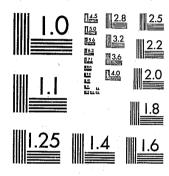
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Is There a Place
for Economics in
Criminology and Criminal Justice?

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U.S. Department of Justice

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#### ABSTRACT

It is argued that the study of economics is appropriate for, and would make a significant contribution to, criminal justice degree programs by enriching the understanding and augmenting the technical expertise of students who undertake that study. Economics is based on a very different philosophy of human behavior. From the economist's philosophy has evolved a theory of human behavior which is, to a striking extent, complementary to that of traditional criminology in its choice of endogenous and exogenous variables, and in its assumptions concerning the nature and structure of the relations linking the former to the latter. Methodologically, economics is distinguished from traditional criminology by its greater stress on formal, logical deduction.

The discipline also offers, through econometrics, a powerful instrument for empirically estimating and testing theoretical propositions,

A survey of recent criminological research that uses the economist's paradigm is provided.

The purpose of this paper is to discuss two related questions concerning the interface between criminal justice education and that branch of social science defined as economics:

- (i) What contribution can economics make to criminal justice education?(ii) Should the study of economics be a required part of a criminal justice degree program?
- Because the answers to these questions are to be provided by an economist, and because experience teaches us that the fishmonger never advertises rotten fish, one might anticipate an affirmation of the importance of the study of economics for criminal justice education. That anticipation would be well founded: the reader shall not be disappointed. This writer readily admits that his advocacy is tainted, and that for reasons which are not altogether clear either to him or to his psychiatrist, he is predisposed toward the subject of, and the manner of thinking involved in, economics. However, on his behalf it should be said that he also has a natural proclivity toward criminology. He likes criminology, and identifies himself as a criminologist, despite the fact that he plies the crime and criminal justice trade rather differently than do most criminologists. Moreover, his advocacy derives as much from rational consideration as it does from inclination. Experience has convinced him to his surprise, if not astonishment;

and most certainly to his delight -- that the tools of analysis provided by economics are extraordinarily effective when applied to issues in crime and criminal justice.

In honesty, and in the aftermath of several chastening experiences, he hastens to admit that economics has its deficiencies. The discipline, used alone, provides much too narrow a perspective for guidance in the resolution of problems involving criminal justice policy. Economists, I confess, are somewhat unfamiliar with, and are uncomfortable in, the real world. The unfortunate consequence is that, from the lucubrations of some of our purer practitioners, one obtains answers to criminal justice problems that are often abstruse, sometimes glib, and rarely useful for policy implementation. But let us not digress: we are come to praise Caesar, not to bury him.

If we define traditional criminology as that body of knowledge comprehended by texts such as Gibbons (1973), Reid (1976), and Sutherland and Cressey (1978), then the nature of, and contributions of, economics can be distinguished from that of traditional criminology on the basis of philosphy, theory, and methodology.

#### **PHILOSOPHY**

Economists, and their science, bear the peculiar imprint of, and are universally identified by, their philosophy. Economists accept as an article of faith, and assert as a revealed truth, the proposition that man is rational, that he is free to choose among alternative behaviors, and that his choice is governed by a desire to maximize his own wellbeing. The implication is that man engages in a personal calculus whose arguments are pleasure and gain, profit and loss, benefits and costs. This view of human behavior is not unknown to criminology, of course. Indeed, criminologists have their own name for it: neoclassical theory. Indeed, they will trace the doctrine's evolution to its formal inception in the eighteenth century; and they often evoke it in discussions concerning the deterrence hypothesis. Moreover, I find it most interesting, if not startling, that the best brief description of the economist's special Weltanschaung is found in criminology: specifically, in that venerable text by Sutherland and Cressey (1978). The doctrine, they say, is "individualistic, intellectualistic, and voluntaristic" (Sutherland and Cressey, 1978: 56). Nevertheless, while most criminologists acknowledge the philosophy, very few grant it familiarity. Criminology textbooks, for example, give it short shrift -- a most apt phrase, incidentally, when the subject is crime and criminal justice. Sue Titus Reid's (1976) text is a case in point: in brevity, her description of the doctrine is equal to Sutherland and Cressey's; but, worse, she refers to the doctrine in the past tense,

