

The strengths of social constructivism: A critical dialogue with Boghossian

(Las fortalezas del constructivismo social: un diálogo crítico con Boghossian)

Mohammadreza ESMKHANI*

University of Religions and Denominations

ABSTRACT: This article has three purposes. First, it illustrates the strengths of social constructivism (SC) as a major thesis and its two interrelated corollaries: the "social dependency" thesis, the "communitarian" theory of meaning, and the "contingency" view of knowledge. Second, by underscoring these strengths, it will show how one can counter the anti-social critique of the kind Boghossian espouses, highlighting some genuine disagreements that cannot be resolved by appealing to the assumptions and resources that are at the heart of the matter in the first place. To this end, the following points will be discussed: (1) Boghossian misses the mark primarily by focusing his main critique not on "social dependency" but on a conceptually different doctrine, namely "relativism" (defined as the "social relativity" thesis); (2) he criticizes SC by presupposing the very "non-social" view of meaning that SC was originally proposed to attack; and (3) the logic of SC "debunks" the very epistemic system on which Boghossian relies by claiming that it is as dependent on "(historical) contingencies" as any other. Finally, some responses are offered to "rationalist" concerns, which are mainly concerned with the application of SC's logic to its own arguments.

KEYWORDS: social constructivism, knowledge, meaning, contingency, normativity, Boghossian.

RESUMEN: Este artículo tiene tres propósitos. Primero, ilustra las fortalezas del constructivismo social (SC) como una tesis principal y dos corolarios interrelacionados: la tesis de la «dependencia social», la teoría «comunitaria» del significado, y la concepción «contingente» del conocimiento. En segundo lugar, al remarcar estas fortalezas, se mostrará cómo puede responderse a críticas anti-sociales como la que realiza Boghossian, identificando ciertos desacuerdos genuinos que no pueden resolverse apelando a las asunciones y recursos tomados como punto de partida en el debate. Con este objetivo, se discutirán los siguientes puntos: (1) Boghossian yerra el tiro al dirigir su crítica no a la «dependencia social» sino a una doctrina conceptualmente diferente, el «relativismo» (definido como la tesis de la «relatividad social»); (2) Boghossian critica SC presuponiendo la misma concepción «no social» del significado que SC trata de atacar; y (3) la lógica de SC desacredita el sistema epistémico en el que se basa Boghossian, al sostener que es tan dependiente de contingencias (históricas) como cualquier otro. Finalmente, se ofrecen algunas respuestas a las objeciones «racionalistas», relativas a la aplicación de la lógica de SC a sus propios argumentos.

PALABRAS CLAVE: constructivismo social, conocimiento, significado, contingencia, normatividad, Boghossian.

* Correspondence to: Mohammadreza Esmkhani. University of Religions and Denominations. Qom, Iran – m.r.esmkhani@gmail.com – https:// orcid.org/0000-0001-5627-2206

How to cite: Esmkhani, Mohammadreza (2024). «The strengths of social constructivism: A critical dialogue with Boghossian»; Theoria. An International Journal for Theory, History and Foundations of Science, 39(3), 333-352. (https://doi.org/10.1387/theoria.25981).

Received: 21 January, 2024; Final version: 12 November, 2024. ISSN 0495-4548 - eISSN 2171-679X / © 2024 UPV/EHU Press



()()) This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License

1. Introduction

Is there an "absolute" rational truth, an "unconditioned" epistemic norm, or an "autonomous" meaning that somehow *transcends* concrete formative-evaluative conditions and is not substantially related to the epistemic-semantic practices of actors, especially their societies? Or is there some way to abstract the procedures of belief formation/evaluation and the processes of meaning-construction from the "context" of the relevant community and to describe them objectively, non-contextually, and non-indexically? These questions have been the bone of contention among philosophers: from Protagoras' "Man is the measure of all things" vs. Plato's permanent ideal forms, through Nietzsche's perspectivism vs. the idealists" absolutism, to the relativism-rationalism debate in the philosophy of science, e.g. between Popper vs. Kuhn, and finally to the so-called "rationality wars" in the second half of the 20th century.

This debate has had a checkered history in recent years, with realists/rationalists/absolutists sometimes challenging constructivists/relativists and sometimes the other way around. In the midst of this heated dispute, this article defends social constructivism (SC) as a "debunking" project, first by emphasizing the *strengths* of the position it advocates, and then by polemically challenging critical remarks made by such absolutist-minded objectivists as Paul Boghossian. In *Fear of Knowledge* (2006) and other related essays (1989, 2001, 2008), as a proper representative of anti-SC, he vigorously defends the thesis that there are some "society-transcendent" absolute facts that govern the rational-epistemic order.

To this end, the *strengths* of SC are first presented as three interrelated theses: (1) the "social dependency" thesis as the core idea of SC, which is concerned with the condition of possibility of human constructs; (2) the "communitarian" thesis, which treats meaning and its normative rules as "social institutions"; and (3) the "contingency" thesis, which views human knowledge as a contingent achievement. Second, the key claim is that the anti-SC opponent either does not deal directly with the core idea of SC or relies in a questioning way on essentially non-social assumptions, which is shown by demonstrating that: (1) the bulk of Boghossian's attack is not against social dependency, but against a conceptually different doctrine, i.e., relativism, defined as the "social relativity" thesis; (2) he criticizes SC by assuming a particular non-social view of meaning and rule-following that SC was originally proposed to attack; and (3) not only does he fail to provide us with a rationale for the "inevitabilist" picture of knowledge-making that he adopts in his discussion, but the alternative thesis, which regards any firmly established knowledge as a certain contingent achievement, claims to "debunk" the legitimacy of the very scientific and philosophical disciplines on which he relies. In the last part, some replies are given to certain rationalist worries, which are mainly concerned with the "circularity" of the arguments in favor of SC.¹

¹ The main contribution of this article is to draw attention to where the "strengths" of SC lie and where anti-SC criticism misses the point. Thus, its overall reflections are inspired by contemporary Wittgensteinian thinkers who, interestingly, are among Boghossian's primary targets, notably Bloor (1983, 1997, 2007, 2011, 2020) and Rorty (1979, 1989, 1991, 2000). Moreover, although this article takes Boghossian's view as a paradigmatic example of the anti-SC perspective, its main points could well apply to other philosophers who oppose SC in the same vein, e.g., Brown (1989), Goldman (1999), Haack (1996), Kitcher (1993), Kukla (2000), Nelson (1994). The critical objection is that they fail to appreciate the real "force" of SC, and fail to recognize that SC aims to "debunk" the very legitimacy of their fundamentally accepted categories, such as "truth," "objectivity," and "rationality" (cf. Haslanger, 2012, pp. 83-85, 113-138).

2. The strengths of SC

SC, with its two crucial constitutive parts, "social" and "constructivism," is a powerful idea that is sometimes confused with other related doctrines, leading to confusing, irrelevant conclusions. This section illustrates three theses and their significance as the *strengths* of SC, which, as far as this piece is concerned, are related to three "turns" they make in our view that distinguish SC from other schools of thought.

