguilhem, would always be reworked through the experience of a subjectivity. But it is as if Canguilhem’s originality were restricted to coordinating *a posteriori* representations and accidents experienced subjectively, which would bring Canguilhem closer to a transcendental pragmatism. The break with Alain’s pacifism, as we have already said, was not limited to the political level. In fact, let us carefully read the injunction with which Canguilhem & Planet close this *Traité*:

What remains, under these conditions, to choose for today? It remains that the conflicts that tend to take on a quasi-universal amplitude, therefore contain the principle of their own resolution. For if wars are now waged between a small number of groups of nations, and no longer from one nation against another, it is because a new form of human association is in the making, and it seems difficult to prevent it from being violent and lasting. If we compare the data of the international problem with the data of the social problem in general, we will see that the two problems are not separated; war becomes what it naturally was, a struggle of forces between different human regimes. Despite the enormous complexity and intertwining of historical problems, they are types of political and social organization, in accordance with a general meaning and a value given to human life, which are facing each other. Depending on whether we adopt an idealistic or a realistic morality, we will choose the groupings that we consider defending from near or far, this or that conception of life. There is no longer any internal or foreign policy, war is waged with a view to organizing human society. An idealistic morality impels us to opt for groups that represent a progressive ideal. Here, like Shakespeare’s Hamlet, one must choose (Canguilhem & Planet, 1939, p. 922).

We see, therefore, how the historical experience of the rise of fascism significantly transformed Canguilhem’s perception of the phenomenon of war, leading him to break with Alain’s pacifism. More than that, such transformations took place at the level of his moral and epistemological philosophy, as they reached the heart of the conception of the uniqueness of value, henceforth perceived as impossible, as Braunstein asserts: “Since Nietzsche, at least, and also since the ‘polytheism of values’ by Max Weber, known to Canguilhem through Raymond Aron, it is no longer possible to consider the uniqueness of value” (Braunstein, 2011a, p. 134). From now on, what Canguilhem will most reject in Alain will be the subordination of the plurality of values to the unity of experience, which is linked to a certain conception of history as Eternal History<sup>17</sup>. Furthermore, he will also reject the opinion that philosophy was already once and for all realized in the work of the great thinkers, which Canguilhem will replace with the idea that it is necessary, in order to force thought to think, to approach foreign matters, which are considered as minor or even despised by philosophical knowledge. However, Canguilhem retains traits from Alain, even if reconfigured in terms of his own philosophy. The most important of all will be the primacy given to practical reason, that is, the primacy of judgment or value

<sup>16</sup> At this point, his thesis is also supported by the interventions of Michel Fichant and Yves Schwartz in the “Colloque Canguilhem” of 1990 organized by Étienne Balibar, published later in 1993.

<sup>17</sup> Even in the posthumous tribute that Canguilhem will dedicate to Alain (1952a), in which he recovers several themes related to aesthetics that will remain dear to him, this censorship will persist.



over being. To this will be linked a certain conception of aesthetic creation, a total repulsion to mere facts (and consequently to a certain way of practicing history, economics, sociology or psychology), a severe criticism of militarism and any systems of obedience or impediment of human reflection or judgment, as well as an attention dedicated especially to education and care, which will culminate, in the case of education, in the way in which Canguilhem exercised his office as a professor, as president of the Agrégation jury, as general inspector and others correlates roles, and in the specific case of medicine, in a philosophical proposal of a pedagogy of healing as medical deontology<sup>18</sup>.

Thus, even after his later meeting with Bachelard in the 1950s<sup>19</sup>, the historical epistemology developed by Canguilhem will reserve for itself the reflective and judgmental task proper to moral philosophy, albeit entirely reconfigured, while Bachelardian epistemology did not fail to submit philosophy to the science's own judgment. In our view, the consequences of Canguilhem's rupture with neo-Kantianism culminate in different results from those promoted by Bachelardian epistemology, although it is possible to think of them in their coordination. Canguilhem will increasingly address an axiological pluralism (according to the Nietzschean topic of the transvaluation of all values), substituting the transcendental subject for the adventure of the living beings. The "conserved transcendental project" is already the result of a total reconfiguration of Kantian philosophy, when Canguilhem recognizes that the Copernican Revolution was only completed when it became physiological (a task accomplished by Auguste Comte and Claude Bernard). The transformation of the subject's position inevitably throws us beyond all possible neo-Kantianism, which does not mean an absolute extirpation of the Kantian or neo-Kantian heritage.

## 4. Conclusion

In this paper, we described two examples of authors who, each in his own way, and from specific domains of scientific and philosophical rationality, assimilated certain assumptions from different strands of neo-Kantianism, asserting in what sense each of them made a rupture with his master. Bachelard, in the field of natural sciences, began his work by unfolding certain postulates of Brunschvicg's neo-Kantianism (in a way close to Cassirer's), but he put back in an original way the problem of the historicity of rationality; Canguilhem, who began his intellectual trajectory under the influence of Alain and the French School of Activity, in his turn influenced by the *Wertphilosophie* developed by the School of Baden-Heidelberg (that of Windelband and specially Rickert), by politically breaking with the pacifism of his master, also reformulating some moral and epistemological assumptions that were implicit in such a political stance. As we have seen, the philosophical motivation that separated Canguilhem from Alain is due to the lack of historical sense of Alain's philosophy, which is expressed in these terms: "Historical, that is, not deducible only from its objective conditions" (Canguilhem, 2018, [1988], p. 1137). When old age arrived in Canguilhem, in one of the many tributes that were paid to his work and to his person, on the occasion of receiving a medal at the "Centre national de la recherche scientifique" (CNRS), in 1987, the author did not forget to evoke the political events that silenced Cavallès, Lautman, Paul Reiss and many others, to the contingency to which he too was subjected. There is no doubt about the relationship he wanted to create

<sup>18</sup> See, in this regard, our book "Towards a pedagogy of healing: an introduction to Georges Canguilhem's philosophy" (in Portuguese): Souto (2022).

<sup>19</sup> In 1955, under the guidance of Bachelard, Canguilhem defended his main doctoral thesis in philosophy under the title *La formation du concept de réflexe aux XVII<sup>ème</sup> et XVIII<sup>ème</sup> siècles*, assuming in the same year the direction of the Institut da Rue de Four, which had overseen from Bachelard since 1940. From then on, there will be a great profusion of historical-epistemological studies in his work, in addition to the borrowing of operative concepts such as "epistemological rupture", "phenomenology", "epistemological experience" (to differentiate of "common experience"), "psychoanalysis of objective knowledge", all of them from a Bachelardian heritage.

between the knowledge of life and the unstable conditions on which this knowledge is, or even must be, established, if life (in this singular living being that is man) is to be led to its own conditions of possibility.

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