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The Function of Bachelardian Epistemology in the Post-colonial Project of Mohammed 'Abed al-Jabri

Jordan Kynes*

Abstract: This paper explores the function of historical epistemology in the thought of Gaston Bachelard (1884–1962) and Mohammed 'Abed al-Jabri (1935–2010). Attributing thought with a particular function challenges our tendency to explain the development of thought in other socio-historical contexts in terms of mere conceptual influence. Available English-language literature on al-Jabri commonly references Bachelard's concept of epistemological rupture as a source of inspiration. Though the reference is astute, this term remains poorly understood and has long been overshadowed by Thomas Kuhn's notion of 'paradigm shift'. The broader function of Bachelard's thought as a renegotiation of time, place, subject, and reason in the natural sciences has been largely neglected in historiographies of the philosophy of science outside of France. This paper emphasizes the level of insight and ingenuity with which al-Jabri employs the function of Bachelard's epistemology by reinterpreting it within the framework of his own socio-historical context. Far from reducing al-Jabri's thought to a mere programmatic reproduction of French thought, I suggest that al-Jabri was among the most astute interpreters of this long-misunderstood theorist.

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Mohammad 'Abed al Jabri, (b. 1936 in Figuig, Morocco—d. 2010 Casablanca, Morocco), has by any standard made an indelible mark upon the intellectual controversies of the Arab-Islamic world. His epistemological critiques of both Arab-Islamic heritage (turāth) in We and Our Heritage (Nahnu wa-t-turāth), as well as of Arab-Islamic thought in his four-volume Critique of Arab Reason (Naqd al-'aql al-'arabi), has been the subject of much debate, as much for their methodological approaches and conceptual foundations as for the highly controversial nature of their conclusions. Generally speaking, however, even his most ardent detractors admit that his work has been a significant contribution, if perhaps a philosophical gadfly, to a modern critical discourse on the history of Islamic thought whose interlocutors can be found from the Maghreb to the Levant, through Central Asia to Indonesia. He is the author of some 40 works and essays on topics ranging from epistemology, to the Moroccan education system, to monographs on Ibn Khaldun² and Ibn Rushd,³ to the chronology of the Qur'anic revelation. Despite the prodigiousness of his output, the majority of his works can be seen as essentially directed towards a single overarching objective: a strategic project designed to induce a distinctly Arab-Islamic modernity. This paper presents al-Jabri's project in terms of its entanglements with the epistemology of Gaston Bachelard (1884–1962), whose writings on the philosophy of science have been largely overlooked in philosophical historiographies outside of France. In doing so, we reveal a stark functional parallel between Bachelard's ideas on reason, collective identity, historicism, and progress in the natural sciences in interwar France and al-Jabri's articulation of an authentic Arab-Islamic modernity in the late twentieth century. To be sure, the discursive migration from the "scientific" to the "political"—i.e. from the natural sciences to the humanities, especially in post-modern theory—has long been criticized as a misappropriation of theory. Interestingly, when we juxtapose the problematics these two marginalized thinkers engaged, we discover that historical epistemology, regardless of the discipline or social context in which it is applied, has always been inherently political. It is the branch of philosophy which asks "What is to be done with tradition?" Therefore, beyond merely noting Bachelard's influence on al-Jabri's thought beginning in the late 1970s, this paper seeks to demonstrate the essential ideological function of historicizing thought; a function which al-Jabri applied just as deftly in the sphere of religious tradition as Bachelard had earlier in the fields of physics and chemistry.

¹ Most controversially perhaps, is his thesis that the authoritarian style of rule in the Arab countries of the East (al-mashreq) is the legacy of an irrational epistemic model—known as 'irfān—inherited from pre-Islamic Persian political thought. Jurj Tarabishi, a Syrian intellectual, took such exception to this thesis that he authored a four-volume counter critique: the aptly-titled Critique of the Critique of Arab Reason.

² (1332–1406): Fourteenth-century critical historian and social theorist of North Africa, whose Prolegomena (al-muqaddimah)—the first of seven books of his history of North Africa (kitāb al-'ibar)—remains to this day a topic of interest for orientalists, sociologists, philosophers, and historians alike

³ Otherwise known in the latinized form 'Averroes' (1126–1198): Twelfth-century jurist and polymath whose commentaries on the works of Aristotle were crucial for revitalizing European interest in Greek thought.

Thorough treatments of Moroccan philosopher Mohammed 'Abed al-Jabri's thought in languages other than Arabic are few and far between. The bulk of this scant literature generally focuses on several of the most controversial theses from his most well-known works *We and Our Heritage* (1980) and *The Critique of Arab Reason* (in four volumes⁴). In 2018, an edited volume of English-language essays on al-Jabri's thought was published under the title *Islam, State, and Modernity: Mohammed al-Jabri and the Future of the Arab World.*⁵ While the work is indeed a milestone in the effort to provide introductory literature on al-Jabri to an English-speaking readership, sustained treatments of his epistemological foundations are largely lacking. Though the French philosopher of science Gaston Bachelard (1884–1962) is mentioned several times in connection with his concept of epistemological rupture, the broader parallels between his thought and al-Jabri's project is never discussed. To my knowledge, few if any have even remarked on the apparent homage to Bachelard's (1938) work *The Formation of the Scientific Mind* (*La formation de l'esprit scientifique*) in the title of the opening volume of al-Jabri's *Critique of Arab Reason*, *The Formation of Arab Reason*. This potential oversight, I argue, might simply be a matter of historiography.

