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Analysis of *Time* Magazine's "Is God in Our Genes": A Critique of Sociobiology

GOD—it is remarkable how easily three letters can spell trouble for so many. In fact, many of the important things in life seem to be represented by three letters: from the person who bought you into this world, your *MOM*, to the genetic code upon which all life depends, *DNA*. Even more interesting than this etymological relationship, however, is the relationship between the first and last examples mentioned: that is, God and our genes. Which one codes for which?

In October 2004, an article entitled "Is God in Our Genes" was published in *Time* magazine. In this article, Jeffrey Kluger reviews a controversial book by Dr. Dean Hamer, chief of gene structure at the National Cancer Institute, called *The God Gene: How Faith Is Hardwired into Our Genes*. Hamer makes two critical claims: first, that human spirituality is an adaptive trait, and second, that he has located one of the genes responsible for this trait. According to Hamer, feelings of spirituality result from the release of certain intoxicating brain chemicals, a process controlled and coded for by our DNA (Kluger). Kluger also offers his own analysis of the relationship between God and our genes, investigating other related studies such as the Minnesota Twin Project in which identical twins and fraternal twins were compared in an attempt to determine the heritability of certain traits (Bouchard 223).

The assumptions and conclusions drawn by Kluger in "Is God in Our Genes" exemplify many of the dangers associated with the emerging field of sociobiology. R. C. Lewontin discusses the flaws of sociobiological theory in his own book, *Biology as Ideology: The Doctrine of DNA*. Lewontin describes sociobiology as an attempt to convince people that life is what is has to be and perhaps should be (89). The theory of sociobiology is comprised of three components: 1) a description of what human nature is like, 2) a claim that such universal characteristics are coded in our genes, and 3) a conclusion that natural selection has led to

individuals' particular genetic characteristics (Lewontin 89-90). Each of these components has common flaws associated with it, a point that will be demonstrated by applying Lewontin's critiques of sociobiological ideas to the "Is God in Our Genes" article. In addition, the popular presentation of this article will be compared to the expert presentation of the aforementioned Minnesota Twin Project. This study was chosen for comparison over Hamer's *The God Gene* because the latter was written for a popular audience and therefore is not considered a scientific publication.

Lewontin expresses two major concerns about the first component of sociobiology—that is, the description of what human nature is like. First, he argues that these generalizations are often based on narrow, ahistorical claims (92). Second, he suggests that these descriptions err in assuming that individual natures are the source of social institutions (93). The *Time* magazine article claims that religion is beneficial to life as we know it and that religion continues to exist because everyone has spirituality.

The most obvious example of a narrow, ahistorical claim provided by Kluger is his statement that "Across the eons, the structure that religion provides our lives helps preserve both mind and body". While Kluger at least attempts to reference the past as evidence to substantiate his claim, the broad phrase "across the eons" hardly suggests a critical evaluation of historical events. In fact, one need only consider the Crusades, the Holocaust, and jihads as counterevidence. Kluger should be commended for acknowledging these issues. However, he addresses them with the dismissive statement, "For every place in the world that's suffering from religious strife, there are many more where spirituality is doing its uplifting and civilizing work." This assertion can never be verified. In order for such a comparison to be conducted, one would have to first divide the world into suitable partitions—a point at which one might run into the

problem of how to decide what the word *suitable* means in this context—and then categorize each as either suffering or benefiting from spirituality. While Kluger does attempt to incorporate history into the basis for his claim that religion benefits the human population, his evidence is broad at best, and his quick dismissal of past counterexamples is suspicious as the explanation for them is a statement that cannot feasibly be confirmed.

The assumption that social institutions arise from individual natures is the second flaw in the first tenet of sociobiology. This is also present in the *Time* magazine piece. While the article mentions that Hamer stresses the difference between the individual and the social—spirituality is personal while religion is institutional—the very title "Is God in our Genes" reflects the general stance adopted by Kluger on the topic: it is okay to interchange the two occasionally. In fact, Kluger refers to Hamer's proposal of spirituality genes with such phrases as "biological roots of belief in God" and "God genes." Because he assumes that religion will naturally arise from spirituality, most of his arguments center around the benefits of religion rather than the benefits of spirituality.

Lewontin is dissatisfied with the second component of sociobiological theory, the claim that universal characteristics are coded for in our genes, because circular logic is used to confirm this postulate (94). Often, heritability studies are conducted to 'test' that certain traits are coded for in our genes and can therefore be passed on—however, Lewontin argues that if we all share the same genes as claimed, then there would be no way to investigate the heritability of these traits (97). The *Time* article employs both circular logic and heritability studies to promote the idea that people are spiritual because of their genes.

The circular logic inherent in claiming that characteristics that appear to be universal are genetically coded for arises when it is asserted that traits must be genetic simply because they are

universal (94). In essence, the justification for the claim is the claim itself. This is evident in Kluger's logic in the sentence, "When tribes living in remote areas come up with a concept of God as readily as nations living shoulder to shoulder, it's a fairly strong indication that the idea is preloaded in the genome rather than picked up on the fly". Critics might notice that the argument flows back and forth between two concepts: 1) the fact that spirituality is universal suggests a genetic basis, and 2) spirituality must have a genetic basis because it is universal. In the first assertion, universality points to genetics and in the second, genetics points back to universality. This circular logic greatly diminishes the credibility of any conclusions formed from this claim.