The very idea of SC: the "social dependency" thesis

First, consider the standard definition of SC. One might say that the proponent of a strong version of SC (hereafter S) typically holds the following thesis (see Griffith. 2017, pp. 1-4; Haslanger, 2012, pp. 83-90; Mallon, 2019; 2009, pp. 93-96):

For some phenomenon to be socially constructed is for it to be in a strong way, e.g., constitutively, contingent upon certain *social factors* for its existence, nature, or property.²

As this definition shows, SC consists of two crucial components that are essential for distinguishing SC from other theses: "social" and "constructivism". The first refers to the original source or site of construction, and the second refers to the way in which the social is incorporated into our practices. The first component distinguishes SC not only from such non-social accounts as psychologism, but also from such constructivism as Latour's, in which the non-social or the social are treated equally. The second component distinguishes SC from other accounts, be they social or non-social, that contain an essential non-constructive part, such as nativism, Platonism, absolutism, and apriorism.

More to the point, the "social dependency" thesis, as exemplified in this definition, serves as a safeguard against such ideas as relativism, which are commonly conflated. The point is that SC and relativism are treated as closely related doctrines, and in many circles are seen as two internally related doctrines. However, they are conceptually different ideas, and it is crucial to distinguish between them, since both the defense and the critique of them are to be pursued on two different levels and would require different conceptual tools. First, consider the standard definition of relativism (Baghramian and Carter, 2020; italics mine):

[...] standards of reasoning, and procedures of justification are products of *differing* conventions and frameworks of assessment, and that their authority *is confined to* the context giving rise to them.

As the above definitions vividly illustrate: (1) while relativism claims "social relativity" and is opposed to the "universality" of, say, knowledge claims, S claims "social dependency" and is opposed to the "necessity" of such claims. This element becomes more significant when we notice that a certain property can be a general or universal "accident" of an object without being a necessary part of it. (2) While S is mainly concerned with the "conditions of

² Interestingly enough, some elements of this definition are included in the one Boghossian (2006, pp. 16-18) offers for a strong version of SC.

possibility" of e.g. human knowledge, relativism is mainly concerned with the plurality and diversity of knowledge systems. This is why the prominent cases for SC often come from philosophical-conceptual analyses, while the primary motivations for relativism come from anthropological and sociological inquiries, studying and recording cultural-social diversities. (3) While the definition of relativism implies the reference to *different* frameworks, from which many critics extract paradoxical results, the definition of SC is mainly directed to a certain conceptual-metaphysical point about the social dependency of a *single, unique* framework. Thus, S's claim that knowledge is not simply produced by observing the world "out there" but is constructed through socially-sanctioned rules has relativistic consequences insofar as it includes the *additional* point that different social contexts lead to the construction of *different* knowledge systems and that there is no "neutral ground" for arbitrating between them.

Accordingly, any critique of SC might miss the mark by simply challenging relativism (see Fuller, 2007, pp. 138-142), since SC is fully compatible with either a relativist or a non-relativist epistemology. To name a few, Bloor's sociologism (Bloor, 2020) is a type of SC that is avowedly relativistic; Collins" program in science studies (Collins, 1985) is another social account of knowledge with overtly relativistic consequences; but Fuller's (1988) social epistemology is a kind of "constructivist universalism" that merely points out that "rationality" is to be explained "sociologically" and that it "need not be limited to the relativist's clearly bounded, self-contained social worlds that are grist for paradoxes about the impossibility of standing both inside and outside one's world at the same time." (Fuller, 2007, p. 138); or one can mention Rorty's social pragmatism (Rorty, 1991, Ch. 1, 2), which, avoiding the apparent contradictions associated with relativism, explicitly adopts "ethnocentrism" and prescribes "conversationalism" as a way of communicating between different social discourses.

More specifically, on the Rortyian view (see Baghramian, 2004, pp. 109-114), one can reject the notion of "relativity" inherent in relativism by abandoning the very "absolute-relative" distinction, as well as pernicious versions of relativism such as "self-refuting" relativism. But, on the other hand, one can replace objective truth with "intersubjective agreement" or "solidarity" as the goal of inquiry, and further define rationality in terms of "the practices of a community," thereby accepting a variant of SC and recognizing the ethnocentric view that "there is nothing to be said about either truth or rationality apart from descriptions of the familiar procedures of justification which a given society —ours— uses in one or another area of enquiry," (Rorty, 1991, p. 23) which, because it rejects the claim that "something is relative to something else," (p. 27) cannot be classified as relativism.

Thus, again, the acceptance of SC does not *entail* relativism, because the very idea of social dependency as the core of SC must be combined with another element, i.e., the relativity thesis, in order to lead to relativism.

The very idea of meaning: SC and the "communitarian" thesis

SC is a powerful, comprehensive approach that can be applied to many areas: language, mind, race, and emotions, to name a few. But more significant and challenging for our discussion is the application of SC to the domains of meaning (of linguistic sentences) and/ or content (of beliefs/thoughts). In such central domains, in contrast to the commonsense

approach that sees meaning/content as something given and fixed, S sees meaning as just as much constructed and produced as any other human artifact. The essentials of S's view of meaning can be outlined as the following radical "turns".

S sees meaning as a "normative" phenomenon, but in contrast to the "meaning-engendered" normativism supported by some philosophers, including Boghossian (1989; cf. Glüer et al., 2018), which shows that meaning statements have "normative consequences," or rather derives the normativity of meaning from the fact that meaningful expressions have "correctness conditions," s/he gives a very different account of its nature, which can be called "meaning-determining" normativism: meaning is essentially such that it is determined by norms, which are ultimately characterized by their sensitivity to "social norms." Moreover, based on the "use" turn, there are no pre-established "meanings" that (can) determine the correctness of uses of expressions; instead, the original locus of meaning is the variety of "uses" related to the dynamic character of linguistic practice (Brandom, 2008, p. 6). This pragmatic turn, which resonates with various voices —e.g. the Wittgensteinian slogan that the meaning of a word is its use in language, or the Rortyian analogy between vocabularies and tools— is the basis of a radical alternative system to Boghossian's, which involves other shifts; e.g. from the image of a unique language with an essential goal (e.g. the representation of non-linguistic facts) to the idea of a multiplicity of linguistic usages that users apply according to different goals.

Moreover, on the basis of the "social" turn and the rule-following version of use theory, according to which the meanings of linguistic expressions are determined by the rules for their use, S gives a straightforward social interpretation of the ontological status of rules: as normative phenomena, they are essentially social in the sense that they are *metaphysically possible* within a given society; in other words, these entities can only be possible for some interacting agents who *construct* and *reconstruct* them through their intentional activities.³ Thus, in contrast to those who formulate the apparent force of normative rules in objective terms, indicating that they have some "external compulsion" on us, S gives an intersubjective interpretation, suggesting that they have such special features because they are seen as "public objects" that are essentially accessible to others.

Finally, since meaning follows use and not the other way around, it cannot exist *prior* to use to appear as an independent reality; or rather, meanings do not have an inner "determining agency" that can a priori determine the entire trajectory of future uses, but all determining agency comes from the "social users." Thus, according to the "constructive" turn, meanings are constructed and reconstructed as users apply the relevant words/concepts within their community, so that there is no such thing as an "absolute zone" or essential core in which one might find some residual part of the meaning of a term that is independent-transcendent of the contingent context of application.

³ The master Wittgensteinian reason for this turn is this: rule-following is a certain distinctive activity that cannot be performed by an *individual subject*, because in the private world of a rule-follower one cannot make sense of the crucial distinction "seems correct/is correct," because there is no *independent standard* for checking correct/incorrect ways of following the rule. Accordingly, some *normative* agreement as a constitutive social fact provides the ground for normative standards of rule-following (cf. Wittgenstein 1953; Kripke 1982; Kusch 2006).

