

# THE EVOLUTION OF CRIMINOLOGICAL THEORIES

by

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## **ABSTRACT**

Since the 1970s, the field of criminology has produced numerous philosophies, theories, and research programs. This has resulted in unresolved debates over philosophical positions, needless competitive theory testing, an inconsistent use of terminology, and general disarray in the field. These problems have hampered theory development and obscured our understanding of theory growth in criminology. In addition, little has been written about theory building in criminology; this has also contributed to the confusing proliferation of criminological theories. Literature from the philosophy of science can help to alleviate some of the confusion and provide some guidance for theorizing in criminology.

In this dissertation, a model of theory growth is proposed and applied to several contemporary research programs relevant to the study of crime and criminality. Wagner's (1984) work on theory building in sociology serves as a foundation for the model used in this dissertation. Ideas from the philosophy of science literature (Feyerabend, 1976; Laudan, 1977) and previous work on theory building in criminology (Bernard and Snipes, 1996) have also been incorporated into the model. Research programs that are considered include radical criminology, neoclassical-deterrence and postclassical explanations of crime, psychodynamic, humanist, behaviourist, and moral development research programs from psychology, biosocial explanations of criminality, and developmental-life course theories of crime and criminality.

The application of this model helps to provide an increased understanding of the history of criminological ideas and is intended to inform future theory building efforts in criminology. Practical implications of the various theories and research programs are also explored.

**Keywords: Criminological Theory, Philosophy of Science**

## **DEDICATION**

This one's for H-S...

jmh

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## TABLE OF CONTENTS

<b>Approval .....</b>	<b>ii</b>
<b>Abstract.....</b>	<b>iii</b>
<b>Dedication .....</b>	<b>v</b>
<b>Acknowledgements .....</b>	<b>vi</b>
<b>Table of Contents .....</b>	<b>viii</b>
<b>List of Figures.....</b>	<b>xi</b>
<b>List of Tables .....</b>	<b>xiii</b>
<b>Chapter 1: Introduction .....</b>	<b>1</b>
Defining the Puzzle: Challenges to Understanding Theory Growth in Criminology .....	1
Methods.....	6
The Omission of Sociological Theories of Criminality and Crime: A Justification.....	9
Outline of Chapters.....	11
<b>Chapter 2: Research Programs, Methodological Anarchy, and Criminology .....</b>	<b>13</b>
A Brief History of Theory Building in Criminology.....	13
Disentangling Terminology, Act I: Theories and Philosophies .....	18
Paradigms and Research Programs in the Social Sciences .....	21
Orienting Strategy and Its Discontents: Strengths and Weaknesses in Wagner’s Model of Theory Growth .....	27
Theory Integration in Criminology: Theoretical Mush or Regression Stew? .....	35
Fusing Knowledge: Challenges of Formulating Integrated Theories in Criminology .....	39
Integrating Philosophies: The Fusion of Orienting Strategies .....	48
<b>Chapter 3: The Marxist Rebellion in Criminology.....</b>	<b>54</b>
The Rise of Radical Criminology .....	54
Marxism, Science, and Theoretical Research Programs .....	55
Breaking Away From Functionalism’s Mechanical Society.....	57
Early Radical Criminology: Bonger’s Marxism.....	61
Understanding Authority: The Conflict-Pluralist Branch of Radical Criminology .....	64
Pioneers in Conflict Criminology.....	70
The New Criminology: Enter the Political Economy.....	79
Marxists in America .....	85
On the Sociology of Division: Rifts in Marxist Criminology .....	90

Utopia Lost: The Development of Left Realism .....	91
The Shape(s) of Crime to Come: Pyramids and Prisms .....	98
From Idealism to Anarchy .....	106
The Perils of Conflict: The Drawbacks of Competition and Division .....	108
<b>Chapter 4: Thinking About the Criminologies of Everyday Life .....</b>	<b>112</b>
A Challenge to Sociological Criminology .....	112
The Economics of Crime and Punishment .....	114
The Orienting Strategy of the Postclassical Theories: Situation, Temptation and Opportunity .....	131
Everyday People, Rational Choices: Understanding Criminals in Modern Society .....	134
Crime Prevention through Environmental Design and the Orienting Strategy of Environmental Criminology .....	150
Criminological Theory in Transition: From the Sociological to the Geographical Imagination .....	155
Unit Theories in Environmental Criminology: The Pattern of Crime .....	158
On the Ramifications of “Armchair Theorizing” .....	175
<b>Chapter 5: Psychological Research Programs and Criminology .....</b>	<b>184</b>
I, Me, Mine: The Psychodynamic Research Program in Criminology .....	188
Childhood, Delinquency and Criminality: Unit Theories in the Psychodynamic Program .....	192
Psychoanalysis and Its Discontents: The Humanist Force in Criminology .....	198
Better Behavior through Science: The Behaviorist Program .....	201
Breaking Away from Behaviorism: Bandura’s Social Learning Theory .....	217
The Good, the Bad, and the Criminal: The Impact of Moral Development in Criminology .....	227
A Brief History of Psychological Interventions .....	236
<b>Chapter 6: The Rise of Biosocial Theories .....</b>	<b>241</b>
Controversy in Criminological Theory .....	241
Redefining the Problem: Criminality, Antisocial Behavior, and Psychopathy .....	247
Evolution of the Biosocial Orienting Strategy .....	248
Better Understanding through Science? The Observational Set of the Biosocial Research Program .....	261
Behavioral Genetics and Criminality: Understanding the Dynamics of Genes and Environment .....	264
Rediscovering Man as a Part of Nature: Evolutionary Theories of Criminality .....	269
Neuroscientific Approaches: The Brain’s Role in Behavior .....	285
Integrated Biosocial Theories .....	293
Towards a Biosocial Criminology? .....	313
<b>Chapter 7: Examining the Impact of The Developmental and Life Course (DLC) Theories .....</b>	<b>317</b>
A New Age of Criminological Theory? .....	317
Key Debates and the Origins of the DLC Research Program .....	318

Out of Many, One: Foundational Elements of DLC Program.....	326
Integration through Elaboration: Thornberry’s Interactional Theory .....	331
Hell Raisers and Their Protégés: Moffitt’s Developmental Taxonomy .....	336
Integrating Across Problem Sets: Farrington’s ICAP Theory.....	342
Chaos and Criminality: Sampson and Laub’s Age-Graded Theory.....	347
A Synthesis of Orienting Strategies .....	353
One Theory to Rule Them All, One Theory to Bind Them? Agnew’s General Theory .....	357
Complementary and Competing Modes of Growth .....	360
Never too Early, Never Too Late: Practical Ramifications of the DLC program.....	364
Pushing the Boundaries of Criminological Theory .....	366
<b>Conclusion: The Philosophy of Science and Its Relevance to Criminology .....</b>	<b>369</b>
Development of Orienting Strategies .....	370
Relationships between Theories .....	373
Level of Explanation, Problem Focus and Scope.....	376
Theory Groups and Scholarly Chains.....	379
Future Directions .....	382
The Relevance of the Philosophy of Science to Criminological Theory .....	386
<b>Reference List.....</b>	<b>390</b>

## LIST OF FIGURES

Figure 1: Elements of an orienting strategy .....	32
Figure 2: Relationship of Orienting Strategy to Theoretical Research Program .....	34
Figure 3: Turk's Theory of Criminalization .....	68
Figure 4: Quinney's Theory Social Reality of Crime Theory .....	72
Figure 5: Chambliss and Seidman's Conflict Theory .....	76
Figure 6: Conflict Criminology Trajectory .....	80
Figure 7: Marxist Trajectory and Resulting Branches .....	86
Figure 8: New Deviancy-Left Realist Trajectory .....	93
Figure 9: Young's Square of Crime .....	96
Figure 10: Constitutive Criminology Trajectory .....	99
Figure 11: Lanier and Henry's Prism of Crime .....	105
Figure 12: Orienting Strategy Competition in Radical Criminology .....	109
Figure 13: Becker's Economic-Deterrence Theory .....	115
Figure 14: Gibbs's Deterrence Theory .....	118
Figure 15: Wilson's Neoclassical Theories .....	122
Figure 16: Van Den Haag's Theory of Punishment .....	127
Figure 17: Cohen and Felson's Routine Activities Theory .....	136
Figure 18: Clarke and Cornish's Rational Choice Theory .....	144
Figure 19: Environmental Criminology Orienting Strategy .....	157
Figure 20: Environmental Criminology Trajectory .....	160
Figure 21: Gottfredson and Hirschi's General Theory of Crime .....	172
Figure 22: Relationship between Problem Focus, Level of Explanation and Theory Type in the Postclassical Research Program .....	181
Figure 23: Orienting Strategy Development in Psychology .....	186
Figure 24: Psychodynamic Research Program .....	193
Figure 25: Behaviorist Research Program .....	206
Figure 26: Eysenck's Criminal Personality .....	213
Figure 27: Social Learning Research Program .....	219

Figure 28: Moral Development Research Program .....	228
Figure 29: Biosocial Orienting Strategy .....	249
Figure 30: Ellis's r/K Theory .....	273
Figure 31: Belsky's Conditional Adaptation Theory.....	283
Figure 32: Neuroscientific Trajectory.....	287
Figure 33: Wilson and Herrnstein's Integrated Rational Choice-Biosocial Theory .....	299
Figure 34: Evolutionary-Ecological Theories.....	307
Figure 35: Moffitt's Developmental Taxonomy.....	337
Figure 36: Farrington's Integrated Cognitive Antisocial Potential (ICAP) Theory .....	343
Figure 37: Sampson and Laub's Age Graded Theory and Informal Social Control .....	348

## **LIST OF TABLES**

Table 1: Key Foundational Elements in Radical Criminology Orienting Strategy .....	59
Table 2: Key Foundational Elements in the Neoclassical-Deterrence Orienting Strategy .....	124
Table 3: Key Foundational Elements in the Postclassical Criminology Orienting Strategy .....	131
Table 4: Key Foundational Elements in the Psychoanalytic Orienting Strategy .....	189
Table 5: Key Foundational Elements in the Humanist Orienting Strategy .....	199
Table 6: Key Foundational Elements in the Behaviorist Orienting Strategy.....	203
Table 7: Key Foundational Elements in the Social Learning Orienting Strategy.....	221
Table 8: Key Foundational Elements in the Moral Development Orienting Strategy .....	227
Table 9: Key Foundational Elements in the Biosocial Orienting Strategy .....	260
Table 10: Key Foundational Elements in Developmental-Life Course Orienting Strategy .....	326

## **CHAPTER 1: INTRODUCTION**

### **Defining the Puzzle: Challenges to Understanding Theory Growth in Criminology**

Several obstacles, both internal and external, stand in the way of a clear understanding of the development of criminological theory. One internal obstacle is a great deal of confusion surrounding much of the terminology used when discussing criminological theory and social theory in general (Wagner, 1984; Messner, Krohn, and Liska, 1989; Williams and McShane, 2004). The confusion over terminology has impeded the development of clear and coherent theories. Indeed, numerous categorization schemes have emerged in modern criminology, many of which are not compatible with each another (e.g., Hirschi, 1979; Pearson and Weiner, 1985; Bernard and Snipes, 1996). This confusion has occurred, in part, because criminologists often seem to be unaware of important historical developments in their own field of study (Laub, 2004; Rafter, 2008). This has led to many “reinventions of the wheel” and many cases of “old wine in new bottles” (Bursik, 2009).

The criminal justice system can also have an effect on criminological theorizing. However, there are few attempts to understand exactly how criminological theories and criminal justice system practice interact with and influence one another. How much does the relationship between the criminal justice system and criminology affect the way in which criminologists theorize? The lack of knowledge about this relationship constitutes an important external obstacle that serves to obscure our understanding of the development of criminological theory.

An in-depth analysis of criminological theory and a rigorous exploration of its underlying roots could provide some answers to the problems described above. The goal of this dissertation is to clarify how contemporary criminological theories came to be, and to uncover the disciplinary influences that have contributed to their origins. To do this, a model of theory growth will be proposed and applied to modern theories of crime and criminality. This model is derived from previous theoretical work undertaken in the philosophy of science (Lakatos, 1970; Feyerabend, 1976; Laudan, 1977), sociology (Wagner, 1984), and criminology (Bernard and Snipes, 1996). However, before discussing the model any further, it is necessary to explore in greater depth the obstacles that impede theory progress.

Criminologists (and most social scientists) tend to use terminology inconsistently and interchangeably (Meier, 1984, Messner, Krohn, and Liska, 1989; Gibbons, 1997). Foremost amongst these is the use of the word *theory*. Theory is often used by social scientists interchangeably with philosophy, perspective, approach, and model (Wagner, 1984; B. Cohen, 1989). This has led to numerous internal obstacles in theory-building in criminology including confusion about the differences between theories and their underlying philosophies (Bottoms, 2008), levels of explanation and scope (Short, 1985; Bernard and Snipes, 1996), the problem focus of theories (Pinatel, 1963 as cited in LeBlanc, 1998) and the nature of causation in human (and criminal) behaviour (Wikstrom, 2008).

Literature from the philosophy of science and theory construction in sociology proves useful in resolving some of these internal obstacles (Popper, 1962; Kuhn, 1962; Lakatos, 1970; Feyerabend, 1976; Laudan, 1977; Ritzer, 1981; Wagner, Berger, and



Zelditch 1984, 1985, 1993, 1997; Wagner, 2007).<sup>1</sup> This body of work provides guidelines for clarifying terminology, suggests frameworks for differentiating between theoretical mechanisms and their underlying philosophical assumptions, and contributes to a deeper understanding of recent theory development in criminology.

Another important internal aspect of theory growth occurs when scholars interact with each other in the workplace, at academic conferences or in social situations. While it may seem somewhat obvious, this dimension of theory growth has received little attention in discussions of criminological theory.<sup>2</sup> However, some scholars outside of criminology have noted this dimension of growth in other fields. For example, Mullins (1970, 1983) has pointed out the importance of “theory groups” and their interactions in the fields of biology and sociology. In a similar vein, Collins (1998) has described how “interaction ritual chains” have been responsible for the proliferation of various philosophies throughout human history. The same can be said of criminological theories; they grow, in part, as a result of interactions between scholars who are colleagues. Akers (1998) discusses the importance of these interactions in the following passage:

I am unpersuaded by the extreme sociology-of-knowledge argument that all ideals, ideology, theory, and knowledge are simply reflections of the locations of their authors and promoters in a particular sociocultural context. I do believe, however, that personal history, being in a particular place at a particular time, does have some impact on a scholar’s work. Certainly, one’s own ideas are strongly influenced by interaction with colleagues and students. (3)

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<sup>1</sup>Gholson and Barker (1985) argued that the work of Lakatos (1970) and Laudan (1977) is useful in understanding the development of theories in psychology. Indeed, the discipline of psychology seems to be characterized by a number of competing programs (e.g., the psychoanalytic approach, behaviourism, social learning, and moral development) each with its own set of adherents. Zimbardo’s (1980) use of “forces” in psychology and Kurtines and Gewirtz’s (1995) discussion of the field of moral development also have striking parallels to Lakatos’s (1970) and Wagner’s (1984) use of research programs.

<sup>2</sup>There are scattered examples of references to connections between criminological theorists (for instance, see Lilly, Cullen, and Ball, 2007). However, no consistent effort has been made to understand how these connections contribute to theory growth.

Laub (2004) makes a similar point and concludes that the development of criminology, and by extension criminological theory, is influenced by factors such as personal history and internal developments in the field.

Several prominent scholars claim that many criminologists seem to be unaware of historical developments within their own field (Rafter, 2008; Bursik, 2009). For example, Laub (2004) has suggested that, “The field of criminology lacks a sense of its own history” (pg. 1). Garland (1985) goes somewhat further and links a lack of internal understanding of criminological theory to the confusion surrounding theory and practice:

What is missing (in criminology) is any detailed account of the formation of the criminological programme, its internal characteristics and conflicts and, most importantly, of the process by which this programme entered into the strategies and institutions of government in Britain and elsewhere... (78)

The relationship between theory and practice is made clearer when one is familiar with both the internal and external factors that influence theory growth.

Wagner (1984) also points out that various “sociological processes” and “external factors” play a role in theory development. External factors may be of particular interest when trying to understand the history of criminological theory, given the connections criminology has to the criminal justice system. However, this relationship between theory and practice should not be viewed as a ‘one-way street’; theories also influence the criminal justice system. Clearly, theory and practice constitute something akin to a dialectical relationship. Stanley Cohen (1981) illustrates this idea in the following passage:

The development of social scientific theory and knowledge takes place not just within the heads of individuals, but within particular institutional

domains. These domains, in turn, are shaped by their surroundings: how academic institutions are organized, how disciplines are divided and subdivided, how disputes emerge, how research is funded and how findings are published and used. In criminology, an understanding of these institutional domains is especially important for knowledge is situated and not just, or not even primarily, in the pure 'academic' world, but in the applied domains of the state's crime control apparatus. (220)

A complete analysis of criminological theory should not only examine the internal dynamics of theories, but should also include some discussion of how theories have been used in the criminal justice system, and why certain theories have received more attention than others.

It is clear that criminological theories have, at various points in time, become incorporated within the criminal justice system. For example, certain ideas or assumptions provide justification for a variety of criminal justice system interventions. This has led to the formation of a variety of 'governmental rationalities' which are "...ways of thinking and styles of reasoning that are embodied in a particular set of practices" (Garland, 1997: 184). These 'governmental rationalities' are important to understanding how theories have become represented in the practical world because they play a role in organizing certain criminal justice system practices, and supply them with objectives and a knowledge base.

An especially interesting recent development is the rise of 'evidence-based' policies in criminal justice systems in the UK, Canada, and the U.S. (Garland, 2000; Solesbury, 2001). Criminological theories, while not always acknowledged, are logically embedded in the underlying philosophies of many of these interventions. In fact, Pawson (2006) contends that the interventions themselves can be seen as theories. While the point made here is important, it might be more appropriate to suggest that all

interventions are based on some sort of underlying theoretical rationale. Given this fact, it seems as though criminal justice system interventions could also provide criminologists with some important hints as to how theory-building takes place in criminology, and how this process interacts with criminal justice system practice.

In many cases, previous attempts to incorporate criminological theories into criminal justice system practices have either had unintended consequences (S. Cohen, 1984) or have resulted in certain theories being unfairly characterized, and abandoned (Moynihan, 1969; Lilly, Cullen and Ball, 2007). Further, Bottoms (2008) suggests that many empirical and applied researchers are unaware of their own theoretical stances. If we are to make sense of criminal justice policies and to understand why some fail, it is important to be aware of their underlying theoretical basis. By analyzing the growth and development of criminological theory internally and its external interactions with the criminal justice system, it might be possible to avoid or minimize these unfortunate consequences in the future.

## **Methods**

To counter what Laub (2004) calls the “collective amnesia” characterizing criminology, a historical and analytical method will be employed in this dissertation. More specifically, this will involve a rigorous analysis of criminological theory beginning in the 1970s.<sup>3</sup> Part of this work will be to apply an existing model of theory growth proposed by Wagner (1984) to contemporary theories in criminology. The basis for this

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<sup>3</sup> Given that criminological theory accumulates, theories before this era are also relevant, but will not be discussed in great detail here. The decade of the 1970s seems to be a sort of ‘watershed’ with regards to theory development in criminology as well as an important starting point if one wishes to understand current policies in the criminal justice system.

model is the distinction between *unit theories* (i.e., specific explanations of phenomena) and *orienting strategies* (i.e., philosophies that guide theory-building).

Since its introduction, Wagner's (1984) model has undergone several important revisions and an effort will be made to include these changes in the present analysis (Wagner and Berger, 1985; Berger and Zelditch, 1993, 1997; Wagner, 2007). In addition, useful ideas from other scholars from both the philosophy of science (Feyerabend, 1976; Laudan, 1977) and criminology (Bernard and Snipes, 1996) will be incorporated with the hope of explaining more aspects of theory growth in criminology. First, Feyerabend's (1976) notion of "anything goes" and the importance of non-conformist thinking can be used to explain large-scale changes or, to use a Kuhnian term, "paradigm shifts" in criminology (i.e., deviance as a catalyst for change). Second, Laudan (1977) has suggested that research traditions<sup>4</sup> can be integrated or usefully combined; this is another key aspect of theory growth and integration. More precisely, this helps to explain integration that is not clearly propositional (i.e., integration that occurs on the philosophical level and not between specific theories).

One major drawback of Wagner's (1984) model is that there is little discussion of the scope, problem focus, or level of analysis of unit theories. In the field of criminology, these aspects of theory are crucial since criminological theories often have a specific problem focus (e.g., criminality or the criminal act) and are sometimes formulated at different levels of explanation (e.g., the micro, meso or macro-levels). In addition, theories may emphasize different levels of data analysis (e.g., individual differences or

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<sup>4</sup> These research traditions are also sometimes called metatheories (see, for example, Williams and McShane, 2010). Wagner (1984) refers to them as "orienting strategies." As will be demonstrated in Chapter Two, they all refer to the same thing.

structure-process theories) (Bernard and Snipes, 1996; Akers, 2009; Bernard, Snipes and Gerould, 2010). To understand these differences, the level of analysis and the problem focus of each theory will be clearly identified. Ideas from Bernard and Snipes (1996) will also be incorporated into the model of theory growth used here. As will be shown later, theory integration can occur across levels and explanatory domains. The distinctions made in the level of analysis and explanation, and problem focus will prove particularly useful in understanding these cross-level integrations.<sup>5</sup>

As mentioned previously, interactions between scholars as colleagues or in the context of mentor-student relationships will be discussed whenever possible. These connections are important because often student will embrace their mentor's theory and will either elaborate upon it or apply it to a new area in an attempt to solve new problems or puzzles.

The interactions and connections between criminology and the criminal justice system can also affect and sometimes impede criminological theorizing. For example, the emergence of criminal justice programs seems to have affected the content of criminology courses as a whole. Further, the involvement of the criminal justice system has affected the nature of the theories produced criminology (Frauley, 2001; Ratner, 2006). Given these facts, the underlying theoretical bases of various criminal justice system practices will be examined with the goal of furthering an understanding of the relationship between theory and practice.

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<sup>5</sup>Several criminologists have pointed that these cross-level integrations are particularly difficult to understand (Messner, Liska, and Krohn, 1989). This seems to be because it is difficult to "fit" different theories into the different levels of explanation (e.g., micro and macro). Some theories may fit into more than one category or may not fit into a category at all (e.g., bridging or meso level theories).