Generally speaking, introductory literature on al-Jabri's thought invokes the names of several familiar francophone thinkers as sources of intellectual inspiration: post-structuralists (Foucault or Derrida), Marxists (Althusser) and, less commonly, structuralist thinkers (Piaget and Bourdieu). As we will see, these references, while certainly defensible as a means of orientation, fail to capture al-Jabri's unmediated insight into the potential for Bachelard's epistemology as a philosophical polemic against the authority of knowledge in the Islamic sciences. This shortcoming, I argue, is itself the consequence of a kind of contingent cognitive *habitus*; the lack of deeper awareness of the parallels between Bachelard and al-Jabri's thought is the result of a lacuna in Western historiographies of the philosophy of science. In the introduction to Mary Tiles's *Bachelard: Science and Objectivity* (1984), the editor explains:

[Bachelard's] historicism which preceded that of Kuhn and Foucault has never been properly discussed. Some people may have heard of his notion of "epistemological rupture" through the works of Louis Althusser, but without giving serious attention to it – or even associating it with Bachelard himself.⁶

⁴ The Formation of Arab Reason (takwīn al-'aql al-'arabi) 1982; The Construction of Arab Reason (bunyat al-'aql al-'arabi) 1984; Arab Political Reason (al-'aql as-siyasi al-'arabi) 1990; and Arab Ethical Reason (al-'aql al-akhlaqi al-'arabi) 2001.

⁵ There remains a glaring omission in al-Jabri scholarship with respect to his earlier works from the 1960s and 1970s: Lessons in Philosophy (1966), Lessons in Islamic Thought (1967); Introduction to the Philosophy of Science (1977); The Thought of Ibn Khaldun: Social Cohesion and the State (1971); and a general critique of the Moroccan educational system Illuminations on the Problem of Education in Morocco (1973). I see this omission as having contributed to a great deal of controversy over al-Jabri scholarship, and currently seek to fill this lacuna in my ongoing thesis.

⁶ Tiles (1984), p. xi.

Accordingly, this historiographical "blind spot" appears to have been reproduced in many treatments of al-Jabri's thought. The prototype of al-Jabri's critical project was laid out in the 1960s—at least a decade before al-Jabri would mention Bachelard—in two baccalaureate-level textbooks which he co-authored with two colleagues from the nationalist resistance party l'Union nationale des forces populaires (UNFP). In Lessons in Philosophy (1966), he covers anthropology, sociology, developmental psychology, and epistemology without reference to any of the post-structural or Marxist legatees of Bachelardian epistemology mentioned above. The other, Lessons in Islamic Thought (1967), presents theses strikingly similar to those found in his epistemological works after 1980. The first testing ground of al-Jabri's political project was therefore the classroom, where he was able to combine philosophy and political activism. We find the first reference to Bachelard in his *Introduction to the Philosophy of Science: Contemporary* Rationality and the Development of Scientific Thought (1976).7 Here, he dedicates the final chapter to Bachelard, who he sees as providing a novel solution to the rational-empirical dilemma in the philosophy of science. His interest in Bachelard's epistemological "alternative" is clear in this work, which precedes the publishing of We and Our Heritage (1980) by a mere four years. What he saw in Bachelard's critique of scientific reason is presumably what inspired all of the aforementioned Western theorists: a third way out of dubious theoretical dilemmas.

Following these preliminary remarks on the textual relationship between al-Jabri and Bachelard, we now move to the contextual to illustrate the *migration* of historical epistemology between the distinct discursive contexts of France and Morocco; from the Western scientific discourse on the "crisis of knowledge" in the natural sciences, to the Arab-Islamic cultural discourse on the "crisis of authenticity" in the era of 'decolonization' and Arab nationalism.

I begin with a general introduction to the broader socio-political and intellectual context in which al-Jabri's critical project emerged, followed by an introduction to several prominent features of Bachelard's epistemology as a response to the crisis of knowledge in the natural sciences. Finally, I will return to a crucial point in al-Jabri's intellectual development with reference to his assertions on Bachelard and Arab-Islamic heritage from *Introduction to the Philosophy of Science* (1977) and *We and Our Heritage* (1980), respectively.

The Problematic of "Authenticity" and "Modernity" ('ishkāliyat al-'aṣāla wa-l-ḥadātha)

Al-Jabri's theoretical work constitutes one of many contributions to a particular discourse on Islamic heritage (*at-turāth*) which emerged in the final quarter of the 20th century to address

⁷ This work is essentially a collection of selected texts surveying the epistemological development of scientific thought with a particular emphasis on the modern era. The relative lack of interest in this work for his thought is perhaps the result of its perception as a mere pedagogical instrument, and not a work of philosophy proper. However, when we consider that al-Jabri himself selected both the texts and excerpts as well as provided introductions to each chapter and commentary throughout, its acquires a philosophical value as a translation of and commentary on modern science. From this perspective, it is easy to understand al-Jabri's intense interest in Averroes, the fourteenth-century commentator and "cultural mediator" of Aristotle.

