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# Three Questions About the Social Function of Reason

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RESUMEN

En The Enigma of Reason (2017) Mercier y Sperber argumentan que la razón humana evolucionó en un contexto de interacción social, y que su función primaria es social (la razón ayuda a los individuos a justificar sus puntos de vista y su conducta dando razones y argumentando con éxito con los demás). En mi comentario, formulo tres cuestiones sobre el alcance y las consecuencias de esa afirmación, que están relacionadas con (1) el alcance de la funcionalidad social de la razón (hay otras funciones secundarias de la razón en la cooperación humana), (2) el razonar en el contexto social (los factores sociales afectan a la evaluación de las razones proporcionadas por otros), (3) el éxito cultural del enfoque intelectualista de la razón ("el tercer enigma de la razón) y el papel de los procesos evolucionistas del contexto social y cultural en el desarrollo científico.

PALABRAS CLAVE: razón, función social, interacciones sociales, factores sociales, cooperación.

#### Abstract

In *The Enigma of Reason* (2017) Mercier and Sperber argue that human reason evolved in the context of social interaction, and that its primary function is social (reason helps individuals to justify their views and behaviors by providing reasons, and successfully argue with others). In my commentary I formulate three questions about the extent and the consequences of this claim concerning: (1) the scope of the social functionality of reason (are there other secondary functions of reason in human cooperation), (2) reasoning in the social context (do social factors impact the evaluation of reasons provided by others), (3) cultural success of the intellectualist approach to reason ("third enigma of reason"), and the role of social context and cultural evolutionary processes in the scientific development.

KEYWORDS: Reason, Social Function, Social Interactions, Social Factors, Cooperation.

# I. INTRODUCTION

The Enigma of Reason: A New Theory of Human Understanding by Hugo Mercier and Dan Sperber is an intellectual adventure. The journey starts with the history of philosophy and science and proceeds through the

meanders of cognitive science and evolutionary psychology, with many entertaining puzzles (for one's own reasoning), and picturesque anecdotes about the master-reasoners like Noble Prize winners, or Sherlock Holmes on the way. Importantly, the journey leads to the substantial rethinking of everything we thought we knew about reason and reasoning. Instead of paying homage to the dogma of the intellectualist approach to reason as a tool to make one's beliefs and decisions better, Mercier and Sperber argue that the origin of reason is social, and its main function is argumentative: we reason, first of all, to justify and convince others, and evaluate arguments provided by others, not to improve our knowledge and decision-making. They make a convincing case that this uniquely human capacity of reasoning evolved in response to the adaptive challenges posed by cooperation and communication.

In my commentary on *The Enigma of Reason* (hereafter referred to as ER) I would like to discuss the scope and the full consequences of the authors' original thesis that the origin and function of human reason are inherently social. Since I am largely convinced by the authors' arguments in favor of the interactionist theory of reason, the aim of my commentary is to provoke clarification and further development of their theory, rather than to propose substantial criticism. Hence, my commentary will take a form of three questions to the authors. These questions were produced by the solitary reasoning with a hope to contribute to the production of interesting arguments when put in a proper (dialogic) context.

# II. THE SCOPE OF THE SOCIAL FUNCTIONALITY OF REASON

According to the interactionist theory, the capacity of reason can be best understood in the light of evolution. From the evolutionary perspective, features of an organism such as organs or cognitive mechanisms are considered in terms of their biological function or how they contribute to the reproductive success of the organism. Mercier and Sperber argue that reason evolved in the context of social interaction, where it responded to challenges posed by human cooperation and communication, and hence that "the main function of reason is social" [ER, p. 176]. The authors distinguish two main social functions of reason. First, reason plays a role in coordination: by providing reasons individuals can justify their views and actions, and so present themselves as reliable cooperative partners. This way reason also helps to shape mutual expectations in social interaction: when people explain their reasons, they

inform others about what to expect of them, and tacitly express their expectations towards others [ER, pp. 8, 186]. Exchanging reasons helps humans to coordinate expectations and goals, which is crucial for human cooperation. Secondly, reason facilitates efficient communication by enabling a joint production of good arguments, which is advantageous to all involved parties [ER, pp. 9, 198, 264]. This argumentative function of reason is manifested both when people produce arguments to convince others, and when they evaluate arguments provided by others.

Do the authors foresee a possibility that reason could serve some other (than justificatory and argumentative) social functions? The question arises if we consider a hypothesis that some other functional features could have been added to reason in the course of evolution, for instance, in order to enhance the role that it already served in response to challenges posed by cooperation and communication, or to provide a solution to another adaptive problem. I am aware that the authors consider this point in the book [ER, pp. 199-201], however my aim here is to initiate a more detailed discussion of the possible secondary functions of reason in the context of human cooperation. By doing so, I would like to examine the full scope of the thesis about the social functionality of reason.