The focus here is analytical rather than archival; the goal is to use historical and sociological analysis to understand contemporary developments in criminological theory and policy that seem particularly interesting or puzzling (Garland, 2001). Efforts will be made to identify key events that help explain current developments in criminological theory and the criminal justice system. This can be seen as an attempt to break free of the “presentist mind-set” that now seems to dominate discussions in many areas of criminal justice and criminology (Garland, 2001: 77-78; Laub, 2004). The empirical data for the analysis will come from a variety of sources including the writings of criminological theorists and theoreticians, research done on criminal justice system interventions, biographical sketches, personal accounts offered by the theorists themselves, and government documents and publications describing criminal justice system interventions. The scope of the analysis is limited to Britain, Canada, and The United States.

### **The Omission of Sociological Theories of Criminality and Crime: A Justification**

After reading the outline of the chapters in this dissertation, it will be noticed that there is no discussion of the traditional<sup>6</sup> sociological explanations of criminality. While there are clearly theoretical research programs in criminology that have grown out of sociological theories, they are not a main concern here. This group of theories has been analyzed in previous work (Heidt, 2003, 2008), and a reiteration of these early theories is not appropriate or useful.<sup>7</sup> The findings can be briefly summarized as follows. Durkheim (1895) and the work of the Chicago School (Park, 1925; Burgess, 1925; Shaw

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<sup>6</sup> The use of “traditional” here is meant to imply early, consensus-oriented criminological theories produced by sociology (e.g., strain, differential association, and control). Critical theories of crime and criminality are a more recent development and will be the subject of analysis for the third chapter.

<sup>7</sup> However, a review of more recent contributions and new incarnations of these classic theories or applications of these theories to problem sets that received less attention early on (e.g., theories of sex offending or white collar crime) would be interesting and should be undertaken.

and McKay, 1942) lay the groundwork for the orienting strategies used by many of these early criminological theories in the sociological tradition including Merton's (1939) strain theory, Sutherland's (1949) differential association theory, and the early control unit theories (Reiss, 1951; Reckless, 1955; and Nye, 1958). Later, each of these trajectories gave rise to their own sets of theories and resulting research programs. Key theories in the strain research program include Albert Cohen's (1955) subcultural theory of delinquency, Cloward and Ohlin's (1960) differential opportunity theory, and Agnew's (1992) general strain theory. Akers's (1966, 1998) social learning theory represents a modern incarnation of Sutherland's (1949) differential association.<sup>8</sup> Important theories in the control research program include Sykes and Matza's (1957) techniques of neutralization and Hirschi's (1969) theory of social bonding.

There are also several modern elaborations of the earlier Chicago School theories that focus on explaining crime at the community-level (Bursik, 1988; Sampson and Groves, 1989; Sampson, Raudenbush and Earls, 1997; Sampson and Raudenbush, 1999). However, a discussion of these is beyond the purview of this dissertation as the focus here is on unit theories that explain criminality and criminal acts. In addition, there are various explanations (Braithwaite, 1989; Hagan, 1989; Miethe and Meier, 1994; Tittle, 1995) that constitute newer or integrated versions of earlier control, strain and learning theories in criminology. Finally, Messerschmidt's (1993) masculinities theory and William's (1999) critical incident metatheory are not true unit theories, and are better thought of as orienting strategies that have failed to yield a clear set of unit theories.

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<sup>8</sup> Akers's (1966, 1998) theory was also greatly influenced by the learning theories in psychology including Skinner's (1953) operant conditioning theory, and later Bandura's (1977) social learning theory. These connections will be described in Chapter 5 which discusses the psychological research programs that have contributed to modern criminological theories.



## **Outline of Chapters**

The focus of the second Chapter is on theory building in the social sciences, and especially criminology. The Chapter will include an examination of the relevant philosophy of science literature (Popper, 1959; Kuhn, 1962; Lakatos, 1970; Feyerabend, 1976; Laudan, 1977), offerings from sociological theorists concerning theory construction (Ritzer, 1981; Wagner, 1984; Wagner and Berger, 1985; Berger and Zelditch, 1993, 1997), and a review of attempts made by criminologists to apply these ideas to the field of criminology (Cole, 1975; Downes, 1976; Young, 1981; Monk, 1988). In addition, the Chapter will cover the literature surrounding theory integration in criminology (Elliott, Ageton, and Cantor, 1979; Hirschi, 1979; Meier, 1985; Pearson and Weiner, 1985; Liska, Krohn, and Messner, 1989; Bernard and Snipes, 1996). Insights from these bodies of knowledge will be combined, and a new model of scientific progress intended to help better understand modern theories in criminology will be proposed.

Chapter 3 will move into an analysis of criminological theory, using the model developed previously, with a focus on the conflict, critical, and radical theories that surfaced during the turbulent decade of the 1970s. Chapter 4 traces some of the developments in criminological theory from the mid-1970s and 1980s, namely the infiltration of the neoclassical deterrence and postclassical theories into criminological thought as well as the rise of environmental criminology.

Chapter 5 consists of a discussion of the various contributions from the different research programs in the discipline of psychology including offerings from psychodynamic and humanistic thought, behaviourist and conditioning theories, social learning theory and work done on moral development. Chapter 6 will be devoted to a

discussion of the biosocial research program in criminology and its origins, and the seventh Chapter reviews the unit theories that compose the developmental-life course research program in criminology. The eighth and final Chapter sets out the conclusions about criminology and theory growth that have emerged through this research.

## **CHAPTER 2: RESEARCH PROGRAMS, METHODOLOGICAL ANARCHY, AND CRIMINOLOGY**

### **A Brief History of Theory Building in Criminology**

Theory building in criminology has gone through a number of different stages since the initial application of positivist methods<sup>9</sup> by Quetelet (1842) and Guerry (1863). These “moral statisticians”<sup>10</sup>, as they are often called, focused on studying changes in official crime rates over time. Taylor, Walton and Young (1976) make an important point about the significance of their work in the following passage:

The first attempts to tackle the problem of crime scientifically were social rather than biological. The transition between classicism and positivism was largely effected by the ‘moral statisticians’...working independently, but almost simultaneously, [they] had drawn very similar conclusions from the publication from 1827 onwards, of the first sets of national criminal statistics (in France). As the figures continued to be published, on an annual basis, it became more and more clear to Quetelet and Guerry, first, that the annual totals of recorded crime remained extraordinarily constant, and second, that the contribution of the various types of crime to the annual total hardly fluctuated at all.

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<sup>9</sup> Positivism refers to the application of the scientific method to human behaviour, and can be viewed as a part of the empiricist tradition. Positivists believe that certain biological, psychological, and sociological factors influence behaviour, and therefore may cause (or induce) a person to commit crime. Some commentators (e.g., Einstadter and Henry, 2006) suggest that there are two basic forms of positivism: individual and sociological (or kinds-of-people vs. kinds-of-places explanations). There is an emphasis on determinism and quantification of behaviour in this tradition, and its favoured methods include hypothesis testing, empirical investigation, categorization, and classification. Positivist criminology can also be seen as diametrically opposed to the Classical school of Criminology; however, there are some attempts to reconcile the two traditions (see Chapter 4 for some examples). In-depth discussions of positivism in criminology can be found in Taylor, Walton, and Young, 1976; Marshall, 1998; and Einstadter and Henry, 2006.

<sup>10</sup> The term “moral” is used because these particular statisticians are interested in statistics that are indicative of social pathology (e.g., rates of crime, suicide, and divorce).

Such a discovery carried with it the clear implication that (officially-recorded) crime was a regular feature of social activity, as distinct from being the product of individual (and therefore arbitrary) propensities to asocial activity. (pgs. 37-38)

The basic technique of using official statistics still informs some modern criminological theories (Sampson, Raudenbush and Earls, 1997; Messner and Rosenfeld, 2001). However, most contemporary theories of criminality focus on the criminal actor rather than society.

With the rise of Darwin's (1859, 1871) monumental work on evolutionary theory, emphasis shifted from social aspects of crime to biological aspects of criminality. Thus, Lombroso (1876) initially focused upon the importance of physical characteristics in distinguishing criminals from non-criminals; consequently, the theory he developed emphasized individual differences (Bernard, Snipes, and Gerould, 2010).<sup>11</sup> For Lilly, Cullen and Ball (2007: 20), this activity "pushed the study of crime away from abstract, metaphysical, legal and juristic explanations as the basis of penology" to a more scientific or positivist approach examining criminality and the conditions under which people commit crime. Obviously, the initial version of Lombroso's (1876) theory (i.e., the crude idea that criminals could be identified by different superficial or "measurable" physical characteristics) was abandoned long ago. However, the positivist method that he used has had a lasting impact upon theorizing in criminology as the search for individual differences that contribute to criminality continues to this day.<sup>12</sup>

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<sup>11</sup> Later Lombroso broadened his approach to include factors outside biology, including social, cultural, and economic variables that he deemed important to understanding criminality (Lilly, Cullen, and Ball, 2007).

<sup>12</sup> For a leading contemporary individual difference theory, see Gottfredson and Hirschi's (1990) general theory of crime. Other examples of these types of theories are also prevalent in psychological explanations of criminality, and in the area of biosocial criminology.

In the early to mid-twentieth century, the focus shifted from biological and physical factors to a more exclusive emphasis on social factors with the work of the Chicago School (Park, 1925; Burgess, 1925; Shaw and McKay, 1942). Sociological positivism dominated sociological theory and research for several decades and had a lasting influence on the field of criminology.<sup>13</sup> The influence of sociology brought with it a focus on social structures and processes that was useful in explaining criminality and crime rates. Starting in the 1950s poverty and a lack of opportunities were assumed to be the main causes of crime (Merton, 1938; Sutherland, 1947; A. Cohen, 1955; Cloward and Ohlin, 1960). During the 1960s, sociologists also suggested that societal reaction, labeling, and the formation of the criminal law were important to understanding human, and especially, criminal behavior (Lemert, 1951; Becker, 1963; Taylor, Walton, and Young, 1973).

In the late 1970s, the problem focus shifted from explaining criminality to explaining crime and criminal acts (e.g. Cohen and Felson, 1979). During this era, sociological explanations such as equating crime and poverty started to fall out of favor. Society had experienced greater prosperity but crime rates were higher than ever. Ideas from political science, economics, and social ecology swept through the field of criminology and began to dominate and influence its theories and research (see Hawley, 1950; Becker, 1974; Wilson, 1976). After an extended hiatus, biological factors also

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<sup>13</sup>The work of Edwin Sutherland is often cited as the primary reason for the connection between criminology and sociology (for a detailed discussion, see Sampson and Laub, 1991). Most criminologists consider this to be a mixed blessing at best (Laub, 2006). In other words, sociological explanations of criminality eclipsed all other approaches to explaining criminal behavior (e.g., biological, psychological, and economic). Sampson and Laub (1991) and Walsh (2002) suggest that the domination of sociology over the study of crime and criminality served to inhibit theory growth.

began to creep back into discussions of criminality in the form of biosocial criminology (for a discussion see Fishbein, 2001 and Walsh, 2002).

In the 1980s, and continuing into the 1990s, several interesting developments took place within criminological theory and many of these relate to theory construction. Specifically, the process of integrating theories has generated a great deal of debate and discussion (Elliott, Ageton, and Cantor, 1979; Hirschi, 1979; Meier, 1985; Pearson and Weiner, 1985; Messner, Krohn, and Liska, 1989; Bernard and Snipes, 1996). The various trajectories in criminology (i.e., strain, control, and differential association/social learning) have yielded a great deal of knowledge that is waiting to be synthesized. However, in recent years, the discussion of theory integration in criminology has diminished, leaving the concept poorly defined and frequently misunderstood.

To more clearly understand theory construction and integration in the social sciences, and criminology in particular, it will be necessary to examine literature from both the philosophy of science and the sociology of knowledge, including a model of theory growth proposed by Wagner, Berger, and Zelditch (1984, 1985, 1993, 1997, and 2007). In addition, it will be useful to review various attempts made by criminologists to apply the concepts generated by the philosophy of science. The examination will be helpful for at least two different reasons. First, one must keep in mind that until roughly the 1970s, theory building in the social sciences (and criminology) was influenced primarily by the methods of the natural sciences (Bottoms, 2008). Consequently, any theory of scientific progress in the social sciences is inevitably informed by the development of theory growth in the natural sciences. Second, and perhaps more importantly, both the philosophy of science and the sociology of knowledge literature can

clarify what can be a confusing area of study. In criminology, theory building, including integration, has been hampered by the lack of a specific and consistent terminology and technique. There are many examples of inconsistent use of important terms in the social sciences and criminology. For instance, Wagner (1984) has pointed out that the word ‘theory’ is used in many different ways in the social sciences. In many cases, people using the word ‘theory’ are actually referring to a philosophy or set of untestable assumptions. Bernard Cohen (1989) has observed that many terms used to describe theoretical elements (e.g. proposition, axiom, assumption, postulate, and theorem) are used interchangeably in the literature. More generally, Meier (1985) has argued that for decades criminologists have been taught about ‘substantive theory’ rather than being taught how to theorize on their own. Since there is no real consensus on theory building in criminology, the debate about theory integration in criminology has also been disorganized and unproductive overall (see Hirschi, 1979; Elliott, 1985; Messner, Krohn and Liska, 1989).

Clearly, there is no consensus as to how one should proceed with theory construction, and theory integration, in criminology. However, by combining insights from an existing model of theory growth (Wagner, 1984; Wagner and Berger, 1985; Berger and Zelditch, 1993, 1997) and ideas from other scholars such as Feyerabend (1976), Laudan (1977), and Bernard and Snipes (1996), a new model of scientific progress intended to help understand some important changes that have taken place within criminology in recent years will be proposed. To demonstrate its usefulness in understanding knowledge development, the model will be applied to some contemporary theories in criminology.

## **Disentangling Terminology, Act I: Theories and Philosophies**

The work of Karl Popper (1959, 1962) represents one of the early critiques of logical positivism in the natural sciences. He argued that knowledge advances through bold conjecture and refutation and the falsification of hypotheses. We often boldly propose theories, test them and determine whether they are falsified or if they receive support. Positive results do not permanently verify the theory since it may be falsified after subsequent empirical tests. The implication here is that falsified theories are to be abandoned. However, Popper (1959) concedes that in some cases it is acceptable to introduce an auxiliary hypothesis as long as it does not “diminish the degree of falsifiability or testability of the system in question” (pg. 83).<sup>14</sup>

During the 1960s, the Popperian view of science was famously called into question by the physicist and philosopher of science, Thomas Kuhn (1962). Kuhn claimed that science did not proceed in a completely rational and linear way as Popper had suggested. First, he pointed out that falsified theories are not always abandoned by scientists and many actually remain in wide use.<sup>15</sup> Second, Kuhn (1962) argued that science is characterized by paradigms which are broad collections of laws, principles, and assumptions that all scientists must learn to use and accept as true. Within these paradigms, scientists generate specific theories to solve scientific problems. Paradigm shifts may occur when anomalies in the dominant paradigm begin to accumulate. Eventually, after enough anomalies have accumulated, the scientific community will lose

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<sup>14</sup> Wagner (2000) goes further and suggests that in most cases it is actually irrational to abandon falsified theories.

<sup>15</sup> Kuhn suggested several reasons why theories are not always abandoned after falsification. Falsified theories may remain in practice because either there is no better alternative theory or because ad hoc modifications may be devised that address the problem(s) within the theory. According to Kuhn (1962), practical use (and not empirical support per se) determines whether or not a theory is rejected or retained (pgs. 79-80).



faith in the dominant paradigm and will adopt an alternative paradigm that is more capable of dealing with the unsolved problems (Kuhn, 1962).

Kuhn (1962) describes three discernible stages of science. First, there is a *pre-science* stage in which no one paradigm is clearly dominant. When a dominant paradigm emerges, science is thought to enter a second stage of *normal science* in which scientists constantly attempt to enlarge the paradigm through the production of theories that explain specific phenomena (he called this ‘puzzle-solving activity’). Finally, after enough anomalies have accrued, a *crisis* will arise, and revolutionary science will occur, leading to a paradigm shift (Kuhn, 1962).<sup>16</sup>

Kuhn’s (1962) work points out the importance of considering the social and human aspects of scientific activity. According to Richards (1987), “Kuhn’s view of science thinks in terms of communities of scientists rather than of individuals. To this extent it is a sociological theory,” (p. 61).

One major shortcoming of Kuhn’s (1962) description of science was that he failed to fully explain the relationship between paradigms and their constituent theories. Hoping to address this problem, Lakatos (1970) proposed the idea of a research program. This concept essentially divides science into two primary parts: the negative and positive heuristics. The negative heuristic of a research program consists of foundational assumptions that cannot be abandoned or modified without major changes to the research program. The positive heuristic contains sets of hypotheses and theories that help us solve particular problems along with various hints and suggestions as to how one can

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<sup>16</sup> Popper (1970) later acknowledged that ‘normal science’ did take place, but claimed it was weak science. According to Popper (1970), science should always be progressing and should never take on an impervious, ‘dogmatic’ nature.

improve these theories (Laudan, 1977: 77). Elements within the positive heuristic are expendable and may be sacrificed if they are shown to be non-progressive or unhelpful to knowledge development.

Lakatos (1970) agreed with Popper (1959) that theories that are falsified need not be immediately abandoned. However, he goes further, suggesting that theories should be evaluated by examining their predecessors, not only their competitors. Essentially, the importance of the series of theories is emphasized and this is called a research program. Lakatos (1970) also claimed that several different research programs may be in operation at once and that each will contain sets of different, but related theories. Programs are also thought to go through progressive and/or degenerating modes called 'problemshifts'. Progressive problemshifts must be both theoretically and empirically progressive. Lakatos (1970) explains this statement in the following passage:

Let us say that such a series of theories is *theoretically progressive* (or *'constitutes a theoretically progressive problemshift'*) if each new theory has some excess empirical content over its predecessor, that is, if it predicts some novel hitherto unexpected fact. Let us say that a theoretically progressive series of theories is also empirically progressive (or *'constitutes an empirically progressive problemshift'*) if some of this excess empirical content is also corroborated; that is, if each new theory leads to an actual discovery of some *new fact*. Finally let us call a problemshift *progressive* if it is both theoretically and empirically progressive and *degenerating* if it is not. We *'accept'* problemshifts as 'scientific' only if they are at least theoretically progressive; if they are not, we *'reject'* them as 'pseudoscientific'. Progress is measured by the degree to which a problemshift is progressive, by the degree to which the series of theories leads us to the discovery of novel facts. We regard a theory in the series as 'falsified' when it is superseded by a theory with higher corroborated content. (pg. 118, italics in original)

This debate about the growth of knowledge generated considerable controversy not only within philosophical circles but also in the social sciences, and specifically criminology. In turn, this led to several applications of the concepts (i.e., paradigms and research programs) to various areas of sociological and criminological theory. In the next section, some of these applications will be reviewed with special attention paid to the efforts made to apply these concepts to the field of criminology.

### **Paradigms and Research Programs in the Social Sciences**

Scholars have made several notable attempts to apply Kuhn's notion of paradigms and the Lakatosian concept of research programs to various areas of theory in the social sciences.<sup>17</sup> One of the earlier examples of an analysis of criminological theory using philosophy of science concepts is found in Cole's (1975) article entitled "The Growth of Scientific Knowledge: Theories of deviance as a case study". Using citations as an indicator of influences on the field, Cole (1975) explained the rise and fall of strain theory in criminology. His primary conclusion was that strain theory is best conceptualized as a network of interconnected theories and research – similar to the Lakatosian notion of research programs.

Downes (1976) tried to directly apply the concept of research programs to explain the shift from traditional criminology to the sociology of deviance in British criminology during the 1970s. While Downes (1976) suggests that the Lakatosian model is useful

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<sup>17</sup> While not specifically focused on criminology, some of the other attempts are somewhat relevant to criminology since the theories and perspectives analyzed have been used in the study of criminal behavior. Van IJzendoorn and Tavecchio (1987) applied Lakatos's research programs to attachment theory. Burawoy (1990) used the notion of research programs in an attempt to describe the theoretical status of Marxism. Ritzer (1981) applied a reformulated version of Kuhnian paradigms to the discipline of sociology as a whole. In each application, the use of the concept seemed to provide a clearer understanding of theoretical activity in each area.

(especially the criteria used to indicate progressive and degenerative problemshifts), he also observes that there are many pieces of criminological research which "...do not fit neatly into the scheme of things adopted..." (pg. 498). He adds that competition between programs seems to be an important factor in stimulating progressive problemshifts in the field of criminology (Downes, 1976).

Young (1981) made use of the concept of paradigms to explain the advantages and disadvantages of the various approaches within the field of criminology in the late 1970s. Young never specifically refers to Kuhn's (1962) work although he still seems to be drawing on some of his ideas. It should also be noted that Young's application and resulting model seem to have been quite successful as it has been used as analytical template by Einstadter and Henry (2006) in their textbook on criminological theory.

Young (1981) argues that there are six major paradigms in criminology: classicism, positivism, conservatism, strain theory, new deviancy theory, and Marxism. To pinpoint the specific strengths and weaknesses of each approach he attempted to clarify six different types of base assumptions including their respective views of human nature and the social order, definitions of what constitutes crime, their views on the extent and distribution of crime, and the principal causes of crime identified by each perspective (Young, 1981). He closed by saying that it would be a mistake to conclude that these structures develop in clear, non-overlapping stages, and that there are often

“uni-linear ties” within each approach.<sup>18</sup> Finally, he points out that criminology is rarely dominated by one paradigm or theory.

Given the lack of any one dominant and overarching paradigm in criminology or any of the social sciences it appears that Young (1981) might actually be talking about the Lakatosian concept of a research program as well. In any case, this term might more accurately represent the field of criminological theory than would Kuhnian (1962) paradigms.

More recently, Monk (1988) attempted to apply the concept of Lakatosian research programs to the field of criminology. Unfortunately, this application was riddled with problems. Monk (1988) started by noting, rightly, that other than Kuhn’s (1962) notion of paradigms, the philosophy of science literature has been sorely neglected in criminology. Further, he points out that an inherent weakness of using Kuhnian paradigms is that Kuhn’s (1962) original argument has drawn a great deal of criticism, and that the Lakatosian (1969) model would likely provide more insight.

