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CRIMINAL JUSTICE

# Research Bulletin

NCJRS

CT 22 1989

ACQUISITIONS



Vol. 4 No. 5, 1989

## The Sophistication of Hans Jurgen Eysenck: An Analysis and Critique of Contemporary Biological Criminology

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\*Dr. Hans Eysenck must be thanked for his many written exchanges concerning this paper. His critical reviews and scholarly insights played a significant part in its development. Only the author can be blamed for any shortcomings in logic or belief.

### Abstract

Not since the days of Lombroso have we seen such a keen interest in biological explanations of crime. Due to the increasing sophistication of these theories and the advancements in the biological and social sciences — both enabling us to better understand our behavior as it relates to our physiology — many are enthusiastic about this theoretical direction. However, many of the more sociologically and critically oriented criminologists are skeptical. They see the reductionist focus and practical implications of biological theories of crime as misguided today as they were in the past. This paper will examine Hans Jurgen Eysenck, a man who exemplifies the sophisticated biological theorist of today, and will provide an analysis and critique of his theory and ideas about crime and their implications. The paper concludes stressing the destructiveness of "theoretical ethnocentrism" in academics, and the need for expanding the criteria we currently use in judging the worth of criminological theories that may be used in criminal justice practice.

### Introduction

A re-emergence of explaining criminal behavior through biology and eugenics is in our midst. Not since Lombroso has there been such a keen interest in reducing the explanation of crime into biological differences between the "criminal" and the general population. The most recent and recognized example is Wilson and Herrnstein's (1985) attempt to develop a grand theory of criminal propensity based mainly on the research and literature of biological criminology. The popularity of their book has resurrected an enduring debate within the criminology/criminal justice

fields on the efficacy and appropriateness of biological explanations of criminal behavior.

The reasons for this renewed interest in biological explanations of crime vary depending on one's perspective. Biological criminologists propose that advances in the biological sciences enable us to better understand human behavior as it relates to our physiology, including the deviant behavior we define as criminal. Skeptics assert, however, that the movement merely reflects an ideological attempt to distract attention from more substantive crime-related issues — such as social injustice, poverty, inequality, and racial discrimination — by explaining crime through simplistic "good people/bad people" dichotomies.

A pioneer of this Neo-Lombrosian perspective is Hans Jurgen Eysenck. Even though American criminologists have overlooked Eysenck's work for the most part, he exemplifies today's more sophisticated biological theorists. In fact, Gibson (1981) attributes the recent attention to biological theories of crime, on an international level, mainly to Eysenck's work in this area. It is because of his status and refined capacity for critical thought that this paper will examine Hans Eysenck the man, his biological theory of crime, and the more salient implications of his theory. From here, his theoretical focus will be scrutinized from various theoretical perspectives. The paper concludes by stressing the destructiveness of "theoretical ethnocentrism" in academics as well as the need for expanding the criteria we currently use in judging the worth of criminological theories that might be used in criminal justice practice.

### The Precocious Eysenck

Eysenck first detailed his theory on crime and anti-social conduct in *Crime and Personality* (1964). Subsequent editions of this book and numerous journal articles suggest that his work represents an important impetus for the recently increased interest in biological explanations of crime. Eysenck is also credited with the development of an exemplary theory using biological predispositions as causal factors in criminal behavior (Gibson, 1981; Taylor, Walton and Young, 1973).

Eysenck was born in Berlin in 1916. Because of the Nazi takeover, he left Germany and moved to England where he resides to this day. His higher education began at the University of London, where he studied under the direction of Cyril Burt. Burt and Eysenck worked on various projects together, but became intense rivals when Eysenck, as an undergraduate and master's student, published in academic journals at a rate which not only exceeded that of Cyril Burt, but also that of the entire staff of lecturers. Despite their differences, however, Burt influenced Eysenck's meticulous use of statistical research and allowed him the opportunity to mature as a scholar (Gibson, 1981).

Eysenck continued his graduate study in psychology at the (temporary) Mills Hill Emergency Hospital under Aubrey Lewis. Lewis was immediately impressed by Eysenck's work and eventually promoted him to the head of the psychology department within the newly founded Institute of Psychiatry, a part of the University of London. Eysenck has remained at this college of research, renamed the Maudsley Hospital, for thirty years (Eysenck, 1987). Under his direction, the department has developed into one of the leading psychiatric research centers in the world.