Why should this be? Perhaps the aficionados of conflict theory or cultural anthropology can provide the answer. Certainly not an economist. However, when the answer is self-evident, we can, I believe, dispense with authority and documentation. Simply put, traditional criminologists confess a different religion. They believe in positivism. Man's behavior is explained as the ineluctable result of natural causes. It "is determined by forces outside the control of the individual" (Conklin, 1981: 78). The difference is of the dimension of polar opposites; it is metaphysical; it is as fundamental, as divisive, and as unbridgeable as that which separates the Christian from the Musselman. Consequently, and almost of necessity, that philosophy which ascribes freedom of will to man, becomes "generally questioned" (Sutherland and Cressey, 1978: 56) by traditional criminologists. Religions, like oil and water, do not mix. Or so it would seem.

Thus, the issue that divides the two schools concerns their view of man: whether his behavior is the result of natural causes or whether he freely chooses to behave as he does. As we all know, the determinism vs. free will issue has exercised some exceedingly subtle and sophisticated minds, whose labors have elaborated the question into manifold meanings, have clarified and enriched our understanding of the issues involved, and have sharpened the analysis of these issues. Nevertheless, neither their deductive logic nor their empirical evidence has provided the definitive TRUTH that resolves the question. Furthermore, as we also know, a priori plausible arguments and indirect empirical evidence can be adduced in support of both -- or most? -- of the principal interpretations of the issue.

I have chosen, after deliberation, to confuse philosophy and religion so as to emphasize the depth of the division between the two systems of thought, Philosophyconveys too much of a sense of cool, intellectual, dispassionate give and take. I suspect most of us have not come to our philosophical position out of agnosticism; we have not been guided there by rational consideration; and we do not maintain our position simply as an intellectual game. However we have come to our faith, we protect it with passion, react with hot emotion to its insult, and equate compromise with heresy. And with good reason, for one cannot consider the causes of crime and the proper response to criminal behavior without an a priori answer to fundamental moral questions -- for the squeamish, substitute ontological questions -- such as those relating to good and evil, punishment, and individual responsibility.

#### THEORY

One's philosophy, properly elaborated, should determine the elements of, and the structure of, one's theory. Thus, in social science, the actors appearing in a theoretical model should be suggested by, and should obtain their roles from, the theory's underlying philosophy. Not only their behavior, but how their behavior is explained, should follow from, or at least be consistent with, that philosophy.

See Nozick (1981: Ch. 4) for a genuinely readable summary of the debate.

Because the economist's theory is grounded in the assumption of voluntary human behavior, the actors in his story are individuals. He constructs his microeconomic theory from these elemental particles in the same way that physicists construct their theories — or used to, at any rate — from atomic particles. To be sure, economists also deal with firms (business firms, if you will; though the connotation is much too restrictive), and with other aggregates of individuals. But at basis, the firm and these other aggregates are presumed to obey the same laws, and to manifest essentially the same behavior, as the individuals of which they are composed. Aggregation produces no qualitative change: no being is created whose behavior is inconsistent with the underlying philosophy. Aggregation is simply that: an adding up.

Thus, economists who have turned to criminology have peopled their stories with individuals freely and consciously deciding whether or not to commit an offense, with potential victims making decisions with reference to victimization avoidance, with entrepreneurs providing illicit merchandise and services as well as other entrepreneurs providing private protection services and devices, and with public agencies -- police, courts, and corrections -- operating as extensions of the will of the collectivity of these individuals.