The very idea of knowledge: SC and the "contingency" thesis

One of the most challenging features of SC, related to both the social and the constructive parts, is its emphasis on the enormous *contingency* of constructions that social agents can make, i.e., the strong idea that something, as natural and invariable as it seems, "could have been otherwise." Needless to say, if one agrees strictly with the social-constructivist account of meaning of the previous section, one immediately arrives at a social theory of knowl-edge/science: all scientific rules and also all scientific knowledge, insofar as they are loaded with meaning, are regarded as "social institutions." This account as such is very significant because it shows the *ubiquity* of the social at the heart of any use of scientific concepts. Be that as it may, this particular dimension aims more directly at undermining and "debunking" the non-social stance, and thus deserves special consideration.

The contingency, i.e. the denial of *inevitability*, of social constructs is one of the crucial points that makes SC "non-benign" (cf. Soler, 2015, pp. 1-9; Collins, 2015) and is seen as related to the doctrine of "no predetermination," which means that the outcome of the construction process is not entirely "predetermined" (e.g., not by the way the world is) (Mallon, 2009, pp. 94-95; Hacking, 1999, pp. 63-80). Thus, S's debunking project sees what is traditionally conceived as "natural" as the product of "alterable" historical-social processes (Haslanger, 2012, pp. 83-85; Griffith, 2017, pp. 1-4), denies that there is anything "intrinsically privileged" about the way we organize ourselves (Barnes, 2014, p. 337), and holds that the actual final case realized in a field (e.g., a type of physics) is only one of many possible cases that could have been realized (Hacking, 1999, pp. 73-74). Accordingly, in contrast to inevitabilism, "contingentism" claims that it is possible for a science to be as successful as ours but radically different in its methods (e.g., experiments) or its results (e.g., scientific theories) (Soler, 2008, p. 230), and emphasizes that the collective choices actually made in the history of science could have been legitimately different and possibly incompat*ible* (Soler, 2015, p. 14). Therefore, it offers a fundamentally different alternative conception of what scientific knowledge is, could and will be.

3. A critical dialogue with Boghossian

Based on the "strengths" of SC outlined above, this section shows how to counter the kind of criticism that Boghossian offers as a paradigmatic example of anti-SC philosophers. Of course, what follows is not a step-by-step attack on Boghossian's argument; rather, it is a series of steps to show where he fails to address the *strengths* of SC as a viable alternative, e.g., by conflating it with other doctrines, and how SC as a "debunking" project undermines the epistemic-conceptual system he relies on.

3.1. SC or relativism?

Given the above considerations, it is important to keep SC and relativism separate, and to defend/attack them in proportion to the strength of their core ideas. In truth, it is precisely this confusion that we find in Boghossian's critique. Here is some textual evidence: First, while he is particularly interested in social constructivist conceptions of knowledge (Boghossian, 2006, p. 7), and gives a straightforward picture of constructivism about knowledge

(pp. 22-23), as soon as he starts criticizing, he chooses "epistemic relativists" as his main target, i.e., "who think that there are *no universal epistemic facts*, that facts about what belief is justification by a given item of evidence can *vary from community to community*" (pp. 58-59, italics mine), and states that a "constructivist view of rational belief had better assume an explicitly relativistic form" (p. 59), and finally focuses on a "constructivist/relativist view of justification"(p. 63). It is also clear from the chapters of his book that after scrutinizing and refuting constructivism and relativism with respect to facts, when it comes to considering constructivism with respect to knowledge/justification, he changes the titles and the main topic: "Epistemic Relativism Defended" and "Epistemic Relativism Rejected."

Additionally, even in attacking the "constructivist/relativistic view of justification," Boghossian (2006, pp. 59-70) focuses on a specific consideration associated with two leading philosophers —Rorty on Cardinal Bellarmine and Wittgenstein and the Azande— as a powerful argument for a "relativistic" view of rational belief, while ignoring the "social constructivist" dimensions that underlie their works (such as the "social use" theory), which will be duly taken into account in the following discussion. Moreover, the emphasis on "epistemic relativism" in the three chapters of his book leaves some questions unanswered —e.g., "Why think that our epistemic system is correct and theirs isn't?" (p. 77)— that are not essentially related to the SC thesis, because, once again, the central debate between SC and anti-SC revolves around, for example, the ultimate ground of the correctness of any epistemic system.

Therefore, it is safe to say that the main body of Boghossian's criticism is concerned with relativism and its contradictory conclusions, and does not take the core idea of SC seriously. More to the point, as the following discussion illustrates, such a core idea is intertwined with a distinctive view of meaningfulness (the communitarian thesis) and of knowledge-making (the contingency thesis) that underline the constructive role of "sociality" in our semantic-epistemic discourse and offers a radical alternative to Boghossian's commitments in this regard.

3.2. Meanings and their constitutive rules as "social-constructs"

For Boghossian (1989, 2003, 2005, 2006), meaning is essentially "normative," i.e., meaning statements have normative consequences, due to the fact that meaningful expressions have "correctness conditions:" "my use of it is correct in application to certain objects and not in application to others... meaningful expressions possess conditions of correct use" (Boghossian, 1989, p. 513). Thus, at least for those thoughts with factual content and for a set of words/expressions —e.g., mental words expressing the logical constants— there are certain "right" norms (e.g., concerning their correct-applications) that *objectively* determine their contents/meanings, "independently" of what an epistemic subject or a community of subjects think(s) or mean(s). He (1989, p. 516) also holds that the so-called rule-following considerations are significant only for a certain kind of "normative constraint," suggesting that they do not apply to all expressions, since for some important cases, such as those with factual content: "our thought ... is evaluable according to a set of norms that are *objectively* applicable to our thought ... whether we like it or not ... I no longer have any choice about whether my thought is subject to assessment as true or false, or as justified or unjustified." (Boghossian, 2005, p. 186; italics mine) Implied in this account are two stances. The "objectivist" stance, which holds that the semantic rules/norms, and with them meaning itself,

are objective, implying that they are *society*-independent (Boghossian, 2006, pp. 12-13) and *judgment*-independent (Boghossian, 1989, p. 508). Thus, there is an objective ought implicit in the normative rules that guide applications, "independent of" our subjective dispositions, choices, and decisions (Boghossian, 2003, pp. 38-39). And the "determinist" stance, which points out that meaning properties are *primitive facts* (in the form of particular mental states) that contain/determine future applications. Putting these together, meaning facts are treated as if they can "transcend" all the instances and applications available to their users, and there is some objective core of meanings/contents that is fundamentally "transcendent" of their social contexts.

More to the point, the vital role of this view in Boghossian's critique is embodied in his attempt to prove that two famous case studies often used by relativists (Boghossian, 2006, pp. 103-109) —the Bellarmine system (the case of using a *different* epistemic principle) and the Azande system (the case of using a *different logic* than ours) — are not *genuine* alternatives to his standard epistemic system: The former is not a fundamentally *different* epistemic system, and the latter is not a competing *alternative* to his, so that they are not strong enough to make him doubt the correctness or validity of his epistemic system. In the second case, for example, because of the close connection between the meanings of the logical words —e.g., "if" — and the rules governing their use (e.g., modus ponens), it seems that the Azande and "we" (i.e., Boghossian's culture) "are not really disagreeing about the validity of the rule modus ponens. If the Azande employ *different rules* for inferences involving "if" … this would simply show that they mean "something different" by that word than we do by "if" (Boghossian, 2006, p. 107, italics mine).

