

**Steven Pinker.** *Rationality: What it is, why it seems scarce, why it matters.* Penguin 2021. 391 pp. \$32 USD (Hardcover ISBN 9780525561996); \$18 USD (Paperback ISBN 9780525562016).

Steven Pinker's *Rationality* is useful in offering insight into the ways in which philosophical terms have been popularized outside the context of philosophy, but in the process have lost their original philosophical meaning. As a cognitive psychologist, Pinker's goal is to explain the seeming paradox that while human progress, as he sees it, is very palpable in material terms, there is a strong sense of what he would describe as 'irrationality' in human thinking and decision-making. Pinker points out that 'rationality' in the behavioral sense would seem to be practiced by societies that Western anthropologists describe at the 'hunter-gatherer' level of development. The example he offers is that of the San people of Southern Africa. But the cultural-sociological practices of the San people in the sense of their 'empirical rationality' when they hunt animals and seek to survive in a harsh environment would seem to be a human characteristic.

The point of human existence, in general, is survival. This too, is the case for all living forms of animate nature. To support Pinker's point, consider the similar case of how the Roman historian Cassius Dio, writing in the Third Century, described the anthropological cultures of the inhabitants of the British Isles. Such anthropologies could, of course, be generalized for Europe before the cultural irruption by the Greeks. Given that the Ancient Britons survived to become a highly influential people with a worldwide reach, does that mean that their behavioral practices were 'rational' in Pinker's sense? Cassius Dio wrote: 'There are two principal races of the Britons, the Caledonians and the Maeatae, and the names of the others have been merged in these two... Both tribes inhabit wild and waterless mountains and desolate and swampy plains, and possess neither walls, cities, not tilled fields, but live on their flocks, wild game, and certain fruits... They dwell in tents, naked and unshod, and possess their women in common, and in common rear all the offspring... They can endure hunger and any kind of hardship; for they plunge into the swamps and exist there for many days with only their heads above the water, and in the forests they support themselves upon bark and roots, and for all emergencies they prepare a certain kind of food, the eating of a small portion of which, the size of a bean, prevents them from feeling either hunger or thirst' (*Roman History*, LXXXVII, 12, 1-4).

This description of the Ancient Britons was also echoed by another Roman historian, Herodian: 'Most of Britain is marshland because it is flooded by the continual ocean tides. The barbarians usually swim in these swamps, run along in them, submerged up to the waist. Of course, they are practically naked and do not mind the mud because they are unfamiliar with the use of clothing, and they adorn their waists and necks with iron, valuing this metal as an ornament and a token of wealth the way other barbarians value gold.' Similar cultural observations were made about the Norsemen/Vikings/Swedes despite their conquests throughout most of Europe just 1,000 years or so ago. Given their success, Pinker would no doubt argue that their success provided evidence of their rationality. Yet, an Arab visitor Ibn Fadhlān writing in the year 972 AD described the Norsemen 'the fishiest of Allah's creatures: they do not wash after shitting or peeing, nor after sexual intercourse, do not wash after eating. They are like wayward donkeys' (Rosendahl, 34, *The Vikings*, Revised ed. Penguin



Books, 1998).

The point of the above is to show that there is nothing special about the San people surviving under conditions that seem ‘rational.’ The same applies to all communities that have survived to this day.

The point is that human survival under all practical circumstances during their nomadic and agricultural stages of development have all practiced what Pinker labels as ‘rationality.’ This brings me now to my critique of Pinker’s idea of rationality. The fact is that outside of philosophical circles where the term has its origins, ‘rationality’ carries its own specific etymology and is central to philosophy with its fixated grappling with issues of ontology and epistemology. The age-old definitions of rationalism dating from classical Greek philosophy were all in accord with the idea that the empirical world captured by sense data were not adequate to acquire ‘truth.’ It is on this basis that the history of philosophy has been perennially consumed with the issue of truth. Even when logical decision-making is correct in whatever form, this is not what ‘rationality/rationalism’ actually means in its classical philosophical sense. As an aside consider similar usages of the term ‘philosophy,’ as when some businessperson claims their programmatic operational model is a ‘philosophy.’