The assumption is that all of these actors are rational, intent on maximizing their own wellbeing. Counterproductive, welfare-diminishing behavior, unless due to inadequate or incorrect information, does not exist in the economist's model. However, I must emphasize the fact that welfare maximization does not imply a simple-minded dollar and cents

calculation. More than monetary gains and losses are involved. For example, potential offenders are assumed to take into account not just the economic pay-off from crime, but also the returns and costs associated with legal sanctions, the status losses and/or gains associated with engaging in crime, the qualitative dimensions of legitimate and illegitimate work, the value of leisure, and so forth. Some of these elements may, in fact, possess no monetary equivalent (Heineke, 1978). Moreover, the potential offender is expected to balance present and future returns to both legitimate and illegitimate activity by means of a time-discount, a mathematical concept which is analogous to deferred gratification.

The individual proceeds, then, to achieve as much as he can of the things which have value for him, and to avoid as much as possible those things which he dislikes. Unfortunately, the good life takes income and it consumes time, both of which are in short supply. The path to heaven is blocked: the best that an individual can do is to achieve a maximum within these resource constraints. Thus it is that the economist's models deal with constrained maxima. To engage in crime, we assume that an offender must take time from legitimate activity or from leisure.

To reduce the risk of victimization, the potential victim must reallocate resources, perhaps devoting more income to the purchase of private or public protection, perhaps reallocating time by foregoing that walk in the park. To provide more of one kind of criminal justice service, a criminal justice agency, given a fixed budget, and barring a fortuitous intervention such as a reduction in resource prices or

technological change, must reduce the provision of some other service.

And, if a community wishes to increase aggregate criminal justice expenditure for crime prevention and control, it must sustain a diminution in other social services or a reduction in its take-home pay. In short, as the economist is wont to say, there is no such thing as a free lunch.

In the economist's view, man is embedded in an environment which limits and, in a sense, determines his choices. Pushed and pulled about by a multiplicity of environmental factors, man makes do as best he can. His **re**sponse to any particular situation depends upon the configuration of these environmental factors, mediated, of course, by his personal tastes, or preferences. Because wellbeing is the ultimate dependent variable, the economist directs his attention toward those environmental parameters -- independent variables -- that affect wellbeing. Thus, the returns to legitimate activity, reflected by indicators such as per capita income and the unemployment rate, the rate of return to illegitimate work, and the risk and severity of legal sanctions, which may affect the return to both legitimate and illegitimate activity, are natural and proper arguments in his explanation system. By the same token, the demand for law enforcement services is expected to depend upon potential losses from criminal activity, the productivity and the price of law enforcement inputs, and the community's ability to buy these services.

Because the economist and the traditional criminologist look at the world from very different perspectives, and because, as we shall see, they speak very different languages, it is easy to exaggerate their theoretical

differences, and just as easy to overlook the striking extent to which their theories are complementary. Note, especially, that they have a common predisposition to explain human behavior on the basis of environmental stimuli. (I leave aside the lesser schools of thought that advance genetic inheritance and biological mechanisms as principal criminogenic variables.) The economist and traditional criminologist differ, primarily, in their dichotomization of environmental variables into those chosen for analysis and those chosen for neglect: benign neglect is to be assumed. Thus it is that the economist's attic is cluttered with a quite different set of "important" but not particularly useful variables than those found in the criminologist's attic. (Economists name their clutter "exogenous," thus totally disarming potential critics; and then, with proper hauteur, cast the lot beyond the pale.)

As a striking example of their complementarity, consider the different treatment accorded to that which economists call "tastes," and criminologists refer to as attitudes, values or personality. Economists recognize that the taste for work, for leisure, for illegitimate income and violence, and, more generally, for the things that heighten and depress wellbeing vary from individual to individual. They concede that these tastes, which are the desiderata for distinguishing one person from another, have a profound effect on behavior, predisposing one individual to respond to a particular environmental stimulus while another does not. However, qua economists, their interest in tastes is superficial. They really do not care how tastes may be identified, how they ought to be classified,

faceless. Tastes are exogenous; and, accordingly, are consigned to the pound, ceteris paribus. For economists, explained behavior is derived from environmental stimuli, mediated by individual preference.