Turning to the critical point, the main contention is that such a taken-for-granted semantic theory is the exact opposite of the one S offers in social-constructivist terms (see section 2), each component of which debunks a central aspect of his paradigm. Thus, S and Boghossian adhere to two different paradigms concerning our linguistic discourse, the root of which refers to the fact that, in contrast to Boghossian's immediacy commitment, according to which the whole machine of meaning-construction and rule-following is of some self-contained structure, S holds that the social network is the very normative "background" that sets the stage for the function of meaning-conferring rules and the construction of relevant meanings.⁴ Now that we are equipped with this alternative point of view, the problematic nature of Boghossian's attack can be stated as follows:

First, contrary to his restrictive view of the scope of rule-following activity, which treats (epistemic/semantic) rules as privileged phenomena and places them beyond the reach of "socially based negotiations," S holds that the social thesis applies with equal force to the cases he excludes: the typical "observational" cases in which our beliefs are plausibly secured on the basis of observation, and the exceptional logical constants that are subject to

⁴ Boghossian (1989, pp. 534-536) explicitly rejects any communitarian view, pointing out that the problem of meaning can be solved at the *individual* level (e.g., by finding the appropriate meaning-determining dispositions). Accordingly, grasping a concept or following a semantic-epistemic rule can essentially be done without any essential reference to other subjects. Nevertheless, two points seem to be relevant. First, his conception of society or community is flawed, since a property that is common at the individual level (such as a disposition to make mistakes) is not necessarily duplicated at the community level (see Bloor, 1997, pp. 141-142). Second, the community may have some irreducible property without any counterpart at the individual level, such as providing the *normative* dimension for the dispositions of individuals.

proper epistemic norms. The main reason is that, for S, any application of a rule is in principle "negotiable" (Bloor, 1996, pp. 85-853), and we lack any general algorithm that specifies that a particular application must follow from a particular rule (Collins, 1985, p. 14). Since all these basic cases, as rule-following activities, are ongoing decision-based processes regulated by social agents, the meanings of the simplest empirical statements and logical constants, despite their apparent stability and transparency, are "socially constructed," and S not only sees no reason to restrict SC to certain domains, but regards any attempt to separate these two domains as another instance of smuggling "absolutist" ideas into the main debate (see Bloor, 2007, 2011, 2020).

As a relevant example, consider Bloor's (1983, pp. 123-132; 1992) discussion of Lewis's logical theorems, which shows that logical words related to such logical relations as "implication" and "or," which are treated in an unproblematic way in Boghossian's view, could mean "something different" in different discourses (e.g. logical systems and ordinary speech), so that one might end up rejecting or accepting a particular logical move from, say, "p" to "p or q." Thus, according to Bloor, just as proofs in formal logic can be criticized "in principle," since one can always challenge their "taken-for-granted" basis -e.g. by being sensitive to the context of the use of the relevant expressions and thus taking the "relevance" of p/q seriously— the Lewisian system, with its distinctive conception of "implication," is a special language-game that we learn as a rich custom for pursuing our basic purposes/interests. Thus, there is no such thing as a "metaphysical-transcendental must" governing the transition from "q" to "p and not p," but the point is that we make this transition as a matter of taken-for-granted moves in an accepted language-game, and in practice any stopping point for our challenges and curiosities is a matter of convention. To put it more radically, the logical compulsion is ultimately a kind of "social compulsion" sanctioned by our fellow humans (see Woolgar, 1993, p. 46).

The moral of such an example⁵ is that the basic rules Boghossian uses as self-evident assumptions are not as transparent and determinate as he thinks, and it turns our attention from the apparently straightforward rule applications in observational-logical instances to their interpretative nature, which ultimately terminates in some social "non-interpretative" bedrock. Thus, in contrast to his theory, which takes the stability of our observational-logical order as something given, for S there is some deep structure, i.e. the background of agreement, which is necessary for the possibility of any surface harmony of observational-logical judgments.

Second, unlike Boghossian, who separates objective truth-conditions and correct epistemic norms from the actual "constructive" processes and all the negotiations and decisions involved in them —on the basis of which he claims that the Azande "mean" something different by some signs, so that this does not contradict what we take to be "true" and "objective," or perhaps the Azande do not refute what we accept, assert, state to be "true" or "objective," so that there is no real disagreement here— S applies the communitarian thesis to such respected categories: their local extensions/intensions (or, as Barnes (1981, p. 308) prefers "tensions") are based entirely on how social agents within a given community come to agree on them through their negotiations (see Kusch, 2002, pp. 212-215). Thus, the apparently objective truth-conditions are nothing more than some "intersubjectively" nego-

⁵ For applying the similar consideration to such ordinary, observational statements as "emeralds are green" and establishing their grounding in "forms of life," see (Collins, 1985, pp. 15-18).

tiable achievements, dependent on future contingent circumstances. Moreover, the very separation of contingent refuting-assertive processes from fixed products, which gives such entities a sense of non-sociality, is untenable against S, who does not and thinks it impossible to separate these two areas in the first place.

The principal reason is that, just as there is nothing more to meaning than "use," there is nothing more to our concept of truth than what can be captured by "socially sanctioned" uses of statements that are considered true/false (see Ellenbogen, 2003, pp. 2-3). Or rather (see Rorty, 2000), the concept of truth cannot be separated from "practices of justification" as various conditioned experiences of justifying beliefs that do not transcend our social consensus. Therefore, S rightly accuses Boghossian of transcending the socially sanctioned uses that give meaning to words/concepts in his own culture, of trying to "objectively" delineate the intension/extension of such concepts in advance of use, and of trying to impose his external conception of "true" and "objective" on their concepts, which have different sets of internal relations.

Thus, while Boghossian takes pre-established extensions/intensions for "objective" and "true" for granted, and does not take seriously the possibility that these categories might well be interpreted intersubjectively —i.e., that no proposition has a society-transcending truth-condition, but only a society-based assertion-condition— the alternative view implies that different communities" conceptions of "true" and "objective" might be different because of the different norms/rules of their use. Consequently, if they use "true" and "objective" differently in their culture, according to different rules regarding, say, their logical inferences, with the result that their general sense of *reality* (carving the "world" at different joints) and *logic* (with a different sense of logical "compulsion," "coherence," and "relevance") is different from Boghossian's culture, then these are *bona fide* cases of genuine disagreement that cannot be resolved by appealing to some absolute understanding of the similar words or by taking certain objective conditions for granted.

As a result, from S's perspective, what Boghossian's view suffers from, due to its heavy reliance on a particular semantic theory that gives priority to meaning over "use," is that it fails to recognize that reversing such priority prevents us from imposing any *additional meaning* on words/expressions —for example, the Azande's particular expression for "if" — beyond what can be gleaned from their concrete uses. In other words, the general pattern of use of the word in their society is all there is for its meaning, and if they use this expression differently within their culture —for example, not being sensitive to contradictory conclusions or apparently having a different conception of coherence— this simply indicates that they have an alternative conception of the idea involved.⁶⁷

⁶ The Azande case is a very intriguing one, to which, I think, Winch's point still applies: "It is the European, obsessed with pressing Zande thought to where it would not naturally go —to a contradiction—who is guilty of misunderstanding, not the Zande. The European is, in fact, committing a category-mistake." (1964, p.26) The crucial point is that in such special contexts as the Azande, the subjects obviously violate the classical logical inferences *as* formulated in standard texts, for example, by easily allowing contradiction in their epistemic system. The fact that there certainly seems to be a rule-action gap here, implying that the action does not fit with a given rule or a common interpretation of it, is evident from many different ways of dealing with such anomalies; for example, the attempt to ascribe an *alternative*, non-standard, three-value logic to the Azande (see Cooper, 1975).