While heading the Maudsley Institute, Eysenck continued his scholarly pursuits. By 1980 he had published 51 books (Gibson, 1981), and between 1969 and 1977 had a total of 5,370 citations in the Social Science Citation Index (Garfield, 1978). His writings cover diverse and controversial topics including theories of personality development, the innate differences in intelligence between races, behavioral therapy, behavioral genetics, and personality and quantitative testing.

Eysenck attributes his array of research interests and the controversy they often generate to his personal approach to science. He characterizes this approach as "Romantic," "Extroverted," or "Revolutionary" science (derived from Kuhn, 1970), as opposed to a more traditional, "Classic," "Introverted," or "Ordinary" type of science (Eysenck, 1986). Even though much of Eysenck's success is due to this style, he concedes the disadvantage of its being somewhat speculative, which exposes him to criticisms by more traditional scientists.

Eysenck's first work on criminal behavior, *Crime and Personality* (1964), fits this revolutionary characterization well. Upon his own admission, much of this work was speculative in nature and was not intended to shape public policy for treatment of offenders or prevention of crime (Eysenck, 1970). In two later editions of this book, however, Eysenck presented his theories with increasing confidence due to the mounting scientific evidence that genetic factors may be partially responsible for anti-social and criminal conduct. Furthermore, he found that the traditional sociological theories of crime contributed little to the scientific understanding of individual differences in behavior between criminals and others when subjects were exposed to similar environments. Eysenck believes that his theory can be used in formulating testable deductions and scientific laws. Because of this flexible "revolutionary" approach, Eysenck's theory of crime has evolved with the findings of his and others' research. The basic tenets, though, remain unchanged.

Eysenck's theory could best be termed as a "biologically-rooted conditioning theory" (Eysenck, 1980). He maintains that individuals refrain from law breaking to the extent that they are adequately socially conditioned and acquire an internalized conscience. This conditioning takes place in early childhood when one learns moral habits and develops a conscience governing his or her conduct. Thus, the under-socialization of the conscience is the key to anti-social and criminal behavior.

Differences in development of the conscience result from two sources. The first is the environment, specifically improper parental upbringing. The second is various inherited physiological factors, one of the most important being "low cortical arousal" (Eysenck, 1977). To elaborate, the autonomic nervous system in those people characterized with "low cortical arousal" is less sensitive to environmental influences such as pleasure and/or pain. Accordingly, high cortical arousal is connected with better conditioning and low cortical arousal with poor conditioning. Therefore, individuals who have inherited low cortical arousal require more frequent and/or intense stimuli than the "average" person in order to condition normally. The absence of this type of strong stimuli can result in a weak moral conscience.

Personality traits which are characteristic of those who condition poorly include extraversion, neuroticism, and psychoticism. Eysenck contends that these three personality traits are causally correlated with what we define as deviant and often criminal behavior. Thus, certain people have innate predispositions towards crime. The sophistication in Eysenck's work lies in his inclusion of environmental influences: he allows for the integration of his biological theory with other sociological theories of crime.

It should be noted that Eysenck bases his belief of "genetic determinism" on the evidence provided by studies examining personality differences and similarities between twins and adopted children (Eysenck, 1977). He agrees with the conclusion in Lee Ellis's (1982: 57) review of biological criminology research in which Ellis states the following:

Sensing the weight of the accumulating evidence, especially throughout the past decade, along with several other types of less direct evidence not treated in this article... many scientists have concluded since the start of the 1970's that some significant genetic factors are probably, or at least very possibly, causally involved in criminal behavior variability....