Traditional criminologists, on the other hand, direct more attention to tastes, personality, or attitudinal variables relative to environmental variables. In differential association theory, to select an almost perfect example, individuals are assumed to receive an assortment of definitions of criminal behavior (environmental stimuli) whose origin is taken for granted (consigned to ceteris paribus), but whose quantity and intensity are assumed to form the individual's attitude toward crime. Whether it be criminal definitions or the variables associated with social learning theory, subculture theory, or control theory, relatively more attention is given to the origins of personality types and to the behavior of the personality subsequent to its formation, or transformation, than to the environment. Thus, explained behavior, to a very considerable extent, is derived from attitudes, mediated and formed by environmental conditions.

Note the symmetry: traditional criminologists and economists agree that the personality makeup and the social milieu are both important, but the former places more stress on tastes (or personality), the latter on environment, in identifying the precipitating causes of criminality.

Complementarity extends, as well, to the nature of, and the importance assigned to, the formal relation which is assumed to connect dependent and independent variables. The economist's theoretical system

consists, normally, of one or more continuous functions. These functions describe aggregate behavior. While they are based on individual behavior, they neither require nor imply that the functional relation for the individual be continuous. The economist assumes that, for each taste variable, there exist different threshold values for different individuals. The individual behavior relation may be dichotomous (for example, to rob or not to rob a bank), or it may be continuous (to embezzle an average sum of money per week from one's employer). It is important to note that, in this theory, and in the real world, most individuals are not expected to alter their criminal behavior, any more than ordinary consumers would be expected to alter their expenditure for goods and services, as a result of a small variation in an environmental stimulus. In the context of the above example, many persons would not rob or steal regardless of the temptation; some will regardless of the cost. But if the population under consideration is large enough, and if the range of variation in the stimulus is in the neighborhood of the threshold values of some of the individuals in that population, then a small variation in that stimulus (the independent variable) can be assumed to generate an equivalently small variation in the dependent variable, whether the latter, at the individual level, is dichotomous or not. The essential result is that the average behavior of a faceless, heterogeneous aggregate becomes predictable.

The economist works at the margin, i.e., with small movements along a continuous function; and he directs his attention to the magnitude of the response of the "marginal group," to use Zimring and Hawkins' (1968)

aptly coined phrase. The traditional criminologist, on the other hand, is more comfortable with discontinuous functions and with global change. Sometimes step functions are posited: for example, the individual manifests criminal behavior or he does not. Sometimes the function, often not specified, is simply assumed to shift: for example, his theory may assert, with plausible argumentation, that males and young adults are more criminalistic than females and the elderly. The focus is on the individual. A particular behavior occurs or it does not. Continuous variation is uncharacteristic of, if not foreign to, and is probably inappropriate for, the traditional criminologist's theory. Variation more often involves movement from functional relation to functional relation, rather than movement along or within a particular function.

Additional examples to illustrate the complementary features of traditional and economic approaches to the explanation of crime and criminal justice behavior could be easily developed, but would be superfluous. I believe these that I have proferred make my point: possibly because of the contradictory Weltanschaungen of our two disciplines, their criminological theories are markedly different. Yet, despite their fundamental philosophical difference, the theories are largely compatible — indeed, more than compatible. Taken together, they significantly broaden and enrich the study of crime and criminal justice.