One hypothesis is that reason in the cooperative context, primarily used for justification and shaping mutual expectations between partners of social interaction, could have been selected or co-opted to serve a secondary (related) function in human coalition and group formation. In particular, the "coalitionary function" of reason could be to facilitate decision-making about whom to make alliances with or whom to consider a group member, and in sustaining the existent coalitions (note that it could have emerged as the individual level secondary feature as long as forming and sustaining coalitions is beneficial from the perspective of individual fitness). Since this speculative function has two components, let me discuss each of them respectively.

First, reason could help people to decide with whom to make alliances and facilitate the recognition of group members. In particular, the evaluation of reasons provided by others to justify their views or actions, in addition to testing their quality and the level of commitment of the reasoner, could serve to filter individuals who really share the audience's views from those who don't. In that context, the capacity of reason would be used for checking the degree of compatibility of reasons between the reasoner and the audience in order to facilitate the recognition of group members or potential cooperative partners. For instance, people who are able to provide comprehensive and correct (from the point

of view of a religious community) reasons for why they perform specific religious behaviors such as participation in religious rituals, could be perceived as true believers by a religious community. In that situation, both performing the behavior, and providing reasons for this behavior that are compatible with the reasons entertained by the religious group, may serve as signs of being (potential) trustworthy cooperator [cf. Norenzayan (2013)]. The same logic could apply to the formation of political or morality-based groups (e.g., performing a morally good behavior for a bad reason, at least bad from a perspective of a certain community, might question one's reliability as a partner of social interactions), or even small-scope alliances such as friendship (e.g., exchanging and evaluating reasons could serve individuals to test the scope of compatibility, as a ground for potentially advantageous future interactions). Note that this point might provide just an extension of the author's thesis that reason evolved in response to problems posed by human cooperation such as whom to trust, and how to coordinate successfully [ER, p. 8].

Second, when alliances or groups are already formed, public production and sharing of reasons could help to shape group identity (as built upon shared views, behaviors and reasons to hold or perform them), decide common goals, and motivate joint action. In that case, the coalitionary function of reason would be mainly manifested in sharing reasons and acting upon them together.

Interestingly, Mercier and Sperber argue that reason does not function adequately (i.e., in a way that is beneficial to the partners of social interaction) outside of the dialogic context, presuming disagreement and confrontation of different ideas as its proper environment [ER, p. 247, p. 289, p. 264]. Consistently, they suggest, in groups who share views on moral, political, religious or any other matters, reasons are exchanged merely in order to express support for these preexistent and already accepted views, and are typically not questioned, negotiated, or improved — there is no room for the argumentative usage of reason [ER, pp. 243-244; cf. Mercier & Sperber (2011), p. 63]. But perhaps the described phenomenon of group polarization could be understood as a manifestation of just another functional feature of reason in the social context which is to help to form and sustain alliances with those who share our views (and reasons)?

Of course, the depicted scenario of how reason could have been selected or co-opted to perform a secondary social function is just one of many possibilities. I would be interested to know what are the authors'

intuitions (and the supporting reasons) regarding the scope of the social functionality of reason.

# III. REASONING IN THE SOCIAL CONTEXT

Human social interactions are extremely complex — people have to consider many different factors when deciding how to behave towards one another, such as history of past encounters, prospects for future ones, the degree of affiliation, social position, etc. Does the fact that reason evolved in the conditions of social interactions makes it sensitive to the complexity of these interactions? In particular, is the evaluation of reasons provided by a speaker sensitive to the specific features of the social context the reasons are communicated in (e.g., who is reasoning, whom is this person to us, what is the record of our past interactions, what kind of relationship with that person we aim for in the future)? The authors acknowledge that at least some of such contextual features are relevant in everyday communication (e.g., the perceived authority or trustworthiness of the source impacts our willingness to accept the provided conclusions [e.g., ER pp. 295, 191]), but they also argue that in overall our evaluation of reasons given by others tends to be objective [ER, p. 332] (e.g., unbiased and demanding [ER, p. 235]; not easily subject to the impact of authority [e.g., ER, p. 196]). Nonetheless, some known examples of social biases seem to pose challenge to the objectivity of the evaluation of reasons provided by others, and even if the reasoning is activated in its proper domain of conflicting ideas or disagreement. For instance, not to look too far, the anonymization of the scientific review process is aimed to improve the objectivity of evaluation of scientific reasons provided by authors and counteract the impact of other, nonscientific reasons such as their gender [e.g., Bornmann, Mutz & Daniel (2007)] or personal and institutional prestige [e.g., Peters & Ceci (1982)] on reviewers' decisions.

How does the interactionist theory of reason deal with the observation that people may be more likely to accept or reject other people's reasons when they have other *social* reasons to do so?