⁷ Boghossian is certainly not alone in pursuing such an anti-SC strategy. For another example, see Searle (1995), who, while avowedly defending a variant of SC in many areas, e.g. the institution of money,

In sum, there is a radical disagreement between S and Boghossian about the nature of the meaning and rule-following phenomenon, which is expressed in the fact that the presumed positions in his anti-SC discussion are already deconstructed in constructive-intersubjective terms. Therefore, Boghossian's critical remarks do not touch on the *strengths* of SC and do not seem tenable against S.

3.3. Modern science and its epistemology as "contingent" constructions

Parallel to the asocial account of meaning, Boghossian maintains an *asocial* view of knowledge and regards science as knowledge par excellence, a body of beliefs formed/evaluated according to certain epistemic rules as "absolute facts" that scientists must follow to reach true conclusions. Moreover, besides the *objective* stance that there are objective epistemic rules valid for everyone, as an absolutist, he needs some assumption (derivable from his work) or should give some cogent argument (absent from his work) about knowledge-making to the effect that there is some "inevitability" governing the trajectory of knowledge-construction; or rather, every successful science has some inevitable course, detachable from the *contingent* conditions of society/history.

For Boghossian, the requirement of the "inevitabilist" position is twofold. On the one hand, the alternative non-inevitabilist option, which emphasizes the contingent pattern of knowledge growth, is hardly compatible with other unyielding principles he favors in his system, such as the objectivity of epistemic rules. For if one really admits that every rational rule has been violated in the history of science, and that literally "anything goes" in scientific practice, then one should either radically "revise" his conception of objectivity or abandon it altogether. On the other hand, one should be satisfied with Boghossian's confident reliance on "modern science" and "epistemology" and his frequent references to the "rationality" of the former and the legitimacy of the latter; in particular, one needs a solid guarantee of the non-alterability of their foundations in the future or in other possible societies. Otherwise, Boghossian is accused of harboring unfounded prejudices about the "superiority" of his present (favorite) science/philosophy, against which one might insist that "our own scientific theories are held to be *as much subject to radical change as past theories* are seen to be" (Hesse, 1976, p. 264, italics mine).

Now, apart from the fact that S explains such notions in a social-constructivist way and regards the epistemic rules as "social facts," contrary to the inevitabilist position, s/ he adopts the contingency thesis (see 2.3) according to which any established scientific knowledge, i.e., its methods or its results, "could have been *otherwise*," implying that there is nothing *inevitable* about them. In this light, the following will show that one of the *strong* aspects of SC's works, especially those attacked by Boghossian, is to highlight the *contingency* of modern science and modern epistemology, against his uncritical reliance on them. Thus, while the previous section showed that reliance on "non-social" assumptions/commitments is a problematic strategy against SC, this section argues that these assumptions/ commitments are not as solid and fixed as Boghossian thinks, and are as much subject to "historical contingencies" as any other conceptual scheme. In other words, SC as a "de-

because of the separation of use (application) from the definition of expressions, ultimately presupposes an essentially *non-social* account of meaning/content.

bunking" project shows that the philosophical and scientific knowledge on which Boghossian relies heavily —i.e., modern epistemology-oriented philosophy and modern science turns out to be certain *social constructs*, that there is nothing "inevitable" about them. To illustrate this point, two cases are cited, both of which are somehow at the center of his critique: Rorty's historical view of knowledge and the socio-cultural investigations of contemporary science studies into the whole edifice of modern science.

Let us consider Rorty's case first. The first intriguing point is that while Boghossian (2006 p.6) chooses Rorty as his main target, he never deals with those prominent elements in Rorty's philosophy that have strong social constructivist implications. For example, the idea of the "contingency of language" (Rorty, 1989, Ch. 1), which suggests that one should think of the history of our language as "Darwin taught us to think of the history of a coral reef" (p. 16). Also, the two principles that "all consciousness is a linguistic affair" and "everything is a social construction," which together lead to the radical claim that "all our knowledge is under descriptions suited to our *current social purposes* (Rorty, 1999, p. 48, italics mine). More to the point, regarding the contingency of knowledge-making, there are only "conversational constraints" on our discourses and their particular social norms (Rorty, 1979, pp. 165-212), so that we must explain "... rationality and epistemic authority by reference to what society lets us say, rather than the latter by the former" (p. 174). Moreover, the fact that the main body of modern philosophy -especially the so-called "theory of knowledge," which aims to discover some privileged representations in our mind/language (as a *mirror of nature*) or to reconstruct some fixed and permanent structure in our knowledge as in the conditions of possibility forms- is based on some unfounded assumptions, i.e. the neo-Kantian assumptions, so that after deconstructing them and revealing their "optional" and contingent nature, one does not need them to continue philosophizing.

In other words, not only should the epistemic norms supported by Boghossian be explained by reference to a particular culture, but Boghossian's epistemic apparatus itself should be explained by reference to his chosen community and its particular norms, i.e., the "analytic-philosophical" epistemology that seeks to build our epistemic discourse primarily on unquestionable premises and/or objective conditions. Therefore, Boghossian's main opponent has told us a certain "historical" story about the foundations of his analytic-conceptual practice and, in a way, radically undermines its foundations: "Analytic philosophy *cannot*, I suspect, be written without one or the other of these distinctions. If there are no intuitions into which to resolve concepts ... nor any internal relations among concepts to make possible 'grammatical discoveries'... then indeed it is hard to imagine what an 'analysis' might be." (Rorty, 1979, p. 172)

Accordingly, against such a "contingent"-based conception of knowledge-making, which points out that there is nothing *privileged* about the very epistemic system and analytic-conceptual tools that Boghossian adopts today, and against such a "historical narrative" that directly targets the social basis of Boghossian's philosophical thought, thus debunking its legitimacy and authority, the crucial step Boghossian could have taken, or should have taken, is to present some reasons why one is still entitled to hold on to the distinctions deconstructed by Rorty's anti-epistemological stance, in the absence of which one would be entitled to use *alternative models* of philosophical enterprise based on different ways of doing philosophy; for example, the kind of philosophizing proposed by Wittgenstein and Rorty only for "therapeutic" or "illuminating" rather than theoretical-explanatory purposes.

The crucial step here for the anti-social critic is to offer something *stronger* than the claim that our epistemic results and methods now work perfectly or have been successfully tested in the history of science. For all of these claims are perfectly incorporated into the SC framework by inserting them into the social background of their production/development. What is needed is some guarantee of the *necessity* of, say, evidential relations; in other words, he must establish that the claim is true not only in the actual state of affairs but in all "possible societies," the very idea that the contingentist S cannot accept.