The fundamental claim about philosophy is that in its quest for knowledge it seeks absolute truth. In that quest it has been compartmentalized into terms used by Plato such as idealism, which represents absolute reality as the ‘theory of forms,’ which represent timeless, ideal objects in the empirical world. This epistemological bifurcation is at the heart of philosophy. The problem is that the search for absolute truth labeled as ‘rationalism’ has been compromised by the fact that empirical knowledge grasped by sensory inputs does not carry the imprimatur of infallibility. Thus, the epistemological debate over the centuries has been whether the search for the truth lay only with the province of reason. The empiricists argue that rationalist knowledge had no content. In this connection, ‘rationality’ in the strict epistemological sense has no epistemological connection with ‘rationality’ according to Pinker.

Pinker’s text is based on a set of items from elementary logic, interspersed with empirical probability theory and practical behavior of all sorts. There are discussions of set theory, propositional logic, Bayesian Logic, etc. Clearly, Bayesian theory does possess empirical content. But one aspect of Pinker’s argument discusses why, despite the growth of human knowledge and technological advancements, there seems to be a plethora of ‘conspiratorial’ beliefs percolating in society. In this connection, it would seem that Pinker has not fully recognized that the human mind is a very complex organ whose cerebral structure includes not only the neocortex but the amygdala, which guides the emotive states of humans. It is these emotive feeling states that determine human attitudes which direct thoughts. Thus, negative or positive feeling states are first directed towards some situation before the appraisal takes place. In this regard, what some would consider conspiratorial and based on weak evidence, others would eagerly accept. The point here is that emotivity is what determines thought in sensate matters. Hume’s trenchant observation that ‘reason is always slave to the passions’ undoubtedly influenced the ‘relations of ideas’ as epistemologically distinct from ‘matters of fact,’ given that the amygdala interplays with factual knowledge in the understanding and interpretation of

sensate phenomena. Kant in his *Critique of Pure Reason* sought to resolve this epistemological divide by merging ‘truths of reason’ with ‘truths of fact’ by way of the ‘synthetic a priori’ that sought to merge with what he labeled the synthetic a priori. Kant’s explanation for this merger was his belief that Newton’s laws conferred a certain empirical universality. But this approach did not really solve Hume’s ‘problem of induction’ because the subjects and predicates of synthetic a priori propositions did not add any empirical content to their synthetic components. The empiricism—rationalism problematic still has not been solved. But Pinker and other scholars would seem be oblivious of the age-old debate. Even cognate aspects of this puzzle have flowed into the perennial mind-body problem. The issue is whether there is some intermediary mind stuff that allows the bridging of mind and body. After all, machines can operate at the same level as humans but they are not conscious of such. *The Conscious Mind* (Oxford University Press 1996) by David Chalmers seems to point in the same direction.

All this points to the fact that ‘rationality’ is not as adequately explored as it should be. The fundamental issue is that, beyond some basic forms of practical rationality, theoretical forms of rationality are hardly countenanced by individuals. Even in the case of practical rationality, individuals in general are often guided by their emotions, which are controlled by the amygdala of the cerebral limbic system.

Popper with his falsifiability criterion hoped to solve the problem of induction with a strict logical riposte. But Kuhn and Lakatos both argue that researchers tend to support their theories with possible ad hoc refutations. The point is that once a set of ideas or an ideology becomes embedded in the human brain’s neurons and synapses, their pathways tend to be resistant to change. In this regard, emotionally founded beliefs which may seem quite seem far-fetched and absurd are held on to firmly. But there are also cases where sophisticated scientific ideas were resisted mainly on emotive grounds, as was the case John Bell’s ‘entanglement theory. There is also the fundamental issue of why neurons and synapses work so differently for different persons even at the most basic levels. Some individuals grasp the difference between modus ponens and modus tollens quickly while others do not. We recognize, of course, that the human brain operates with 100 billion neurons and 100 trillion synapses.

Given the biological evolution of the human brain, concerned primarily with survival purposes, the limbic system which houses the amygdala would have no need for the intricacies of propositional and symbolic logic. In this regard, Pinker’s chapters on Bayesian Reasoning, and Rational Choice and Expected Utility unpack the complexities of more sophisticated reasoning. The research carried out by Simon on the idea of ‘bounded rationality’ and Kahneman and Tversky show up the fallibility of human reasoning often affected by emotive elements which have put an end to the more cruel aspects of human punishment.

Pinker’s *Rationality* is an interesting work but it is half done. A more complete explanation of rationality would require a delving into the human brain itself with an examination of its limbic system housing the amygdala.

**Lansana Keita**, University of the Gambia