Monk (1988) draws heavily upon Tiryakian’s (1978, 1979, and 1986) application of Lakatos to sociology and this seems to be his downfall. Monk (1988), like his predecessor Tiryakian, spent a great deal of time attempting to locate a “charismatic leader” of criminology whose theory could serve as a theoretical core of the field but his efforts prove to be unsuccessful. Monk (1988) mentions that Edwin Sutherland is likely the closest thing criminology has had to a “charismatic leader”. He was correct in his

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<sup>18</sup> For example, there may be several different forms of positivism, all inspired by a different discipline. So one could adhere to biological positivism, psychological positivism, sociological positivism, etc. (Young, 1981). One could also argue that there are several approaches informed by classical criminology like neoclassical or post-classical criminology (see Einstadter and Henry, 2006 for more details).

assessment that Sutherland cannot fill this role especially when one considers the critiques levelled at his work (see Laub and Sampson, 1991 for instance). It appears that Monk (1988) may have been overly concerned with finding a charismatic theorist rather than investigating the ideas presented in the theories.<sup>19</sup> Most disappointing is the fact that Monk (1988) neglects to apply many of the relevant Lakatosian concepts (e.g., hard core and protective belts, and research programs) to theories and theorizing in criminology.

It seems as though most criminologists see the field of criminology developing in the context of research programs. Given that several leading scholars have made use of this concept, there is arguably some merit to the model. At the same time, in most cases some problems with Lakatos's (1970) model have also been identified. The major strengths of the model seem to be that it addresses the group aspects of scientific development (Szamka, Lovaglia, and Wysienska, 2002) and the existence of two theoretical entities operating at once.<sup>20</sup>

Wagner's (1984) model of theory growth is derived from the Lakatosian notion of research programs and was developed in the field of sociology. The Wagnerian model seems to be a good choice to explain theory growth in criminology for several reasons.<sup>21</sup> First, even if they receive many negative evaluations, theories in criminology are rarely abandoned. Wagner (2000) argues even more forcefully than Popper (1959, 1962) or Lakatos (1970) for retaining theories after falsification; he goes so far as to say that it is

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<sup>19</sup> Bernard (2001) also states that criminologists often focus too much on the person rather than on their theory.

<sup>20</sup> These could be generically called metatheories and theories. According to Kuhn (1962) they would be paradigms and specific explanations of phenomena. In the Lakatosian (1970) model, they would be called the negative and positive heuristics (or the hardcore and protective belts). Whatever terminology is used, one should be aware that each set of terms refers to similar sets of ideas.

<sup>21</sup> It could also be argued that Wagner's model is appropriate because it is based in sociology. Until somewhat recently, criminology operated almost exclusively under the auspices of sociology. Consequently, a great deal of criminological theory is actually sociological theory.

actually irrational to abandon falsified theories. Wagner (2000) illustrates his perspective by the use of metaphor:

I liken the process to that of jigsaw puzzle solving. The first time a solver attempts to insert a piece into a particular location in the puzzle, he may place it inappropriately. Does that mean he should give up and throw away the puzzle? Of course not. The solver rotates the piece, tries it in another location or sets it aside temporarily until more of the puzzle has been revealed. The same is true with respect to theoretical puzzles. The first time a theorist proposes a particular theoretical argument she may do so inaccurately. Does that mean she should give up and throw away the theory? Of course not. The theorist tries a new instantiation, adds a scope condition or revises an assumption and retests the argument. (p.35)

There are many examples in criminology that illustrate the reality of this claim. For instance, Merton's (1938) strain theory and its offspring (A. Cohen, 1955; Cloward and Ohlin, 1960) dominated the study of crime from the late 1950 to the late 1960s (Cole, 1975). These theories gained so much popularity that they were able to influence the state approach to controlling crime in the form of various government initiatives, including the War on Poverty and the Mobilization for Youth program (Moynihan, 1969). Somewhat surprisingly, these theories eventually fell out of favor during the 1970s and through the 1980s<sup>22</sup>, and this could have been viewed as something similar to a falsified theory or degenerative problemshift. However, strain theory is still very much alive in criminological theorizing. Recently, both Agnew (1992, 2001, and 2005) and Messner

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<sup>22</sup>It is difficult to pinpoint one event that caused the loss of faith in strain theory. It must be seen as a gradual decline rather than a sudden fall. Politically, the idea of strain became unattractive when policies and programs resulting from the theory (e.g., War on Poverty, Mobilization for Youth Program) started to be viewed as failures because they did not stem the rising crime rates of the 1960s and 1970s. Criminal behavior came to be seen as an individual choice rather than a social problem. In criminology, both radical and conservative criminologists attacked strain theory (Garland, 2001). One might also argue that development of strain theory had stagnated in the sense that the perspective had failed to generate new and interesting problems for theorists to solve; this halted production of unit theories. Wagner (1984) suggests that fertility is a particularly important aspect of theory growth. It ought to be noted that this may not have been a problem with strain theory per se, but instead a lack of interest in developing the perspective and unit theories.

and Rosenfeld (1988, 2001) have produced important criminological theories that draw on ideas from strain theory.

The success of these theories seems to be related to their increased attention to level of explanation as each theory emphasizes either the micro- or macro- level. For example, Agnew's (1992, 2001, and 2005) general strain theory is proposed at the individual level, and is much more psychological in nature than Merton's (1938) original theory. In addition, he presented his theory formally and has provided guidelines for testing it. Finally, recent formulations of this theory attempt to integrate many other previous criminological theories (learning, control, social disorganization, and masculinities theory to name a few) and incorporated a developmental component (Agnew, 2005). Messner and Rosenfeld's (1988, 2001) institutional anomie theory develops the idea of social structure and its effect on societal crime rates, something they felt was neglected in Merton's (1938) original formulation. The role of social institutions (e.g., family, education, politics, and the economy) in preventing and encouraging criminal behaviour is emphasized. The scope of this theory is limited to serious crime and it is concerned with societal variation in crime rates, so it is clearly on the macro-level. Messner and Rosenfeld (2001) also argue that their theory fills a niche because other "sociological" theories of criminal behaviour (e.g., learning and control theories) are more appropriately categorized as social-psychological (For another similar argument, see Bernard and Snipes, 1996).

Second, criminologists who have made use of the philosophy of science literature that focuses on knowledge development all seem to have arrived at the same conclusion: criminology (which is interdisciplinary) is always characterized by several different and



often competing approaches to explaining crime and criminality. This suggests that the Lakatosian notion of research programs is probably the best choice to explain the process of knowledge development in criminology. Since Wagner's (1984) model is derived directly from the work of Lakatos (1970) and is a great deal more specific to the social sciences, it is an appropriate choice for understanding and explaining theory building in criminology.

### **Orienting Strategy and Its Discontents: Strengths and Weaknesses in Wagner's Model of Theory Growth**

In 1984, David G. Wagner proposed a model of theory growth in sociology based on the growth taking place within a body of theories known as expectation-states theory.<sup>23</sup> Over the years, the model has been refined by and elaborated upon by Wagner and several other sociological theorists (see Wagner and Berger, 1985; Berger and Zelditch, 1993, 1997). The model draws upon the work of several philosophers of science, the most prominent being Popper (1959, 1962) and Lakatos (1970).

Perhaps the most important aspect of the model is the distinction drawn between an orienting strategy and a unit theory. Wagner suggests that there is frequent confusion between the two concepts, given that they are both referred to as 'theory' (Wagner, 1984; Wagner and Berger, 1985). Orienting strategies do not contain specific predictions; rather, they are larger entities that seek to explain what factors are important to achieving

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<sup>23</sup> Expectation-states theory seeks to explain regularities in small, informal, problem-solving groups composed of members who are initially of equal status (also called 'Bales' groups). Eventually, different levels of power and prestige for each group member emerge in response to their interactions over time. The argument revolves around an evaluation/expectation process in which members evaluate their own and each others' past performances. These evaluations become increasingly consistent and can contribute to an 'expectation state' in member in their future evaluations. Consequently, future evaluations will come to be based more on past performances than actual performances in the task at hand (Wagner, 1984, pgs. 80-81). Recently, this program has been absorbed into the larger status characteristics program (Wagner and Berger, 2002).

an understanding of the nature of society (in the case of sociology). According to Wagner (1984: 29), the concept of orienting strategies is similar to that of Kuhn's (1962) paradigms. For example, both Marxism and structural-functionalism could be viewed as orienting strategies. Marxists believe that to achieve a clear understanding of society an examination of problems arising from competition between social classes is always required. In contrast, structural-functionalists believe that examinations of social structures, how they relate to one another, and how they serve specific social functions, will produce a deeper understanding of society. Unit theories are more precise than orienting strategies and contain specific predictions and concepts, all of which are empirically testable. There are many examples of unit theories in criminology. Merton's (1939) strain theory, Hirschi's (1969) theory of social bonding, and Akers' (1998) social learning theory are all examples of unit theories in criminology.

Several philosophers of science (Kuhn, 1962; Lakatos 1970; see also Laudan, 1977) have suggested that two clear entities are operating as knowledge develops. On the one hand, there are overarching philosophies and metatheories that guide and direct the theorist. On the other hand, there are also more specific sets of interrelated propositions and principles that explain exact relationships between variables. These must be kept separate, otherwise widespread confusion and conflict will result (Wagner, 1984, 1992; also see Walker 2002). Sociologists and criminologists have also made this point frequently (see B. Cohen, 1989 for an additional sociological example; see Robinson, 2004, Bottoms, 2008, and Williams and McShane, 2010 for examples from criminology).

Wagner refers to sets of interrelated unit theories as "theoretical research programs" (TRPs). He then goes on to describe a number of structural and contextual

relations that theories in a program may hold, and argues that these relations are also useful for illustrating various forms of theory growth. These relations include elaboration, proliferation, variation, integration and competition. Typically, elaboration occurs when the theorist adjusts the theory to more closely fit the data; in Wagner's view, this is what most theorists are referring to when they mention theory growth. Attempts to make the theory more general (i.e., increase its scope) or rigorous (e.g., expressing a discursive theory as a set of propositions or by clarifying propositions) also fall under the heading of "elaboration" (Wagner, 1984). TRPs characterized by frequent elaboration are thought to be in a linear mode of growth (Wagner and Berger, 1985).

The other theoretical relations are somewhat less common, but all are important in explaining different dimensions of theory-building. Proliferation takes place when explanatory principles are applied to a completely new explanatory domain; consequently, proliferation is often cross-disciplinary and/or cross-level. Proliferation occurs when a theory is imported from an outside discipline or when a theory is applied to a new level of explanation (i.e., a macro-level theory is reformulated and applied at the micro-level). Frequent proliferation will result in a branching type of program (Wagner and Berger, 1985). In some cases, theories share the same problem focus, have similar scope conditions, and may draw upon the same family of concepts (Wagner, 1984; Berger and Zelditch, 1997). However, the two theories may have slightly different explanatory mechanisms and may make conflicting predictions; this relation is called variation. This may occur frequently early on in some programs in order to refine the core principles.

Competition means that two or more theories are vying to explain the same phenomenon and often do this in very different ways, share few scope conditions, and contain conflicting theoretical constructs and principles (Berger and Zelditch, 1997). Finally, integration occurs when two or more theories are combined to form a stronger overall explanatory account.<sup>24</sup> Integration may take place between proliferant<sup>25</sup>, variant or competing theories (Wagner and Berger, 1985). The integration of proliferant theories is the most interesting of these three because, in some cases, this constitutes an example of cross-level integration which has been a topic of great interest in criminology of late (Messner, Krohn, and Liska, 1989; Bernard and Snipes, 1996; Sampson, 2000; Laub, 2006). This relation is, in most cases, quite rare, and represents a major advance in the TRP (Wagner, 1984).

In early accounts of the model, Wagner (1984) and Wagner and Berger (1985) argued that orienting strategies were unchanging entities and they did not include them as a component of a theoretical research program. Orienting strategies were considered constants, and it was suggested that they change extremely slowly, if they change at all (Wagner, 1984). However, in later reformulations of this model, Berger and Zelditch (1993, 1997) have suggested that the portrayal of orienting strategies as fixed and static structures is untenable.

It is obvious that the incorporation of new elements into a program can also be a reaction to metatheoretical directives or assumptions newly added to the orienting strategy of the program, and not solely the result of empirical verification. In other

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<sup>24</sup> It is important to note that certain elements of the original theory are often lost after integration is complete (Wagner and Berger, 1985; Berger and Zelditch, 1993, 1997).

<sup>25</sup> This word does not appear in the dictionary. Wagner (1984) used this term to refer to a theory that has been applied to a new explanatory domain or at a different level of explanation.

words, it is a fairly common occurrence to change a directive or to import an assumption into one's orienting strategy to alter the nature of the theories a program is producing. As Berger and Zelditch (1993) suggest "...at least some elements of orienting strategies grow as a consequence of the experience of using strategies in the construction of theories" (pg. 11). This inclusion of an element (e.g., an assumption or directive) that is not clearly part of a unit theory would not be considered a form of growth in Wagner's (1984) original model.<sup>26</sup> Finally, since elements in the formal sets of a program are often indistinguishable (especially early on), it seems as though the distinction may not be necessary or desirable.<sup>27</sup>

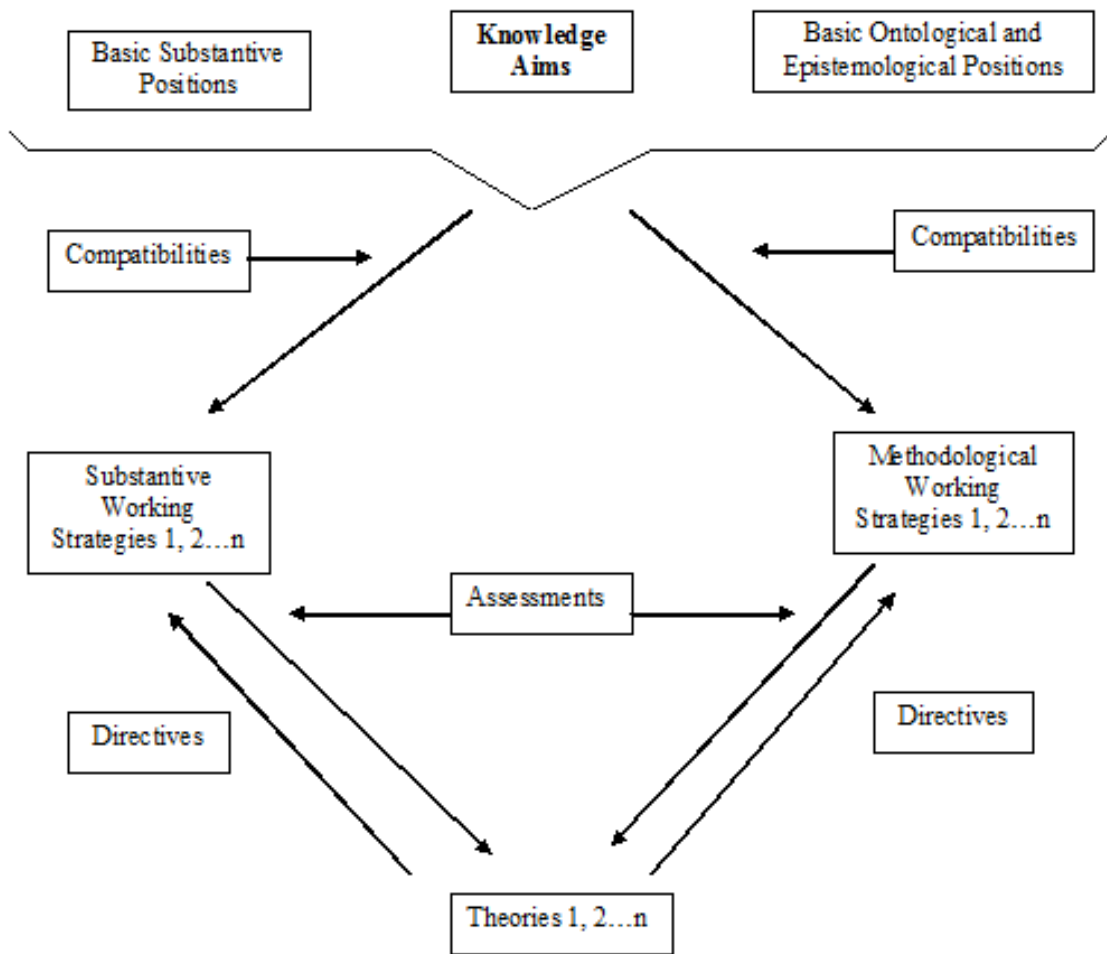
Berger and Zelditch (1993, 1997) address this problem by reformulating the concept of orienting strategies. The authors suggest that orienting strategies are actually composed of more parts than previously thought, and efforts are made by Berger and Zelditch to clearly delineate these elements. Figure 1 (see page 32) is a graphic depiction of the elements of an orienting strategy and their various connections and relations to one another. Orienting strategies are composed of foundations and working strategies which contain assumptions and directives that guide theory construction. Foundational elements are usually very broad and abstract philosophical assumptions, whereas working strategies tend to be concrete directives that guide theory construction and are thought to change over time (Berger and Zelditch, 1997: 36). Berger and Zelditch (1997) add that working strategies should be included as elements of a theoretical research program

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<sup>26</sup> One possible reason for this problem may be that the expectation-states program (i.e., the basis for the model) was in an earlier phase of development at the time the model was proposed. Berger and Zelditch (1993) allude to this several times during their attempt at reformulating the TRP concept.

<sup>27</sup> I say this because, according to Wagner (1984), it is possible for auxiliary elements to become integrated into the core sets. Additionally, core sets may be falsified and discarded in response to empirical tests (pg. 90-91).

Figure 1: Elements of an orienting strategy



SOURCE: Berger, Joseph and Morris Zelditch (1993, pg. 18). "Orienting Strategies and Theory Growth", In Joseph Berger and Morris Zelditch (eds.) *Theoretical research programs: Studies in the growth of the ory*. Stanford, CA: Stanford University Press.

because they “...play so immediate a role in growth and grow so reciprocally with the growth of theory...” (pg. 42).

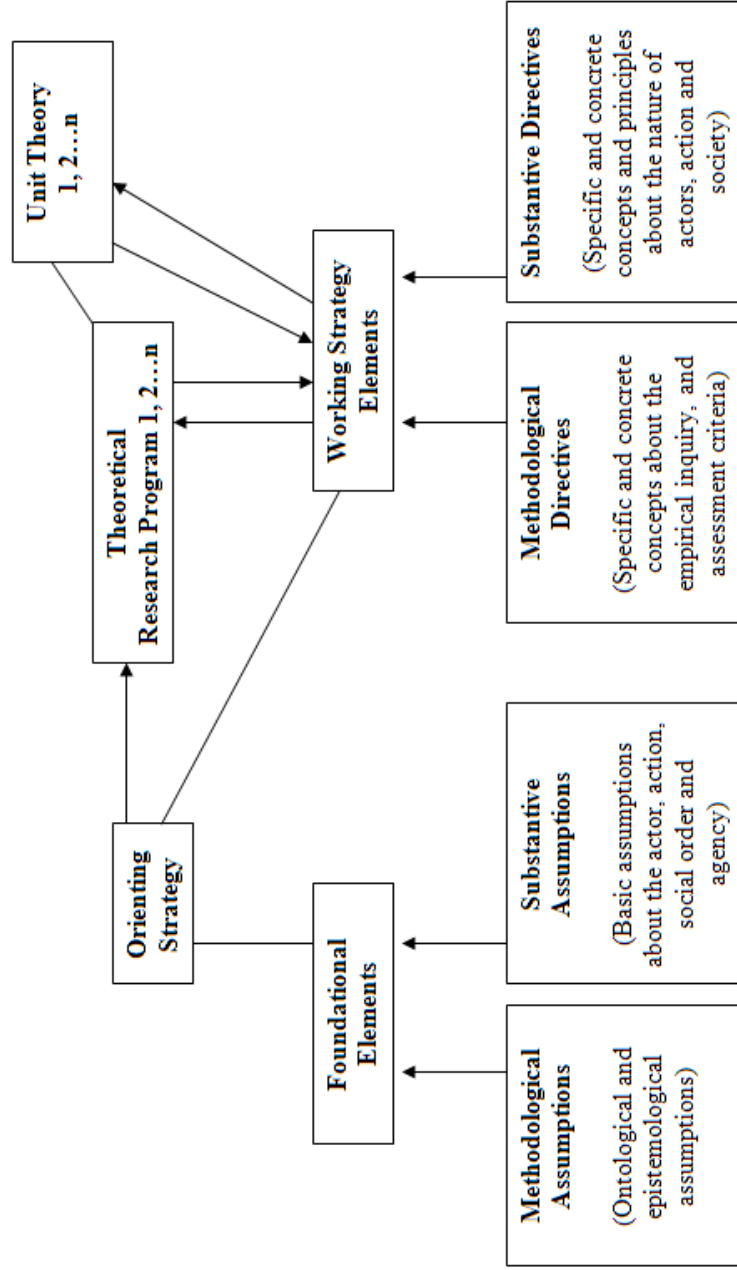
Both the foundations and the working strategies also have methodological and substantive aspects; these are depicted in Figure 2 (see page 34). For example, methodological foundations can be equated with basic assumptions about what is (i.e., ontology) and how we know what there is to be known (i.e., epistemology). Substantive foundations are assumptions dealing with the nature of actor and action and of the social order, including the agency of the actor and actor rationality. Methodological working strategies give answers to the “how to” questions of theory (e.g., how to construct and assess a theory) while substantive working strategies explain the “about what” portions of theories (e.g., what concepts and principles to use, what questions to ask and answer) (Berger and Zelditch, 1997: 36-37).<sup>28</sup> Working strategies could also be thought of as collections of directives which guide the theorist to important problems, suggest appropriate methods for explaining the phenomenon at hand, and provide criteria for assessing and evaluating theories.

All of the distinctions described above seem to be worth making. In fact, a number of prominent criminological theorists have used Wagner’s (1984) distinction between unit theory and orienting strategy and the theoretical relations to explain theory

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<sup>28</sup> There are numerous examples of both type of working strategies within sociology. For example, some well-known methodological working strategies include Blumer’s naturalistic approach to symbolic interactionism vis-à-vis Cooley’s more “mentalistic” approach (Stark, 2001, p. 76-77). With regards to substantive working strategies, there are definite differences between the Mertonian (1939) and Parsonian (1937) approaches to functionalism although the two share many similar assumptions. These working strategies have been used to inform numerous sociological and criminological theories including social learning/differential association and strain trajectories. There are also many other working strategies in criminology from a wide of array of disciplines (e.g. biology, psychology and economics). Unfortunately, a thorough discussion of these would be quite complex and is beyond the scope of this dissertation.