#### **METHODOLOGY**

The argumentation engaged in by economists has two characteristic forms, one of which is deductive, the other inductive. His logicaldeductive systems are his glory -- or his cross, as some detractors would say. On the basis of extraordinarily few assumptions, involving rationality, freedom of choice, communication among actors, etc., he is able to build a purely deductive, abstract but meaningful, sometimes realistic, and astonishingly elegant description of individual and collective behavior. His methodology is identical to, and sometimes indistinguishable from, that of the mathematician. The application of this methodology to behaviors such as consumers allocating income, individuals choosing among work and leisure activities, and firms making price and output decisions has been exceedingly successful, providing explanations and predictions with respect to these behaviors which ought to command the respect of the other social sciences. Economists can be justifiably proud of this analytical apparatus -- this microeconomic theory -- which they have developed over the past two centuries.

Of course, our "micro" theory is not without its problems. In a deductive system, everything hinges on one's axiomatic base, for the propositions that flow from the model's basic assumptions are, themselves, not conceivably falsifiable. Micro theory's derivative propositions

are as immutably true as the theorems in pure mathematics. Hence, when a model's axioms faithfully represent a particular aspect of reality, meaningful, valid propositions concerning that reality may be derived. The assumptions are all important: they determine the extent of applicability of the model, and the power of its conclusions. <sup>2</sup>

One should expect to find, therefore, that the economist's micro theory can be mapped most readily into a crime or criminal justice context when the actors in his model are exposed to significant variation in pecuniary gains and losses, or to gains and losses that have a pecuniary representation. In such situations, the economist is most likely to make a contribution to criminology. It is natural, therefore, for economists to consider the effects of sanctions and economic status on offender behavior, and to consider the "output" decisions of agencies involved in crime or criminal justice. Thus, it should not be surprising that, in little more than a decade, economists have developed a firm, mathematically elegant, theoretical foundation for the proposition that sanctions, operating through deterrence, are inversely related to the offense rate. Nor should it be surprising that economists feel very much at home in attempting to explain the price and output behaviors associated

with victimless crime; or that they have a great deal to contribute to criminal justice agencies concerning the cost, output, and efficiency of agency processes. Note, again, that economics permits and encourages a broadening of the scope of criminology. While there is some overlap in subject matter, particularly, and painfully, concerning deterrence theory, the two disciplines naturally incline toward separate areas of analysis, each selecting those areas in which it has a comparative advantage. Price and output, costs and efficiency: these are the stuff of economics. There is no analogue for the economist's microtheoretic explanations for these concepts in traditional criminology. Hence, assuming each continues to work at that which he does best, the economist and traditional criminologist ought to be able to meet on common ground with a minimum of contention. Certainly, there is more than enough work to be done: there is no need to play a zero-sum game.

Juxtaposed to his purely deductive system, the economist offers what was, for a time, a unique inductive system, econometrics. Loosely speaking, econometrics may be defined as a set of procedures for estimating a theoretical system, often composed of more than one equation, using formal statistical procedures that recognize, and attempt to minimize, both bias and random error. This methodology is particularly applicable to empirical criminological research, wherein theory often postulates complex, interrelated causal systems, and conventional multivariate procedures tend to produce biased estimates (Orsagh, 1973).

An old, "in-house" anecdote illustrates the problem:

An engineer, a physicist, and an economist were stranded on a desert island. They had one can of beans and no immediately available means of opening it. Each of the three proposed a solution. The engineer suggested that a rock found nearby could be chipped into a point and that, with another rock used as a hammer, the top of the can could be cut open. The physicists, noting that all three persons wore glasses, suggested that the lenses of these eyeglasses be aligned with the sun's rays. The focused light, so obtained, he alleged, would produce enough heat to cut open the lid. The economist began by saying, "Let's assume we have a can opener." Some of our theorizing is like that.

#### RECENT RESEARCH USING THE ECONOMIST'S PARADIGM

In the last fifteen years a substantial body of research has emerged which exhibits the main features of the economist's unique paradigm. His theory and methodology have been applied to crime and criminal justice issues with results that, in all modesty, I can report are excellent. There are, at present, two monographs dealing with the economics of crime (Hellman, 1980; Phillips and Votey, 1981) that are suitable for textbook use; and several collections of readings (Rottenberg, 1973; McPheters and Stronge, 1976; Gray, 1979; Andreano and Siegfried, 1980). In the following, the journal literature is used to illustrate the wide range of subject matter covered by this research. The survey is not concerned with research findings, nor does it exhaust either the subjects considered by economists or the research undertaken within each subject field.