Let us now consider modern science and its foundations. Boghossian often appeals to modern science —its conceptual-empirical apparatus and its superior rationality and authority— as the most reliable example of our epistemic achievements. To challenge relativism, he also deals with two scenarios (the Azande and Bellarmine ones) that could have been chosen differently, more in line with and more challenging to his elevated scientific knowledge. In this regard, the crucial point is that, in contrast to his armchair conceptual analysis, recent SC-oriented works, which are somehow his main target, which scrutinize the practice of modern science in a *naturalistic* way and pay more attention to its deep social roots, lead us to the *contingency* of the very epistemic system he relies on, which is considered something "ahistorical" in his view. For in such debunking projects, the cherished notions that the anti-social rationalist takes as invariable sources (such as observation and experiment) are treated as "questionable topics" (Lynch, 1993, pp. 280-308) or "sociologically problematic" (Barnes et al., 1996, p. ix). For instance, the observation principle, on which Boghossian positively rides as a transparent epistemic principle, is treated as a *start*ing point for further inquiry, i.e., how is it formed, negotiated, interpreted, transformed, and violated in a specific (social) context?

Thus, a brief look at the consequences of such rich social studies vividly shows that it is not necessary to travel to a distant time (e.g., Bellarmine's case) in order to conceive fundamentally different alternatives to his epistemic system. To name a few: The fact that there are significant variations in mathematical thought that can be explained by "social causes" (Bloor, 1991, pp. 84-130). The fact that we could have been left with a very different physical science (Pickering, 1984) and that "the history of high-energy physics should be seen as one of the social productions of a culturally specific world" (Soler, 2015, p. 17). The fact that what counts as mathematics depends somewhat on a complex "contingent history" and its subject matter is much *less determinate* than we have imagined (Hacking, 2015). The fact that in a scientific controversy everything depends on the closure of such a debate, into which *contingencies* enter as the main factors (Collins, 1985; Pickering 1987); and the fact that it is a *contingent* matter that everyone currently relies on experimentation as the privileged scientific method, since in the original debate about the value of experimental practice: "there was nothing ... inevitable about the series of historical judgments in that context which yielded a natural philosophical consensus in favour of the experimental programme." (Shapin and Schaffer, 1985, p. 13, italics mine).

As seems obvious, in contrast to Boghossian's "uncritical" trust in a particular body of scientific knowledge and his assumption of the rationality of science as an invariable phenomenon, the main message to be drawn is that there is nothing necessary, "free from society," in our taken-for-granted scientific knowledge and its rationality, however deeply it is intertwined in our worldview. This makes it problematic to use this knowledge to attack such an opponent as the contingentist S, for whom there is nothing more palpable than the continuous change and variation of scientific knowledge in all its aspects.

Consequently, given the massive contingency of scientific knowledge and the possibility of radical alternation of any scientific hypothesis and theory, the main burden of proof falls on the objectivist-absolutist philosopher, who seems to have two options, neither of which has been seriously discussed by Boghossian: either to prove some sort of necessity or inevitability in the procedure of constructing scientific knowledge, which guarantees that it follows the same pattern of logic/rationality in all possible societies; or to refute the underlying assumptions and consequences of those "naturalistic" accounts of science. Otherwise, belief in any fixed rationalistic principle is just a kind of metaphysical faith or intuitive opinion, neither of which has any cash value from S's stance.

Last but not least, neither of these paths seems very promising: as to the first, because any argument in favor of inevitabilism would require the challenging assumption that one can a priori survey *all logical possibilities* in the "space of reason" or consider *all future audiences*, which in principle conflicts with S's other strong assumption, viz., that rationality unfolds a posteriori in the course of scientific practice and becomes emergent on the "social site," and that (rational) justification is constantly produced by local agents for local audiences, and that there is no context-free and "valid-for-all audiences" justification (see Rorty, 2000, pp. 4-5).

And as for the second, it seems to open up a series of attacks and counter-attacks between these two alternative paradigms, leading to either a "conceptual" or an "empirical" debate: the fate of the first debate is similar to other philosophical debates —such as the one between determinism and libertarianism in the metaphysics of free will— which can vary in proportion to the strength of the arguments and evidence presented. But suppose one insists on *empirical adequacy*. In this case, S seems to have the upper hand: contingentist S, as illustrated, claims to be able to more realistically describe/explain the enormous vicissitudes of science-making, and to account for the multiplicity and plurality dominant in the history/practice of science. Moreover, by emphasizing the "contingent" aspects of science, S treats such an approach as Boghossian's as too idealized and too detached from "empirical reality," i.e., the history and practice of scientific knowledge, to reach the concrete heart of sciencie practice and enrich our empirical picture of science (cf. Soler *et al.*, 2014).

All in all, relying on such an assumption as inevitabilism and taking the rationality and legitimacy of a certain body of knowledge for granted is not tenable against S, who already has a different, contingency-oriented conception of knowledge-production, which, based on a social constructivist explanation, would debunk the presupposed rationality/legitimacy.

3.4. Replies to some objections

This final section attempts to respond to some challenging objections that seem to threaten SC in general, and the considerations of this article in particular, which are often raised against SC by absolutist-minded critics, and which mostly concern the application of pro-SC arguments to themselves. First, if meaning and rationality are "social constructs," does not this statement itself apply equally to all those considerations and arguments in favor of SC, showing that their meaning and plausibility are nothing more than contingent social achievements? If so, what is the point of raising them, especially against anyone who seeks "epistemic" reasons and "true" statements? Moreover, is it not obvious that the author himself has used some high-level logical inferences like *modus ponens* to substantiate

his points or to refute Boghossian's view? If so, is this not itself a negation of S's claim that there are no "socially based" standards of rationality?

As for the first objection, three points deserve attention. First, the critic not only presupposes a non-social, absolute understanding of epistemic reasons in the first place, and thus already emphasizes the "correctness" of his own view, which is actually the root of the matter, but in the very demand to offer (right/correct) "epistemic" reasons, he still seems to have difficulty recognizing that, *from S's point of view*, the epistemic and the social are not essentially separated, so that one should either give "epistemic" reasons or is simply out of the "space of reasons." In contrast, one of the consequences of the strengths of SC is that something can be both rational and social/constructed, and indeed, in a strong version of SC, the social constitutes the rational, and rationality and justification are ultimately treated as a *sociological* matter: justification, consisting of a set of evidence, considerations, and examples, is virtually "justification for" certain people in some local context, and always has *intersubjective* validity. Thus, reasons can be both justified/valid and social/local, i.e., their very validity depends on the epistemic rules of a particular local community.

Second, in particular, S has not the slightest concern about applying the said logic to his own stance, and indeed some have tried, in order to be consistent, to impose the condition of "reflexivity," avoiding any transcendental position with respect to his own stance, no matter how much crisis it might provoke (see Woolgar, 1993, pp. 83-95). As a consequence, S fully admits that his own reasons are socially constructed and thus as contingent as any other reasons: they depend on some historical-social *contingencies*, serve some interests, are formulated from some specific standpoint, and are "true" and "justified" according to local standards.⁸

Accordingly, in response to the critic who says, "S cannot claim that her/his claims and reasons are also "constructions'!" S replies, of course s/he can; what else could they be? Is it not the virtue of such a position that it can formulate a statement that is "true of" all practices (see Kusch, 2002, pp. 270-273) —i.e., that they are all socially constructed— *without denying* that the statement itself is socially constructed – i.e., "true in" the community of SC and plausible to anyone who has already accepted its particular standards and goals?