the heightened sense of social and cultural stagnation arising after the failure of the United Arab Republic and the humiliating Arab defeat in the Six-Day War of 1967. The roots of this discourse can be traced to that of the project of Arab "renaissance" (an-nahḍa) which had begun roughly a century earlier under the conditions of the European colonial presence in North Africa and the Middle East and included the notable contributions of Jamal ad-Din al-Afghani⁸ and Mohammed 'Abduh.⁹ The newer "post-colonial" discourse, however, increasingly emphasized notions of identity (huwiyya), authenticity (aṣāla) and heritage (turāth) by virtue of which projects of reform (iṣlāḥ) and renewal (tajdīd) might be legitimately undertaken. In this post-1967 discourse, these concepts were more intimately tied to National fragen than their discursive counterparts of the preceding Nahda effort in the late nineteenth and early twentieth centuries. In a paper presented at the Conference on Authenticity and Renewal in Contemporary Arab Culture in 1971, Egyptian literary critic Shukri 'Ayyad noted that the textual proliferation of the notion of authenticity (aṣāla) began around the mid-1950s and "seldom appeared in the Arabic critical literature of the 1920s and 1930s".10 This development should come as no surprise when one considers that the 1940s and 1950s witnessed the ascent of various Arab nationalisms (both nation-state and supra-national) within the framework of the so-called "decolonization" process. The concept served as a point of convergence between a sense of selfhood (dhātiyya) at both the individual and national level.11

The "authenticity" discourse in the early post-colonial period was therefore very much a product of the socio-political environment in which it emerged. Proposals for political, social and economic programmes could only be pursued in good conscience to the extent that they referred to some standard of cultural authenticity. The key to maintaining political independence, especially from the dominant capitalist-communist binary, was consummate with cultural independence itself. In this way, whether Arab or Islamic, the legitimizing function of "authenticity" remained a constant feature of political discourse, while the substance of this authenticity became the focus of vigorous debate.

For example, Egyptian intellectual Zaki Naguib Mahmoud characterized the "authentic" Arab by his ability to appropriate external cultural influences. On the basis of this characterization, he called for a comprehensive adoption of rationality and a modern lifestyle while maintaining "the Arab cultural distinctiveness (by retaining) certain aspects of religious doctrine, art and social conventions not conflicting with the scientific movement in any of its branches". Mahmoud's approach was essentially pragmatic, being less concerned with distinctions between "traditional" and "modern" in favour of applying "whatever will be of practical utility".

⁸ (1838–1897) Anti-colonial agitator and early theorist of political Islam.

⁹ (1849–1905) Islamic Jurist and early Modernist thinker who strove to reform Islamic education at al-Azhar University in Egypt.

¹⁰ Boullata (1990), p. 14.

¹¹ Kassab (2010), p. 118.

¹² Boullata (1990), p. 17.

Like Mahmoud, many theorists began from the premise that "modernity" was a phenomenon external to authentic Arab culture and would prove at some level incompatible with authentic Arab identity. Accordingly, the solution to the modernity-authenticity dilemma required a negotiation, or compromise, by which the two might coexist for the sake of "progress". This is what Ibrahim Abu-Rabi' refers to as "adaptionist", as opposed to the more extreme "rejectionist" position, 13 which called for either a wholesale rejection of the West and all it represented, or an extirpation of Arab-Islamic heritage. For al-Jabri, however, the path towards an intrinsically Arab-Islamic modernity required neither adaption, nor rejection, nor compromise, in the sense of a bricolage of Arab-Islamic and European cultural virtues. He was sure that modernity could be achieved from within by calling for Arabs to modify, not their heritage, but rather their relationship with it in an act of epistemic renewal. In this way their authentic selfhood might remain intact.

For al-Jabri, the "compromise" approach was a failure: not because of an essential incompatibility between "modernity" and "authenticity", but rather because these two options formed a dichotomy that was simply false. The very idea of an either/or dilemma served an ideological function, as much for Arabs, who sought to preserve their identity in the face of a Western "modernity" which had been imposed upon them, as for the West, which demanded conformity to the project of universal modernity which it saw exclusively as its own. The reflexive recourse to tradition as a means of cultural and political renewal gave rise in part to what is known as the "Islamic resurgence", but here too, al-Jabri identifies a procedural error in the way this project was implemented. Instead of functioning as a means to an end, i.e. a kind of reservoir from which notions of identity and cultural authenticity could be drawn to establish continuity into the present and beyond, the Islamists employed the notion of turāth, often translated as "tradition" or "heritage", as an end in itself: a conceptual refuge into which the Arab "I" ('ana) could flee from the "Other" ('ākher). It is the breaking of the refuge mechanism, and thereby the false dichotomy itself, which forms the fulcrum of his reading of Arab-Islamic heritage in We and Our Heritage.

Toward this end, he identifies a structural obstacle in the manner by which *turāth* itself was treated. The Arab subject's conception of *turāth*, it seemed, had become an inseparable part of *turāth* itself (what al-Jabri called *al-fahm at-turāthi li-t-turāth*, or "the traditional understanding of tradition"). In order to overcome this structural impediment al-Jabri turned to epistemology. By his own account, the "traditional understanding of tradition" is so pervasive and overbearing that it keeps the modern Arab from reading his heritage in a manner consummate with the realities of the modern world. In fact, he claims, he does not read his heritage at all, but rather *is read* (*maqru'*) by it. What is occurring is essentially a melding of the subject (the modern Arab) and the object (*turāth*) under consideration. As a

¹³ Abu-Rabi (1996), p. 44.