Of course, Hans Eysenck along with Sybil Eysenck and others have contributed to the empirical research that specifically tests (and to some degree supports) his theory (Feldman, 1974; Bartol and Holanchock, 1979; Hoghugh and Forrest, 1970; Eysenck, 1970; Eysenck, 1977; Eysenck and Eysenck, 1970; Fulker, 1981). It is appropriate to note, however, that some research has also been critical of and/or has refuted parts of his theory (Bartol, 1979; Hoghugh and Forrest, 1970; Gibbons, 1982; Vold, 1979; Taylor, Walton and Young, 1973). For instance, in Bartol and Holanchock's study of prison inmates (1979), the authors found that Eysenck's proposition that criminal populations would have a greater percentage of extraverts when compared to

the total population proved inapplicable to Blacks and Hispanics. Of course this does not render his theory invalid, but rather lends support to a more sociologically oriented explanation. In short, the research neither adequately supports nor falsifies Eysenck's theory of crime; it is simply inconclusive.

### Implications of Eysenck's Theory

Eysenck claims to avoid making far-reaching claims about the implications of his theory (Eysenck, 1977). He does believe, however, that his theory might play a part in answering two significant questions: 1) What accounts for individual differences in criminality? and 2) What accounts for the rise in crime in most Western nations? He also discusses some practical remedies to the crime problem as guided by his theory of crime.

#### Individual Differences

As Eysenck asserts, the question of why two people respond differently when exposed to the same environmental influences has not been scientifically answered by traditional sociological theories. First, he acknowledges that part of the differences may be attributed to differences in the development of the conscience and moral habits (a proposal which is advanced by other theorists). Eysenck goes further, however, and argues that there are biological predispositions in certain people's autonomic nervous system (low cortical arousal) which curb normal conditioning of the conscience and personality. Therefore, individuals respond differently in similar environments because of the presence (or absence) of biological predispositions.

#### Rise in Crime

Eysenck also provides an explanation for the general increase in crime — especially in the United States. He points out that there are not necessarily more people genetically predisposed to crime in America. He blames, rather, the "general growth in permissiveness" in homes and schools that has led to a significant decrease in the number of "conditioning contingencies" to which children are exposed (Eysenck, 1983). Accordingly, children with "low cortical arousal" raised in this environment will have a much weaker conscience — being more likely to engage in criminal and anti-social activities. Eysenck stresses, though, that this theory should ideally be integrated with other sociological theories of crime (Eysenck, 1977).

#### A Tentative Solution

Finally, Eysenck provides an approach to reducing crime and reforming criminal offenders. At this point clarification must be made as to Eysenck's stance on punishment and the treatment of offenders. Two common misreadings and misinterpretations of Eysenck's work include: 1) that because anti-social conduct stems from genetic predispositions, nothing can be done (nihilism), and 2) that because serious criminals have a lower-level of arousal, they must be differentially sanctioned with more severe punishment in order to feel the pain (Wilson and Herrnstein, 1985).

Concerning punishment, Eysenck completely dismisses the notion that criminals should be punished for purposes of reform and provides psychological studies which prove such measures to be ineffective (Eysenck, 1970). Instead, he proposes more benevolent approaches which rely heavily on positive reinforcement techniques. For instance, he recommends the use of a token economy in prisons similar to the system established by Maconochie in the mid-1800's (Eysenck, 1983).

Eysenck also strongly disagrees with the concept of therapeutic nihilism (if propensity is inherited, nothing can be done). To Eysenck, this misinterpretation of his theory illustrates the public and academic world's ignorance of genetics (Eysenck, 1977). He proposes a controversial solution. Since some children condition quickly and others are difficult to condition, the highly emotional child, if properly diagnosed, could be subjected to a modified upbringing — including the use of behavior modifying drugs — which would minimize the possibility of the child becoming delinquent or criminal.

Subjecting children to this type of intervention is obviously controversial, but no more so than Eysenck's recommendation for adult criminals. He discounts the use of brain operations since these tend to make an individual more extraverted; however, he does recommend extensive drug therapy. This involves the use of stimulant drugs, similar to amphetamines, to heighten cortical arousal among those predisposed to low cortical arousal. This seems logical considering that depressants, such as alcohol, desensitize a person's cortical arousal, resulting in decreased inhibition and increased excitability; these factors lead to extraverted behavior which is often deviant or criminal in nature. Stimulants have the opposite effect: they induce enhanced sensitivity to outside stimuli (conditioners) while generating more introverted behavior. By carefully introducing these two types of drugs, changes in the degree of extraverted behavior and conditionability are at least theoretically possible.

