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# An Overview of the Nature–Nurture Debate and a Proposed New Paradigm

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**ABSTRACT** *The roots of the nature-nurture debate within psychology are briefly reviewed. Nature (that is, genetic influence) and nurture (social-environmental influence) offer two distinct perspectives on human personality and behavior. However, despite their differences, the two perspectives are philosophically identical in that both, when carried to the extreme, result in the disintegration of personal accountability and agency. The arguments for nature and for nurture imply an outward locus of control: either one's genes or one's history of social influences may be considered to adequately account for how a person behaves. Neither of these arguments gives an individual control over one's course of action and behavior. The ramifications of this view are analyzed. I argue that the lack of moral agency and personal accountability implied by this view renders the United States' legal system meaningless as far as it assumes that people can control their behavior. An alternative philosophical view is then recommended. Specifically, I propose that nature and nurture should be considered conjunctly with the noetic, the "spirit." This proposed view provides a more comprehensive explanation of individual differences in personality and behavior.*

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**B**reaking away from past paradigms, a new movement in the nature–nurture debate seeks to more fully explain who or what is ultimately responsible for personal identity. For centuries, nature, or genetic influence, and nurture, or social-environmental influences such as parents and schools, were the only two viable positions in the debate. It has remained under continuous intellectual scrutiny because at the heart of the issue lies a problem of existential relevance: namely, what is ultimately responsible for one's behavior, personality, and success (or lack thereof) in life?

One problem in answering that question is that it is extremely difficult to determine *how much* influence a person's genetic material has on a person's behavior, intelligence, and success in life, and how much influence

social influences, such as wealth and education, contribute to them. With the modern age, a new dimension of human development has emerged, specifically, the noetic. The term comes from the Greek word for mind, and refers to a person's individual agency and freedom, but more specifically the ability to think. In this essay, agency refers to the capacity of an individual to choose and carry out any course in the presence of several options. Each of the traditional perspectives (nature and nurture) offers a unique view on the factors that shape the development of personality. However, these perspectives, taken individually, do not adequately explain how or why people develop differences in behavior and personality. At best, when these two perspectives are combined, they provide a better but still incomplete and inaccurate depiction of human behavior. Furthermore, nature, nurture, and the noetic not only represent a scientific schism but also reveal underlying disparities in life styles and philosophies: people typically support theories that reflect their cosmological perspectives of life. Nature and nurture imply moral hedonism (i.e., anything that is pleasing is morally right and anything that is displeasing is morally wrong) by asserting that we cannot control what our genes/society dictate us to do, whereas the noetic preserves moral responsibility by declaring that despite the influences in our lives, we ultimately have the ability to choose. To better understand some of the important implications of the centuries-old debate and the relevance of the noetic for the debate, it is important to understand its origins and how the debate has evolved subsequently.

Officially, the nature–nurture debate can trace its origin to 1874 even though it has been discussed or at least hinted at by philosophers in all ages. In 1874, however, the intellectual world had been recently rattled by the renowned Charles Darwin, who had published *On The Origin of Species* in 1859. His cousin, Sir Francis Galton, was deeply impacted by the theory of evolution that Darwin had laid out, namely, the theory of natural

selection. Galton inferred that if animals were evolving as Darwin suggested, then humans were also evolving. Furthermore, personal experience led Galton to believe that traits such as intelligence were inherited. For example, it bothered Galton that, even though he came from a wealthy family and good environment, he was not as academically successful as he aspired to be. In addition, he noticed that genius appeared to run within families. In other words, certain lines of families seemed to be smarter than others. Also, when two smart parents had children, there was a much higher likelihood that the children also were smart. However, Galton was aware of the potential for interaction between nature and nurture. He set about testing the validity of his new theory of nature-nurture interaction. To do so, he measured and compared the intelligence and personality of adopted children relative to biological children. In 1874, Galton coined the phrase “nature and nurture,” and subsequently it found its way into mainstream psychology (Fancher, 1996, p. 216-244).

