THE EARLY RATIONALITY OF TRUST AND SKEPTICISM

HUGO VICIANA ANTONIO GAITÁN

Paul L. Harris, Trusting What You're Told. How Children Learn from Others, Harvard University Press, 2012, 272 pp.

Victor S. Thomas Professor of Education at Harvard, Paul L. Harris is a leading figure in developmental psychology. His previous work on imagination and theory of mind has guided the efforts of those people—including philosophers—purporting to propose relevant theories on such topics. In his new book, based on the latest research, Harris offers an account of the cognitive underpinnings of children's deference to the information either revealed or communicated by other people. Due to its subject matter, as well as the way in which Harris places the significance of many of the findings in this area in the midst of debates ranging back to Hume, Rousseau or Piaget, *Trusting What You're Told* may be of substantial interest for those engaged in social epistemology, the justification of testimony, and the philosophy of education.

The book delves into what Harris seems to consider a disproportionate emphasis in psychological theory of relying on children's own rational and quasi-scientific abilities to progress in their discovery of the world (the so-called "child as scientist" framework). Against this background, the first half of the book covers the early development of deference to adults' testimony and instruction, while its second half deals more specifically on how children confer epistemic trust on specific domains such as morality, scientific and fictitious entities, or some of the supernatural beliefs typical of modern religion.

In chapters one and two, he begins by discussing the emergence of "displaced reference"—the use and understanding by young toddlers of talk referring to objects or events not directly perceived (e.g., "what dad is doing when he is not at home"). He then undertakes the challenge posed by the possibility of "verbalism," i.e, the idea, argued by some, that young

Institut d'Histoire et Philosophie des Sciences, Paris-1, ENS, CNRS, France. / Hugo.Viciana@normalesup.org Universidad Carlos III, Madrid, España. children do little else than parroting what they hear, and not really learning from the content of what others say. Harris shows evidence of the way that children—at least by 22 months old—do not only verbally accept what is told to them, but also effectively change their actions on the base of the content of that information. (Although the relative inability of children this age to learn from verbal instruction how to correct certain persistent errors—such as those arising from their intuitions on the physics of falling objects—is also of significance.) Then the discussion centers on the question of which rules govern young children's belief update, enrichment, and revision, when the sources of information vary, and, in particular, when the information collected personally competes with the information communicated by other adults (a recurrent theme throughout the whole book). Harris emphasizes the importance of the early emergence of questioning, as indicative of how human minds quickly put themselves in a path of discovery and interaction different from the one followed by other animals. In spite of their ingenuity—we are reminded even apes that have been taught to communicate with humans do not ask questions. While taking into account that opportunities of schooling for parents and socio-educative level seem to predict the amount of questioning present in children, Harris presents the view that children's questioning goes a long way. He offers a thesis that goes beyond the assumptions of James Sully and Piaget—for whom children questioning was a means to satisfy their thirst for teleological explanations—and the Isaacs—according to whom, children's early questioning satisfies their demand for explanations when facing the breaking of observed regularities. For Harris, children's early questioning hints to a sophisticated picture of the metacognitive abilities of young children to appreciate their own ignorance, other people's domain of expertise, and the utility of asking questions. Besides, and against mere verbalism, a number of studies seem to show that children have, from very early on, an adequate linguistic understanding of what are possible, satisfactory answers to a question.

Chapters three and four examine first some of the main psychological mechanisms in young children's dispositions for observational learning, and then categorization from testimony. While reviewing the current evidence on over-imitation and selective imitation, Harris underlines how children, compared to other apes, take into account the communicative intention of the model. This leaves the door open to the possibility that children also take into account normative and conventional dimensions of certain actions. He emphasizes the high degree of both autonomy and deference in learning about the categorization of objects. On the one side, infants can categorize on a purely perceptual basis. About as early as they learn to speak they may even correct adults that misattribute certain objects as belonging to certain categories (e.g., "this is not a shoe!"). As

studied by Alexander Luria, they may also resist reasoning from general premises communicated by an adult if the premises go against the child's own experience (the so-called "empirical bias"). On the other side, when being informed by an adult, in carefully controlled experiments depicting objects of ambiguous appearance, they tend to rely on that advice for the categorization of the object. According to Harris, children weight the testimony of the adult by what he calls "a metric of the implausibility" of the claim relative to children's previous categorization. Interestingly, as children are offered special, subordinate, categories of objects, they tend to accept those statements more easily (e.g., an adult saying: "this is a Moroccan bird!" instead of saying "this is a bird," while pointing to a picture of a "bird-like creature," would be trusted more).