Eysenck feels, therefore, that stimulants can make a criminal offender more amenable to positive conditioning. Of course, he does recognize the ethical antinomy involved: one side being the impartiality of the law towards the criminal and his rights, and the other, the wish to make criminal offenders better citizens. Eysenck believes that because he is a "scientist," he cannot offer a solution to this ethical dilemma (Eysenck, 1977).

#### Response to Controversy

Along with the ethical problems of Eysenck's solutions to crime, he also recognizes many of the criticisms of his theory and their subsequent implications. He stresses that his theory is just that — only a theory, not absolute truth. He emphasizes that he in no way implies he has found the secret of criminal conduct. Eysenck states to his critics: "an explanation of part of a phenomenon is not to be despised because it does not deal with the total phenomenon" (Eysenck, 1977: 198). Eysenck also circumvents many traditional criticisms against "positivistic" theories of crime. In fact, he aligns his views on "positivism" with Lakatos, a post-Popperian philosopher who is even more critical of positivistic thinking than Popper (Eysenck, 1987). A few

examples of his critical outlook on traditional (Vienna Circle) positivism, as related to the study of crime, include: 1) characterizing his approach to science as "revolutionary," as discussed above; 2) recognizing that he cannot prove his theory right, but is instead attempting to make testable deductions, formulate scientific laws, and direct future research; 3) defining criminal behavior using a continuum rather than a simple criminal/non-criminal definition (an assumption made by early biological criminologists); 4) admitting that his theory, at this time, would apply primarily to violent and other serious offenders — not all types of criminals; and 5) admitting that the concept of "crime" is subjective and relative, and should be operationalized cautiously.

One of Eysenck's personal experiences reveals the possible origin of his appreciation of the subjectivity of criminal definitions:

Perhaps in conclusion I should mention that I am well aware of some of the dangers of subjectivity in criminology — thus I was twice guilty of crimes in Germany for which the death penalty was mandatory! Needless to say I do not feel a criminal in the usual sense (Eysenck, 1987).

### Theoretical/Philosophical Criticisms

As evidenced by Eysenck's response to his critics, he is obviously capable of defending his theory. As mentioned earlier, though, biological theories of crime are very controversial. Therefore it is only fitting, in the course of an objective analysis of his theory, to provide in turn a critical analysis of Eysenck's theory of crime.

The more pointed critiques of biological theories of crime question the theoretical focus: criminality is caused by certain people's innate biological predispositions (e.g. low cortical arousal). Various sociological and critical perspectives in numerous disciplines take exception to this level of inquiry and explanation. The three perspectives analyzed here — traditional social determinist, symbolic interactionist, and critical social theory — are not, of course, exhaustive, but will provide a broad look at some of the more important theoretical criticisms.

### Social Determinist

The traditional social determinist, in believing that primarily outside influences cause social and behavioral phenomena, might inquire: Why do not all people with "low cortical arousal" (extraversion) commit crimes? The answer seems obvious — because of differential environmental influences. The reasoning here is that extraversion, or other factors supposedly making one predisposed to crime, can conversely lead to highly "desirable behaviors; the person is, in a sense, predisposed to "successful" behavior as well. The key factor in determining whether or not the extraverted person will commit criminal acts is his environment, not his psychological trait of extraversion. Therefore environmental stimuli (social conditions), not biological predisposition, ultimately determine behavior.

### Symbolic Interactionist

Beyond the social determinist argument, there is a tendency among many sociologists, and among anthropologists as well, to consider the discussion of biological factors inane. Whether the argument falls under the concept of "symbolic interactionism" — that our reality is only symbols and meanings created by interaction with others — or "mentalism" — that our thoughts and actions are determined by culture, not genetic make-up — the reasoning is the same. Our behavior, they argue, is not simply predetermined by physiological or even social influences; we have the over-riding capacity to actively determine our reality during the process of interacting with other people, dialectically creating social structures (Berger and Luckman, 1966; Montague, 1985). Therefore, we consciously "respond" through learned knowledge and human reason; we do not react to genetically predisposed drives. Taylor, Walton, and Young (1973), in criticizing Eysenck's work, clarify this active role in criminal behavior:

Thus men rob banks because they believe they may enrich themselves, not because something biological propels them through the door of a bank. (p. 65)