The importance of the economist's voluntaristic, intellectualistic orientation is, perhaps, best exemplified in the literature dealing with the criminal choice. Two important theoretical models explain why individuals choose crime: one was developed by Becker (1968), Ehrlich (1973), and Sjoquist (1973); the other by Block and Heineke (1975) and Heineke (1978). Neher (1978) provides an unusual, special model which is used to explain the decisionmaking of the street criminal. In the general models, the criminal choice is conditioned upon the costs associated with getting caught. The most obvious cest, for an economist at least, is that associated with legal sanctions. The

deterrence hypothesis follows directly, and almost unambiguously, from the rational choice model. The hypothesis has been subjected to intensive theoretical and empirical analysis. Rigorous empirical investigation, using econometric technique, dates from the early 1970s. Having been deflected and distracted by the hopelessly insoluable issue of the efficacy of the death penalty, it is now beginning to bear fruit. Despite the allegations of some (see, for example, the recent review of the President's Task Force on Violent Crime by Diana Gordon (1981)), this evidence overwhelmingly supports rational choice theory, though the magnitude of the deterrent effect is open to dispute. Space constraints prevent citation of the many economists who have contributed to the vast, accelerating accretion of deterrence research. The interested reader should consult the reviews of Palmer (1977), Nagin (1978), Beyleveld (1980), and Orsagh (1982).

The foregoing general theoretical models have also been used to examine the relation between economic status and the criminal choice. The theoretical arguments are highly technical and must be dismayingly abstruse to the layman; yet the debate about the existence and nature of the crime/ economic status nexus found in the economist's literature carries extremely important policy implications. The arguments strike at the heart of the justification for CETA, for example, and also raise questions about the efficacy of income-enhancing rehabilitation programs for offender populations. The empirical evidence concerning the crime/economic status relation is more easily understood, but is just as ambiguous. The contributions of economists to this research issue may be found in the reviews of the literature by Gillespie (1975), Braithwaite (1978), Orsagh (1979), and Orsagh and Witte (1981).

<sup>&</sup>lt;sup>3</sup>The obverse of the <u>criminal</u> choice coin is the element of choice exercised by potential victims. Ehrlich and Becker (1972), Heher (1978), and Balkan and McDonald (1981) have made important contributions to the theory of victimization avoidance.

Heineke (1978) suggests possible reasons why deterrence may not operate.

5It may seem odd, but the economist cannot deduce a necessary causal.

<sup>&</sup>lt;sup>5</sup>It may seem odd, but the economist cannot deduce a <u>necessary</u> causal linkage between crime rates and economic status.

The micro-economic theory of optimum resource allocation maps into criminal justice issues very nicely. The appropriate share of national income to devote to crime prevention and control is considered by Becker (1968) and Stigler (1970); and the optimum allocation of resources between private and public producers of crime prevention services by Clotfelter (1977). The optimum distribution of police expenditure is considered somewhat generally by McPheters and Stronge (1974); its distribution across neighborhoods is considered by Shoup (1964) and Thurow (1970); and its distribution across income classes by Weicher (1971).

The applicability of the theory of production to criminal justice issues has been demonstrated by a number of economists. Katzman (1968), Hirsch (1973), and Heineke (1977) have investigated the police production function. Gillespie (1974; 1976) and Landes (1971) have modeled the production of court and pretrial processes; Monkman (1974), Tabasz (1975), and Block and Ulen (1979) that of corrections. Anderson (1974) and Singer (1977a; 1977b) provide cost/benefit analyses for the production of police services and correctional "treatments," respectively.