From the time of Galton until the 1920s, followers of his original assertions defended the position that although the environment can play a role in human development, nature has the upper hand and larger influence (Behaviour genetics, 2009). In a sense, advocates of nature believed that people are “destined” to certain outcomes based on their biological histories. This is not to say that there was no opposition to this position, but it was commonly accepted that intelligence and personal appearance were almost completely predetermined by one’s parents, and that personal effort would be to no avail if one’s genes did not permit the adequate potential. For example, Charles Cooley held that criminal behavior was influenced by the “inheritance of biological traits” (Beck, 1976, p. 65; Cooley, 1896, p. 399-495). In Galton’s words, “social advantages are incompetent to give [eminent] status to a man of moderate ability” (Fancher, 1996, p. 229). Galton considered the idea of “eugenics,” that is, improving the human race through selective breeding. If nature was the source of one’s intelligence, for example, why waste money or other resources on teaching children who were genetically inferior and thus destined for scholastic failure and social debauchery? The implications of this belief could be seen in the Nazi regime in Germany. The Nazis attempted to create a better world by eliminating those individuals with perceived inferior genes. For many, the implications of nature-controlled behavior cast a bleak future, void of freedom; accordingly, many began to turn to the influence of nurture and one’s environment as a scientifically viable alternative. People desired to find

alternatives that instilled hope and freedom.

In the 1920s, the belief in nurture’s crucial contributions to intelligence and personality gained prominence (Behavior genetics, 2009). This shift in perspective could be related to the individualist movement stirred by the Great Depression. People were very disheartened by the idea that there was no hope in altering their present circumstances due to genetic influences outside of their control. People may have yearned for a more controllable lifestyle as opposed to that which the Great Depression thrust upon them, and thus people turned to a nurture standpoint. However, opposition to Galton’s viewpoint was prompt and sometimes vicious. For example, Alphonse de Candolle (1806-1893), published data that supported his claim that the environment was the major influence in a person’s life. Specifically, he documented the disproportionate number of famous scientists who came from “small to moderate-sized countries with moderate climates, democratic governments, tolerant religious establishments, and thriving commercial interests”—evidences of favorable environments (Fancher, 1996, p. 230). In addition, around the 1920s, a rise in the emphasis of nurture is reflected in various studies (Miner, 1915; Kantor, 1921). This new emphasis only increased the intensity of the debate between the two sides.

To support either nature or nurture, one would have to separate the two factors and be able to study one at a time independently of the other. To many, the challenge of separating the intertwining influences of nature and nurture is simply impossible (McCall, 1981). Studies have been conducted to support both the nature and nurture side of the conflict. Advocates of the nature position insist that studies of monozygotic, or identical, twins are strongly supportive of nature. Identical twins that are raised separately in two “different” environments have been demonstrated to exhibit similar preferences in professional careers, for example (McCall, 1997, 60-77). Studies also show similarities in emotional tendencies (Strelau, Zawadzki, Oniszczenko, Angleitner, & Riemann, 2002). However, nurture supporters assert that because identical twins have a highly similar appearance, they are treated similarly and thus receive similar nurturing despite early separation (Plug & Vjverberg, 2003, 611-641; Plomin, DeFries, McClearn, 1990, 315).

Many studies suggest that an adopted child’s IQ has a greater correlation with the biological parents’ IQ than with the adoptive parents’ IQ (Burks, 1928; Leahy, 1935). These studies are countered by those that show the IQ of adopted children increasing when they are placed with higher-IQ adoptive parents or in special education

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programs (Clarke, 1984a; Rutter, 1985). However, after each battle, the futility of the argument became more and more clear; advocates of nature were never going to convince advocates of nurture and vice versa. However, both sides failed to recognize the similarities to their arguments: if scrutinized closely, underlying assumptions of both perspectives are similar in that they ultimately lead to the disintegration of personal responsibility of action: stark determinism.