**Figure 2:** Relationship of Orienting Strategy to Theoretical Research Programs



DERIVED FROM: Wagner (1984); Wagner and Berger (1985); Berger and Zelditch (1993, 1997)



development or to inform the methods of theory construction (see, Meier, 1985, 1989; Short, 1985; Messner et al., 1989; Tittle, 1989; Cornish, 1993; LeBlanc, 1998; Williams and McShane, 2010). However, Wagner's full model has never been directly and fully applied to the field of contemporary criminological theory, and no attempts have been made to apply Berger and Zelditch's (1993, 1997) reformulations of the model to any of the recent developments in the field of criminology. This is somewhat surprising since criminologists of various affiliations have suggested that theorists, theoreticians, and even researchers need to become better acquainted with the underlying philosophical assumptions of the theories they propose and use (Hirschi, 1979; Young, 1981; Gibbs, 1985; Meier, 1985; Bottoms, 2008).

### **Theory Integration in Criminology: Theoretical Mush or Regression Stew?**

Integration has been one of the most confusing and hotly-debated topics in criminology (Elliott et al., 1979; Hirschi, 1979; Meier, 1985; Pearson and Weiner, 1985; Messner et al., 1989; Bernard and Snipes, 1996). While references to integration in criminology continue, discussion of the topic has waned in recent years. To further understand the present situation of integration in criminology, the origins of the debate must be fully understood.

The debate about integration began in the late 1970s after Elliott and his colleagues (1979) proposed an integrated theory which combined ideas from Merton's (1938) strain theory, Burgess and Akers's (1966) social learning theory, and Hirschi's (1969) social bonding theory. While Elliott's (1979, 1985) theory did yield some

interesting insights<sup>29</sup>, it was harshly criticized (Hirschi, 1979; 1989; Thornberry, 1989). Despite being one of the most vocal opponents of integration in criminology, Hirschi's (1969, 1979) suggestions for conceptualizing this activity have informed much of the resulting discussion about integration (Akers, 1989; Messner et al., 1989; Gibbons, 1994; Robinson, 2004).

To fully understand Hirschi's (1979) thoughts on integration, it is necessary to be familiar with his method of categorizing theories. In his seminal work, *Causes of Delinquency*, Hirschi (1969) claimed that all criminological theories could be placed in one of three categories: strain/anomie, control, or cultural deviance. Further, he suggested that these three types of theories held conflicting "base assumptions", and for this reason, he argued that theories from the different categories could not be usefully combined or integrated. In later writings, Hirschi (1979) identified three different types of propositional integration in criminology including side-by-side, end-to-end, and up-and-down integrations.

Messner and his colleagues (1989) later elaborated on Hirschi's (1979) original scheme noting that levels of explanation (micro-macro) must also be taken into account. Consequently, there could also be cross-level integration or integrations involving a micro, meso (or bridging) and macro theories. As noted earlier, in Wagner's (1984) model, this would equate to integration involving proliferant theories.

Side-by-side (or horizontal) integrations attempt to partition variables and provide different theories for different types of crimes and criminals. An important guiding

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<sup>29</sup> For instance, Elliott's (1985) model provided an important foundation for the developmental-life course (DLC) theories, specifically the use of a longitudinal approach to understanding crime (Lilly, Cullen, and Ball, 2007).

assumption to this sort of approach is that different types of crimes and criminals can be identified and studied (Gibbons, 1985). A less common type of side-by-side integration occurs when a link is uncovered between two or more theories and it is found that they are partially overlapping. Messner et al. (1989) provide an example of this in the following passage:

This form of side-by-side integration has the potential of being transformed into an up-and-down approach, given that the theories share *common assumptions*. For example, Hirschi's (1986) recent application of social control theory and rational choice theory *are linked by the common assumption of both theories that human beings are self-seeking*. Within that common structure, different explanatory variables are used to account for stable differences among the propensity to engage in criminal acts (criminality) and criminal events. (pg. 8, italics added)

It seems that Berger and Zelditch's (1993, 1997) orienting strategy reformulations would be particularly useful when trying to identify (and possibly encourage) this type of growth. Finally, Messner and his colleague (1989) also identify cross-level side-by-side integrations which explain different types of crime and criminals by using both micro and macro level theories.<sup>30</sup>

End-to-end (sequential) integration refers to the situation that may arise when a theorist puts variables from different theories into a developmental sequence (Hirschi, 1979; Messner et al., 1989). For example, in Elliott's (1979, 1985) integrated theory, variables from Burgess and Akers's (1966) social learning theory are thought to be more proximate causes of crime than control theory variables from Hirschi's (1969) bonding theory. In most cases, the effects of remote variables are mediated through more proximate variables, so the indirect effects of variables are assumed. Cross level, end-to-

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<sup>30</sup> An example here would include Durkheim's (1897) analysis of suicide; what was thought to be a psychological phenomenon was shown to be a social one. Messner et al. (1989: 14) go on to say that this type of integration "may not be possible or desirable" in criminology.

end integrations attempt to explain how variables from different levels of explanation (i.e., micro or macro) are related to one another. A recent example of an attempt at this sort of integration is Akers' (1998) revised social learning theory.

The last category of integration offered by Hirschi (1979) is called up-and-down (or deductive) integration. Messner and his colleagues (1989) identify two types of up-and-down integration: theoretical reduction and theoretical synthesis. Theoretical reduction is a common form of integration in the natural sciences; however, in the social sciences, attempts at theoretical reduction tend to cause a great deal of controversy. This type of activity occurs when one theory absorbs another because it has more general or abstract assumptions.<sup>31</sup> Theoretical synthesis occurs when a theory is produced through the abstraction of more general and abstract assumptions from at least some parts of two or more theories. Cross level up-and-down integrations are also characterized as reductionist in nature and the debate about whether or not these are even possible has been quite "academic and arcane" (Messner et al., 1989, pg. 15).

Messner and his colleagues (1989) describe yet another type of integration that is conceptual (rather than propositional) in nature. This type of theoretical activity would include identifying conceptual parallels between different theories. For example, Akers (1989; 1990) suggests that certain variables and causal mechanisms from his social learning theory correspond to certain variables used in strain, control and rational choice/deterrence theories. While this type of integration is thought to be a necessary

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<sup>31</sup> Some claim that Burgess and Akers's (1969) social learning theory is an example of theoretical reduction and represents a "travesty of Sutherland's position" (Taylor, Walton, and Young, 1976: 132). This seems somewhat inaccurate as major criticisms of Sutherland's original differential association included its vague nature and the fact that the learning mechanism was not identified in Sutherland's writings. Pearson and Weiner's (1985) model might be a better example of reductionism as nearly all criminological theories are subsumed within a more general social learning framework.

precursor to up-and-down integration, other theorists have pointed out that conceptual integration can quickly result in “theoretical mush” (Akers, 1989; see also Bernard and Snipes, 1996).

To conclude, Messner and his colleagues (1989) advise that more modest “middle-range” integration is the best option. This suggestion seems to spring logically from Merton’s (1968) call for “theories of the middle range”. The goal is to integrate propositions or concepts from different theories while at the same time remaining true to the original constituent theories. A major impediment to this sort of activity is the tendency of theorists to claim that their theory can explain all criminal behavior (see Gottfredson and Hirschi, 1990; Akers, 1998; Agnew, 2005 for examples of this). The following section will discuss other obstacles standing in the way of integration in criminology.

### **Fusing Knowledge: Challenges of Formulating Integrated Theories in Criminology**

Vold and Bernard (1986) argue that some integration is necessary to produce a complete explanation of crime:

In order to present a complete explanation of the phenomenon of crime, it is necessary to explain not only why people behave the way they do but also why their behaviors are officially defined and processed as crime. That is, criminology must include both theories of criminal behavior and theories of the criminal law. These two types of theories must be consistent with each other since they both ultimately explain the same phenomenon. *A theory of criminal behavior that is joined to and consistent with a theory of the behavior of the criminal law constitutes a unified theory of crime.* (pg. 361, italics added)

It seems that Vold and Bernard's (1986) requirements for a unified criminological theory may still be unrealistic at this point in the development of criminology. Theories of crime and criminality and theories of criminal justice are distinct problem sets in criminology; it is unclear how differences between all of these types of theories could be resolved at any time in the near future. This being the case, the focus here will be on contemporary theories of crime and criminality. To more fully understand these sets of theories, it will be necessary to identify and discuss various aspects of them including their disciplinary and philosophical influences, as well as their problem foci (or explanatory domain), varying scopes, and levels of explanation. A number of influential criminologists have discussed these factors, and some of their insights can be used to inform a discussion about theory development in criminology.

In recent years, several criminologists have suggested that criminology should be an interdisciplinary undertaking; this implies an integrated approach to theorizing (Jeffrey, 1990; Barak, 1998; Robinson, 2004). Obviously, this requirement will alter the nature of the theories produced by criminologists since variables will be drawn out of different disciplines. Biological, psychological, sociological, and environmental factors are most commonly emphasized in contemporary theories of crime and criminality; however, economics and social ecology have also made notable contributions.

Barak (1998) and Robinson (2004) have called theorists who embrace this integrative approach to theorizing "interdisciplinary generalists". The idea here is that criminologists should use knowledge from not only the social sciences but also from the natural sciences and humanities as well. Jeffrey (1990), and later Robinson (2004, 2009),

have employed an integrated systems perspective in order to help organize the various disciplinary contributions to the study of crime.<sup>32</sup>

Level of explanation has also received some scattered attention from criminological theorists. Some have argued that proper integration requires a discussion of the levels of explanation (Bernard and Snipes, 1996). In most cases, theories are thought to be expressed at either the micro- or macro-level (Short, 1985; Akers, 1998; Sampson and Wikstrom, 2006).<sup>33</sup> Micro-level theories typically focus on individuals, and attempt to explain why people become involved in criminal activity. For example, most biological and psychological theories, and some sociological theories (i.e., Hirschi's [1969] theory of bonding), would be considered micro-level theories. Macro-level theories in criminology examine the much broader effects of social systems on crime and criminal behavior, and tend to be based on ideas from sociology, political science or economics. For example, social disorganization theory, anomie or social strain theory and radical/conflict explanations of criminal behavior are expressed at the macro-level.

Another aspect of explanation relates to the problem focus or the explanatory domain of the theory. Fishbein (2001) has pointed out the importance of distinguishing between criminal behaviour and antisocial behaviour. In a similar vein, Robinson and Beaver (2009) have suggested that criminologists and criminal justice scholars often use

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<sup>32</sup> This move towards interdisciplinarity is partially responsible for the rise of the 'risk factor' approach in criminological theorizing (Farrington, 1992; Moffitt, 1993; Bernard, 2001).

<sup>33</sup> Some theorists also add a meso-level to this categorization scheme (Brantingham and Brantingham, 1981; Williams and McShane, 2010). This refers to a bridging theory that explains how micro and macro theories might be reconciled. Williams and McShane (2010) use the example of Cloward and Ohlin's (1960) differential opportunity theory. This theory bridges the gaps between Merton's (1938) macro-level strain theory Sutherland's (1947) micro-oriented theory of differential association theory. However, others seem to omit this level (Akers, 1998; Sampson and Wikstrom, 2006). As Short (1985) suggested years ago, there still exists "no universally recognized or agreed upon" method for conceptualizing levels of explanation in criminological theory (pg. 55). This would seem to be a major obstacle in the way of proper theoretical integration.

terms like crime, criminal behaviour, criminality, delinquency, antisocial behaviour, deviance and aggression interchangeably when, in fact, they can mean very different things. This can create considerable confusion when attempting to compare theories from different perspectives and disciplines. Therefore, it seems important to pay attention to the problems the different theories are attempting to explain. An early discussion of this issue was offered by Pinatel (1963, as cited in LeBlanc, 1998). Pinatel suggested that there are three levels of the criminal phenomenon including criminality, the criminal and the crime. Criminality<sup>34</sup> refers to the “sum of infractions in a given time and place” (LeBlanc, 1998). The next level, called the criminal, refers to the personal characteristics of the offender, and these may be biological, psychological, or sociological in origin (pg. 20). Crime, the last level, can be equated with the criminal act or criminal event (LeBlanc, 1998). According to LeBlanc, most mainstream criminological theories focus on the criminal and, to a lesser extent, on criminality.

While Pinatel’s distinctions are instructive, they are also somewhat incomplete as they disregard the activities of the criminal justice system and criminal law. Brantingham and Brantingham (1984) offer what could be seen as a more complete discussion of problem sets within criminology. First, they mention criminal politics as a problem focus which can be thought of as “the study of the origins of the criminal law” (Brantingham and Brantingham, 1984: 19). They also mention that theories may be concerned with the behavior of the criminal justice system and how its actions may contribute to crime (e.g., labeling theory). Other theories are concerned with the

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<sup>34</sup> Pinatel’s use of this word is somewhat confusing as the total amount of crimes in a given area might be more appropriately called the crime rate. In criminology, criminality usually refers to “the origins of criminal behavior in individuals and groups of people” (Brantingham and Brantingham, 1981: 19; see also Lilly, Cullen, and Ball, 2007). This problem could also arise from a misleading translation as Pinatel’s original work was in French.



behavior of criminals, or “criminality”. Criminality may be attributed to a variety of moral, biological, psychological, social and political factors. The last problem set identified is the criminal event or the act of crime. Brantingham and Brantingham (1984) go on to say that this problem set is actually a combination of the two other sets:

The criminal-event problem set synthesizes, to a significant degree, the issues of the criminal politics and criminality problem sets. Criminal-events occur when there is a concordance of behavior and prohibition in time and space. Issues of criminal politics and the origins of criminal motivation can, in effect, be treated as dimensions of the criminal-event problem set. (pg. 20)

Extrapolating from this quotation, one could conclude that integration might naturally arise when a theory attempts to offer a solution to more than one problem set. Two examples of this are Farrington’s (2003) integrated cognitive anti-social potential (ICAP) theory and Agnew’s (2005) general theory of offending which both attempt to account for both criminality and the criminal event.

Another important aspect of a theory is its scope. This usually refers to the level of generality associated with the theory (i.e., how many different types of criminal behaviors and crimes can the theory explain?). For example, there are ‘suite’ versus ‘street’ crimes, victimless versus predatory crimes, planned versus opportunistic crimes, organized versus disorganized crime, stranger versus intimate crime, and differences in female and male criminality. In some cases, unit theories may also explain more specific aspects of the criminal event (e.g., how criminals select sites to burglarize or why crimes concentrate in particular neighborhoods as in Brantingham and Brantingham [1978, 1997]). The scope of a theory may vary based on its problem focus, level of explanation,

methodological approach, and underlying philosophy. In some cases, integration may be accomplished by increasing the types of crime a theory can explain.

Integration can also be forced by a shift in preferred data and methods. For example, recent developmental-life course theories are concerned with the emergence of and desistance from criminal activity. The timing of the variables is particularly important to explaining these types of phenomena (Agnew, 2005). To understand temporal aspects of key variables in criminology, longitudinal data is required. Developmental-life course theories (e.g., Farrington, 1992; Moffitt, 1993 and Sampson and Laub, 1993) are examples of this change in data preference. These contemporary theories examine changes in how variables affect criminal actors, so simple cross-sectional data are no longer (and probably never were) sufficient to explain the complex nature of criminality. The focus on change over time allows the theorist to identify when and why different variables from biology, psychology, sociology and other disciplines are important.

Laub and Sampson (2003) have argued that this shift in methodology demands more attention be paid to the use of qualitative research and data. Given the emphasis on description, qualitative data can provide much more detailed accounts of why people change over time. Some suggest that another aspect of integration is methodological integration (Wikstrom and Sampson, 2006). One might speculate that they are referring to the use of longitudinal and qualitative data in addition to the traditional use of cross sectional and quantitative data.

In their article about theory integration in criminology, Bernard and Snipes (1996) lay out a set of directives to guide theory integration in criminology. The first directive

suggests that both the level of data analysis and the level of explanation in theories ought to match. So, theories should be classified not as micro- and macro-level theories, but rather by the type of data used to test them. In other words, theories tested using individual-level data should be categorized as individual difference theories, and those tested using aggregate data should be characterized as structure/process theories.

The second directive cautions against the overuse of competitive theory testing. Theories should be viewed as somewhat complementary rather than as in constant competition with one another. Different theories are thought to explain different aspects of crime or criminality, and therefore all could be relevant. This leads Bernard and Snipes (1996) to embrace a risk factor approach as an alternative to theory falsification. The risk factor approach deals with structured probabilities and advises that theorists combine variables known to be related to criminality into comprehensive theoretical models (Bernard, Snipes, and Gerould, 2010). According to Bernard and Snipes (1996), these models also represent examples of integrated theories.

The risk factor approach has become quite popular in criminology, especially with regards to the developmental-life course theories. However, several prominent criminological theorists have criticized this approach to theorizing. Caspi and Moffitt (2006) have suggested that the field of criminology is in danger of becoming locked into a risk factor mode, and Wikstrom (2006, 2008) has questioned the underlying logic of such an approach. Given this reliance on the risk factor approach, many variables in criminology should be regarded as correlates of crime or criminal propensity rather than causes (Wikstrom and Sampson, 2006; Wikstrom 2008). In Wagner's (1984) model of theory growth, the risk factor approach would not constitute an example of integration.

Instead, this would appear to be a change in methodological directives of the working strategies of some criminological theories (see Berger and Zelditch, 1993, 1997).

Bernard and Snipes (1996) also question Hirschi's (1979) categorization scheme of strain/anomie, control and cultural deviance theories. Specifically, they argue that strain and cultural deviance theories should be thought of as structure/process theories while many control theories are more akin to individual difference theories. Another important implicit assumption emerges from this distinction. Structure/process theories assume that criminals and non-criminals are similar and that social environments determine which people commit crime. Many control theories operate under the assumption that criminals have specific individual characteristics (e.g., weak bonds or low self-control) that cause them to become criminals. Nearly all biological and psychological theories of criminality are also individual difference theories (Bernard and Snipes, 1996). Since they are explaining different aspects of the same phenomenon, it is more useful to view structure/process and individual difference theories as complementary rather than as competing theories.

The previous review of the literature about integration reveals a serious lack of clarity and consistency. A great deal of this confusion stems from the fact that criminologists have traditionally paid little to no attention to the philosophical underpinnings in the theories they use (Meier, 1985). One way to rectify this problem is through an application of Wagner's (1984) model to theories in criminology. The theoretical relations suggested by Wagner are also useful for understanding which theories are acceptable candidates for integration. Especially important is identifying elements (i.e., assumptions and directives) within orienting strategies of the major unit

theories as these also tell a great deal about the potential compatibility of unit theories. The importance of underlying assumptions is well illustrated by Messner and colleagues (1989):

One classic example of middle-range or small integration is Cloward and Ohlin's (1964) revision of Merton's anomie theory. They borrow from differential association theory the idea that knowledge of illegitimate means must be learned and that opportunities to learn them are differentially available. This idea traditionally embedded in the general assumptions of Sutherland's differential association theory, is not necessarily incompatible with assumptions from Merton's anomie theory, although many of the assumptions of the general Chicago perspective, in which Sutherland's theory is originally embedded, are incompatible with many of the assumptions of the structural functional perspective, in which Merton's theory was originally embedded. Indeed, the ideas that legitimate and illegitimate opportunities are differentially available seem eminently compatible. (pg. 17)

The preceding paragraph points out the importance of understanding substantive aspects of orienting strategies, and how these might be important to understanding integration in criminology (Wagner, 1984; Berger and Zelditch, 1993, 1997).

Many of Bernard and Snipes's (1996) points seem useful and accurate. While it might be overstated in their article, continuous and competitive empirical testing of individual unit theories does not appear to be productive. Further, it seems reasonable to place a great deal of importance on understanding levels of explanation in relation to levels of data analysis. However, Bernard and Snipes (1996) seem to neglect an important aspect of integrative activity. In many cases, there seem to be important changes occurring in the orienting strategy of a theory before integration takes place. In many cases, this involves the importation of assumptions and/or directives from outside the research program. These changes often lead to changes in the unit theories being produced by the program. The next section will provide support for this kind of

theoretical activity by reviewing similar arguments made by both Laudan (1977) and Ritzer (1981). Ideas offered by Popper (1965), Hirschi (1973), Feyerabend (1976) will also be incorporated.

### **Integrating Philosophies: The Fusion of Orienting Strategies**

Another way in which theory growth can occur is through a fusion of elements from two or more orienting strategies. While this might sound strange, several analysts have suggested that this sort of activity can and does take place in both the physical and the social sciences (Laudan, 1977; Ritzer, 1981). Further, criminologists have recently illustrated how adding new elements to existing orienting strategies can fundamentally change the nature of the unit theories the program produces (Bottoms, 2008). To understand how orienting strategy elements can be fused or grafted into one another to create new unit theories, it is necessary to explore the work of Laudan (1977) and Ritzer (1981). This will provide an important grounding for understanding how this activity occurs in criminology in the context of orienting strategy elements.

Laudan (1977), like numerous commentators in a variety of fields (Kuhn, 1962; Lakatos 1970; Wagner, 1984; B. Cohen, 1989; Williams and McShane, 2010, Robinson, 2004; Bottoms, 2008) claims that there are two types of scientific theory, general and specific, and that it is necessary to distinguish between the two. Laudan (1977) presents his reasons for considering this distinction as important in the following passage: “...until we become mindful of the cognitive and evaluational differences between these two types of theories, it will be impossible to have a theory of scientific progress which is historically sound or philosophically adequate.” (pg. 72, italics in original). General theories are thought to be sets of assumptions that guide the construction of theories (pg.