The theory of the firm and of market behavior have been used to analyze the heroin markets (Rottenberg, 1968; Moore, 1970; Fugii, 1975), the price-fixing behavior of producers of bread (Block, et al., 1981), operations of organized crime (Schelling, 1967; Rubin, 1973; Reuter and Rubinstein, 1977), and the impact on firms engaged in criminal or administrative rule violations from private enforcement, through civil liability suits, vs. public enforcement (Polinsky, 1980b), and the efficacy of using private vs. public enforcement (Polinsky, 1980a).

The breadth of subject matter subjected to economic analysis is further illustrated by studies of the effect of crime on real estate values (Hellman and Naroff, 1979), the efficacy of gun control policy (Phillips, et al., 1976), racial bias in sentencing (Myers, 1979), the impact of correctional programs on the criminal choice (Avio, 1973) and Witte (1977), the incapacitative effects of imprisonment (Ehrlich, 1974), the applicability of theory for offender classification (Marsden and Orsagh, 1982), and for forecasting crime and criminal justice activity (Orsagh, 1981).

### WHAT PLACE, THEN, FOR ECONOMICS?

I have argued that the economist's philosophy comes before you with excellent credentials, soliciting and deserving peer status among interpretations of human behavior. Although its view of human nature is in fundamental conflict with that of traditional criminology, it is nonetheless, an eminently plausible view; it has a long intellectual history; and it cannot be refuted either logically or empirically. I have also argued that this philosophy has fathered an elaborate, ever-evolving deductive theory of human behavior, two centuries old, which rivals in its elegance, complexity, and supremely logical structure the constructs of the doctors of the medieval church. This theory, in turn, coupled with innovative empirical methodology, has, within a decade, made substantial contributions to our understanding

<sup>&</sup>lt;sup>6</sup>Of course, it cannot be proven to be correct, either.

of crime and criminal justice, as we have shown in the foregoing section.

It can also be argued that those who assume the title of social scientist (subspecies traditional criminologist) are constrained to an open-minded, objective pursuit of truth; and, consequently are obliged by the dictates of their science to play the gracious host to the minority viewpoint. Of course, the majority stands to lose something thereby. Its self-assurance, bred of consensus, could be sensibly diminished, the persuasive power of its gospel may become enfeebled by division of opinion, and its faithful might be sorely troubled, if not seduced, by heretical views. But if these are virtue's costs, one ought, properly, to inquire of the gains to be had from more open-minded, objective research. Several arguments come to mind. First, adopting a Marxian or Hegalian perspective, one may divine a higher, more sophisticated philosophical synthesis, the natural product of the confluence of these disparate systems of thought. Alternatively, one might envision the evolution of a more truthful representation of human behavior, engendered by a cross-fertilization of ideas. And, of course, one may argue that, for the devout whose faith is unshakable, the study of the alternative system may serve to deepen, broaden, and enrich that devotion. Thus, for the orthodox, there could be profit in the exchange.

What do we economists offer to the education of the aspiring criminologist? Whether the foregoing arguments are persuasive or not, and whether he will or not, the student of criminology, as a matter of

self-interest, must come to recognize the existence of, and learn to deal with, the economist's scribblings. The corpus of research by economists now exceeds the critical mass. If the student does not acquire the rudimentary tools of the economist's trade, he cannot understand their argument; he can neither advance nor effectively counter their argument; and, accordingly, he is not likely to excel in his chosen discipline.

Finally, the student should consider that an open, if agnostic, receptivity to the economist's paradigm can, at no sacrifice of principle, enrich his understanding and augment his technical expertise. Although our philosophical differences are too deep to assure a harmonious relationship, the complementary features of our theory and methodology permit -- indeed, encourage -- a joining of the traditional criminologist and the economist in a marriage of convenience. In truth, could such a marriage be effected, it would bring honor, and profit, to both houses. The issue of the marriage, as they say, would do us both proud.

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