Besides these nature vs. nurture and biological structure vs. human agency arguments, there is also a criticism aligned with the interpretive perspective which concerns the adoption of natural science methodologies (to the exclusion of other knowledge-acquiring methods) for understanding crime. The overall opposition stems from the basic assumption biological scientists generally make in studying crime causation: that there are two measurably different groups in society — the "law-abiding" and the "criminals". The law-abiding, or the "normal" population, obeys society's formalized rules (law). The other population, the "criminals", is easily distinguished from the law-abiding because they disobey the law and have various psychological and physiological anomalies. Many argue that this simple dichotomy is clearly flawed — this "dualistic fallacy" ignores the complexity and ubiquitousness of "wrongdoing" in our society.

As noted above, Eysenck conceptualizes crime on a continuum. However, even the most advanced statistical analyses and "value-free" research decisions will inevitably require some type of break in that continuum between "criminals" and "normal" people. The underlying dualistic fallacy thus still exists. Similarly, the interactionist would argue that Eysenck's theory adheres to a legally guided definition of deviant behavior that has evolved from various motives — the least of which is scientific rigor.

### The Critical Perspective

Critical criminologists have similar but stronger oppositions to the adoption of the biological sciences as a basis for understanding crime in society: the reliance on biological science for legitimate knowledge acquisition about the phenomenon of crime is stifling to the theoretical development of criminology. In fact, Nils Christie (1978) considers this biological focus an "unfortunate step backwards." Young (1986) blames the "theoretical bankruptcy" in criminology

on the mainstream approach — particularly within an area such as biological criminology — of searching for “meaningful” statistical relationships. Overall, these theorists maintain that attempts at accurately operationalizing and quantitatively measuring someone’s genetic predispositions, and then statistically manipulating the “quantified meaning” of a person’s behavior for purposes of finding the “causes” of crime, only stifles our progress in understanding a “value-laden,” sociologically complex phenomenon.

As can be inferred from the German philosopher Habermas (1968, 1979), this scientific method provides for an ideological (distorted) understanding of crime. It is ideological in that knowledge of human interaction acquired through the natural science model is unduly accepted as legitimate. This mind-set channels our method of inquiry and subsequent discourse toward manipulative means and away from discussing more substantive ends (Fay, 1978; Bernstein, 1978). Eysenck’s approach to understanding crime, therefore, from a Habermasian perspective, strips the act and the subsequent discourse (“communicative action”) about the act of its true political, social, and human meaning (Habermas, 1979). In its place the empirical-analytical approach provides for a narrowly focused discourse (“purposive-rational action”) which is primarily concerned with scientific prediction and control. This purposive-rational discourse allows for little reflective understanding and substantive dialogue about the nature of crime, and what might be a just reaction to our crime problem.

### Negative Consequences

Accordingly, the critical theorist would ultimately question the negative consequences of explaining crime through the genetic make-up of particular people in society. In attempting to determine the cause of crime as a result of “low cortical arousal” — as in Eysenck’s theory — the study of crime becomes preoccupied with particular individuals’ physiological aberrations. The danger of this limited level of theorizing lies today, as it has historically (Kevelev, 1985), in the zealous application of a partial explanation of crime — for example, the personality trait of extraversion — by the larger society, eventually constituting the knowledge base for our response to crime. Society, therefore, not necessarily the criminologist, develops a simplistic justification and insidious ideology for oppressive control: they (the “criminals”) are actually physiologically different from us (the “normal” people).

From this “we-they” dichotomy, two consequences logically follow. First, it provides a scientifically based justification for targeting certain individuals and/or groups of people — by virtue of their biological make-up — for the purpose of controlling or eliminating their “dysfunctional” physiology, a rationalization used for oppression against various targeted groups throughout history. (The most extreme examples are the practice of slavery in the 1800’s, the Holocaust/genocide of various targeted groups during WWII, and the judicial mandate and implementation of a sterilization program for certain undesirables in the United States).

