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Book Review

Gerardo Ienna, *Genesis and Development of French Historical Epistemology: A Trajectory Towards Political Epistemology*. Cham: Springer, 2025. 242 pp.

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Gerardo Ienna's *Genesis and Development of French Historical Epistemology: A Trajectory Towards Political Epistemology* fills a significant gap in the literature on French Historical Epistemology (FHE) by offering not merely a reconstruction of doctrines, but a socio-historical analysis of the very formation of the field, while bringing its political inflection to the fore. Contrary to the normative approaches often adopted in the historiographical literature on historical epistemology, Ienna advances “a description of the uses that have been made of the label ‘French historical epistemology’” (p. 1), bringing to light the political stakes within the FHE tradition. Ienna's archival thoroughness and historiographical sensitivity are beyond doubt. The expansiveness of the reconstruction reflects this ambition, even if it occasionally makes it difficult for a unifying conceptual architecture to crystallize. What emerges is a compelling and densely documented intellectual history whose theoretical implications are at times suggested more than systematically consolidated. Ienna's work succeeds in reconstructing French historical epistemology in a way that maps its formation, leaving, however, its political implications only partially systematized.

By refraining from a normative treatment of FHE, Ienna can illuminate its intricate process of canonization and, in doing so, articulate a distinctive standpoint within the ongoing “controversy regarding the existence of this category, from both a historiographical point of view and a methodological-programmatic point of view” (p. 5). Ienna carries out an investigation of historical epistemology as an intellectual label, “an object of negotiation and controversy between communities of researchers” (p. 4). This social genesis of FHE is introduced by Ienna through his description of the debate over the legacy of positivism, which emerged between the late nineteenth and early twentieth centuries. Along these lines, Ienna suggests that the *historical-critical method* – which emerged in Germany at the close of the nineteenth century and was shaped by the interaction of various cultural and institutional forces at work in the German academic and scientific fields – “can be considered the most authoritative antecedent to FHE” (p. 6), inasmuch as it may be perceived as “the first intellectual label based on a research program that claimed the inseparability of historical and epistemological analyses of knowledge” (ibid.).

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The many intellectual currents that came to light toward the close of the nineteenth century, although seeking to distance themselves from positivism, nevertheless preserved elements of its disputed legacy. Widely regarded as a precursor of FHE, Comte — who was among the earliest authors “to integrate epistemological reflection with the historical reconstruction of scientific thought (and vice versa)” (p. 8) — exerted some influence on the so-called “historical-critical method” that took shape in German-speaking countries during this period. In the opposite direction, at the dawn of the twentieth century, Ernst Mach’s influence is felt among “the entire generation of French authors belonging to the *critique des sciences* who saw a point of reference in the historical-critical method” (p. 15). Mach’s reception became a key site of early twentieth-century epistemological controversy. It was within this context that the opposition between the tradition of logical empiricism and the emerging neo-rationalism arose, the latter characterized by a strong historicist and anti-logicist orientation that was predominantly French.

In *La théorie physique chez les physiciens contemporains* (1907), Abel Rey would use the term *épistémologie historique* to designate both a research program that clearly sets itself apart from the Anglo-American logicist tradition and a historical approach in line with the Comtian thought. FHE emerged, therefore, out of this dispute and, after the interregnum of the Second World War, gathered momentum as it unfolded into two main trajectories. The first – which “followed a line of continuity between authors such as Bachelard, Canguilhem, Foucault, Althusser, Bourdieu and another long series of authors” (p. 26) – is designated by Ienna as the “major canon”. The second, which Ienna terms the “minor canon” of FHE, the intellectual origins of which can be traced back through Brunschvig to the thought of Comte, sought instead to extend historical reflection into the domain of the philosophy of mathematics. It is called the “minor canon” to “highlight the doubly subordinate character of this new epistemology, or surrationalist school, compared to the major canon of FHE and the analytic philosophical tradition” (pp. 41-42).

These minor and major canons, as Ienna argues, were united not only by their mutual interest in historicizing epistemology but also by the political-ideological radicality of its authors. The emergence of both cannot be separated from the French political-intellectual scene. Building on this, Ienna demonstrates “how the foundations of FHE rested upon the proposal for a profound rethinking of the relationship between epistemological reflection and scientific practices” (p. 52), which ultimately entails distancing from prescriptive approaches that seek to define a priori what constitutes a scientific practice. FHE developed, instead, a descriptive posture intended to grasp how rationality arises from technical-scientific activity itself, which in turn gives rise to a form of epistemological materialism, that is, “a perspective focused on the material features producing rationality, whether these are practices, discourses or objects to be understood rigorously in their historicity” (ibid.). Against the backdrop of the French sixties and seventies, FHE arose, thus, in opposition to “an abstract and ‘immaculate conception’ of scientific reason” (p. 53).

