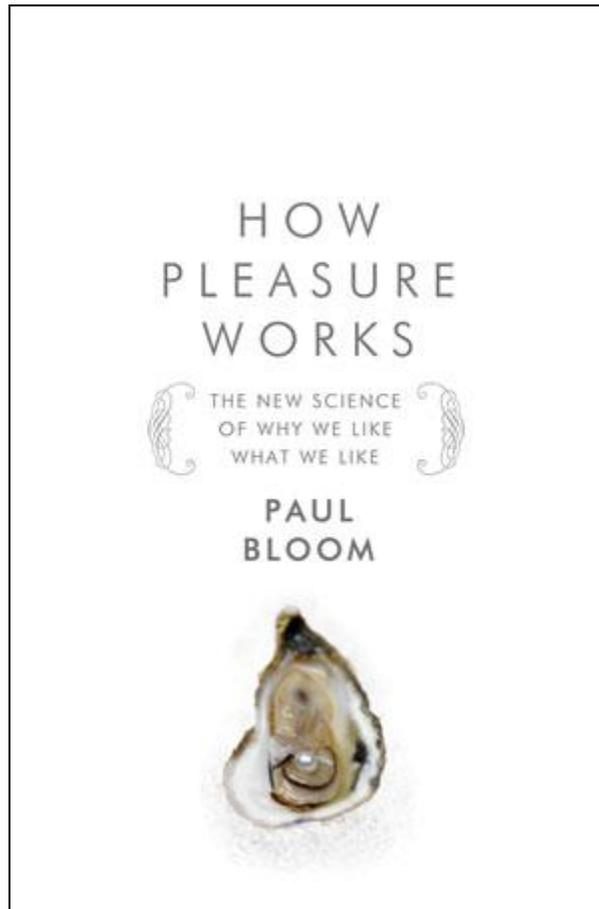


What Is Pleasure?

Review: *How Pleasure Works: The New Science of Why We Like What We Like*

By George F. Koob, Ph.D.



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The book *How Pleasure Works*, by Paul Bloom, is less about how pleasure works and more about exactly what pleasure is—or rather what the essence of pleasure is. Nevertheless, it is a delightful treatise from an evolutionary psychologist’s point of view on why we enjoy certain things more than others. Obviously, there is a direct biological need for food, shelter, and reproduction of the species that presumably forms the basis for pleasure in all humans and mammals (and perhaps all species). But as Bloom points out, many pleasures associated with

humans involve sources of pleasure not directly linked to direct biological needs—for example, the value attached to a real Rolex watch versus the lack of value attached to a reproduction.

To explain all the sources of pleasure in humans, Bloom hypothesizes that “the pleasure we get from many things and activities is based in part on what we see as their essences.” He further argues that “our essentialism underlies our passions, our appetites and our desires.” His attempt at extending to pleasure the concept of essentialism, which can be as concrete as a category or as broad as life force, is pervasive. As such, he argues that our pleasurable sensations are colored by their essences. Romantic pleasure of attraction is colored by our relationship to the person and the history of the relationship. The pleasure obtained from an object is colored by the history of the object (belonging to a famous individual or painted by a famous painter, perhaps). The pleasure of horror and tragedy is associated with “practicing for the worst scenario,” analogous to the pleasure of play fighting. He argues at the end of the book that some essentialism leads us to behave in ways that are immoral, such as eating human flesh, ugly obsessions with female virginity, eating foods to the point that we destroy our bodies, and treasuring material objects to the point of ignoring the needs of real people. He mentions that there is a cost to our pleasure (see below).

Finally, Bloom argues that in other domains we are explicitly aware of essences and seek them out. Such seeking may in fact have clear survival value, even today, such as the appeal of nature or being close to nature. Some of us as scientists (relatively few of us are scientists in fact) or those of us with religious views of some kind (probably most of us have some religious views) are aware of our essentialism. Indeed, something basic to all religions is the notion that there is more to the world than what strikes our senses. This deeper reality that has personal and moral significance has been described as spirituality but has many parallels with essentialism, leading the author to speculate that we have “the power not only to try and connect to a deeper reality, but envision what this reality might be.”