 $^{^{\}rm 14}$ To be sure, al-Jabri's approach was itself clearly ideologically motivated, but he freely admits this in his own writings. For a detailed discussion of this topic see Al-Sayyed (2001), p. 45

¹⁵ Gaebel (1995), p. 12.

result, the method employed in the interpretation of *turāth*, whether "historicist, functionalist, or structuralist" is irrelevant as long as the basic condition of objectivity does not obtain

a fortiori when the object that we are treating is as eminently a part of the subject—and the subject is as eminently part of the object—as tradition, the methodological challenge to be noted as a priority is therefore to find the means to disjoin the subject from the object and to disjoin the object from the subject, in order to allow for the rebuilding of their relationship on a new basis".¹⁶

Al-Jabri argues therefore for the necessity of an epistemological rupture ($qat\bar{t}'$ $ib\bar{t}stim\bar{u}l\bar{u}ji$) with the traditional understanding of tradition (fahm at- $tur\bar{a}thi$ li- $tur\bar{a}th$) in order to generate modern readings ($qir\bar{a}'at$ $mu'\bar{a}sira$) of Arab-Islamic heritage (turath). As we will see, the concept of epistemological rupture, and the particular approach to historicism which it implies, is key to understanding the strategic function of al-Jabri's project, which was intended to collapse the "authenticity" vs "modernity" dichotomy as well as to liberate the subject from both external (Western) and internal (traditional/Salafist) models of authoritative reference. Al-Jabri embraced epistemology because he found in it the means to solve the "crisis of authenticity", just as Bachelard had sought to do in the context of a similar crisis in the philosophy of science.

Bachelardian Epistemology

Gaston Bachelard (1884-1962), in his capacity as a philosopher of science, 17 was himself responding to an impending crisis of knowledge in the natural sciences which had begun in the nineteenth century and grew all the more significant with Einstein's theory of relativity. Like the Arab intellectuals of the post-1967 debates on turāth, natural scientists were forced to reconsider the value of their traditions: of knowledge(s) heretofore produced in their respective fields. The future of Newtonian mechanics, Euclidian geometry and classical chemistry seemed precarious at best, having been overtaken by alternatives based on novel foundations. Scientists were faced with the question of the value of a compendium of knowledge which appeared to have lost its utility in the face of novel challenges: had this knowledge therefore been relegated to the proverbial dustbin of history? Here too the refuge mechanism manifested among "communities" of scientists—what Bachelard refers to as les cités savantes-who remained committed to accumulative continuity in notions of scientific progress. While Bachelard rejected the accumulative approach to scientific progress, he did not reject the "scientific past" in toto: it played an integral dialectical function as a springboard towards progress. It was only by means of the past, says Bachelard, by a perpetual critical review of its content and methods of theoretical production, that science moved forward. In his

¹⁶ Al-Jabri (1999), p. 24.

¹⁷ Bachelard was also a prodigious theorist on the poetic imagination. There has been much debate over the extent to which his interests in the philosophy of science and literary critique are reconcilable. Further reading on this topic can be found in Lecourt (1974).

earliest work, *Essai sur la connaissance approchée*, Bachelard explains that "scientific truth is, by nature, a truth that has a future". ¹⁸

From here, we can already begin to see discursive parallels between Bachelard and al-Jabri, not only at the theoretical level, in terms of the relationship between past, present and future, but also at the *functional* level as a response to crises of knowledge; whether in the natural sciences or the Islamic sciences (those disciplines including Arabic grammar (naḥw), principles of Islamic jurisprudence (uṣūl al-fiqh), dialectical theology ('ilm al-kalām) and rhetoric ('ilm al-balāġa), which al-Jabri takes to be the core textual constitution of Arab-Islamic *turāth*)

Epistemological Obstacle

Most researchers working within critical, postmodern or postcolonial thought in the humanities are familiar with—or at least have a faint idea of—Thomas Kuhn's concepts of "paradigm" and "paradigm shift", which describe the emergence of new epistemic frameworks as spontaneous crystallizations among scientific communities. The term has long outgrown its humble origins in the philosophy of science and has become so ubiquitous as to have lost a great deal of conceptual clarity. At face value, it appears to convey the same phenomenon as the perhaps less intuitively conceivable "epistemological rupture"; a rose by another name perhaps. However, as indicated above, Bachelard's epistemological rupture is distinguished by its particular relationship with the past. More so than Kuhn, Bachelard was interested in offering an account of *the process* of change; the very mechanisms by which change is rendered possible, and the identification of impediments to this process, which he calls *l'obstacle epistemologique*.

To know, according to Bachelard, is "to know against a preceding knowledge". ^{19,20} Knowledge is not procured *ex nihilo*, but rather in contradistinction to what came before it. In this way, the past (old forms of knowledge) and present (new forms of knowledge) are forever dialectically related. Sciences advance by means of epistemological acts, which overcome epistemological obstacles through "a dialectical synthesis of its past and the negation of its past in order to create something new that maintains a relation with its past. The past is re-interpreted in order to be assimilated by current doctrines." ²¹

It is perhaps helpful to think of an epistemological obstacle as a kind of "psychological stumbling block" which is as natural to the scientist's mind as it is to that of the non-scientist. Despite his best intentions, the scientist thwarts his own attempts at progress when he succumbs to certain cognitive habits. The delineation and diagnosis of these habits is the task Bachelard undertakes in his 1938 work, *The Formation of the Scientific Mind* (*La formation de l'esprit scientifique*), ²² which can be seen as a kind of psychoanalysis of the scientific mind.