Second, through this type of biological reasoning and simplistic justification we again overlooked the obvious:

inordinate rates of crime in a society cannot be rationalized as a simple problem with certain individuals’ genetic structures. Crime is obviously a social problem — a problem influenced by well-known (although often quantitatively difficult to prove) sociological factors such as poverty, an unjust social ordering, relative ignorance and deprivation, alienating institutions, a lack of meaning in people’s lives, the breakdown of the community, an intolerance of deviant behaviors, reactive reduction measures, and many other such factors. In short, there exists a complex social environment that has proven to be conducive to anti-social behavior (crime) and repressive reactions.

### Theoretical Ethnocentrism

Taylor, Walton, and Young (1973), the same critical theorists who question Eysenck’s focus, deem him at the same time the “most noteworthy biological determinist.” Eysenck’s high level of conceptual construction and the critical, scholarly presentation of his theory are obvious even to his critics. Eysenck, aware of the controversial nature of his theory, presents well-reasoned arguments that mark his theory and ideas on crime as a model from a biological criminology perspective.

Despite Eysenck’s objective stance, however, his theories have fomented criticism to the point of his being labeled “racist” or “fascist” (Gibson, 1981). One might expect this criticism considering the historical use of eugenics both in this country and around the world (Kevlev, 1985). Nonetheless, these views are often exaggerated by an unfair simplification and distortion of Eysenck’s theory.

Hence, from this discussion of Eysenck himself, his theory and its critique, two points need to be made. The first point is simple: within academics, ethnocentric challenges generate destructive conflicts; respectful, dialectical debates, however, can lead to a higher level of understanding. A thorough critical analysis of Eysenck’s theory and its implications is as essential to a discussion of modern biological theories of crime as is Eysenck’s academic freedom to responsibly present and promote such views.

The second point is illustrated by the wide gap between Eysenck’s views and those of his critics: theoretical ethnocentrism seems to be caused primarily by the often overlooked occurrence of bypassing levels of theory building (Short, 1985). That is, because different theories and their implied methodologies focus on different levels of explanation (from biological/psychological to sociological), debates about the superiority of one theory over another completely bypass one another on parallel courses. Ian Craib (1986: 23), however, in synthesizing many social theorists’ thoughts, views the separation of these different levels as not altogether negative: “It should be apparent by now that I am suggesting that theory is necessarily fragmented in that we need different types of theory to explain different things.” If theory fragmentation is indeed necessary, then the key question for studying crime becomes, “Which level of theorization is most appropriate for an adequate understanding and a ‘just response’ to our crime problem?”

The mainstream response to this question in the discipline of criminology would be that the best theory, regardless of its level of theorization, is the one that holds up to quantitative testing. A number of more critically-oriented

social theorists partially disagree (McCarthy, 1978; Giddens, 1977; Fay, 1975; Bernstein, 1972; Habermas, 1968; Gouldner, 1972; Denhardt, 1981; Craib, 1986). They argue that the answers to such questions will ultimately have to be decided, at least to some degree, on the philosophical level. They justify this position on the simple yet rarely admitted fact that the theories to which we adhere provide us with a framework for action. In other words, contrary to the more traditional positivistic perspective, theory and facts, and practice and values, are intimately related; they are coalesced in the realm of human action.

As related to criminological theories and criminal justice practice, these theorists believe that by exposing the normative dimension (explicit or implicit assumptions about the way the world is and ought to be) of different theories (critical discourse), we can focus on those theories that are conducive to a "just" response to crime. Their point stresses the need for critical thought with regard to criminal justice practice: select criminological theories based not only on quantitative validation or logical coherence, but also on the normative assumptions implicit in the theory that will effect societal consequences. As discussed in this paper,

Eysenck's type of biological theory of crime has serious implications and consequences for individuals, society as a whole, and the type of justice we administer. These all warrant normative and consequential scrutiny. The integration of critical thought, therefore, would mitigate potentially unjust or ineffective criminal justice practices that could be derived from Eysenck's theory of criminality.

### Conclusion

Eysenck was forced to retire from the Chair at the Maudsley Institute in 1983 because he reached the mandatory retirement age (Gibson, 1982). He has continued to write and publish extensively, though, remaining actively involved in academics. His most recent project includes a revision of his highly acclaimed work, *Crime and Personality* (Eysenck, 1987). He can rest content with his accomplishments — Hans Eysenck will undoubtedly be recorded in history as one of the leading researchers and writers in the field of psychology as well as a pioneer in modern biological criminology.

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