

Steven Pinker's "The Blank Slate" Précis

Steven Pinker's book, "The Blank Slate," refutes a dominant social scientific paradigm of the Twentieth Century, the Standard Social Science Model. He particularly criticizes three prevalent themes, which have shaped this model: the Blank Slate idea, the idea of the Noble Savage, and the Ghost in the Machine idea as problematic or wrong. The idea of the Blank Slate, attributable to Locke, holds "that the mind has no innate traits" (Amazon.com book description); the mind is therefore shaped exclusively by experience. The Noble Savage idea, deriving from Dryden and Rousseau, holds "that people are born good and corrupted by society" (Amazon.com book description). The idea of the Ghost in the Machine – "each of us has a soul that makes choices free from biology" (Amazon.com book description) - and usually attributable to Descartes, argues against the concept that humans are "just other hunks of matter in the biological world" (3) and that we can change that which we don't like about ourselves. Pinker's "The Blank Slate" marks the ascendancy of a biological view over a social one, and its significance lies in its brain-centered analysis of human behavior.

Pinker argues that cognitive science, neuroscience, behavioral genetics, and evolutionary psychology bridge the divide between biology and culture, thus radically rewriting those aspects of the concepts of the Blank Slate, the Noble Savage, and the Ghost in the Machine. Cognitive science continues to show in ever-increasing complexity how the mind "can be grounded in the physical world by the concepts of information, computation, and feedback," (31) how "the mind cannot be a blank slate, because blank slates don't do anything," (34) how "an infinite range of behavior can be generated by finite combinatorial programs," (36) how "universal mental mechanisms can underlie superficial variation across cultures," (37) and how "the mind is a complex system composed of many interacting parts." (39) By drawing on brain research, cognitive science therefore significantly redresses the Blank Slate idea.

Neuroscience, the study of how cognition and emotion are implemented in the brain shows how our emotional lives, in conjunction with the way we think, are all seated in the brain's activity, an amazing thought for many people (41). Phineas Gage, who lost part of his brain in a railway accident, lived with perception, memory, language, and motor functions intact, but with a completely changed-for-the-worse personality (42). Scientists such as Gazzaniga and Sperry have shown that when the corpus callosum is cut, the brain's two cerebral hemispheres "can exercise free will without the other one's advice or consent" (43). Thus cognitive neuroscience is washing away not just the idea of the Noble Savage but also the concept of the Ghost in the Machine.

Studies of identical twins separated at birth, reared apart and reunited years later show remarkably broad-based similarities, thus calling into question the Blank Slate hypothesis as well (47).

Evolutionary Psychology researches the adaptive design or purpose of the mind as it was engineered in ancestral environments. It examines the way natural selection simulated engineering processes to examine the ways in which how well something works played a causal role in the way it originated (52). Evolutionary Psychology thus explains the reasons why the '*tabula rasa*' isn't blank.

The significance of Pinker's book lies in his positing that the Blank Slate is an empirical hypothesis about the way the brain functions, which has to be evaluated on the grounds of whether or not it is true (421). Cognitive science, neuroscience, behavioral genetics and evolution are more and more showing that the Blank Slate idea is not true (421). The brain's incredible complexity, its amazing ability to mentally represent real and hypothetical worlds, and its powerful combinatorial computational ability all show that the brain has numerous innate traits (424) and that not all choices it makes are free from Darwinian evolutionary processes.