As Ienna frames it: “being materialistic in epistemology means seeing the absolute principle of every cognitive activity in the incessant dialectic among nature, rationality, and history” (p. 56-7). For instance, the Bachelardian notions of *applied rationalism* and *technical materialism* both refer to the fact that one cannot understand the essence of reason except “through the concrete work that it does and its practical dynamism” (p. 56). Reason is thus conceived as the result of a dialectical activity between the knower and the known, a process that unfolds historically in the interaction between theory and practice. It is through phenomenotechnics – the process by which scientific practices actively construct their objects – that the object of science is “realised”. This notion also plays an essential role in *La formation du concept de réflexe aux XVIIe et XVIIIe siècles*, Canguilhem’s doctoral thesis

directed by Bachelard, in which Canguilhem examines the reification of theories through which scientific objects are constituted within the conceptual field that shapes them. Canguilhem reinforces certain Bachelardian intuitions while also refining and nuancing some of his theses.

The emergence of both authors as central figures in FHE entails a hybridization of Bachelard's theses with Canguilhem's historical-epistemological positions. The distinctions between them are only briefly mentioned rather than fully explored by Ienna. While this choice allows the narrative to maintain its broader historiographical focus, the analysis of the differences between Bachelard and Canguilhem remains underdeveloped. The peculiarity of Canguilhem's thought, as Ienna indicates, lies "in its affirmation of the autonomy of 'vital rationalism' [...] compared to other sciences, in particular physical-mathematical ones, which had reduced the dimension of life to mere mechanism" (p. 101). Canguilhem's decisive institutional and pedagogical role marks not only the shift in FHE's axis of interest from the physical-mathematical sciences toward the biological and life sciences but also the rise of an original historical model, which emphasizes "the analysis of the intersections between theories and the culturally shared sphere of conceptual production in its historical evolution" (p. 74).

Bachelard addressed this question of epistemological regionalism, which was shaped by the intellectual *zeitgeist* of the thirties, in *Le rationalisme appliqué* (1949). The dissemination of epistemological regionalism in France enabled the emergence of distinct philosophies of science, such as philosophies of mathematics, the life sciences, logic, medicine, and other epistemological domains. Ienna addresses the specific region of mathematical thought, reconstructing the main theses of the "minor canon" of FHE. Figures such as Brunschvicg, Bachelard, Cavaillès, and Lautman aimed at safeguarding the specificity of mathematical thought. The emergence of a philosophy of mathematics in the context of FHE marks, therefore, a conception of mathematical rationality as autonomous and irreducible to other epistemological regions. This epistemological perspective was frequently accompanied by political engagements on the left. According to Ienna (p. 104), the turning point of this tradition of French epistemological thought occurs in Brunschvicg's reformulation of mathematical thought in *Les étapes de la philosophie mathématique* (1912), in which a 'surrationalist' current took shape, asserting the creative power of mathematics. Brunschvicg sought to challenge the view of mathematics as merely subordinated to experimental physics, emphasizing instead its creative capacity and its role in opening theoretical possibilities later realized in physics.

Following Brunschvicg, "the search for the foundations of mathematical knowledge must not be entrusted to philosophies that claim to justify it through a return to the subjective pole or its reduction to logic" (p. 113). Conversely, "the intrinsic creativity of mathematical knowledge and its specific criteria of rationality can be understood only through an internal analysis of the historical stages it has completed in its evolution and internal dialectic" (p. 113). The recognition of mathematics' creative capacity and the autonomy that stems from it contributed to the consolidation of a minor canon within FHE, which could be "further extended to other authors such as Hermann Weyl, Gustave Juvet, Alexander Grothendieck, and many others" (p. 122). More recently, as Ienna highlights (p. 122), this capacity to articulate alternatives to the logicist and neo-positivist approaches that have long dominated the international scene has sparked renewed interest among philosophers and mathematicians alike.

The regionalisation of epistemology, which made possible the development of this 'minor canon', opened FHE – mainly through Canguilhem's shift in the axis of interest from the physical-mathematical sciences towards the biological and life sciences – to the human

and social sciences. Although authors such as Meyerson, Metzger, Bachelard and Canguilhem had already attended to the social and anthropological dimensions within the theory of knowledge, these questions were further elaborated in the work of Althusser, Foucault and Bourdieu. It was with these latter authors, as Ienna (p. 139) observes, that the delineation of the connections between epistemology, politics and society became one of the distinctive features of FHE. This “political turn” of FHE was not an external graft, but a development immanent to its materialist and regionalist premises. Already in Bachelard it was argued that “an epistemology that fails to take into account the process of ‘intense socialization’ at the base of the production of scientific knowledge, as well as its historicity, is only ‘an epistemological utopia, the utopia of individualism of knowledge’” (Ienna, 2025, p. 152). Yet it was Canguilhem who played a decisive role in opening FHE to social issues. The specificity of some of his research objects, “such as the distinction between the ‘normal and pathological’ and the relationship between ‘the living and its milieu’ necessarily entailed a consideration of the social dimension of epistemology” (Ienna, 2025, p. 153). Canguilhem, as Ienna (p. 157) points out, was, therefore, “the first to legitimize the idea that a historical epistemology of the human and social sciences could take shape by shifting focus from the physical-mathematical sciences to the life sciences, preparing the ground for Foucault, Althusser, and Bourdieu”.