The assertion that universal characteristics are genetically encoded is further undermined by the heritability studies conducted to prove the genetic origin of certain characteristics (Lewontin 97). In the *Time* magazine article, Kluger references the Minnesota Twin Project to support his claim that spirituality is genetic, and therefore heritable. However, if spirituality is indeed coded for in everyone's genes, there would be no way to conduct a heritability study because everyone would share this spirituality gene regardless of whether they were related or not. Kluger suggests that while everyone does inherit the spirituality gene, not everyone inherits the same degree of spirituality. Therefore, a heritability study can be conducted based on the degree of spirituality shared between related and unrelated persons. In this case, the null hypothesis would be that people pass on similar degrees of spirituality to their offspring. If we combine the assumption made by Kluger. earlier that spirituality is beneficial to the species, and this new suggestion that people have varying degrees of spirituality, should we then conclude that some people are more evolved than others?

This is where the final component of sociobiological theory comes into play. According to Lewontin, sociobiology's grand conclusion is that natural selection has led to the particular genetic characteristics of individuals: evolution has coded us to become the people we are today (90). The main problem with this claim is that there is often no evidence to support it. While one can propose theories as to how a particular characteristic might have been beneficial and therefore passed on from generation to generation in higher and higher percentages, it is difficult to know what has actually happened. Lewontin stresses this difference between *plausible* stories and *true* stories (100). Kluger's sociobiological conclusion is that the spirituality gene is "one of the hinges upon which the very evolution of the human species turned". They suggest two ways in which spirituality has shaped human evolution: 1) individuals with the spiritual sense were more likely to survive because religion promoted the creation of groups, which in turn provided security and stability, and 2) those with the spiritual sense thrived and passed the trait on to their offspring while individuals lacking the spiritual sense risked dying out in chaos and killing (Kluger). The critical reader must notice that while these statements seem to make sense, Kluger does not provide any supporting evidence to show that this actually happened.

Evidence, or rather its presence or lack thereof, seems to be the key difference between popular and scientific publications. The *Time* magazine article is an example of a popular presentation, whereas the Minnesota Twin Project is an example of expert presentation. In "Sources of Human Psychological Differences: The Minnesota Study of Twins Reared Apart," Thomas Bouchard, David Lykken, Matt McGue, Nancy Segal, and Auke Tellegen present a study of identical and fraternal twins separated in infancy and reared apart (Bouchard et al 223). It was hypothesized that if characteristics were heritable, identical twins would share those traits regardless of whether they were raised together or apart. Kluger references this study because

one of the psychological traits examined was “religious interests and values” (Bouchard et al 226).

The two articles by Kluger and Bouchard et al start in a similar fashion. First, both propose an idea: the *Time* article suggests that spirituality is genetically encoded, and the twin study suggests that certain psychological traits are hereditary. Then, both articles have to make some assumptions to start their analyses: the *Time* article makes the assumptions discussed throughout this paper, and the twin study makes the assumption that a comparison of identical twins raised apart versus those raised together is indicative of whether traits are results of a person’s genetics or his environment. Finally, the two articles must collect evidence for analysis: it is here in the presentation and discussion of evidence that the differences between the two publications begin to emerge.

Popular articles and scientific articles first differ in the type of evidence they provide. In Kluger’s piece, evidence is offered in the form of summaries of other people’s work and interviews of noted professionals in the fields of biology, anthropology, or religion. Therefore, the article would be considered a secondary or perhaps even tertiary source as the evidence presented is obtained from other sources. In contrast, the evidence presented in Bouchard’s article comes in the form of quantitative data, charts, and graphs based on measurements made by Bouchard and his colleagues themselves. Therefore, this would be considered a primary source. Popular articles tend to be more general in content and focus more on interpretation of evidence rather than the reliability of evidence. Scientific articles, on the other hand, are subject to more scrutiny regarding the reliability of their evidence since it is the first time these findings are being published. Bouchard’s piece therefore is much more specific in content and focuses

equally on the reliability and interpretation of evidence. After all, interpretation of data is useless if the data cannot be trusted in the first place.

However, this does not mean that analysis is any less important than evidence. In fact, the goal of any type of publication, popular or scientific, is to offer new insight on a particular topic through analysis. The presentation of these conjectures differs between the two types of articles. As the popular writer, Kluger presents his conclusions as facts. He even occasionally adopts a condescending tone, as in "it's an argument that's not terribly hard to make" in reference to his own deduction that spirituality genes have shaped human evolution. Bouchard, on the other hand, gives his conclusions as possibilities, using such phrases as "it is a plausible conjecture" to introduce his analyses (Bouchard 227). This is likely due to the fact that Bouchard's work will be peer-reviewed by other professionals who will be much more critical than Kluger's less-scholarly, general audience. While the expert's audience requires that new ideas be backed by sound reasoning, the popular audience is more content to simply appreciate the novelty of an author's ideas.

God and genetics—two of the most controversial topics today combined into one article in *Time* magazine. People love controversy. Drama, whether on television, in plays, or in books, exists worldwide. This tendency towards the dramatic is coded for in our genes by a *controversy gene* that has been naturally selected for throughout the ages to make us the drama-loving people we are today. In the past, individuals with the *controversy gene* learned more about human interactions than those without it, and therefore thrived better in the environment and produced more offspring. Scientists should begin a search for this *controversy gene* while readers congratulate themselves for not believing a word of this last paragraph! Sociobiological theory is so well-structured that only critical readers will notice the flaws in the assumptions, logic, and

conclusions made. Unfortunately, the average American will only be exposed to sociobiology through such popular modes of presentation as *Time* magazine, where the authors are more concerned with reading as many studies as possible to amass evidence in support of some novel interpretation, than they are with critically analyzing these same studies for inconsistencies and contradictions. As long as this approach of reading for the sake of collecting rather than critiquing continues, the field of sociobiology will thrive off of the new controversial claims it can make as long as a plausible stories exist to support them. One can only hope to educate the readership and encourage them to be more critical of content to curb the spread of such faulty theories.

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