Both views, nature and nurture, assume a similar locus of control for an individual: outside the individual and out of one's control. According to the nature perspective, responsibility for an individual's personality and behavior is assigned wholly to the child's parents, who cannot be blamed because they received what genetic material their parents gave them, and so on. Ultimately, in this view, people are not responsible for the way they act because they can't control it. Failures and even social deviances can be explained on a genetic level: for example, violent delinquents should not be held responsible, according to nature, because they are genetically programmed to act in that manner. According to the nurture perspective, the social ambiance and economic status of the child predominantly shape her or his subsequent life and predict behavior and tendencies. Children do not choose which country or time period they are raised in, each of which comes with its own set of morally acceptable standards, beliefs, and attitudes. Thus, according to both perspectives, a person is left with little moral agency to choose who one ultimately becomes because that is left to the mercy of nature and nurture to determine.

Beginning in the 1970s, nature and nurture came to be understood as influences that interacted much more fluidly than originally imagined. Moreover, many people were still disconcerted with the lack of personal freedom presented by nature and nurture proponents; accordingly, some opted to shift to a "new paradigm: nature, nurture, and noetic" (McLafferty, 2006, p. 3).

At the present point, psychologists need to recognize the possibility that the noetic perspective, or the "soul," may be the factor that accounts for personal differences and discrepancies not explained by nature and nurture, such as differences in dispositions and spirituality (Frankl, 1967). The noetic perspective adds such qualities as free will, agency, and spirituality to the equation of simply nature and nurture; perhaps free will further accounts for differences in behavior and personality (McLafferty, 2006). Actually, the noetic isn't a new idea at all; it just never became as popular or as mainstream as nature and

nurture; perhaps free will further accounts for differences in behavior and personality (McLafferty, 2006). Actually, the noetic isn't a new idea at all; it just never became as popular or as mainstream as nature and nurture did in psychology. For instance, Alfred Adler proposed a similar idea, namely, goal-oriented behavior (Rychlak, 1973). Instead of being dominated by genetic and social influences, one is influenced by the goals he or she individually chooses to pursue. However, critics may interpret this to mean that individuals choose goals that they have been socially, or genetically, programmed to desire. For example, if it is my goal as a child to become an astronaut when I grow up, the only reason I chose that goal may be that my father was an astronaut, and I wanted to emulate him. Through such interpretation, the heart of the noetic philosophy is corrupted because there is no longer individual freedom. According to the noetic perspective, goals can be influenced socially and/or genetically, but there must remain the capacity of the individual to choose to ignore such influences if desired and choose other goals.

Another example of the noetic perspective in action comes from the life of William James, who remains well-known for his pragmatic approach to science and psychology. He demonstrated exceptional artistic abilities in his youth. But when his father threatened to commit suicide if any son of his pursued art, William went to Harvard and studied chemistry instead. Later, in 1867, he traveled to Germany, where he was deeply impacted by the emerging mechanistic physiology. Indeed, it "powerfully impressed him intellectually, but oppressed him spiritually with its deterministic philosophical implications" (Fancher, 1996, p. 252). In fact, he became depressed to the point where he could no longer work and even considered suicide. After reading an essay on free will by Charles Renouvier, he wrote in his journal that "my first act of free will shall be to believe in free will" (Fancher, 1996, p. 254). He then began his recovery, slowly willing himself to think more positively and less oppressively. This is a remarkable case study where he merely *willed* himself out of depression; William James was given a new option and chose to follow it. A resounding belief in moral agency allowed him to overcome the social pressure towards determinism and a potential genetic disposition to depression. Nature and nurture both would have predicted depression as highly likely and yet he chose not to be depressed. It becomes clear that nature and nurture by themselves are insufficient to explain the human differences.