71). These refer not to specific explanations of phenomena, but to families of related theories called ‘research traditions’. Obviously, there are also specific theories that attempt to explain particular phenomena. Laudan (1977) goes on to argue that research traditions play a more immediate role in understanding scientific progress than do specific theories.<sup>35</sup>

Laudan (1977) also argues that research traditions can be synthesized or integrated, and claims that this can take place in two different ways. In some cases, research traditions can be seen as complementary since each can deal with the conceptual or empirical problems that the others cannot.<sup>36</sup> When combined, the result is a formulation that incorporates the presuppositions of both research traditions without any major modifications to either. In other cases, there are fundamental elements of each research tradition that conflict with one another. To resolve these conflicts, certain elements must be discarded and this, in effect, requires the abandonment of the original research traditions. The product is a new research tradition with some of the characteristics of each of its predecessors.<sup>37</sup>

Ritzer (1981) also suggests that these larger bodies of theory or paradigms can be integrated with one another (pg. 11). He qualifies this claim by saying that full integration of paradigms should not be the ultimate goal since this sort of fusion is likely not possible. However, Ritzer (1981) claims that some insights from competing

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<sup>35</sup>Thus, Laudan agrees with Kuhn (1962) and Lakatos (1970) on this point, but also mentions that the accounts of how these general theories or ‘research traditions’ evolve are unsatisfactory. It should also be mentioned that these changes are not always progressive.

<sup>36</sup>Laudan (1977: 103-104) uses the example of the fusion between Newtonian and Cartesian theory to form Schofield’s materialism.

<sup>37</sup>Here Laudan (1977: 104-105) cites the formation of Marxism as an example. Marx combined elements of Hegelian idealism, Feurbach’s notion of materialism, and the “capitalism” of Adam Smith. A more specific discussion of this activity can be found in Ashley and Orenstein (2001: 191-194).

paradigms can sometimes be usefully combined. He goes on to explain how one could produce an integrated paradigm in sociology.<sup>38</sup>

Wagner (2007) points out some possible pitfalls of this type of integration. First, he cautions against attempts to find a general theory of society as efforts to do this in sociology in the past have been unsuccessful. This seems to have some relevance for criminology. For many years, the “Holy Grail” of criminological theory has been a general theory of criminal behavior. There are some indications that this may have been an unproductive approach since no general theory of criminal behavior has emerged. Second, Wagner (2007) suggests that as theorists attempt to integrate on larger and larger scales (e.g., unit theory integration versus working strategy integration versus foundational integration) the process becomes more difficult and controversial (Wagner, 2007). He does acknowledge, however, that the integration of orienting strategies is possible; however, Wagner (2007) claims that it might not be desirable given the amount of opposition one can face when attempting to produce such a theory.

Wagner’s (2007) caveats may be true of attempts to fuse orienting strategies within one discipline (e.g., sociology, psychology, political science); however, criminology presents a unique case. As discussed previously, criminology is widely acknowledged as being an interdisciplinary pursuit since it draws on ideas, theories and perspectives from a variety of disciplines (Jeffrey, 1990; Barak, 1998; Robinson, 2004). While some disciplinary ideas may be inherently incompatible, it seems that, more often than not, conflicts can be resolved.

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<sup>38</sup> While Ritzer’s (1981) writings are extremely useful, he never addresses how specific explanations (i.e., unit theories) fit within his paradigm.



Several commentators have suggested that the ultimate goal should not be a general theory of criminal behavior; rather, criminologists should be attempting to clarify and refine specific causal mechanisms that lead to criminal behavior by using any useful ideas at their disposal (Bunge, 2004, 2006; Wikstrom and Sampson, 2006; Wikstrom, 2008). Several philosophers of science have suggested that the way in which these types of discoveries are made is by challenging well-established and respected theories and ideas.<sup>39</sup> For example, Popper (1965) claims that scientific theories develop through bold conjectures that can be tested through falsification. He cautions specifically about becoming overly dogmatic and suggests that scientists ought to question all theories since no theory can ever be fully verified (Popper, 1959).

Surprisingly, Feyerabend (1976) echoes Popper's (1959) sentiments by encouraging methodological anarchism. He argues that scientists often embrace the "consistency condition" or the idea that new hypotheses must be consistent with older, well-established theories. The tendency to support the consistency condition rather than questioning old ideas serves to hinder the development of knowledge. Hirschi (1973) also argues for something much like an 'anything goes' approach:

*A final procedural rule. Avoid the fallacy fallacy. When a theorist or methodologist tells you you cannot do something, do it anyway. Breaking the rules can be fun.* (pg. 42, italics added)

The implication here is that progressive forms of science are most accurately characterized "by a whole set of partly overlapping, factually adequate, but mutually inconsistent theories" (Feyerabend, 1976, pg. 27, italics in original). This is very similar

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<sup>39</sup> At first glance, some of these ideas may seem contradictory or incompatible (e.g., Popper's critical rationalism and Feyerabend's methodological principle of 'anything goes'). However, a careful reading of each author's work reveals some striking similarities and substantial areas of agreement.

to the Lakatosian notion of research programs. In fact, Feyerabend (1976) suggests that the Lakatosian methodology is merely a form of anarchism in disguise. There are many examples from criminological theory that illustrate the important role of challenging preconceived notions in making theoretical breakthroughs. As will be illustrated later, many of these challenges involve adjusting various elements of an orienting strategy to produce new theories.

Given the similarities between orienting strategies and research traditions, one could argue that orienting strategies can be fused in ways similar to those described by Laudan (1977) and Ritzer (1981) without causing the problems Wagner (2007) cautioned against. Further, in a recent article about theories and their relationship to empirical inquiry, Bottoms (2008) uses terminology that holds many parallels to Wagner's (1984) distinction between unit theories and orienting strategies. This point is illustrated with a quote from Bottoms (2008) describing activity taking place in Sampson and Laub's (1990, 2004) age-graded theory of informal social control located within the developmental-life course research program:

...what Sampson and Laub are engaged in here is creating an initial 'theoretical scaffold' (the 'life course perspective' with its accompanying core theoretical concepts), which is intended to have a 'relatively durable form since it adapts reflexively rather than automatically in relation to empirical data' although it should be 'capable of accommodating new information and interpretations by reconfiguring itself' (Layder, 1998, p. 150). In practice, what has happened since 1993 is that Sampson and Laub's use of the framework of Elder's 'life course perspective' remained fully durable, but within this framework the content of their initial substantive theorization has – as we shall see- undergone some significant modifications...the initial formulation of this theory linked the life course perspective to one other theoretical tradition, namely a developed and modified version of Hirschi's (1969) *control theory*. (pg. 108, italics in original)

A more thorough treatment of how this model applies to Sampson and Laub's (1990, 2004) theory will be provided in Chapter Seven. For now, it is sufficient to point out that this theory challenged many established assumptions in criminology about free will and determinism. Throughout this analysis, the model of theory growth proposed and derived from the ideas above will be applied to other contemporary theories in criminology in better understand the dynamics of theory growth and integration.

To this point, the discussion has focused upon problems in theory construction and how these might be addressed by applying the philosophy of science literature to contemporary criminological theories. In the next chapter, the radical turn in theorizing is explored through a review of tenets of the conflict, critical, Marxist, and constitutive programs in radical criminology and their contributions to criminological theory.

## CHAPTER 3: THE MARXIST REBELLION IN CRIMINOLOGY

### The Rise of Radical Criminology

Many observers have struggled to understand the development of radical criminology<sup>40</sup> since its emergence in the late 1960s and early 1970s. Some have classified it as a paradigm shift (Young, 1981), while others claim that there is no single paradigm of ‘radical criminology’; rather, there are many ‘radical criminologies’ (Mungham, 1980; Friedrichs, 1980; Huff, 1980; Lynch and Groves, 1989). In an overview of the criminological enterprise in Canada since the 1930s, Ratner (1984) suggests that there have been three “exemplars” in the historical development of criminology including the correctionalist-rehabilitative, liberal-progressive, and the critical/radical paradigms. There seem to be some common underlying themes in the critical/radical paradigm but any conception of a united radical criminology is clearly inaccurate. Even so, there are definite interrelations between the different theories in this area, and also clear differences in the foundational assumptions embraced by most mainstream criminologists. Some remarks from Gibbons support this assertion, “...these “new criminologies” (citing the title of Taylor, Walton, and Young’s 1973 book) are predicated at least to some degree *on a different set of assumptions about reality, inquiry,*

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<sup>40</sup> In the interest of simplicity, I will refer to this general area of theories in criminology as radical criminology.

*and criminality than those that guide mainstream criminology.*” (1994, pg. 152, italics in original).<sup>41</sup>

For a number of reasons, the concept of research programs is particularly useful for describing developments and shifts in this area. First, many of the theories are interconnected because they share the same foundational assumptions and basic orienting strategy. Second, from Ratner’s (1984) analysis, one can conclude that there are entities operating which are larger than theories. This corresponds to most criminological analyses of theory growth (Cole, 1975; Downes, 1978; Young, 1981) and to work done in sociology and the philosophy of science on knowledge growth (Ritzer, 1981; B. Cohen, 1984; Kuhn, 1962; Lakatos, 1970; Laudan, 1977). However, since there is no one ‘radical criminology’ as has been suggested in other analyses (Mungham, 1980; Friedrichs, 1980; Huff, 1980; Lynch and Groves, 1989) there are likely sets of theories in a variety of different areas – this sounds similar to a field characterized by competing research programs (Lakatos, 1970; Wagner, 1984; Wagner and Berger, 1985).

### **Marxism, Science, and Theoretical Research Programs**

In addition to Wagner’s (1984) model of theory growth, Burawoy’s (1990) application of Lakatosian research programs to Marxist theory in sociology provides several useful insights that will be used in this analysis.<sup>42</sup> First, the core of any research program takes a great deal of time to develop. Translated into Wagnerian terms, this

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<sup>41</sup> References to mainstream criminologists and mainstream criminology can create confusion. Young (1994) was most likely referring to theories produced by sociological positivism (e.g., social learning, control, and strain) that dominated criminology for a long period of time. It is also possible that this was a general reaction to positivist approaches (biological and psychological) that had dominated criminology since the work of Lombroso (1876).

<sup>42</sup> This should come as no surprise, given the influence of Lakatosian (1970) research programs on Wagner’s (1984) model of theory growth.

means that the core and auxiliary sets might remain indistinguishable for any number of years (Wagner, 1984). Second, the core of the program is best conceptualized as “a family of overlapping and often competing cores which give rise to *different branches within a single research program*. Each branch reconstructs the core in a different way. In this view, successive theories develop as belts within branches.” (Burawoy, 1990, pg. 779, italics in original). On a related note, while applying Lakatosian research programs to criminology, Downes (1978) came to a similar conclusion. He suggested that several influential studies could not be placed into any one program; instead, they were overlapping, and could have fallen into several different programs. In Wagner’s model, this situation could be conceptualized as sets of competing orienting strategies early on, each producing unit theories followed by critique and readjustment; the cycle should keep repeating itself until a core set of principles has emerged (Wagner, 1984). Finally, and perhaps most importantly, Burawoy (1990) advises that while evaluating research programs, it is important to recognize sub-traditions or new branches that aid in re-orienting research without clear predictive pay-offs. Interestingly, these often appear in criminology (e.g., the labelling perspective) and several examples of these traditions seem to be present in this area of criminological theory. While they do not always lead to full-blown research programs, these “sub-traditions” still contribute to theorizing by suggesting new orienting strategy directives (e.g., offering conceptual schemes, identifying new problem domains) and providing a “seedbed” from which other theories develop. The Labelling perspective clearly contributed to the development of the conflict and radical theories in criminology in these ways (Turk, 1969; Quinney, 1970).

The following section will outline and discuss some of the foundational assumptions of these theories. This will help to differentiate the conflict and radical theories from those produced by mainstream criminology from the 1930s to the 1960s.<sup>43</sup>

### **Breaking Away From Functionalism's Mechanical Society**

Long before conflict, Marxist, and critical currents of thought swept into the field of criminology, they were part and parcel of the discipline of sociology. This is hardly surprising, until the 1980s most criminologists were actually sociologists who studied crime. One reason for this was Edwin Sutherland's efforts to discredit criminological research occurring in other areas (for an example see Sampson and Laub, 1991). Thus, to understand the development of these perspectives in criminology, it is necessary to be familiar with both early conflict unit theories in sociology, and key aspects of the classical social theories from which they were derived. In addition, one must bear in mind that many of these early attempts were reactions against the dominant mode of theorizing at the time, structural-functionalism.<sup>44</sup>

Most criminologists in the area of radical criminology embrace a number of Marxist techniques and assumptions for studying society. Perhaps the most well-known of these is Marx's theory of historical materialism. This theory is based on observations of transformations in a society's economic structure, which some have described as an "empirical theory of history" (Lynch and Groves, 1989, pg. 9). The conceptual framework associated with this method is composed of three interrelated concepts: mode

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<sup>43</sup> Before the radical theories, criminology was dominated by a positivist orientation based on the natural sciences (Bottoms, 2008), and heavily influenced by sociology and social psychology.

<sup>44</sup> For an interesting attempt to create a general sociological conflict perspective in opposition to structural-functionalism see Collins (1975).

of production; means of production; and relations of production (Lynch and Groves, 1989).

The mode of production refers to the economic system characterizing a given society (e.g., feudalism, mercantilism, capitalism, socialism, or communism). The machines and technology used in any economic arrangement are called the means of production. Last, the relations of production describe the relationships of the people to the means of production. The capitalist mode of production is thought to be especially problematic, primarily because the means of production are owned by a small group of business people, known as the bourgeoisie or the owners. The other group, called the proletariat or the workers, have no choice but to sell their labor to the bourgeoisie for a wage. This situation is thought to create obvious conflicts between the two classes, since both are trying to maximize profits at the expense of the other (Lynch and Groves, 1989). The system also induces alienation in many members of the proletariat. The workers try to cope with this conflict and alienation in a number of ways; some escape through religion and/or recreation. Others resort to drug use and crime, and are often chronically underemployed or are unemployed (Ashley and Orrenstein, 2001). These troubled members of the proletariat were called the lumpenproletariat by Marx, and are of the greatest interest to criminologists.

According to Marx (1867) will continuously lower wages paid to workers in order to keep maximizing profits and consolidating wealth; this is known as the immiseration thesis. Eventually the lower rung of workers will become disenfranchised, and will join the ranks of the lumpenproletariat. For example, one could argue that the prison-industrial complex that has arisen in the U.S. is heavily populated by African Americans,



many of whom are actually disenfranchised workers who became involved with the drug trade and other sorts of crime out of financial need. Once imprisoned, the capitalist system further exploits the prisoners by offering jobs that pay a small fraction of what they would make on the outside. After released, former prisoners will likely have trouble finding jobs because of their criminal record, and will more than likely return to prison because of this where they can be exploited again and possibly for a longer period of time (T.R. Young, 1996).

The work of Marx provides the basic conceptual scheme used by radical criminologists. Key foundational elements of the orienting strategy guiding these research programs are derived from Marx's writings on society and crime,<sup>45</sup> and these are summarized in Table 1.

**Table 1: Key Foundational Elements in Radical Criminology Orienting Strategy**

- Society is characterized by conflict rather than consensus
- Crime is defined by those with the most power in society
- Social structures and processes are most important for understanding criminal behavior

A foundational assumption shared by these theories is the idea that society is characterized by conflict and class competition rather than consensus and universal agreement (Berger and Zelditch, 1993, 1997). Eventually, the conflict and competition give rise to social stratification and inequality, and crime ensues. Wealthy and powerful individuals and entities are allowed to exploit those less powerful, and their actions are

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<sup>45</sup> Note that these theorists were not able to use Marx's actual unit theories, as he did not offer formal theories about crime. However, Marx did briefly discuss crime in a few passages and these have been used as a springboard for theorizing (Bernard, Snipes, and Gerould, 2010).

often not defined as criminal. In addition, when the elite groups do behave criminally they are not charged by the state with criminal violations.

There is some empirical evidence to support these sorts of arguments. For example, Blau and Blau (1982) have shown that crime rates are related to levels of inequality. The hypothesis in this research is that “variations in rates of urban criminal violence largely result from differences in racial inequality in socioeconomic conditions.” (pg. 114). Data was gathered from 125 of the largest metropolitan areas in the U.S. The findings indicated that socioeconomic inequality between races and general economic inequality both increase rates of urban criminal violence.

McMullan’s (2007) research on the Westray mining disaster is an example of qualitative research that lends support to ideas in the radical criminology research program. The goal of this study was to understand how official discourse, especially medical discourse, helps to shape and produce the truth in criminal court proceedings. The Westray mining disaster occurred in Pictou County, Nova Scotia in 1992. The company was criminally charged with manslaughter and criminal negligence causing death. During the court proceedings it was found that the company violated occupational health and safety laws. The management and inspectors were specifically found to be at fault; however, no person or entity was ever held responsible.

McMullan (2007) performed a content analysis of various documents including medical texts (e.g., death certificates, doctor’s reports, the final report of the chief medical examiner, and legal testimony from medical experts). In addition, he also examined the miners’ accounts of what happened which were presented to the public inquiry. He found that the miners’ accounts were “were re-orchestrated into smoothing

exercises whose primary goals were to restore respect to the industry and recover credibility for government institutions.” (pg. 41).

The unit theories in this program tend to focus exclusively on social structures and processes that give rise to criminality. Thus, individual differences are ignored and are thought to be unimportant in explaining criminal behavior (Bernard and Snipes, 1996). The discussion will now focus upon some of the various unit theories the radical criminology research program has produced.

### **Early Radical Criminology: Bonger’s Marxism**

The earliest attempt to understand crime directly through any kind of conflict orientation was made by the Dutch criminologist, Willem Bonger (1916). He suggested that the inherent competitive atmosphere of capitalism creates a situation that encourages people to commit crime (Bonger, 1916). This postulate emerges from different assumptions made about the social order and human nature; specifically, the idea that humans are innately social and must be corrupted in some way to become criminals. The corrupting force is thought to be the capitalist economic system. Essentially, “criminal thoughts” originate because capitalist society nurtures individual egoism and suppresses people’s natural altruistic tendencies. Bonger (1916) was working with both the conceptual framework and assumptions emerging from Marx’s historical materialism orientation, so much of his orienting strategy is drawn out of Marx’s earlier work; however, psychoanalytic concepts are added to understand individual behaviors (Williams and McShane, 2010).

Even though Bonger was working with a number of Marxist ideas, his work breaks with a true Marxist orientation in several important ways. First, as Taylor, Walton and Young (1973) rightly claim, he fails to directly examine how the capitalist system is responsible for producing and reproducing crime; instead, criminal behavior is located in the individual. Taylor and his colleagues (1973) also mention that:

For Bonger, 'criminal thought' is by and large a product of the lack of moral training in the population. Moral training has been denied to the proletariat, in particular, because it is not the essential training for work in an industrializing society. The spread of 'moral training' is the antidote to 'criminal thoughts'. (p. 224, italics added)

The commitment to Marxism ends at implicating the political economy as a cause in the overall crime equation. Consequently, Bonger's (1916) work is similar to a form of sociological positivism in which social factors are central to the explanation but the focus is still on the individual. The addition of psychoanalytic concepts also distances Bonger's work from the Marxist orientation since Marxists assume that people are inherently social and are corrupted by the social structure of the capitalist system. The capitalist system acts upon individuals, encourages egoism rather than altruism, and distorts their innate social nature. Bonger (1916) never examined how and why certain behaviors are criminalized and the connection this has to social class (Taylor, Walton, and Young, 1973).

For its time, in the early twentieth century, the suggestion that the political economy was tied to criminal behaviour, and the notion that society is characterized more by conflict than consensus were revolutionary ideas. Bonger's (1916) work can be seen as an attempt to apply Marxist concepts to explain the crimes generated by the late 19<sup>th</sup> and early 20<sup>th</sup> century European capitalist system. He also extends a Marxist explanation

of crime to explain crimes committed by the bourgeoisie as well as the working class. However, Bonger's work, with its emphasis on "moral training"<sup>46</sup> now bears a greater resemblance to contemporary control theory rather than Marxism. Clearly, with regards to future criminological theorizing in this area Bonger's (1916) use of a modified Marxist orienting strategy was more important than the unit theory he produced.

Portions of this work can be thought of as metatheorizing in an attempt to develop the foundations of a new orienting strategy that can be used to formulate other Marxist/conflict unit theories about criminality and crime (Berger and Zelditch, 1993, 1997). The use of Marxism can also be thought of as a proliferation, since the theorist has taken these ideas from social theory and applied them to the explanatory domain of crime, specifically, to explain the emergence of criminal behavior (Wagner, 1984, pgs.47-48). Bonger (1916) seems to suggest that a few foundational concepts and assumptions would be useful to the study of crime, but the core set of the program has not been adequately worked out. He also suggests a unit theory; however, the unit theory is somewhat divorced from its Marxist roots, and consequently, the unit theory failed to gain traction in the program. This indicates that it would be somewhat early to produce a core unit theory because core concepts and assertions have not been adequately clarified and refined (Wagner, 1984, pg. 100).

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<sup>46</sup> The similarity to Durkheimian assumptions of human nature (Bernard, Snipes, and Gerould, 2010) and the importance of moral training bears an uncanny resemblance to statements made by some control theorists, starting with Durkheim and continuing on with contemporary work on self-control theory (see for example Gottfredson and Hirschi, 1990). Further, the emphasis placed upon the increased likelihood of criminal behavior in unmarried people (Bonger, 1916, pgs. 450-464), holds a great deal in common with Hirschi's (1969) theory of bonding and also Sampson and Laub's (1993) age-graded theory of informal social control. The emphasis on the family could be the result of embracing psychoanalytic concepts from Freud.

## **Understanding Authority: The Conflict-Pluralist Branch of Radical Criminology**

Following Bonger's (1916) initial formulation, it would be over 40 years before interest in radical criminology resurfaced (Bernard, Snipes, and Gerould, 2010).<sup>47</sup> Within a year of one another, two sociologists - Vold (1958) and Dahrendorf (1959) - produced unit theories which revitalized the dormant conflict program. Some may have problems with drawing parallels between the work of Bonger (1916) and the subsequent theorizing of Vold (1958) and Dahrendorf (1959). It is true that neither was directly drawing upon Bonger's (1916) research; however, Bonger was the first to have suggested using a conflict perspective (be it Marxian or Simmelian) to study crime, rather than using a consensus-oriented approach which was typical in structural-functionalism. Furthermore, as stated previously, Bonger cannot be considered a true Marxist since he does ultimately locate the cause of crime in the individual (Taylor, Walton, and Young, 1973).