Chapters five and six deal with the development of differential trust. Reviewing his own research as well as some of the most well-cited studies, Harris offers a framework on how early trust in other people's testimony is weighted by previous familiarity, and previous competence. In a nutshell, familiarity trumps competence at first, since children tend to accept more easily statements given by their close caregivers if those statements are in conflict with the ones given by a stranger. However, as the preschool years advance, competence tends to trump familiarity. Harris calls this a "major shift in the basis for children's trust." Subsequently, he assesses the evidence showing how children are sensitive to group disagreement and majority views. As it stands today, there is relatively robust evidence of a bias for trust being preferentially conferred to other individuals in the same cultural group (as exemplified, for instance, by subtle linguistic markers) having emerged already at around four years old, and perhaps even earlier.

From then on, the book focus on the processes surrounding early trust in specific domains. Although Harris reviews the evidence that shows that children are in many respects autodidacts in their moral judgments, in chapter seven he tries to emphasize the ways that children may learn from others from very early on in the moral domain. He reviews research showing that preschoolers do not only pay attention to the perceived emotional impact of an action on other people, they also attend to verbal information conveyed by others about the effects of those actions, and modify their moral judgments accordingly. His case in point in this chapter, however, is based on the detailed study of the moral judgments held by "independent vegetarians," i.e, children that have grown up as vegetarians in a family where the parents are not vegetarians.

Chapter eight, titled "Knowing what is real," surveys the current state of knowledge on children's early beliefs on theoretical entities, or "hidden agents," such as germs, vitamins, gods or the tooth fairy. It turns out that children tested in several different cultures tend to make an early distinc-

tion between scientific entities and other kinds of entities based on the amount of confidence they put on their existence. Harris places the significance of these discoveries in the aftermath of the debate raised in the 70s by anthropologist and philosopher Robin Horton. Horton emphasized the overlooked similarities between the understanding of the supernatural and the understanding of the scientific realm, and their underlying folk ontologies. Research led by Harris seems to show that, in a sense, the continuity thesis about beliefs in the supernatural and the scientific realm can be supported. This is so to the extent that children conceptualize the existence of certain hidden agents in reference to similar causal powers learned through testimony. On the other hand, he emphasizes how a "tentative and preliminary" distinction emerges in children of different cultural backgrounds concerning the ontological status of different agents. Young children thus tend to place a higher level of confidence in natural entities (such as germs and vitamins). Interestingly, it is only much later in childhood that the level of confidence that they place on locally-valid religious entities (such as the belief in certain "cave spirits" held by most adults in an indigenous Mexican population) comes close to the level of confidence placed on certain scientific entities.

In chapters nine and ten, Harris addresses the development of certain religious beliefs such as the belief in the afterlife, the special powers of God, or miracles. The aim is to reconcile Hume's sensible advice on the epistemology of believing in miracles with the sociological fact that most adults seem not to observe it. This is prima facie paradoxical, since—as Harris' own research has shown—children can quickly distinguish normal causality from supernatural causality. Harris' claim is that young children as early as five years old develop a capability akin to a "magic detector." Nonetheless, the children raised in a religious environment studied by Harris and others tended to accept as plausible a fantastic story whenever God was somehow involved in it, and the effect was especially important for older children. To account for this, Harris invokes several psychological mechanisms. Among them are the lasting effects of the application of a charity principle of interpretation in everyday life. When children, living in an environment where institutionalized religion is ubiquitous, try to make sense of the seriousness with which many adults speak about religious supernatural events, they will give them a special status, perhaps different from unobservable scientific entities such as germs and vitamins, yet certainly more on that side of the confidence spectrum than other supernatural creatures such as fairies and ghosts.