Bloom’s book is a pleasure to read, pun intended. His major points about the sources of pleasure in the human experience provide the reader with a wholly different view of the human experience. To some extent, the exposés about essentialism explain paradoxes such as the enormous pleasure produced by a real Vermeer painting as opposed to the less than enormous pleasure of an excellently executed Vermeer fraud. His anecdotes are outstanding and provide clear examples of the points he is elaborating. Similarly, his delving into scientific experiments

in social, developmental, and evolutionary psychology is done adroitly and with care to engage rather than lose the reader. As a result, it is difficult to stop reading the book. If one could be left in peace, one could probably read through large parts in one pleasurable sitting, pun also intended.

However, as a behavioral neurobiologist and physiologist, this reviewer is still left pondering several major domains of questions that perhaps Dr. Bloom can pursue in his next book. Please note that I have worked on the brain reward systems for most of my life. In the last 10 to 15 years, I have focused on what I have conceptualized as the brain anti-reward systems. Questions in the first domain are as follows. How exactly *does* pleasure work at the body level? Where does one experience pleasure and how does that come about? At the brain level, what neuronal circuits are involved? Are they common to all pleasures (ultimate essentialism) or distinct? How are these different pleasures expressed in the body? Where do these feelings take place? We experience orgasms in our genital areas, for example, but paraplegic individuals still experience sexual pleasure.

Questions in the second domain are as follows. Exactly what is essentialism? The author leaves us hanging a bit. Is it spirituality? Or does it revert back to some satisfaction of basic human (mammalian) needs, such as food, shelter, and reproduction, that require the development of associations (“conditioned reinforcement” in behavioristic lingo) to become derivative (such as the pleasure of money)? The thrust of the book would have had more impact if the author had come to a firm conclusion in each pleasure domain as to what constitutes the essential nature of the pleasure being described.

Questions in the third domain are my current obsession. What happens when the brain/body pleasure system goes awry? How is this related to essentialism? The author touches, albeit lightly, on opponent process theory. Opponent process theory is a concept in motivation where hedonic states, once initiated, are automatically modulated by the central nervous system with mechanisms that reduce the intensity of the hedonic feelings. Here, two processes were defined. In the initial a-process there are positive hedonic responses. These positive hedonic responses occur shortly after presentation of a reinforcer, correlate closely with the intensity, quality, and duration of the reinforcer, and show tolerance (habituate with repeated exposure). In contrast, the b-process is a negative hedonic state that appears after the a-process has terminated. It is sluggish in onset, slow to build up to an asymptote, slow to decay, and gets larger with

repeated exposure. In the domain of drug addiction, excessively taking drugs ostensibly for their extremely pleasurable effects can lead to tolerance to the a-process and exaggeration of the b-process (opponent process). The opponent process is also reflected in a major reward deficit state during drug withdrawal and protracted abstinence. Over-engaging the brain reward system depletes reward neurotransmission and also sensitizes brain stress (anti-reward) systems, leading to the aforementioned major reward deficit state. This state presumably drives more excessive drug taking or relapse during states of abstinence. These dynamics probably extend to process addictions, such as pathological gambling or binge eating disorder, as well. Where has essentialism in the pleasure system gone awry?

In summary, this is an engaging book and a fun read, and it certainly made this reviewer think much about everyday pleasures. However, it also took this scientist one step further, which was to reinforce his interest in understanding how pleasure really works.

George F. Koob, Ph.D., is a professor and chair of the Committee on the Neurobiology of Addictive Disorders at The Scripps Research Institute and adjunct professor in the departments of psychology and psychiatry, and adjunct professor in the Skaggs School of Pharmacy and Pharmaceutical Sciences at the University of California, San Diego. As an authority on drug addiction and stress, he has contributed to our understanding of the neurocircuitry associated with the acute reinforcing effects of drugs of abuse and the neuroadaptations of the reward and stress circuits associated with the transition to dependence. Dr. Koob has published over 700 scientific papers and has received continuous funding for his research from the National Institutes of Health, including the National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), and the National Institute on Drug Abuse (NIDA).