Vold's (1958) formulation draws heavily upon the work of Georg Simmel, a 19<sup>th</sup> century social philosopher.<sup>48</sup> For Simmel, conflict cannot be reduced to mere economics as in Marxist philosophy. Instead, different competing interest groups vie for power and control in society, in a number of ways. Eventually, this competition leads to equilibrium in society because every group is forced to compromise at least some of the time. According to conflict theorists, conflict is a natural and necessary social process in all societies that eventually leads to social order. As Bernard and his colleagues (2010) explain:

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<sup>47</sup> There are a few exceptions, most notably Rusche and Kirchheimer's (1943) work about the influence of economics on the growth of the penitentiary in industrial society. However, no Marxist theories of criminal behavior were offered.

<sup>48</sup> The connection to Bonger (and Marx) is a bit strained, but is still definitely present. Both, Marx and Simmel were working with ideas developed by Hegel, so many of the underlying assumptions are similar, especially the assumption of societal conflict over consensus (see Ashley and Orenstein, 2001, pgs. 191 and 270).

These social interaction processes [between the groups] grind their way through various kinds of uneasy adjustment, to a more or less stable equilibrium of balanced forces, called social order or social organization. Social order, therefore, does not reflect a consensus among the groups, but reflects the uneasy adjustment, one to another, of the many groups of various strengths and different interests. Conflict is thus one of the principal and essential social processes in the functioning of society. (pg. 247)

Vold (1958) also suggests that conflict between groups reinforces loyalty in members of each competing group (Bernard, Snipes, and Gerould, 2010). To put it more simply, a person will become more committed to his or her group (and its cause) the harder they have to fight for it.

Another important influence on Vold's (1958) theorizing can be found in the social psychology of the 'Chicago School'. The assumption here is that humans are naturally social creatures (Bernard, Snipes, and Gerould, 2010). Eventually, groups are formed, and later are defined in relation to one another (as is the case with individuals).<sup>49</sup>

The group struggle for power described by Vold (1958) eventually manifests itself in legislative politics, and it is here where the theory intersects with the study of crime. More specifically, the dominant group(s) has the power to decide which types of behavior are criminalized. Hence, for Vold, the activities of formal control agents (e.g., police, courts, prisons), criminals, and lawmakers are all interrelated and are interconnected to conflicts between different interest groups (Bernard, Snipes, and Gerould, 2010).

As with Vold's (1958) formulation, Dahrendorf's (1959) theory retains the element of conflict, and rejects the idea of economic reductionism characteristic of many

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<sup>49</sup> All of this is consistent with Cooley's (1902) and Mead's (1934) symbolic interactionist perspective.

Marxist accounts. In fact, he argues that consensus and conflict models are both useful to understanding social reality, depending upon the problem being studied (Dahrendorf, 1959, pg. 175).<sup>50</sup> Rather than supplementing his work with Simmelian thought, Dahrendorf draws upon Weberian concepts. Instead of using the Marxian notion of class, he replaces it with Weber's relations of authority and domination. The Weberian influence is obvious as Dahrendorf (1959) writes:

So far as the terms 'power' and 'authority' and their distinction are concerned, I shall follow in this study the useful and well-considered definitions of Max Weber. For Weber, power is the "probability that a command given with a specific content will be obeyed by a given group of persons". The important difference between power and authority consists in the fact that whereas power is essentially tied to the personality of individuals, authority is always associated with social positions or roles. (pg. 166)

The relations of authority and domination are represented by Dahrendorf's (1959) conception of the basic unit of social organization called "imperatively coordinated associations", which are always composed of two positions, one of authority and one of domination. These associations cannot be reduced to class struggles and the political economy (see Taylor, Walton, and Young 1973, pg. 240-241). Rather, the situation is more complicated; this forces the criminologist to study the social dynamics of legal and authoritative relationships and the different groups involved with them.

The works of Vold (1958) and Dahrendorf (1959) represent an important shift in the study of law and crime. Specifically, there is a new addition to the substantive

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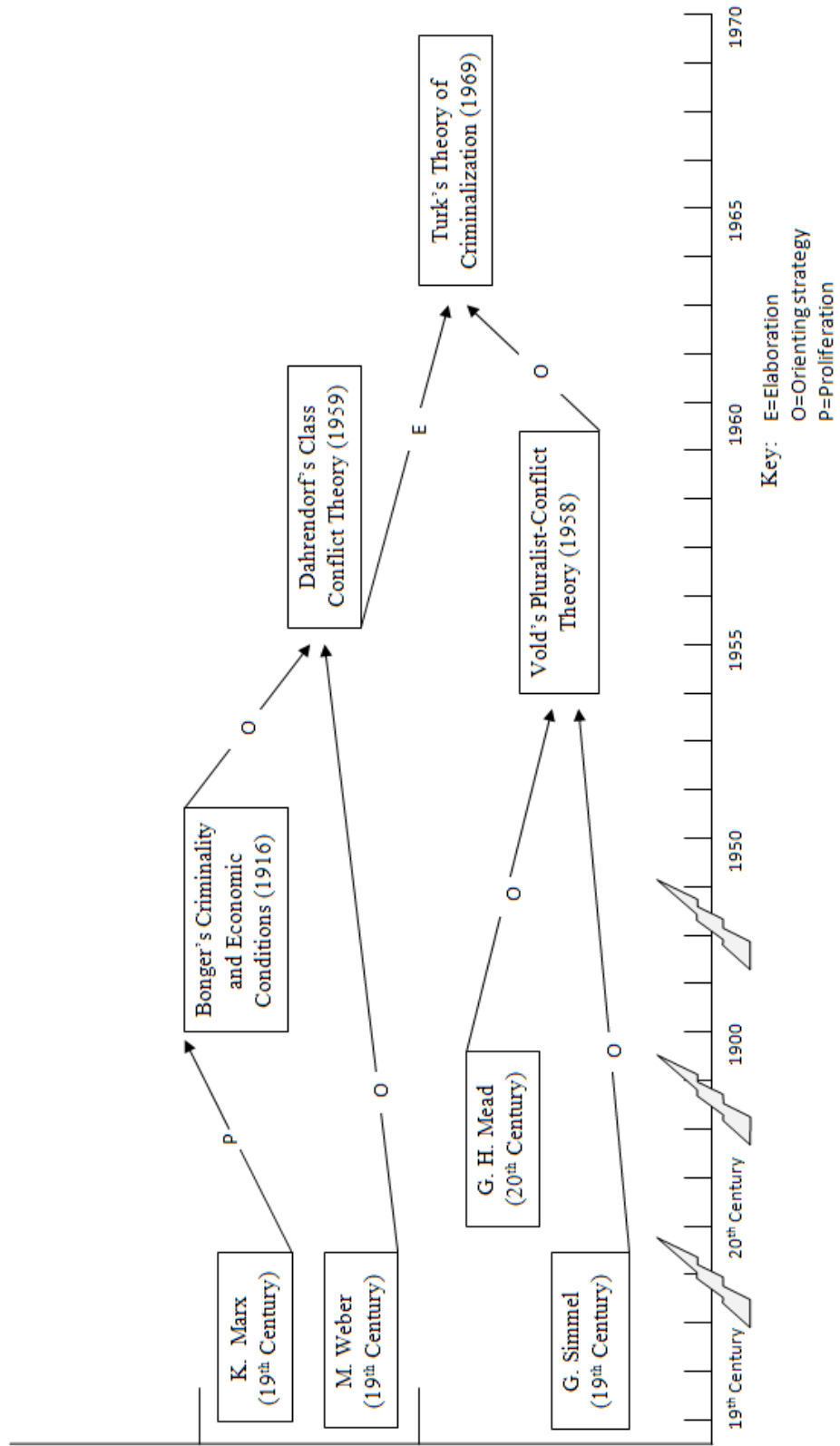
<sup>50</sup> This is a useful and important point especially when reviewing contemporary criminological theories. A full discussion of conflict theory is omitted from modern criminological theory textbooks (Lilly, Cullen, and Ball, 2007; Williams and McShane, 2009). More often than not, theory texts discuss early conflict and Marxist theories of crime but fail to review more recent versions of these theories in any detail. This obscures the development in the area and makes it appear as if these areas are less important than other theories that focus on criminality and the criminal act.



working strategy of the radical program. This new problem directive represents a statement about the social reality of the phenomenon under investigation - the activities of the authorities are also important when attempting to understand crime and criminal behavior (Wagner, 1984 p. 30). Further, at this point, the research program was characterized by proliferation. Bonger's (1916) use of Marxist ideas to explain criminality involves the application of ideas from a different explanatory domain. The importation of both Simmel by Vold (1958) and Weber by Dahrendorf (1959) illustrates proliferation from social theory into the explanatory domain of the formation of the criminal law, a different problem focus. This presence of proliferation indicates that the program is increasing in breadth because the range of problems addressed by the theories is increasing (Wagner, 1984, pg. 103). This conflict program has entered a branching phase given the frequent application of ideas from outside criminology (Wagner and Berger, 1985).

The next major unit theory in the conflict program was articulated by Austin Turk (1966) (see Figure 3 on page 68). In his theory, Turk is working within the same Weberian conceptual scheme developed by Dahrendorf (see Taylor, Walton and Young, 1973). The main goals of this theory are to explain how authorities assign criminal status to people, and to understand why some people accept authority whereas others do not (Turk, 1966). Turk also assumes that conflict is a natural part of society, so this assumption from the Simmelian-Voldian approach is combined with the work of Dahrendorf (1959) (Lily, Cullen, and Ball, 2008). The central argument here is that laws result from the most dearly held cultural and social norms of powerful interest groups with influence over the authorities (Gibbons, 1979). However, cultural and social norms

**Figure 3.** Turk's Theory of Criminalization



may not always match; it is this incongruence that determines the potential for conflict with each legal norm. The largest clash will come when two sides strongly adhere to differing sets of cultural and social norms. Eventually, through conflict-filled interactions, both authorities and subjects learn their place and accept each other's positions (Taylor, Walton, and Young, 1973).

Turk's (1969) formulation is interesting as it represents an attempt at integrating the conflict-pluralist and Weberian ideas of Vold (1958) and Dahrendorf (1959). However, according to Wagner (1984), this would not be considered a true case of theoretical integration because formal propositions from both of the constituent theories have not been combined. Instead, Turk has taken the Simmelian element from Vold's (1958) orienting strategy and used it to elaborate upon Dahrendorf's (1959) theory (Wagner, 1984). This appears to be an example of orienting strategy integration described in Chapter Two. Orienting strategy elements are being combined and the resulting unit theory reflects the new changes to the working strategy directives (Berger and Zelditch, 1993; 1997).

There are a few problems in Turk's explanation. First, the theory fails to explain the specifics of how authorities become authorities (Gibbons, 1979). Second, Turk's (1969) theory risks slipping into a "tautological abyss". As Taylor, Walton and Young (1973) point out:

At the basis of Turk's rather tautological theory of criminalization is a view of conflict over social norms – not in the sense of the failure of some individuals to internalize dominant norms, but in the sense that different people relate to different sets of norms, depending on their own individual bio-social experience – some of which norms are institutionalized as norms of domination, others of which are assigned the status of deference. Conflict, and the assignation of a criminal status to various kinds of

behavior, will depend on the congruence between social norms and the cultural evaluation of norms. (pg. 243)

While somewhat difficult to comprehend, this passage does point out a major weakness in Turk's (1969) theorizing. He claims to take a pluralist-conflict point of view, and he does, but only with regards to social action. As the preceding statement suggests, Turk assumes that legal norms largely represent a general consensus in society. This problem is partly a result of his selection of theoretical concepts. The substitution of authority for class seems useful; however, the two are inextricably linked to one another, since authority often manifests itself in class power. Wealthier people have more political influence than the poor, this political influence nearly always equates to authority. The connection between class and authority presented an important anomaly for the conflict criminology program to resolve.

### **Pioneers in Conflict Criminology**

Beginning in the late 1960s, conflict theory in criminology began to thrive. There was a great deal of interest in the new focus on the behavior of the agents of formal social control, and the effects that this might have on both crime and deviance. Quinney's conflict theory, presented in *The Social Reality of Crime* (1970), is the first in a series of interesting formulations involving a number of philosophical shifts.<sup>51</sup> In addition, there are a number of influences (both new and old) represented in this particular unit theory. In order to understand the myriad philosophical strands woven into Quinney's (1970)

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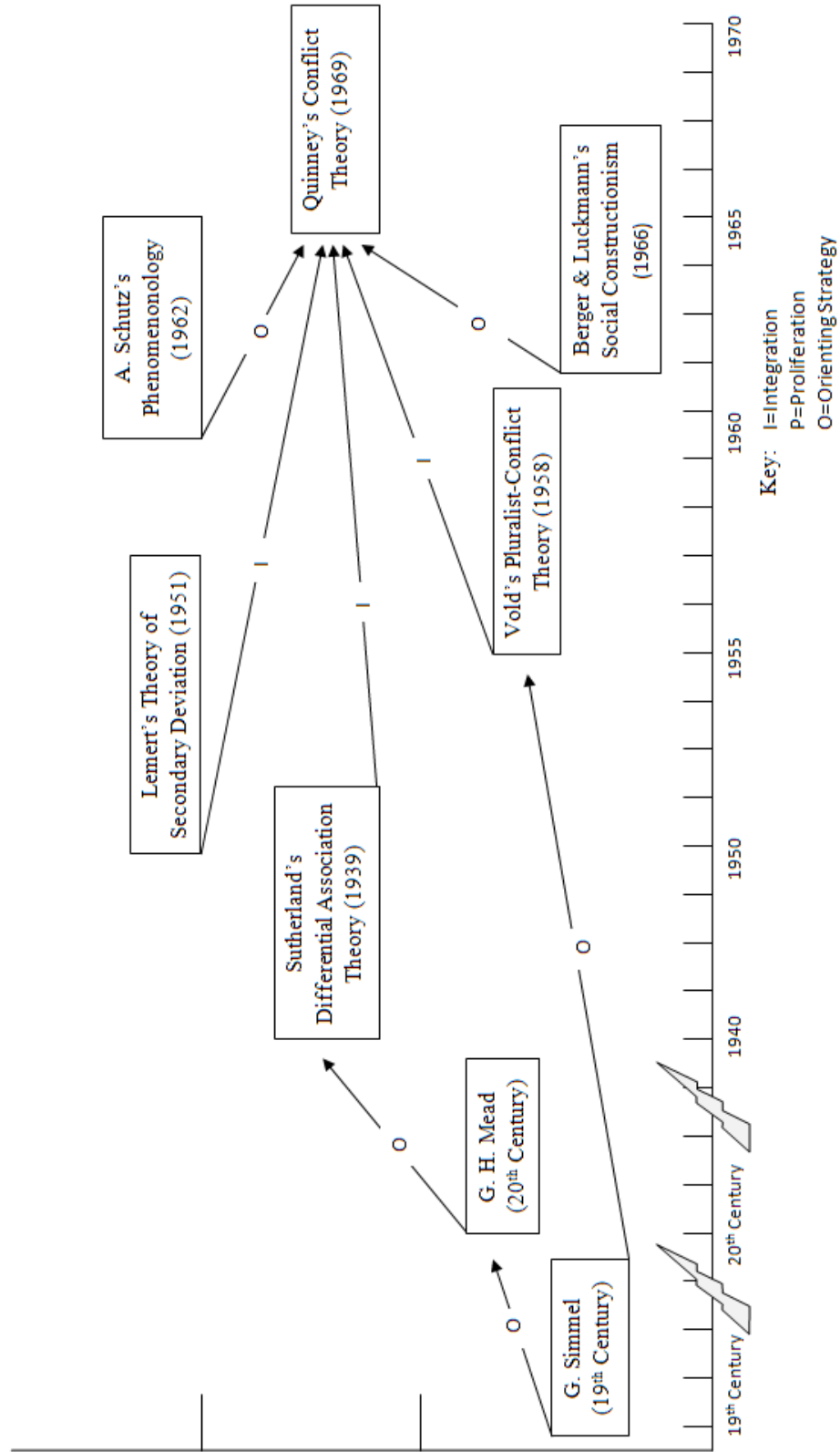
<sup>51</sup> Richard Quinney's numerous shifts in philosophical assumptions and perspectives are very well documented (see Gibbons, 1979 pg. 179-180; Lilly, Cullen, and Ball, 1995 pgs. 158-164; Einstadter and Henry, 1995, pg. 234).

theory, a close analysis of the theory's propositions and assumptions will be useful (see, Figure 4 on page 72).

A basic ontological assumption in Quinney's formulation is that there is no clearly objective reality or existence; epistemologically this means that there is no absolute definition of the law. In other words, all behavior defined as crime is socially constructed (Quinney, 1970). These statements are clear challenges to foundational assumptions held by most earlier criminological theories based on positivism. Several methodological directives result from this social constructivist orientation. Causation in the social sciences is considered to be qualitatively different from causation in the physical sciences because the subjects under study (i.e., humans) are part of social reality and can alter it at anytime. Cause is connected to effect, but only in a person's mind, so, the only thing connecting cause and effect is theory. Further, the social scientist is also a part of social reality which makes objectivity all the more complicated. So, the objectivity and impartiality implied in positivist theories of criminology are nothing more than a fiction. These are the basic elements of Quinney's methodological working strategy (Berger and Zelditch, 1993, 1997), and are drawn primarily from work done in sociology and philosophy on the social construction of reality done by both Schutz (1967) and Berger and Luckmann (1966) (Quinney, 1970, pgs. 13-17).

More influences can be identified by exploring Quinney's (1970) substantive working directives. First, society is conceptualized as a dynamic entity wherein phenomena are thought to emerge from the dynamics of social processes and these interactions involve conflict. Power is thought to be differentially distributed in various interest groups. Finally social action is thought to be intentional, goal-oriented and

**Figure 4:** Quinney's Theory Social Reality of Crime Theory



meaningful. The influence of Voldian (1958) conflict theory and the importance it places on groups can be easily seen here. Further, Quinney is reliant upon symbolic-interactionism.<sup>52</sup>

The problem focus of Quinney's (1970) theory is particularly interesting:

Two schools of thought have developed. Some argue that crime is properly studied by examining the offender and his behavior. Others are convinced that the criminal law is the correct object: how it is formulated, enforced and administered. The two need not become deadlocked in polemics. The long overdue interest in criminal definitions happily corrects the absurdities brought about by studying the offender along; the two approaches actually complement one another. A synthesis of the criminal behavior and criminal definition approaches can provide a new theoretical framework for the study of crime. (pg. 4)

This new framework can be seen as an early attempt to produce a theory that accounts for both criminality and the formation of criminal law.<sup>53</sup> All of these elements contribute to the substantive directives that compose Quinney's working strategy; they make assertions about both the subject matter being studied and the nature of social reality (Wagner, 1984, pg. 30; Berger and Zelditch, 1993, 1997). This also determines the problem focus of Quinney's (1970).

The propositions presented by Quinney expand on the assumptions, connect each to one another, and suggest their ramifications for the study of crime. First, crime is defined by authorities. Second, these definitions of crime are focused on behaviors

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<sup>52</sup> The same is true of Vold's (1958) formulation, probably because of his reliance on Simmel. The founders of symbolic-interactionism (Cooley and Mead) were also both influenced by Simmel (Ashley and Orenstein, 2001).

<sup>53</sup> This directive is important considering that some subsequent theorizing in this area attempts to account for both "action and reaction", as in Taylor, Walton and Young's (1973) new deviancy theory and Young's (1987) square of crime or "criminal behaviour and the behaviour of the criminal law", as in Bernard, Snipes, and Gerould's (2010) unified theory of crime. These theories are concerned with essentially the same task: expanding the heuristic set in the study of crime.<sup>53</sup> The heuristic set refers to the range of problems a program's units theories can potentially solve (Wagner, 1984, pgs. 93-95).

which conflict with the interests of certain groups, that is, either the authorities' interests or the interests of groups linked to those with authority (e.g., special interest groups, and lobbyists). Third, these definitions are applied indirectly by those with the power to shape the agents who enforce the definitions. The first three propositions are derived mainly from the work of Vold (1958) and Dahrendorf (1959) because the theory combines ideas about interest groups and authority-subject relationships.

The fourth proposition states that those who are the least connected to the dominant group(s) have a greater chance of having their behavior defined as criminal. This proposition relies upon several ideas from the symbolic interactionist perspective. Specifically, it is derived from Sutherland's (1949) differential association theory and its more recent elaboration, Burgess and Akers's (1969) differential reinforcement theory, to explain how "different segments of society have different normative systems and different patterns of behavior, all of which are learned in their own social and cultural settings" (Bernard, Snipes, and Gerould, 2010, pg 250). In addition, a proposition stemming from Lemert's (1950) labeling theory is used to understand how criminal roles are formed and how they may reinforce subsequent criminal behavior. Fifth, these conceptions of crime are constructed through human communication. This proposition flows out of some of the social constructionist assumptions described above. Finally, the last proposition is a definition of the social reality of crime, which amounts to a composite of the other propositions (Quinney, 1970).