Nature and nurture both present a depiction of humans as puppets controlled by a manipulative gene pool or by an environmental puppeteer. By contrast, the noetic perspective offers an alternative to the logical fallacy that has riddled psychology for so long: each person is her or his own puppeteer. The nature-nurture debate is not a false dilemma as many would have us believe; there are more than just two options. So how exactly might the three factors interact in human development? Combined, they continue to build upon prior beliefs, and grant greater and deeper comprehension into human nature. For example, it is plausible that mental disorders are the interactive result of environmental and genetic factors (Rutter, 1997). Thus, a specific gene may be manifested in a manner that elicits a specific environmental influence that strengthens the effect of the gene. With the addition of the noetic, for example, perhaps a gene causes its carrier to be shy. Shyness, in turn, leads to social rejection and ultimately to antisocial behavior. Using her or his own agency, however, the carrier accepts herself or himself as being antisocial simply because of the felt *desire* to be antisocial despite the encouragement otherwise from parents and religious figures. It is conceivable that twins with similar genetic predispositions to antisocial behavior could turn out differently: one takes it upon himself or herself to stop being antisocial due to fervent religious belief while the other, who also attends the same church, remains antisocial. In other words, there are similar genes and social influences, and yet one chooses to change, but the other does not. This is the noetic in action.

Genetic research makes it difficult to deny the impact of genes on a number of traits. For instance, many studies have demonstrated the impact of genes on alcoholism, cigarette smoking, aggressive behavior, obesity, and even religious affiliation (Vrasti & Olteanu, 1988; Windle & Tubman, 1999; Sabol, 1999; and Reed, 1997, respectively). However, the same data analyzed under the noetic perspective yields different results: perhaps monozygotic twins are different simply because they *want* to be different. Perhaps there *isn't* a gene to point to for every overt behavior and subconscious thought; perhaps there is *not* a traumatic childhood or social influence event for every disorder.

In the modern era, whether people are responsible for their actions is becoming an increasingly important question in the legal system, where the terms of punishment largely rely on how legal responsibility is affixed.

Say that John is on trial for raping a woman. This is the fifth time, according to state records, that he has been charged for this crime. Is he guilty? According to the nature perspective, John is the result of a unique combination of genes that caused him to exhibit a particular set of sexual habits that society has deemed unlawful. According to the nurture perspective, John was raised in a particularly abusive and sexualized environment. His father was a notorious rapist, and thus John learned to exhibit the same traits. Both perspectives lay the responsibility for John's criminal behavior on something other *than John himself*. If John is ultimately not responsible for the way he has behaved, how can he reasonably be punished? He cannot be. Or rather, he should not be. Instead, imprison his parents for passing on defective genes or his father for being a poor role model. Taking nature and nurture viewpoints to the extreme apparently undermines the very fabric of the United States' legal system if we assume the legal system is meant to punish purposeful behavior. The legal system could, hypothetically, inject preapproved genetic code into inmates to change behavior, or attempt to correct their behavior through instruction. If this were the case, however, the legal system would be more focused on *correction*, which it clearly isn't. Are inmates subjected to lessons on morally acceptable behavior? No. Are they adopted into government-approved families to teach them proper values? No. We would sentence a prisoner according to how difficult an act was to correct, not on how severe it was. The nature and nurture perspectives not only provide theories of personality but also amoral lifestyles or at least moral ambiguity. As previously defined, morality requires personal motivation towards a specific *goal*, and thus, if a person lacks control of her or his actions and is incapable of goal motivation, nothing she or he does is morally wrong or right. Adamant believers in nature and nurture thus proclaim that since no lifestyle is morally superior to another, one may live however one so desires. This is because if genes, or our culture, ultimately dictate how we act, we cannot intend to do anything, and thus, *everything* we do is genetically/socially permissible.

It would seem unwise to attribute too much strength to nature or nurture alone. It is equally important to consider one's personal capacity for choice-making free agency. The notion of free agency provides for a viable legal system, not to mention a more fulfilling lifestyle by providing the possibility of change and control over one's outcome in life. It only makes sense to punish a person who is deemed as morally responsible, that is, capable of making choices. For this reason, children are not punished in courts the

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same way adults are. The paradigm I have proposed suggests that behavior is a result of nature, nurture, and the noetic; consequently, it would leave ramifications in the psychological and legal realms. It is a matter that is crucial to law, personal liberty, and existential fulfillment.

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