¹⁸ Bachelard (1928), pp. 60–61.

^{19 (}My emphasis) "On connaît contre une connaissance antérieure".

²⁰ Bachelard (1938), p. 15.

²¹ Chimisso (2015), p. 4.

²² In the French title, the double-meaning of "formation" and "education" is preserved. Al-Jabri's apparent homage to Bachelard in the title of his 1984 work The Formation of Arab Reason (takwīn al-

The first obstacle to overcome is that of *opinion*, which merely "translates desires into knowledge". The scientist must therefore be wary of confounding the projection of his desires, some pragmatic benefit, with the very knowledge which he seeks: "in designating objects by their utility, [opinion] forbids them to be known".²³

There is also the empirical obstacle, whereby the observer mistakes his primary judgement for a value-free intuition, when it is in fact informed by a "more or less romanticized sensualism ... which claims to take its lessons directly from a clear fact (*donné claire*)".²⁴ This obstacle applies as much to the laboratory as to the classroom, where metaphors and analogies employed as pedagogical instruments begin to accrue a psychological concreteness and lose the initial utility of their abstraction. As a result, whether in praxis or pedagogy, both student and researcher must constantly struggle to rid themselves of various affective impositions. As Bachelard himself explains: "We understand nature by resisting it."²⁵

The Polemic Against Philosophical Apriorism

Bachelard's position on the relationship between philosophy and science is unique. As a philosopher of science, he was not satisfied with the then-available philosophical approaches to science, claiming "science does not have the philosophy it deserves". With this statement, he challenges the idea that philosophy is the engine of scientific progress. It seemed to him rather that science had surpassed philosophy, which was "not only incapable of reflecting new scientific developments ... [but also] of describing the effects of these developments on perception and philosophical/scientific concepts". 27

In taking this position, he launched a polemic against all of the prevailing (particularly in France) philosophical tendencies of his time. ²⁸ In the course of his polemic, he rarely mentions theorists by name, instead taking aim at the epistemological fundaments upon which their theories rested. ^{29,30} In this way, realism, idealism, classical rationalism and empiricism, among others, are dealt with in turn. In failing to provide a satisfactory account of scientific developments, these philosophical currents had become somewhat of a cognitive burden, or a conceptual "strait-jacket" ³¹ to the enterprise. Broady explains Bachelard's dissatisfaction with the philosophical "state of the art" as follows:

^{&#}x27;aql al-'arabi) loses the secondary significance in both English and Arabic. This is important, because Bachelard was very concerned with good practices in scientific pedagogy, and al-Jabri was a life-long educator who seems to have been equally inspired by Bachelard's musings on education.

²³ Bachelard (1938), p. 14.

²⁴ Bachelard (1938), p. 23.

²⁵ Bachelard (1938), p. 23.

²⁶ Bachelard (1990), p. 20.

²⁷ El yaznasni (2002), p. 17.

²⁸ El yaznasni (2002), p. 45.

²⁹ El yaznasni (2002), p. 18.

³⁰ Among those thinkers whom he does critique by name are Émile Méyerson, Henri Bergson and Henri Poincaré.

³¹ Broady (1997), p. 8.

Contemporary French philosophy still relied on the nineteenth or more often eighteenth century view on the physical world and mathematics, treating fundamental concepts like cause, time, space, measure, mass etc in much the same manner as Kant did—as if logic had reached its final state with Aristotle, geometry with Euclid and mechanics with Newton.³²

Bachelard took issue with the coercive authority of foundational epistemologies, because what was "taken as basic in any discipline at any period cannot claim to be basic in any objective sense". The uncritical adoption of these epistemologies resulted in an increasingly subjective, even ideological, approach to scientific praxis. Bachelard therefore developed what Broady refers to as a "protectionist attitude" in the hope of *liberating* science—not only from its philosophical "strait-jacket", but by extension from the *a priori* ideology of the researcher which reproduced itself in scientific praxis. To be sure, Bachelard is not accusing scientists of harbouring implicit political agendas beyond the laboratory, but simply of succumbing to a psychological obstacle. As Bachelard explains: "There comes a time when the mind prefers that which confirms its knowledge over that which contradicts it, or it prefers the answers over the questions. And so the conservative instinct prevails, (and) spiritual growth ceases." ³⁵

The best defense against the "conservative instinct" is the question. In fact, the question is the very engine of progress because it induces critical reflection on that which is simply taken for granted; once liberated from philosophical apriorism, new sciences would be free to develop on their own terms and within their own unique *problematics*. However, the liberation from philosophical intervention came at a cost; it threw the notion of universal reason into question.

Bachelard provides some measure of reassurance in his 1949 work, *Applied Rationalism* (*Le rationalisme appliqué*). In this work, having delineated the epistemological obstacles in the psychology of the individual researcher, Bachelard shifts his attention towards group psychology, or the socially-constructed nature of thought. The title's English translation is perhaps misleading, as it suggests a form of rationalism *produced in isolation* from its subject. For Bachelard, reasoning cannot be separated from the object or phenomena it seeks to describe and as such, no single authoritative model of reasoning suffices for the study of various subjects; reason is at the same time "informing" and "informed".