Quinney's (1970) theory can be seen as an example of both proliferation and integration (Wagner, 1984). He has taken conflict-pluralist assumptions from Vold's (1958) theory and combined them with propositions from symbolic-interactionist theories

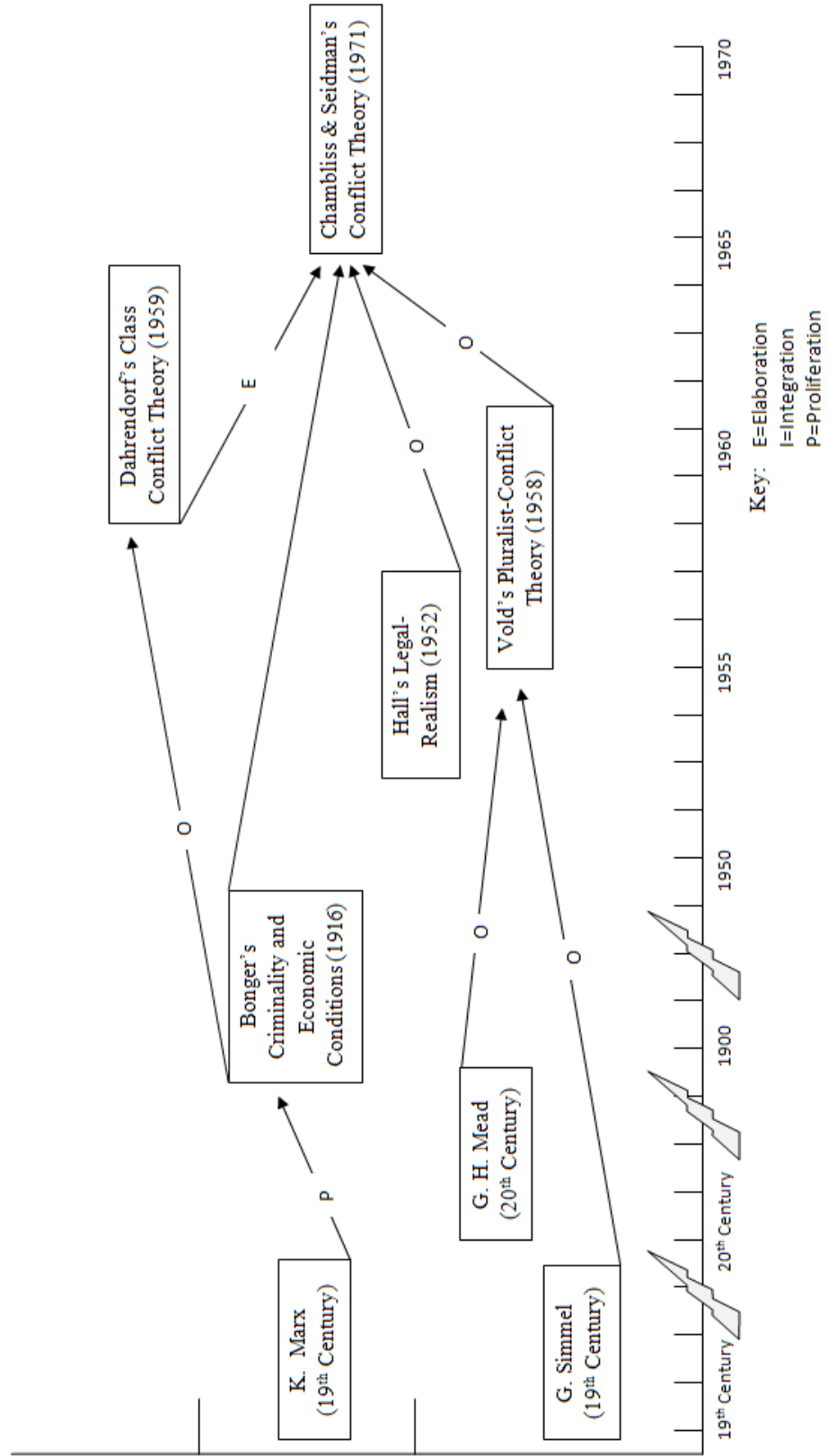


(Sutherland, 1943; Burgess and Akers, 1969). Both sets of ideas are also expressed in formal propositions and interrelations are described. This use of these ideas from symbolic-interactionism and conflict-pluralism is illustrated by Quinney's (1970) emphasis on conflicts between different "segments" of society. Some segments of society are very well-organized (e.g., business, labor groups) while others have organized themselves only recently (e.g., women, poor people, and racial/ethnic minorities, homosexuals). The probability that individuals in the different groups will violate laws varies in relation to their level of power and organization. Groups with the least power are thus the most likely to have their behaviors criminalized in some way (Bernard, Snipes and Gerould, 2010). This helps to explain exactly how authorities become authorities and therefore, Quinney (1970) avoids some of the problems encountered in Turk's (1969) earlier theory.

This activity resulted in both an increase in breadth, from the proliferation of social constructionist ideas into criminology, and density, from the integration of existing ideas to expand upon the accounts offered in the original constituent theories. The impetus for this activity stems from the increase in the heuristic set (problem foci) or the number of problems addressed by the theories in this program as this theory attempts to account for both criminality and the formation of criminal definitions (Wagner, 1984, pg. 95 and 103-104).

The last unit theory in the conflict trajectory in the conflict program was proposed by Chambliss and Seidman (1971) (see Figure 5 on page 76). The legal scholar Jerome Hall is one of the most important influences in this theory. Specifically, Hall's "legal

**Figure 5: Chambliss and Seidman's Conflict Theory**



realism”<sup>54</sup> philosophy was applied to the area of criminal law and criminology. The assumption derived from this perspective dictates that one must focus on the “law-in-action” rather than the “law-on-the-books” (Chambliss and Seidman, 1971, pg. 3 & 176-177). These theorists also assume an interest group perspective rooted in Dahrendorf’s (1959) argument; however, they contend that formal institutions for the purpose of sanctioning are not a necessary part of society (Lilly, Cullen, and Ball, 2008). Chambliss and Seidman (1971) also carry their commitment to conflict further than Dahrendorf. As they wrote at the time:

...we intend to demonstrate that Dahrendorf erred. The legal order itself falsifies his assertion that one cannot choose between conflict and consensus models. Briefly put, the value-consensus model cannot account for the shape of the legal order; it does not even raise sociologically relevant questions about it. By contrast, the conflict model, with all its shortcomings, does have considerable heuristic value for analyzing the legal order. Furthermore, the very existence of a legal order, enforcing prescriptive rules by employing society’s hit men – police and gaolers and sheriffs and the National Guard and the Army, all official armed enforcers – falsifies the consensus model. If consensus existed, we would not need hit men. (pgs. 36-37)

The propositions in this theory can be summarized as follows. First, as society becomes increasingly complex, the law becomes more repressive. Another consequence of increasing complexity is more profound social stratification with some groups gaining power over others. The most powerful groups will determine which norms are formalized and made into law (Chambliss and Seidman, 1971). Given the connections between them, it is not surprising that this explanation sounds very similar to Quinney’s (1970) conflict theory, although the explanatory account is slightly different.

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<sup>54</sup> This is part of a larger body of legal jurisprudence theory.

Consequently, this could be thought of as a variant of Quinney's (1970) theory.<sup>55</sup> In addition, Chambliss and Seidman (1971) eclipse their predecessors, by arguing that economic stratification occurs alongside social stratification. They claimed that wealthy and powerful interest groups use government bureaucracies as a means for maintaining their power. This final element could be regarded as the infiltration of a Marxian theme back into the area of conflict criminology.

This theory presents a good example of elaboration upon the theory offered by Dahrendorf (1959). Because of Turk's inconsistencies mentioned earlier, the theorists have abandoned the Weberian portion of the original theory from Dahrendorf (i.e., the substitution of authority for class) and have replaced it with a sort of "tacit Marxism", which redirects the focus back to class and economic issues. The shift back to Marxism amounts to a change in the substantive working strategy of the theory. This is also an example of proliferation given the incorporation of Hall's (1952) legal realism perspective. This appears to be a new methodological directive in the working strategy of this theory (Berger and Zelditch, 1993, 1997).

Chambliss and Seidman's (1971) theory had a major effect on future program growth. By redirecting the focus on economics, they effectively sent the conflict

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<sup>55</sup> One could also argue that Turk's (1969) theory of the criminalization process was also a variant in relation to these two theories. Eventually Turk's formulation fell out of favour because of problems with explaining the origination of authorities. Further, Quinney's (1974, 1977) and Chambliss and Seidman's (1971) subsequent theories incorporated Marxist elements that help refine the explanatory mechanisms within each theory.

criminology program into a degenerative state<sup>56</sup> while at the same time producing a new ‘pure’ Marxist branch.

According to Wagner’s model, all of this activity in the conflict criminology trajectory (see, Figure 6 on page 80) indicates an attempt to refine various sections of the core (Wagner, 1984). This seems to have been accomplished by producing unit theories, and reacting to criticism by adjusting unit theories—usually through changes in working strategies. This type of activity is definitely present if one examines the progression between the work of Bonger (1916), Vold (1958), Dahrendorf (1959), Turk (1966), Quinney (1970), and Chambliss and Seidman (1971). Essentially, the notion of conflict was a constant, sometimes with a vague Marxist element, as in Bonger’s (1916) work, but most of the time with little regard to the political economy. A great deal of proliferation took place, so it is not surprising that the branch eventually took shape. The theorists were abandoning elements that seemed to be problematic (e.g., the Weberian conception of authority) and trying new ideas in their place (e.g., social constructivist, symbolic interactionist, and legal realist assumptions). Finally, we come full circle back to the Marxist strategy with the offering from Chambliss and Seidman (1971) in which the focus is redirected back to class and economic issues.

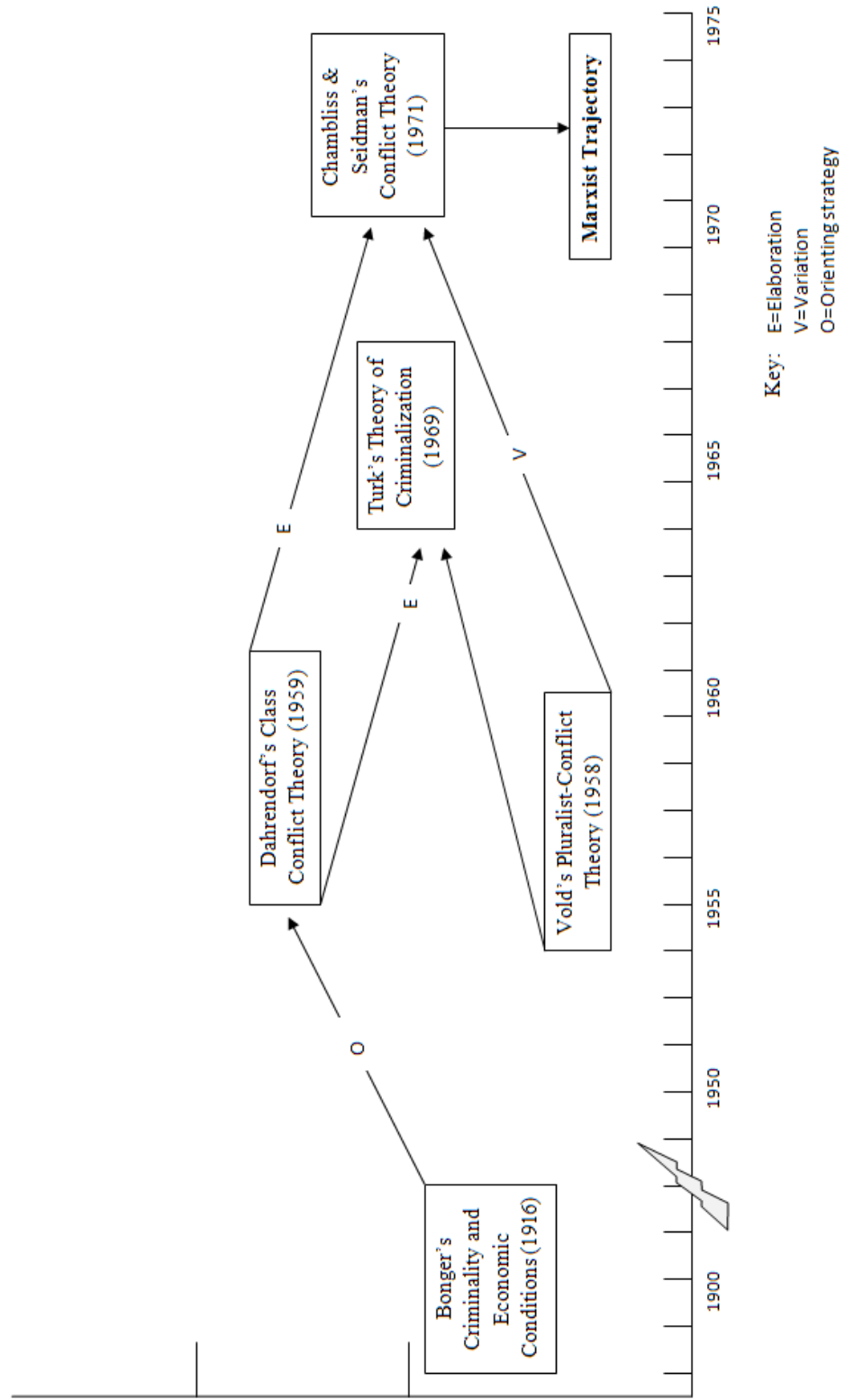
### **The New Criminology: Enter the Political Economy**

Beginning in the early 1970s, criminologists slowly began to lose faith in simple conflict explanations divorced from discussions of politics and the economic factors which may lead to crime (Quinney, 1974, 1977; Chambliss and Seidman, 1971; Taylor,

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<sup>56</sup> After 1971, there would be little interest in the “softer” conflict explanations in the field of criminology as Marxist explanations became more popular. For an exception see Bernard, Snipes, and Gerould’s (2010) unified conflict theory of crime.

**Figure 6:** Conflict Criminology Trajectory



Walton, and Young, 1973; Chambliss, 1975). The impetus for this switch was partially related to the high levels of social unrest during this time. A great deal of this was a result of social inequalities that were being challenged (e.g., the civil rights and women's movements). Further, the counterculture movement was in full force, and political authority was being questioned on a regular basis. These changes were also clearly reflected in the music, literature, and art of the time (Lilly, Cullen, and Ball, 1995).

This decade also presented significant challenges to the institution of science itself. Since the 1960s, philosophers of science had already started to question some of the underlying assumptions and methods that characterize all forms scientific inquiry, such as notions of cause and effect, determinism, and the possibility of true scientific objectivity, and objective truth (Kuhn, 1962; Feyerabend, 1976). A great deal of this activity is related to developments in the physics theory occurring at the time. Surprisingly, the social sciences have been profoundly influenced by this activity.

Perhaps the earliest response from criminology came from Taylor, Walton, and Young (1973) with the publication of *The New Criminology*. In this work, the authors suggested that for the field of criminology to grow, it must be willing to embrace a number of new assumptions. Taylor and his colleagues (1973) seem to have been inspired, in part, by Alvin Gouldner a sociologist who had suggested a new, reflexive and interpretative style of sociology in his (1970) book, *The Coming Crisis of Western Sociology*. Gouldner's directive represents a new part of the orienting strategy in the development of this new Marxist branch. Indeed, *The New Criminology* definitely represents a reflexive and thorough critique of existing criminological theory. Specifically, it explores how scholars' personal beliefs are tied to the theories they have

produced. Another connection to Gouldner's (1970) work is found in the critical work of Taylor and his colleagues (1973) who were reacting to structural-functionalism and its devotion to apparent societal consensus<sup>57</sup>.

Another important component of the strategy used here is the assertion that the political economy is relevant to explaining crime. This idea is important because Taylor and his colleagues (1973) contend that it aids in understanding the wider origins of a deviant act. Obviously, this assumption emerges from Marxist thought, but was almost absent from sociological criminology until this point (Bernard, Snipes, and Gerould, 2010). There are exceptions here, most notably Merton's implicit critique of the political economy in his theory of anomie (for a discussion see Taylor, Walton and Young, 1973, pgs. 101-104) and Chambliss and Seidman's (1971) conflict theory. This shift represented a new substantive focus on class in society and inequalities in wealth and power. "New deviancy" theorists suggested that these class differences could be important in explaining criminal behavior, and especially the formation and enforcement of criminal laws (Taylor et al., 1973, pg. 24).

More influence springs from Merton's (1969) notion of the self-fulfilling prophecy. The following quote from Young (1998) illustrates this in several different ways:

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<sup>57</sup> Of course, the movement against functionalism was already going strong in sociology as can be illustrated by the interest in conflict explanations described earlier. However, the conflict explanations are detectable in criminology before the work of Vold (1958), Dahrendorf (1959), Turk (1969), Quinney (1969), and Chambliss and Seidman (1971). Sutherland (1929) discussed the relevance of conflict for the study of crime, and also did research on white-collar criminality. Additionally, Sutherland advised that criminologists should not be constrained by legal definitions and challenged the emphasis on street crimes (Lynch and Groves, 1989). Further, Sellin (1938) observed that in a culturally homogenous society, conflicts between cultures may be lead to crime.



Two influences from North American criminology were paramount: that of labelling theory and that of subculture theory. The first was most evident; the work of Becker, Lemert, and Kitsuse was after all, the precursor to 'postmodern' developments in criminology. The second was more obscure; it was a considerable presence throughout, particularly in the work on youth subcultures, but its voice was muted (see Cohen, 1980; Downes and Rock, 1988), presumably because of its association with structural functionalism, the *bete noire* of radical sociology at that time. (pg. 17)

Merton's idea of the self-fulfilling prophecy was important to the labeling perspective, because it was used as a logical starting point for the argument that societal reaction could possibly breed more crime, the crux of the labeling perspective (Lilly, Cullen, and Ball, 2008). The labeling perspective is also interwoven into new deviancy theory. To be more precise, the labeling perspective is important to the new deviancy theorists because of their concern over both the immediate and the wider origins of the deviant act. According to the new criminologists, the interaction between being labeled by society and the act of the offender internalizing the label is important to understand (Taylor, Walton, and Young, pgs. 272-273).

The work of Matza<sup>58</sup> had a major impact on new deviancy theory for a number of reasons. First, Matza's (1969) suggestion for an alternative to traditional determinism, known as "soft determinism", was likely an attractive option for the new deviancy theorists because it was a move away from the positivist model of crime (Taylor et al., 1973, pgs. 21-23). The notion of soft determinism has become quite popular in the study of crime over the years with theorists from the strain research program (Agnew, 1995) to routine activities and contemporary control theorists (Cohen and Felson, 1979;

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<sup>58</sup> It is true that some theoreticians consider Matza to be a control theorist (Lilly, Cullen, and Ball, 2008) while others (Einstadter and Henry, 2006) classify him as one of the founders of the labeling perspective. Given that he does take societal reaction into account he is considered to be associated with the labeling perspective for the purposes of this discussion.

Gottfredson and Hirschi, 1990). Further, this idea anticipated a number of theoretical movements in criminology including labeling perspective, social constructionist criminology, and existential/postmodernist criminology (Walton and Young, 1998, pg. 17-18).

Second, Matza (1969) suggested that sociologists (and criminologists) take a naturalistic perspective on deviance (and crime) as opposed to a correctionalist orientation that seeks to change individuals, rather than truly understand their behavior. The suggestion of the naturalist orientation encourages an appreciation for the diversity of human behavior and this, too, is embraced by the new deviancy theorists (Taylor et al., 1973, pgs. 281-282). Most theories of crime offer practical suggestions that provide advice on how to reform offenders or correct the problem of crime. Very few theories seek to understand the offender and how they understand their own behavior.<sup>59</sup>

It seems worth pointing out that the new deviancy theorists did not abandon the search for causal theories of criminal behaviour like the labelling theorists did (Young, 1998). The problem focus of labelling perspective is based almost solely on the reaction of society (or specifically the criminal justice system) to crime and the criminal. As will be demonstrated shortly, the problems addressed by new deviancy theory and later left realism were much broader. One could argue that this amounts to a foundational challenge to a methodological assumption in the field of criminology.

The other strand of theory mentioned by Young (1998) as important – subcultural theory – also is related to understanding the immediate origins of the deviant act. The

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<sup>59</sup> A few notable exceptions are Sykes and Matza's (1959) neutralization theory, Katz's (1988) symbolic-interactionist "foreground" theory, Maruna's (2001) theory of redemption scripts, and Zimbardo's (2007) situational theory.

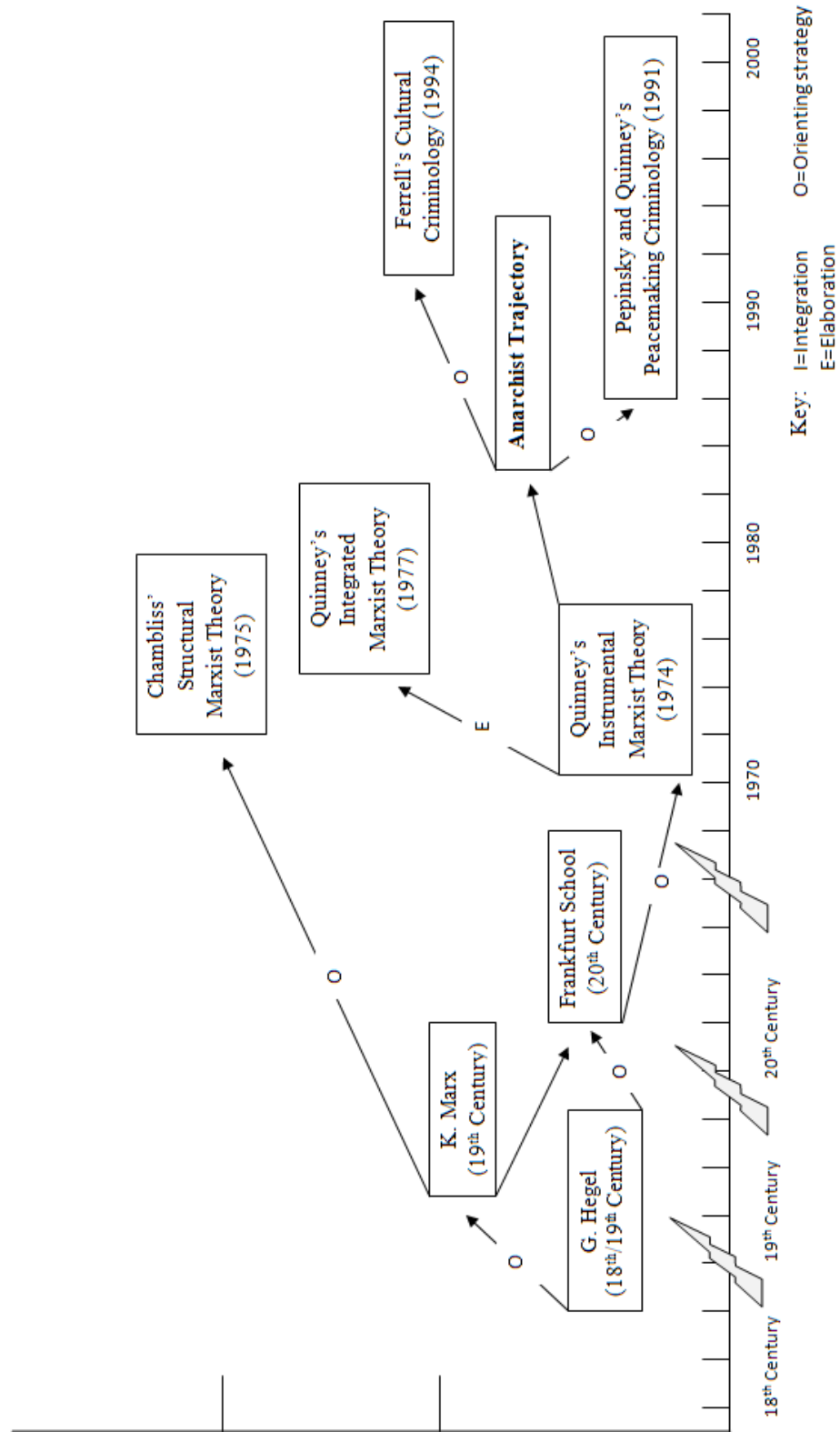
connection alluded to here is that of how subcultures influence the internalization of labeling. Certain assumptions in Merton's (1938) work are relevant here, as his strain theory was the impetus for the early theories of subculture offered by Albert Cohen (1955) and Cloward and Ohlin (1960). Subcultural strain is important to understanding the social psychology of crime (Taylor, Walton, and Young, 1973, pg. 282).