In his conclusions, Harris emphasizes the importance of shifting the analytic frame. Instead of unduly generalizing the metaphor of the child as a scientist, he proposes that we approach the problems arising both in the phenomenon of social learning and learning from testimony through the guiding image of the child as anthropologist (thus in many domains deploying more a strategy of participatory observation than one of Popperian hypothesis testing). He posits:

There is no inevitable march toward objectivity or enlightenment. It is true that most children arrive at a set of rational ideas about some of the fundamental categories of existence—including space, identity, number, and time. Nevertheless, in the course of development, guided by the testimony of others and supplemented by their own imagination, children also come to entertain various culturally specific ideas about where human beings have come from and where they are going. They take these ideas on trust, not on the basis of rational scrutiny. Indeed, rather than seeking coherence, they sometimes accept ideas that are fundamentally incompatible with one another. The endpoint of cognitive development is not objectivity and equilibrium. It is a mix of the natural and supernatural, of truth and fantasy, of faith and uncertainty.

In spite of the value of his contribution, Harris makes a series of theoretical choices that cannot go unexamined in his study on the "implicit epistemology" of trust. Without delving here into the philosophical problems of null hypothesis significance testing, one can at least recognize that Harris' task of defending his view is somehow facilitated through the adoption of a form of intermediate position where the bottle can sometimes be half-full or half-empty. Thus the position predominantly defended is not totally incompatible with its opposite. (Are children naturally credulous? Are children naturally skeptical?) Harris could have written almost the same book, this time emphasizing the skeptical aspects of early cognition in the adoption of other's testimony. After all, such a stance would have been supported by his own admittance of the critical role played by the work of the imagination in the child as a form of filter in social learning.

His defense of the "child as anthropologist" framework is suggestive. It may even be proved to be very fruitful in shaping the future of the discipline. However, some of the main psychological characteristics on which the framework now stands could be subject to serious criticism. Consider his focus on the role played by a charity principle of interpretation in children's adoption of certain supernatural beliefs. After all the effort consecrated to affirm the presence in young children of the required mental abilities necessary for adopting "a metric of implausibility," the blind adoption of counterintuitive ideas seems less and less obvious, and it deserves much closer scrutiny in terms of processes and mechanisms. Furthermore, in his defense of the cultural apprentice interpretation of the phenomenon of over-imitation, maybe a broader picture of how the child understands causality deserves more attention. One alternative hypothesis for instance, although admittedly it may be difficult to test, would have

children take a certain range of observed actions as potential placeholders for actions that cause desirable effects, even if not immediately observable. Some of these effects could be social (communication, play, membership, ostracism, and so forth) and not only narrowly physical. Under such hypothesis, there is no "over-" in imitation. It could be the case that the "causal" and the "normative" reading of over-imitation need not be incompatible but complementary; following adults' demonstrations may be seen as a way of "doing things to people" and, thus, causally intervening in the world.

Harris' case on "trust" over "rational scrutiny" (as in the quote above) is persuasive to the extent that, considering the empirical findings, it seems highly unlikely that children consciously assess the reliability of the speaker based on clearly articulated reasons. However, on different readings of the idea of rationality, such as in "ecological rationality" or "evolutionary rationality", such practical rationality may gain preeminence over trust, even reducing or eliminating it. Unfortunately, lacking a more precise specification of the possible adaptiveness of the decision whether to defer to other's information or not, one cannot really compare the rationality of those decisions on an uncontroversial metric. Finally, we also regret that with its scope being focused mostly on the development of trust in young children, the book lacks a proper discussion of the epistemological role of cultural experts on specific domains, something that one may expect to play a larger role as children grow older.

As it may have been appreciated by the curious reader of this review, Harris' work can provide substantial grist for the mill of what has been called the "reductionist" position in the philosophy of testimony—without totally expunging (certainly not) the prospects for a sophisticated anti-reductionist position based on the natural basis of early "default" trust. Arguing for a middle ground, Harris sustains:

blanket skepticism is no more satisfactory for learning than blanket credulity. It would mean that once children had established a given belief, any subsequent assertions querying that belief would be rejected. The door would be shut to any revision of belief. Such deep and pervasive inflexibility seems unlikely. Indeed, a variety of experiments show that the door is left ajar.

The links he traces between attachment and early trust, and also between normative aspects and the acceptance of social information, it seems to us, could be easily included in a renewed approach to these debates. Here again, the devil is in the particulars, and one cannot but celebrate the addition of this reference, certainly full of relevant details, to the literature on the epistemology of testimony.