With this distinction, reason retains its universality when it informs. It is the organizing faculty of reason proper to every human. On the other hand, each distinct form of rational organization is inextricably bound to the subject of inquiry. It becomes *regionalized*, and therefore "associated with the subject which it informs, the phenomena which it regulates, and

³² Broady (1997), p. 8.

³³ Tiles (1984), p. 34.

³⁴ Broady (1997), p. 8.

³⁵ Bachelard (1938), p. 15.

³⁶ 'Problematic', here referring to a set of interrelated issues, is another ubiquitous term originally coined by Bachelard, and used extensively by al-Jabri.

the phenomenotechnic which it founds", and addresses "the philosophical question about the relationship of a general rationalism to these diverse 'regional' rationalisms".³⁷

This informed reason is restricted to particular scientific communities, what Bachelard refers to as the "cité savante". From here, it is not difficult to surmise the socially constructed nature of knowledge production. In fact, Bachelard himself makes the connection between discipline-specific forms of rationalism and scientific culture. Whether speaking of a cité de physiciens, or a cité de mathematiciens, each "is formed around a kind of thought (pensée) provided by apodictic guarantees" 38 and emerges as a scientific culture:

Culture is an accession to an emergence; in the scientific domain, these emergences are effectively socially-constituted [...] and one cannot judge it without belonging to it.³⁹

Perhaps more so than any other quotation, it is this final sentence which captures the essential thrust of al-Jabri's strategic epistemological project. It explains al-Jabri's lifelong commitment to publishing exclusively in Arabic and his intentionally subjective choice of the title *We and Our Heritage*. It was a work intended for Arabs only.

From Scientific Community to National Community

Introduction to the Philosophy of Science (1976)

Only 4 years prior to the publication of *We and Our Heritage*, al-Jabri published his two-volume *Introduction to the Philosophy of Science* (*Madkhal 'ila falsafat al-'ulum*) (1976). While a deep reading of this work far exceeds the limited scope of this paper, it will suffice for our purposes to draw attention to one crucial feature: the closing chapter and "final word" of this work consists of three texts from the "philosophical scholar" (*al-'ālim al-faylasūf*) Gaston Bachelard.

In a short preface to these texts, al-Jabri summarizes and identifies the texts' essential assertions. The first text deals with Bachelard's insights on the "inversion" ($inqil\bar{a}b$) of the idea of reality in scientific thought brought about by the quantum "revolution":

The scientific object was no longer a perceived fact (mu'tan hasiyyan), but a mental creation (' $in\check{s}\bar{a}'$ 'aqliyy); a rational organization of relations bound with phenomena which could not be treated in the same way they had been treated by classical physics. Today, scientific reality becomes an expression of constructs ($buniy\bar{a}t$), not of existing things ($k\bar{a}'in\bar{a}t$).⁴⁰

³⁷ Bachelard (1994), p. 131.

³⁸ Bachelard (1994), p. 132.

³⁹ Bachelard (1994), p. 132.

⁴⁰ Al-Jabri (2011), p. 463.

The second deals with Bachelard's critique of realism, which is "the realism with respect to scientific objects". This is of course the empirical obstacle; the tendency to take analogies and metaphors as things-in-themselves. By means of this critique, al-Jabri continues, "Bachelard rejects the empiricist tendency, the idealist tendency and classical rationalism which relates a priori principles to thought".⁴¹ In other words, Bachelard neutralized several standard philosophical tendencies by means of a single critique. Finally, with the third text "comes the alternative": Bachelard's unique form of rationalism "which rests on the axis between reason and experience, and rejects the departure (al-'inṭilāq) from a priori principles just as it rejects tying thought and its processes to empirical data alone".⁴² Herein lies the impetus for al-Jabri's breakthrough project: to provide an alternative (between reason and experience) to prevailing ideological tendencies based on the epistemological analysis of methods of rational organization.

We and Our Heritage (1980)

If questions are the best defense against "the conservative instinct", it is only natural that Al-Jabri begins his work with a set of questions: (1) "How do we recover the glory of our civilization? [...] How do we live (through) our heritage?" (2) "How (should) we live our (present) age? How (should) we treat our heritage?" and (3) "How do we realize our revolution? ... How do we rebuild our heritage?" ⁴³ The questions are clearly "regionalized" in his repetition of "we". The "science of *turāth*" which he is proposing is a science of Arabs and for Arabs, liberated from the apriorism of Western orientalist scholarship.

The epistemological privilege of orientalists was of course not the only target of al-Jabri's polemic. Like Bachelard, he also levels his critique against his own contemporaries, without naming them, by summarily dismissing what he describes as the three predominant ideological tendencies ($naz'\bar{a}t$) of contemporary Arab thought: Salafi, Marxist and European liberal. With al-Jabri, Bachelard's "philosophical apriorism" becomes ideology pure.

From the epistemological perspective, they do not essentially differ from one another because they are actually built on a single method of thinking, that which the classical Arab theorists called "analogy of the unknown based upon the known" (*qiyās al-ġā'ib 'ala aš-šāhid*).⁴⁴

By virtue of this method, which al-Jabri attributes to the Islamic scholars of grammar and jurisprudence ('ulemā' an-naḥw wa-l-fiqh), the three tendencies are all Salafi (i.e. conservative, in the Bachelardian sense) in their reliance upon authoritative foundations (the known) in order to arrive at knowledge of the future (the unknown).⁴⁵ Al-Jabri is not refuting the legitimacy of

⁴¹ Al-Jabri (2011), p. 463.