# IV. THIRD ENIGMA OF REASON?

According to Mercier and Sperber the reason is "doubly enigmatic" [ER, p. 4]. On the one hand it has been long perceived by the intellectu-

alist tradition as a superpower making our beliefs and decisions better, on the other hand, as a wide range of psychological research on reasoning has demonstrated, this superpower is susceptible to many biases such as confirmation bias, and errors (overall, far from perfect). In this section I would like to put forward what I call "the third enigma of reason": if the intellectualist theories of reason are wrong, and scientific group reasoning helps to reach good theories (which both are what the interactionist approach claims), why the intellectualist theories of reason have been so culturally successful and resistant to being refuted for around 2000 years?

Would not the interactionist theory rather predict wrong theories to gradually disappear in the process of critical evaluation and discussion by the scientific community? After all, as Mercier and Sperber suggest, "when people who disagree but have a common interest in finding the truth or the solution to a problem exchange arguments with each other, the best idea tends to win" [ER, p. 10]. The same question from a little bit different angle: if good scientific theories tend to be accepted shortly after they are formulated because members of the scientific community can recognize good reasons behind them [cf. ER, pp. 11, 173], should we expect massive conversions of the scientists to the interactionist perspective in the near future? What if that does not happen?

I understand that the authors could not answer all the questions in the already very ambitious book, and that cultural evolution of scientific theories of reason was not what they directly examined. However, I feel that the question about the cultural success and persistence of the intellectualist theories of reason would be interesting to address, in particular if we take into account a broad range of research conducted by the authors (especially, Dan Sperber) in the field of cultural evolution.

Although, the authors do not directly examine this question, they do make some suggestions in the book that provide insights about why wrong scientific theories persist. I would like to examine them first, and further propose a small development in the context of the social function of reason.

First possible answer to this question is that in the past there was not enough disagreement among scholars regarding the view that the main function of reasoning is epistemic, hence there was no much space for producing counterarguments against the intellectualist approach to reason. As pointed out above, from the perspective of the interactionist theory of reason, the clash of ideas and disagreements are triggers of reason, and we cannot expect it to function well outside of this context, even in science.

Secondly, scholars who diverged from the consensual intellectual view of reason risked their reputation, as their reasons for an alternative theory of reason could not be recognized as justifiable by the scientific community of the time. Analogically, as the authors illustrate, for hundreds of years physicians tended to bleed people to death based on a wrong theory of humors simply because such decisions were easy to justify from the perspective of what the medical community of the time recognized as a good method of treatment, even though it was not really effective [ER, p. 258]. Physicians who did not adapt to these standards of treatment could risk their reputation in the medical community (e.g., they could suffer from the lack of reasons [recognized as good by the community] to justify their other, controversial methods of treatment).

Thirdly, the confirmation bias and laziness, typical features of one's own reasoning from the interactionist perspective, could have contributed to the persistence of the intellectualist theory of reason among scholars. Mercier and Sperber directly consider this possibility:

We are as good at recognizing biases in others as we are bad at acknowledging our own. Perhaps this explains why many people can both hold onto an intellectualist position (for themselves and some kindred spirits) and firmly believe that reason is biased and lazy (particularly in individuals who disagree with them). Actually, the usual defenses of the intellectualist approach to reason are themselves good examples of biased and lazy reasoning [ER, p. 330].

I would like to consider one more hypothesis in addition to the three depicted above. As suggested in the previous section, if the reason evolved in the specific niche of social interactions, it may be sensitive to the very nuances of these interactions (e.g., when we evaluate the communicated information we take into account both the content, and our broad knowledge about the source [cf. ER, p. 191]). This could explain why people sometimes endorse different content evaluation criteria depending on *who* is speaking — e.g., their mother, a friend, an acknowledged authority in a particular field of knowledge. In particular, the evaluation criteria for provided reasons could be more relaxed when the source is perceived as exceptionally trustworthy or authoritative, and when

the communicated content constitutes a case with no clear answer (the claims so far seem uncontroversial from the interactionist perspective).

Science is surely full of such cases, with different theories providing alternative explanations (or reasons) for the same phenomenon (including the phenomenon of reason itself). Perhaps, another commonsensical explanation of the cultural success of the intellectual theories of reason is simply that these theories cherished a long tradition of intellectual consensus in philosophy and science (long before these two were distinguishable), which contributed to the high level of acceptance by the subsequent generations of scholars. Specifically, the fact that the intellectualist theories of reason were entertained by many, including many scientific authorities, could have made them more believable and less prone to be subject to critical evaluation to begin with. Interestingly, from the cultural evolutionary perspective, these two processes could constitute examples of frequency-based bias and prestige bias on the cultural transmission working in tandem [e.g., Richerson & Boyd (2005)]. Namely, certain scientific theories may have an advantage in cultural transmission based on how frequently they are endorsed by members of scientific community, and if (many) authoritative figures in science do so, regardless of the critical deliberation on the reasons behind them. Of course, science in particular is a social domain full of astounding revolutions and breakthroughs supplied by a great dosage of critical and creative reasoning. but perhaps these events are perceived as so revolutionary exactly because they were often aimed against a long tradition of scientific consensus?

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