Be that as it may, there is a crucial difference between SC and the anti-social critic, which brings us to the third point: while the critic believes in some "trans-societal" point from which one can make judgments, S, holding that reasons are essentially social, denies any "neutral" point outside of all our social practices to which one can appeal to judge the correctness of such practices. Of course, judging and evaluating other practices is perfectly legitimate, and that is what, for example, this piece has tried to do, but S thinks that any judgment/evaluation, including his own, is articulated within a particular linguistic practice, not as free-form local standards. To put it more clearly, the critical Kantian point is that we all wear some glasses and see the world through their perspective; i.e., there is no view that can be free of some glasses, some naked, neutral stance that claims to see the

⁸ While not denying the inescapable function of the concept of "truth" in our linguistic practice, S accepts that the critical question of whether such and such a statement "corresponds" to the specific reality it claims to be about can legitimately be asked at the next level of language. For example, "*Is it really true that* justification is socially constructed?" The only crucial difference is that for S there is not much to be gained from such an "analysis," and the final answer would not involve any "substantive" account of truth.

world as it is in nature. It is quite obvious that this critical view stands between two alternatives: one (Platonism, absolutism) claims that there are some special glasses that represent the world as it is, having access to the nature of things; the other (Hegelianism, Peirceanism) claims that in the future there will be special glasses, by integrating all the glasses into one or by removing the slivers of the previous ones, that would represent the whole reality in itself. Generally speaking, by rejecting both alternatives and emphasizing "human finitude" and the serious "limits of human knowledge" (Bloor, 2007, p. 251), S holds that there is no socially unconditioned "description" that can be formulated without recourse to some contingent (linguistic) practice.

Turning to the second objection, there are three points worth mentioning on behalf of SC. Firstly, one might say that the critic still presupposes some "absolute" notion of rightness/correctness, and excludes the whole "(social) context" that gives precise content to logical rules. Thus, the cited rule

If Boghossian is right, then X; but not-X; then Boghossian cannot be right.

should be articulated as follows:

If Boghossian is right, then (according to certain presumptions) X; but (according to S's background assumptions and reasons) not-X; then Boghossian cannot be right (from S's stance).

Which is, in a sense, the complex form of the following rule:

If S is right (i.e. if one entertains S's assumptions and reasons), then not-X (and therefore, Boghossian cannot be right).

As circular as this strategy seems, S can claim that s/he is using the same move that Boghossian (2006, p. 100) says is perfectly plausible under certain circumstances; i.e., S is perfectly *entitled* to argue in a circle in such a way as to start with his conceptual-epistemic practice and its standards of rightness/correctness and use them to evaluate/criticize other practices.

Secondly, at a fundamental level, the real question about a particular inference rule, especially in the context of a debate between S and its critic, is not whether S follows it or not; rather, there are two real questions, in answering which S sees its own strength, as follows:

1. Ontologically speaking, what is the ultimate ground of rules? Are they rooted in our (subjective) mind/brain, are they something objective, or are they grounded in intersubjective space? Thus, similar to Kant's project, without denying the validity/objectivity of the common knowledge we possess and use in general, S raises the "critical" question about the ground of such achievements, in answer to which s/he emphasizes the "conversational" (Rorty) and "negotiable" (Bloor) character of (epistemic/ semantic) rules, and places "intersubjective validity" at the center of such activity. Thus, S might accept that s/he currently uses a particular style of thinking or a particular rule to pursue some goals (after all, the process of persuading and communicating with others requires following some agreed-upon rules), but emphatically denies that she attaches any substantive, "meta-societal" weight to them. 2. *Epistemologically speaking*, the appeal to any logical rule seems to be a double-edged sword that can be used with equal force against the critic. To push the last point to its limits, the following question can always be asked: what is it that "justifies" the rule in question and also the justification itself that is offered. It is quite obvious that there is the possibility of an *infinite regress*, which, as it happens, threatens the foundation of any rationalist and foundationalist position that emphasizes the following of solid rules in our argumentative practice. And it is as good as obvious that S's answer to this question is as radical as it is simple: There is a certain "stopping point" to our constant curiosity and questioning, which ultimately leads to the common "taken-for-granted bedrock" that members of a given community (consciously or blindly) accept for the pursuit of other high-level inquiries, a set of agreed-upon assumptions that form the deep foundation of "hinge" propositions around which all empirical inquiry revolves (Wittgenstein), or some solid truths that no one has proposed to question or seriously doubt (Rorty).⁹

Thirdly, even if, for the sake of argument, one is persuaded that there are some brute or innate rules that cannot be violated without us being rational, S still has two reservations: On the one hand, the net result that the critic has established up to this point is that there are some *general* or *universal* rules common to both parties, and that both in fact use them to establish their own views. In the light of the remarks in section 2, however, such a move does not have enough force against SC, because the critic would have to present a satisfactory argument in favor of its "necessity," excluding the fact that it is not itself a contingent, local phenomenon produced by certain socio-historical circumstances. On the other hand, even after accepting these general rules, S still holds that there remains a crucial issue between these two positions regarding the description/explanation of the *development* of human knowledge: the rich amount of "cultural-social diversity" that has emerged and can emerge from this thin layer of common rationality. In other words, S believes that the vast plurality of epistemic systems that have actually built up in history and are continuously building up, along with scientific revolutions and radical changes in our concepts/conceptions of phenomena, cannot be deduced or inferred from a few logical rules or by relying on a few natural cognitive tendencies. The point is that so many constructions have been developed on the basis of a few "common" commodities that the appeal to these factors alone cannot explain the results, so that it is necessary to mention other factors in order to offer a satisfactory explanation, which, for S, are the "social" ones.

4. Conclusion

This essay has polemically defended SC as a *debunking* project: first by emphasizing the *strengths* of SC, e.g., the social dependency thesis, and then by taking issue with Boghossian's anti-SC views and presenting some responses to rationalist objections. Throughout

⁹ Boghossian (2005), revising his view of rule-following considerations, holds that the so-called "intention assumption" must go, at least with respect to some basic epistemic rules, and ends up asking the very question that S asks in the first place: "How could we be said to operate according to certain rules ... given that we could not be said to have accepted those rules by forming the intention to conform to them?" (p. 196)

the discussion, it has been emphasized that such strengths are overlooked in Boghossian's attack, or that non-social accounts of the real problems are taken for granted in his view. In sum, by highlighting the *ubiquity* of the social in our epistemic-semantic practice, this article has shown that the very sources Boghossian and the anti-SC rationalist critic usually use and/or assume in their critique are socially constructed and contingent achievements, and that they insist on playing the same game whose rules are already deconstructed within the SC system.

Acknowledgements

I acknowledge the funding and support for this research from the University of Religions and Denominations. I would also like to thank the two anonymous referees of this journal for their comments and suggestions.

REFERENCES

Baghramian, M. (2004). Relativism. New York: Routledge.