⁴² Al-Jabri (2011), p. 463.

⁴³ Al-Jabri (2006), pp. 16–19.

⁴⁴ Al-Jabri (2006), p. 21.

⁴⁵ Al-Jabri (2006), p. 21.

the method itself, which he insists is "scientific" ('ilmi), but rather the uncritical fashion in which it is employed. To employ Bachelard's terms, the classical scholars ("ulemā") had succumbed to certain psychological obstacles in exercising their judgement. Consequently, the "conservative instinct" of their successors reproduced and reified their judgements until they became an epistemological obstacle and authority in itself.

The "conservative instinct" which makes Salafism, Marxism and European liberalism appear to be feasible prospects for an Arab-Islamic future arises from the failure to observe the conditions ($\check{s}ur\bar{u}t$) set by the classical scholars themselves for the method's proper implementation. Analogy of the unknown based on the known is not legitimate, unless: (1) "both are of the same nature" and (2) "they share—inside their single nature—one thing through which a fundamental element pertaining to both is expressed".46

Invoking these jurisprudential conditions in his discussion of the conservative ideologies, al-Jabri is of course broaching the topic of "authenticity". He then explains how the lenience (tasāhul) and negligence (tafrīṭ) with which the method of analogical reasoning was implemented in the various Islamic sciences since the "age of decline" ('aṣr al-inḥiṭāṭ) led to the conflation of "the known" with the past itself.⁴⁷ This idea, revealing al-Jabri's ultimate commitment to principles of scientific enlightenment, evokes Bacon's claim in his *Novum Organon* that:

The syllogism consists of propositions; propositions of words; words are the signs of notions. If, therefore, the notions (which form the basis of the whole) be confused and carelessly abstracted from things, there is no solidity in the superstructure.⁴⁸

In the case of the Arabs, al-Jabri insists, this cognitive habit was so fundamentally pervasive that it became a subconscious ($la' \check{s}u'\bar{u}ri$) feature of Arab reason ($al-'aql\ al-'arabi$).

Al-Jabri goes on to explain that this "automatic mental activity" (al-nišāṭ adh-dhahaniyya al-'āliyy) was the primary reason for the failure of "Arab renaissance" (naḥḍa); whether "the European past" (liberalism), the "Soviet experience" (Marxism) or the Islamic past itself (the period of the first four Caliphs as codified in the ninth and tenth centuries AD49), the Arab "sought ready-made solutions to emergent problems in a given source (fi 'aṣlin ma)".50 The word "source" here, ('aṣl), is of course one substantive of the root 'a-ṣ-l from which the notion of 'aṣāla (authenticity) is derived.

In other words, all attempts at a renaissance were preemptively doomed to failure because they were "inauthentic" to the Arab experience. The ready-made solutions of European

⁴⁸ Francis Bacon, Novum Organon, Book 1, Aph. 14.

^{46 (&#}x27;illa 'idha kāna ma'an min ṭabi'a wāḥida) Al-Jabri (2006), p. 21.

⁴⁷ Al-Jabri (2006), pp. 22–23.

⁴⁹ To be clear, al-Jabri does not reject the significance of the period of the Rashidun (the rightly-guided Caliphs) for Islamic thought. He rejects, rather, the ahistorical and decontextualized understanding of this period which is the epistemological foundation of Islamic fundamentalism.

⁵⁰ Al-Jabri (2006), p. 24.

liberalism and Marxism were applied without ever asking if their "natures" were compatible with that of the Arabs. The ready-made solution of religious Salafism, though culturally internal, was similarly "inauthentic" because it lacked the due diligence of historicism which would have rendered it relevant to the modern condition. The problem in all cases was essentially methodological. What was needed was a veritable epistemological rupture.

The epistemological rupture does not deal with the *object of knowledge*, and as such there is no relation between it and the corrupt (fasāda) thesis calling for the casting of heritage into museums or leaving it in its place in history.⁵¹

Rather, the epistemological break deals with the "cognitive act" (*al-fi'l al-'aqliyy*), or, "the activity which occurs in some manner, by means of devices ('*adwāt*), i.e. concepts, and inside a particular cognitive field (*ḥaql ma'rifi*)".

Thus, he explains, the concept (the object of knowledge) can remain the same even if all of the following continue to change:

- 1. the concept's treatment and the mental devices on which this treatment depends
- 2. the problematic which orients the concept
- 3. the cognitive field in which it occurs⁵²

This holds true until the effecting of an epistemological break, which is the "point of no return (*nuqtat al-la rujū'*)".⁵³ It is the point "from which it is no longer possible to return to the preceding way" (of thinking). If this onslaught of terminology appears mystifying at first glance, let us consider the break in terms of the phenomenon of epistemological revolution induced by Einstein's theory of relativity, for which Bachelard endeavoured to give a philosophical account. After Einstein, concepts (objects of knowledge) like time, space and mass continued to be employed but were simply subsumed under a novel framework of understanding. Having reached the point of no return, the refuge mechanism was simply not an option for physicists who had grasped the profound significance and validity of Einstein's proposal. They were compelled to give up their traditional understanding of these concepts.