Althusser adopted Bachelard’s notion of epistemological break to demonstrate the scientific character of the historical materialism formulated by Marx in *The German Ideology*, which arguably marked the decisive moment of Marx’s rupture with his ideological past. This notion became foundational to the structuralist interpretation of Althusserian Marxism. In this perspective, as Ienna (p. 163) argues, “the epistemological break took on an even more radical role than in Bachelard’s because it represented the line of demarcation, or rather a qualitative distinction, between science and ideology”. Althusser sought to formulate a materialist, dialectical, and historically grounded philosophy of science that would assist scientists in their work by helping them identify and eliminate the ideological remnants embedded in their spontaneous philosophical outlook. For Althusser, as Ienna explains (p. 171), “only the analysis of social, economic, and class relations allows for understanding the processes through which scientists’ spontaneous philosophies were formed”.

It is within a broader anthropological lineage – also represented by thinkers such as Meyerson, Koyré, and Canguilhem – that Foucault developed his archaeological project, drawing on a transformed version of this perspective to identify what he termed “historical a priori”, namely, the conditions that delimit what can be seen and articulated at a given historical moment. In this respect, Foucault departed from Canguilhem’s historical epistemology, which sought to reconstruct conceptual transformations within established scientific fields, by redirecting his inquiry toward the conditions that made such forms of knowledge possible in the first place. As a result, the internal shifts within medical and psychopathological discourse were interpreted not as isolated conceptual developments but as expressions of a broader cultural and cognitive configuration. Moreover, as Ienna observes (p. 145), Foucault was anticipated by Metzger, who advanced a historicized conception of the a priori, understood as the set of elements that shape the cultural and conceptual framework within which a scientist’s experience takes form.

Building further on Bachelard and Canguilhem, Foucault maintained that the history of science is characterized less by continuity than by dispersion and rupture, and archaeology’s specific task is to identify these discontinuities in the configuration of knowledge, whether historical or regional. Whereas Bachelard and Canguilhem focused on conceptual transformations within scientific practices, Foucault redirected the inquiry toward the broader discursive conditions that make such forms of knowledge possible. Against the

background of the same intellectual milieu, and taking up the thesis of epistemological regionalism, Bourdieu and his collaborators argued that sociology possesses a specificity comparable to that of electrical rationalism, as described by Bachelard, or the rationalism of the life sciences, as analysed by Canguilhem. The objective of *The Craft of Sociology* (1991), as Ienna argues (p. 192), was precisely to make explicit the scientific criteria governing this epistemological region, thereby enabling sociology to assert itself as a science among others, defined both in relation to and in distinction from the natural sciences. From this perspective, individual constructions reveal themselves to be historical and collective achievements, regulated by the internal norms through which the scientific field structures itself and establishes the conditions for the pursuit of common objectives, including the exclusion of those who transgress its rules. Scientific verification thus appears as a socio-logical process, embedded in the collective structure of the scientific field.

In his concluding remarks, Ienna proposes what he presents as the first formalization of a hypothetical Italian canon in historical epistemology, whose roots lie in a reaction against the Italian traditions of historicism and neo-idealism. Beginning with Federigo Henriques and moving through Antonio Gramsci, Ludovico Geymonat, Giulio Preti, Galvano della Volpe, Paolo Rossi, Aldo Giorgio Gargani, and finally to an examination of the highly contentious debates of the so-called Italian Science Wars of the 1970s, Ienna identifies a shared set of conceptual concerns – such as the historicity of scientific rationality, the critique of idealism, and the regional differentiation of epistemic practices. Ienna shows how this canon emerges from concrete philosophical disputes, offering a persuasive framework for understanding the distinct contribution of Italian thought to the broader field of historical epistemology. In doing so, he not only reconstructs a lineage of authors but also seeks to stabilize a field of inquiry that has often remained fragmented and marginal within broader debates on historical epistemology.

Approaching French Historical Epistemology not as a fixed theoretical program but as a historically shaped configuration, Ienna undertakes a meticulous reconstruction of the debates surrounding its development and, in doing so, renders perceptible the gradual emergence of a canon of French Historical Epistemology. Combining careful historical reconstruction with conceptual clarity, Ienna brings to light not only the constitution of a politically inflected canon of FHE, but also the emergence of more circumscribed constellations. Although the trajectory toward political epistemology remains only partially developed in the course of the historical reconstruction, the work's achievement remains undeniable. It succeeds not only in mapping a tradition, but in revealing the historical conditions under which it became recognizable as a coherent field of inquiry.