- Baghramian, M., Carter, A. J. (2020). Relativism. *Stanford Encyclopedia of Philosophy*. Retrieved from http://plato.stanford.edu/entries/relativism/.
- Barnes, B. (1981). On the conventional character of knowledge and cognition. *Philosophy of the Social Sciences*, 11 (3), 303-333.
- Barnes, E. (2014). Going beyond the fundamental: Feminism in contemporary metaphysics. *Proceedings of the Aristotelian Society 114* (3), pt. 3, 335-51.
- Barnes, B., Bloor, D. Henry, J. (1996). Scientific knowledge: A sociological analysis. Chicago: University of Chicago Press.
- Bloor, D. (1983). Wittgenstein: A social theory of knowledge. New York: Columbia University Press.
- Bloor, D. (1991). Knowledge and social imagery. Chicago: University of Chicago Press.
- Bloor, D. (1992). Ordinary human inference as material for the sociology of knowledge. *Social Studies of Science* 22(1), 129-139.
- Bloor, D. (1997). Wittgenstein: Rules and institutions. London: Routledge.
- Bloor, D. (2007). Epistemic grace: Antirelativism as theology in disguise. *Common Knowledge* 13 (2-3), 250-280.
- Bloor, D. (2011). Relativism and the sociology of knowledge. In S. D. Hales (ed.) *A Companion to Relativism* (pp. 433-455). Chichester: Wiley-Blackwell.
- Bloor, D. (2020). Sociologism and relativism. In N. A. Ashton, M. Kusch, R. McKenna, K. A. Sodoma (Eds.) Social epistemology and relativism (pp. 161-173). New York: Routledge.
- Boghossian, P. A. (1989). The Rule-following considerations. Mind 98(392), 507-549.
- Boghossian, P. A. (2001). How are objective epistemic reasons possible? *Philosophical Studies* 106 (1-2), 1-40.
- Boghossian, P. A. (2003). The normativity of content. Philosophical Issues 13(1), 31-45.
- Boghossian, P. A. (2006). Fear of knowledge: Against relativism and constructivism. New York: Oxford University Press.
- Boghossian, P. A. (2008). Epistemic rules. Journal of Philosophy 105(9), 472-500.
- Brandom, R. (2008). *Between saying and doing: Towards an analytic pragmatism*. Cambridge: Cambridge University Press.
- Brown, J. (1989). The Rational and the social. London: Routledge.

Collins, H. (1985). Changing order: Replication and induction in scientific practice. Beverly Hills, CA: Sage.

Collins, H. (2015). Contingency and "the art of the soluble." In L. Soler, E. Trizio and A. Pickering (Eds.) *Science as it could have been: Discussing the contingency/inevitability problem* (pp. 177-186). Pittsburgh: Pittsburgh University Press.

- Cooper, D. E. (1975). Alternative logic in "primitive thought". Man 10(2), pp. 238-56.
- Davidson, D. (2001). Subjective, intersubjective, objective. Oxford: Oxford University Press.
- Ellenbogen, S. (2003). Wittgenstein's account of truth. New York: State University of New York Press.
- Fuller, S. (1988). Social epistemology. Bloomington: Indiana University Press.
- Fuller, S. (2007). The Knowledge book: Key concepts in philosophy, science, and culture. Montreal: McGill-Queen's University Press.
- Glüer, K., Wikforss, Å. (2018, Jun 17). The normativity of meaning and content. *Stanford Encyclopedia of Philosophy*. Retrieved from https://plato.stanford.edu/entries/meaning-normativity.
- Goldman, A. I. (1999). Knowledge in a social world. Cambridge: Oxford University Press.
- Griffith, A. M. (2017). Social construction and grounding. *Philosophy and Phenomenological Research* 97 (2), 393-409.
- Haack, S. (1996). Science as social: yes and no. In Nelson, L.H., Nelson, J. (Eds.) *Feminism, science, and the philosophy of science* (pp. 79-94). Dordrecht: Kluwer Academic Publishers.
- Hacking, I. (1999). The Social construction of what? Cambridge, MA: Harvard University Press.
- Hacking, I. (2015). On the contingency of what counts as "mathematics." In L. Soler, E. Trizio and A. Pickering A. (Eds.) Science as it could have been: Discussing the contingency/inevitability problem (pp. 262-284). Pittsburgh: Pittsburgh University Press.
- Haslanger, S. (2012). *Resisting reality: social construction and social critique*. New York: Oxford University Press.
- Hesse, M. (1976). Truth and the growth of scientific knowledge. PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association 2, 261-280.
- Kitcher, P. (1993). The Advancement of science: Science without legend, objectivity without illusions. New York: Oxford University Press.
- Kripke, S. (1982). Wittgenstein on rules and private language: An elementary exposition. Cambridge, MA: Harvard University Press.
- Kukla, A. (2000). Social constructivism and the philosophy of science. London: Routledge.
- Kusch, M. (2002). Knowledge by agreement: The programme of communitarian epistemology. New York: Oxford University Press.
- Kusch, M. (2006). A sceptical guide to meaning and rules: Defending Kripke's Wittgenstein. Chesham England: Acumen.
- Lynch, M. (1993). Scientific practice and ordinary action: Ethnomethodology and social studies of science. New York: Cambridge University Press.
- Mallon, R. (2009). A field guide to social construction. Philosophy Compass 2(1), 93-108.
- Mallon, R. (2019). Naturalistic approaches to social construction. *Stanford Encyclopedia of Philosophy*. Retrieved from https://plato.stanford.edu/entries/social-construction-naturalistic.
- Nelson, A. (1994). How could scientific facts be socially constructed?" Studies in the History and Philosophy of Science 25(4), 535-547.
- Pickering, A. (1984). Constructing quarks: A sociological history of particle physics. Chicago: University of Chicago Press.
- Pickering, A. (1987). Forms of life: Science, contingency and Harry Collins. The British Journal for the History of Science 20 (2), 213-221.
- Rorty, R. (1979). Philosophy and the mirror of nature. Princeton: Princeton University Press.
- Rorty, R. (1989). Contingency, irony, and solidarity. New York: Cambridge University Press.
- Rorty, R. (1991). *Objectivity, relativism, and truth: philosophical papers*, vol. 1. Cambridge: Cambridge University Press.
- Rorty, R. (1999). Philosophy and social hope. New York: Penguin Books.

- Rorty, R. (2000). Universality and truth. In R.B. Brandom (ed.) *Rorty and His Critics* (pp. 1-30). Malden, MA: Wiley-Blackwell.
- Shapin, S., Schaffer, S. (1985). Leviathan and the air-pump: Hobbes, Boyle, and the experimental life. Princeton, NJ: Princeton University Press.
- Soler, L. (2008). Are the results of our science contingent or inevitable? *Studies in History and Philosophy of Science* 39 (2), 221-229.
- Soler, L. (2015). The contingentist/ inevitabilist debate. In L. Soler, E. Trizio & A. Pickering (Eds.) Science as it could have been: Discussing the contingency/inevitability problem (pp. 1-44). Pittsburgh: Pittsburgh University Press.
- Soler, L., Zwart, S., Israel-Jost, V. & Lynch, M. (2014). Introduction. In L. Soler, S. Zwart, M. Lynch & V. Israel-Jost (Eds.) Science after the practice turn in the philosophy, history, and social studies of science (pp. 1-43). New York: Routledge.

Winch, P. (1964). Understanding a primitive society. American Philosophical Quarterly 1(4), 307-324.

Wittgenstein, L. (1953). Philosophical investigations. Oxford: Blackwell.

Woolgar, S. (1993). Science: The very idea. London: Routledge.

MOHAMMADREZA ESMKHANI is a graduate of the Iranian Institute of Philosophy and is currently a researcher at the University of Religions and Denominations. His main areas of specialization are philosophy of language, epistemology, metaphysics, philosophy and sociology of science, and pragmatism.

ADRESS: University of Religions and Denominations, Faculty of Philosophy, Pardisan Province (Emam Sadegh Blvd.), Postal Code: 37491-13357, Qom, Iran. Email: m.r.esmkhani@gmail.com ORCID: https://orcid.org/0000-0001-5627-2206