With this in mind, he insists

We are not calling for a break with tradition in its standard lingual meaning ... not at all. What we are calling for is: the relinquishing (at-takhkhali) of the traditional understanding of tradition; the liberation from the traditional residues in the processes of our understanding of turath.⁵⁴

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⁵¹ Al-Jabri (2006), p. 24.

⁵² Al-Jabri (2006), p. 25.

⁵³ Al-Jabri (2006), p. 25.

⁵⁴ Ibid., p. 25.

Conclusion

It is clear that al-Jabri was profoundly cognizant of the epistemological controversies over methods in the natural sciences, and perhaps more importantly, of the political stakes of the sociology of knowledge which they entailed. These "stakes" are precisely what is indicated by my use of the word *function*. Bachelard's account of the emergence of independent scientific cultures with "regionally" determined forms of reason served as a justification for disciplinary—in al-Jabri's case "cultural"—independence while maintaining the integrity of science as a whole.

The appeal of this approach for al-Jabri, an ardent nationalist who was among the first Moroccans to receive a PhD in philosophy after independence, was undeniable. As a philosopher, it provided him a means by which to circumvent the "modernity" versus "authenticity" dichotomy; to delegitimize his ideological competitors; and to justify a cultural secession on the basis of scientific rationality. As a nationalist, al-Jabri undoubtedly recognized the entire gamut of terms employed in nationalist discourse in Bachelard's humble musings on science: liberation (taḥrīr), intervention (at-tadakhkhul), unity (al-wiḥda), independence (alistiqlāl) and revolution (ath-thawra), to name a few.

In this light we might characterize his proposal of a science of "turāth" and an "Arab Reason" as the epistemologically induced "secession" of a uniquely Arab-Islamic field of research from the domination of two authorities: European enlightenment universalism and Arab-Islamic traditionalism (taqlīd). This approach appeared to have the added benefit of being scientific, forged as it was in the reasoned and dispassionate reflections of the "Sage of Bar-sur-Aube", Bachelard. If Bachelard spoke of the regionalization of rationality in a "politically weak" sense, indicating mere scientific or academic communities (les cités savantes), the broader socio-political implications of this phenomenon were not lost on al-Jabri, nor were they on Canguilhem, Foucault, Bourdieu or Althusser.

This brings us to the potential objection that I am simply using Bachelard in lieu of any other number of "Western" theorists from whom al-Jabri drew conceptual inspiration. It is only through Bachelard, I contend, that we understand why al-Jabri felt justified employing a variety of Western theoretical concepts without fear of (unduly) being cast as a philosophical imperialist. This has to do with Bachelard's understanding of the relationship between philosophy and science. The former was a tool which, when critically implemented, transcended cultural specificity, while the latter was always to some extent culturally-constituted. Philosophy for Bachelard, as it was for al-Jabri, essentially consisted in reasoned reflection on thought itself. In this respect it was at least a *potential* feature of all human cognitive activity. Concepts (the objects of knowledge), as al-Jabri explained in the preceding section, could remain the same (in name) despite successive changes in frameworks of knowledge (problematics). Al-Jabri felt he could "naturalize" (*yuṭabbi*') these concepts in the Arab-Islamic context, without importing their (historically contingent) cognitive frameworks. He saw this as being perfectly within the realm of sound philosophical praxis.

In this way, in the numerous works which al-Jabri would go on to write, he seemed quite content to reject European liberalism while promoting democracy and human rights in Morocco; to reject Marxism while supporting Arab socialism; to reject Salafism while affirming that Islam must play an integral role in any Arab cultural renaissance. Despite its resonances with major thrusts of the European enlightenment, al-Jabri's philosophical project was designed to satisfy requirements of cultural authenticity and legitimacy; so that the Arabs, not unlike Baron von Münchausen, would *save themselves* from drowning by pulling themselves out of the water by their own hair. To do so, they didn't require the philosophical templates of the West, but the audacity to critically engage their own heritage with a view to exposing the "history of errors"; to embark upon a process which would lead them on a unique path towards progress, an intrinsically Arab-Islamic modernity, and "the philosophy which they deserved".

In the course of the preceding discussion, the reader might have gleaned an ulterior motive in the present work. While ostensibly exploring functional parallels between two thinkers in distinct historical and discursive contexts, and thereby Bachelard's significance for al-Jabri beyond the mere conceptual "adoption" of epistemological rupture, I am also offering an alternative account of the West's relationship with its own philosophical heritage. With no small degree of irony, the lack of familiarity with Bachelardian epistemology, as well as the failure to distinguish it from Foucault's adoption of his concepts and from Kuhn's notion of "paradigm shift", have themselves become somewhat of an epistemological obstacle to al-Jabri scholarship. In other words, our own "traditional understanding of our tradition" which makes of Foucault and Kuhn referential authorities for historical epistemology and the philosophy of science, respectively, has proven to be a hindrance to a more nuanced scholarly reception of al-Jabri's thought. The inevitable position of epistemological privilege from which we undertake the study of thought in other cultural contexts should not prevent us from being open to the possibility that we ourselves have something to learn from them.

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⁵⁵ I am borrowing Nietzsche's characterization of the "Münchhausian audacity" employed by him in Beyond Good and Evil: "Sich selbst aus dem Sumpf des Nichts an den Haaren ins Dasein zu ziehn".

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