Taylor, Walton and Young's (1973) use of labeling and subcultural ideas helps to explain two aspects of crime. Labeling ideas are used to explain how the reactions of society can influence criminal activity. Young (1998) explains "deviancy is not a quality inherent in the act, it is a quality bestowed upon the act" (pg. 17). Subcultural explanations are added to help understand how criminal and deviant behaviors are generated. This is a clear example of integration taking place within the orienting strategy of the radical criminology program (Berger and Zelditch, 1993, 1997). Assumptions and directives about the nature of crime and criminality are being combined to produce a more rigorous unit theory. As will be demonstrated later, this activity results in the addition of more elements into the heuristic set of the program, and eventually gives rise to a new unit theory to solve the new problem.

### **Marxists in America**

During the mid-1970s, Marxism was experiencing a resurgence in North America (see Figure 7 on page 86). Pure conflict explanations of crime had started to fall out of favor shortly after the turn of the decade. This rapid decline can be attributed to a couple of different factors. First, and most importantly, was the failed attempt to divorce class from power and authority (see Dahrendorf, 1958; Turk 1966). The second shortcoming of the pure conflict approach was the lack of any real practical solutions to the problem of

**Figure 7:** Marxist Trajectory and Resulting Branches



crime. With its relativistic stance in regards to criminal law and authority, conflict explanations were only able to offer some insight into how and why laws came to be made. Pure conflict theories also offered some rudimentary insight into the activities and motivations of institutional bureaucracies (Turk, 1966; Chambliss and Seidman, 1971), but gave little advice on how to change them in progressive ways. In addition, many of these theories had little interest in explaining individual criminal behavior. In the Wagnerian model, the shift towards Marxist explanations could be seen as a change to the foundational assumptions of this program since the importance of the political economy and the significance of class were brought back in after being discarded by Vold (1958), Dahrendorf (1959) and Turk (1966).

Quinney (1971, 1974 and 1977) modified his own conflict perspective. He seems to have embraced a perspective similar to the new deviancy theorists, although Quinney incorporated ideas offered by the Frankfurt School of critical philosophy into his orienting strategy. New deviancy theorists did not embrace critical philosophy in any meaningful or direct way.<sup>60</sup> The Frankfurt School is an important European philosophical movement based on Marxism. In Quinney's (1974) own words:

A critical philosophy is one that is *radically* critical. It is a philosophy that goes to the roots of our lives, to the foundations of and the fundamentals, to the essentials of consciousness. In the rooting out of presuppositions, we are able to assess every actual and possible experience. The operation is one of demystification, the removal of myths – the false consciousness – created by the official reality. Conventional

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<sup>60</sup> It is unclear as to the level of influence being transmitted across the Atlantic between Chambliss and Quinney and the new deviancy theorists in Britain. A few indicators suggest that all of these activities were interrelated. First, Anthony Platt's (1974) highly influential article called "Prospects for a Radical Criminology in the USA" appeared shortly after the publication of *The New Criminology*. This article summarizes the core assumptions of the new deviancy theory program. Second, Quinney did appear in the follow-up work to *The New Criminology*, called *Critical Criminology* (1975). Since this occurred just after Quinney's importation of Critical Frankfurt School philosophy into criminology, this activity suggests some short term reciprocal influence.

experience is revealed for what it is – a reification of an oppressive social order. The underside of official reality is thereby exposed. The liberating force of radical criticism is the movement from revelation to the development of a new consciousness and an active life in which we transcend the established existence. A critical philosophy is a form of life. (pg. 11, italics added)

The importation of critical philosophy into the study of crime and the legal order represents an example of proliferation of orienting strategy elements. Fresh ideas foreign to criminology are being imported to achieve a better understanding of the phenomenon in question (i.e., crime and criminality). This addition results in an increase in the heuristic (or problem) set, since critical philosophy helps provide a more comprehensive account of the activities or the legal order (Wagner, 1984, pg. 94).

Quinney's (1974) Marxist unit theory contains six interrelated propositions:

(1) American society is based on an advanced capitalist economy; (2) the state is organized to serve the interests of the dominant economic class, the capitalist ruling class; (3) criminal law is an instrument of the state and ruling class to maintain and perpetuate the existing social and economic order; (4) crime control in capitalist society is accomplished through a variety of institutions and agencies established and administered by a governmental elite, representing ruling class interests, for the purpose of establishing domestic order; (5) the contradictions of advanced capitalism – the disjunction between existence and essence – require that subordinate classes remain oppressed by whatever means necessary, especially through the coercion and violence of the legal system; and (6) only with the collapse of capitalist society and the creation of a new society, based on socialist principles, will there be a solution to the crime problem. (pg. 16)

The influence of Marxism and the radical philosophy underlying the orienting strategy is readily apparent in the propositions. This association with the Frankfurt School described above implies a utopian ideal of society (Marshall, 1998), and this portion of the theory would later draw a great deal of criticism. Quinney's (1974) initial unit theory was also criticized as being vague because the propositions were unclear. It was also

considered to be impractical, since the only solution offered to the problem of crime was the implementation of a socialist regime (Gibbons, 1979, pgs.180-181).

Because of these criticisms, Quinney revised his theory. The reformulation from *Class, State and Crime* (1977) will be discussed here. This final product can be seen as the result of several elaborations upon the initial formulation offered in *Critique of the Legal Order* (1974). Quinney argues that crime can be divided into two main categories: crimes of domination, and crimes of accommodation and resistance. Crimes of domination involve the authorities, governments, or the elites, and include things like police brutality, political corruption, and white collar crimes. Crimes of accommodation and resistance are committed by members of the lower classes or the ‘underdogs’. These crimes arise out of deprivation due to capitalism, and acts of rebellion against a corrupt, unjust system. In this final exposition, Quinney (1977) began to explain the relationships between the different classes, acknowledging that many criminals prey upon members of their own class, and are not involved in some political rebellion against the system. As he sees it, the job of the criminologist is to “raise the political awareness of these ‘garden-variety’ lawbreakers” (Gibbons, 1979, pgs. 182-184).

Chambliss (1975) also incorporated a more explicit Marxism into his next unit theory. This shift was very similar to Quinney’s (although Chambliss had started it earlier) and similar propositions emerged. However, Chambliss’s (1975) formulation is steadfastly focused on the criminal law rather than criminality; this is not surprising given the commitment to legal realism discussed earlier (Lilly, Cullen, and Ball, 2008). He argues that the criminal law is nothing more than a representation of ruling class interests, although, occasionally, the ruling class will cater to special interest groups, usually moral

entrepreneurs. The next proposition goes further, stating that the ruling class will be able to violate laws with impunity, because its members are in control and wield authority indirectly through political influence. As the gap between the classes widens, laws will become more repressive, a claim retained from the earlier formulation. Thus, crime is the result of people reacting to the life conditions imposed upon them by capitalism; the only solution is the implementation of a socialist society (Chambliss, 1975).<sup>61</sup>

### **On the Sociology of Division: Rifts in Marxist Criminology**

At this juncture, it should be pointed out that the type of Marxism embraced by the majority of mid 20<sup>th</sup>-century Criminological theorists is closely aligned with what is known as instrumental Marxism. Instrumental Marxists claim that most powerful members of society use capitalist institutions to maintain and increase their power. A competing interpretation is offered by the structural Marxists whose founders include Althusser and Poulantzas. In short, they argue that the situation is much more complex claiming that society is more than the sum of its individual parts. Further, the system of capitalism is thought to be self sustaining, and does not always serve the interests of the elite or special interest groups (Lynch and Groves, 1989).

Structural Marxism also enjoyed a period of popularity and could be considered another branch. Despite this, it never produced a coherent program of research in the field of criminology, more than likely because many do not consider Marxist criminology to be an accurate interpretation of Marx's writings (Lynch and Groves, 1989). However, Chambliss's work (1975) contains some structural Marxist elements and Quinney also incorporated some structural Marxist elements into his reformulation from *Class, State,*

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<sup>61</sup> This is essentially the same conclusion reached by Quinney (1971) in his original formulation.



*and Crime* (1977) by drawing on work done by Spitzer and Gordon (Einstadter and Henry, 1995). Structural Marxism also does later reappear in constitutive criminology (Milovanovic and Henry, 1996).

As mentioned previously, Instrumental Marxists believe that the criminal justice system is just one of the many tools used by the elite to maintain their power (Lynch and Groves, 1989). In the area of instrumental Marxism there is a further division, between realists and idealists. This can be thought of as a difference in substantive working strategy directives; each directs the theorist to what is important in understanding capitalist society (Berger and Zelditch, 1993, 1997).

This simple philosophical division would give rise to a number of branches within the original program of radical criminology. Realism has been dominated by the left-realist movement, while the idealists have gravitated toward anarchist explanations of crime. The goal of the next section of this dissertation is to briefly discuss these (relatively) new branches and the programs produced by them, as well as to touch upon the still developing area of constitutive criminology.

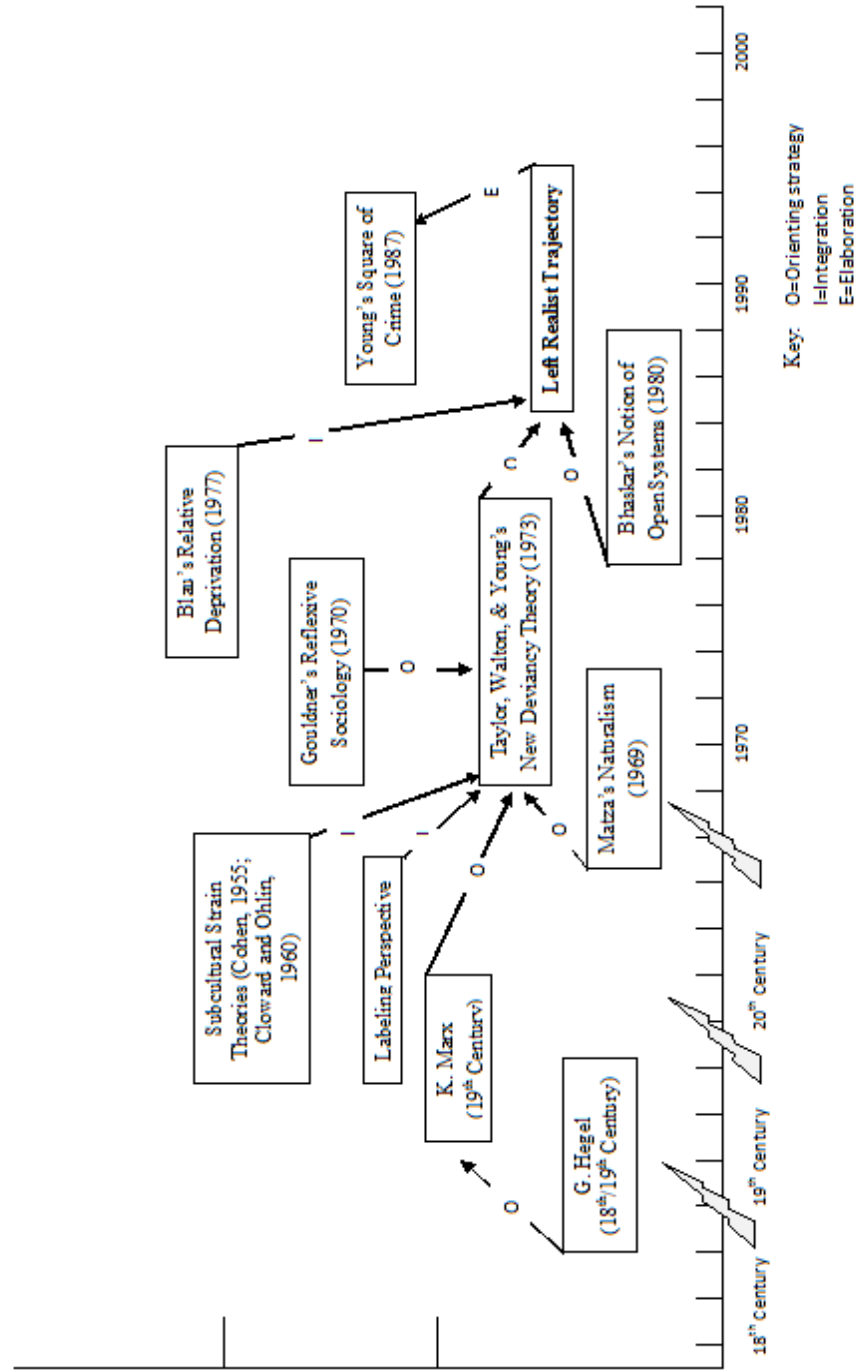
### **Utopia Lost: The Development of Left Realism**

After coming onto the scene in the mid 1970s, new deviancy theory and the resulting Marxist accounts of crime were subjected a number of critiques. First, the radical movement was accused of romanticizing criminals at the expense of victims. Specifically, self-report surveys done in the mid 1980s indicated that many members of the working class and minorities (e.g., Blacks, Asians, and Hispanics) had a palpable fear of crime and victimization. These happened to be the same groups the radical movement

was supporting (i.e., the proletariat) (Lowman and MaClean, 1998). Further, feminists charged the new deviancy theorists with disregarding the victimization of women. Reviewers also noted that while they criticized almost every perspective in the history of criminology, the new deviancy theorists failed to produce any specific theory of crime or the state and did not offer any alternative practical solutions to the problems raised in their work (Gibbons, 1979). The “new criminology” offered by Taylor, Walton and Young (1973) thus seems to be closer to an orienting strategy than a unit theory (Wagner, 1984).

Responses to these criticisms developed over a number of years, and reached fruition in the left realist trajectory (see Figure 8 on page 93). Some of the most significant changes came in adjustments to central components of the orienting strategy in this program. First, the anti-science and resulting anti-correctionalist assumptions were both dropped. Ironically, left realists were willing utilize the work of positivist criminology (Lowman and MaClean, 1998). This change triggered an expansion in the observational set, since the techniques and standards used to evaluate theories in this program had grown (Wagner, 1984, pg. 96). This would also indicate that there has been a change in the methodological working strategy of the program (Berger and Zelditch, 1993, 1997). Left realists also abandoned any idealistic notions portraying criminals as political rebels or romantic heroes (Young and Matthews, 1998). Thus the political economy is still an issue, but there is a realization that “everyday”, working-class people suffer from crime, and desire that something be done about it. In Marxist terms, members of the proletariat are being victimized by the lumpenproletariat. This amounts to a shift from the substantive assumptions of Marxism (Berger and Zelditch, 1993,

**Figure 8: New Deviancy-Left Realist Trajectory**



1997). The previous, more idealistic forms of Marxism seemed to portray the majority of criminals as members of the proletariat who are reacting to the exploitation of the capitalist system.

An important assumption was also added to the foundational methodological elements of the orienting strategy. First, and, most importantly, the distinction between open and closed systems, originally from Bhaskar (1980) was adopted. Young (1998) differentiates between the two in the following passage:

The distinction between open and closed systems is a fundamental one made in the recent realist philosophy of science. Most scientific laws are predicated on research carried out *in vitro*, that is, in closed systems where all extraneous factor are held at constant values. Here the matter of tracing causality is quite simple. But in the actual world – for example, in sciences such as meteorology – the multiplicity of uncontrolled extraneous factors present in an open system makes statements of cause and effect extremely difficult. *Y* follows *X*, depending on the contingency of circumstance: it is better, therefore, to speak of ‘causal powers’ which may or may not be enacted, depending on circumstance. The social world is an ‘open system’ *par excellence*, influenced by extraneous factors of great importance. (pg. 49)

This assumption had a significant effect on the character and number of theories produced by this perspective.<sup>62</sup> Since this assumption implies that causality is incredibly complex, true unit theories will be considerably complex and predication of individual human (and criminal) behavior will be particularly difficult. Further, theories will contain numerous variables, most of which will interact with one another.

One of the early unit theories in the left realist trajectory was an elaboration of Blau’s (1977) theory of relative deprivation (see also Blau and Blau, 1982). Left realists

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<sup>62</sup> Other modern criminological theories are based upon similar assumptions about human nature. Routine activities and rational choice theories (Cohen and Felson, 1979; Cornish and Clarke, 1984) embrace a form of ‘soft determinism’ that allow for environmental or immediate situational factor to be taken in to account. Laub and Sampson’s (2003) age-graded theory of informal social control is premised on the assumption that actors have ‘human agency’ or a socially-situated type of free will.

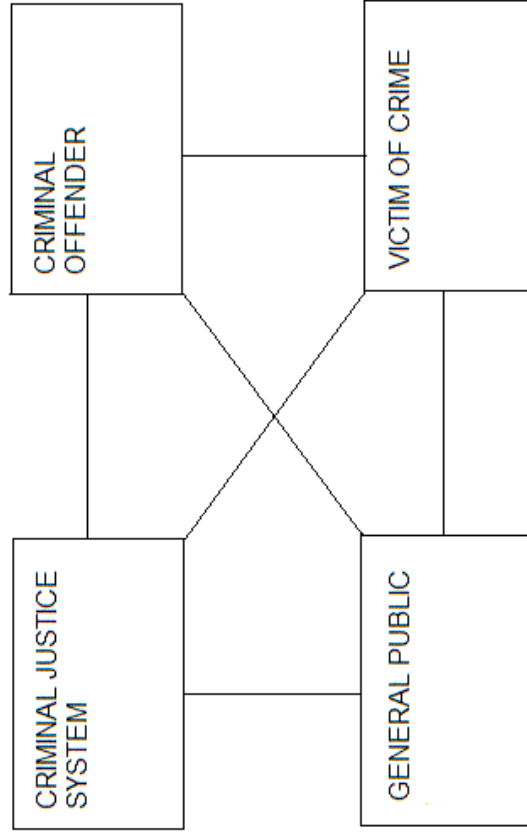
link relative deprivation to changes in the political economy. This importation and incorporation of relative deprivation is not surprising if one considers the influence of the subcultural strain theories on the work of the new deviancy theorists that provided much of the orienting strategy for left realist criminology. Relative deprivation and subcultural theories both ultimately trace their heritage back to Mertonian anomie theory. Young (1998) explains:

Relative deprivation persists but it has been transformed. It no longer involves a comparison across the serried ranks of the incorporated, it has become a comparison across the divided labor market and between those in the market and those excluded. (pg. 280)

So, increases in the standard of living and levels of wealth in North America did not reduce relative deprivation but instead made it worse. Further, during times of economic hardship in the 1980s and 1990s, people started to blame the government and the “system” for their problems (Young, 1998).

The first original unit theory produced by this branch of the program was Young’s (1987, 1992) “square of crime” (see Figure 9 on page 96). Young (1992) pointed out that most previous criminological theories tended to address only one aspect of crime, and that this oversimplifies the study of crime. For example, positivist theories seeking to explain criminality focused exclusively on the offender. Other theories based on victimization studies (e.g., routine activities and lifestyle exposure theory) concentrate on the role of victims in criminal opportunities. Thus, we have the first side of Young’s (1987, 1992) square: the parties involved with the criminal act (i.e., offender and victim). The other side of the square is concerned with the agents of social control, namely the state (i.e., the criminal justice system and criminal law) and the public. On the one hand,

**Figure 9:** Young's Square of Crime



**Source:** Jock Young and Roger Matthews (1992). *Issues in realist criminology*. Newbury Park, CA: Sage. (Reprinted with author's permission)

neo-classicism, deterrence and the labeling perspective devote a great deal of attention to understanding how the state affects criminal behavior. On the other hand, social control theories focus primarily on the role of the public and important social institutions (e.g., family, education, and religion) in controlling the individual's natural inclination towards hedonism, part of which is criminal behavior (Young, 1992). So the other side of the square is composed of the criminal justice system (and criminal law) and the public.

Propositions in the theory state that crime is the result of the four interrelated factors and explain some of the connections. Relations between the public and the police are thought to be the most important because this can affect the public's fear of crime, and also their willingness to report crimes to the police. This has ramifications for crime rates and also levels of informal social control (Young, 1987). Levels of informal social control, in turn, affect the victim's experience with the public. Finally, relationships between the police and offenders may indirectly influence how the police treat citizens (Young, 1987). For example, innocent members of a group stereotyped as often being involved with criminal activity, may be stopped and searched illegally causing frustration with the system. This comes to a full circle and may change the public's view of the police and other agencies of social control (Matthews and Young, 1998).

Thus far, the left realist research branch had been quite productive. The orienting strategy is provided mainly by the work of new deviancy theorists (Taylor, Walton and Young, 1973; Young, 1998). The major unit theory in this branch, Young's (1987, 1992) "square of crime" integrates a number of different ideas and the heuristic set (see Wagner, 1984) and attempts to address the major 'problems' in criminology (i.e., criminality, the criminal act, the activities of the criminal justice system, and societal

reaction). This appears to be an example of integration taking place within orienting strategies as various methodological directives about the proper problems in criminology are being combined (Berger and Zelditch, 1993, 1997). The new integrated working strategy provides fertile ground for further theorization and analysis of relationships between the four points of the square (see for example Lea, 1992). The theory produced - Young's (1987, 1992) square of crime – takes on the integrated nature of the strategy that produced it.

Left realists have suggested numerous policy alternatives and improvements that could be made to the existing criminal justice system. These contributions are too numerous to discuss in detail, but include ideas such as decriminalization (and decarceration) for 'victimless' crimes, harm reduction measures, various alternatives to confinement (e.g., house arrest, diversion programs), community policing initiatives, and new styles of policing (Lea and Young, 1984, 1993; Young, 1998).<sup>63</sup>

### **The Shape(s) of Crime to Come: Pyramids and Prisms**

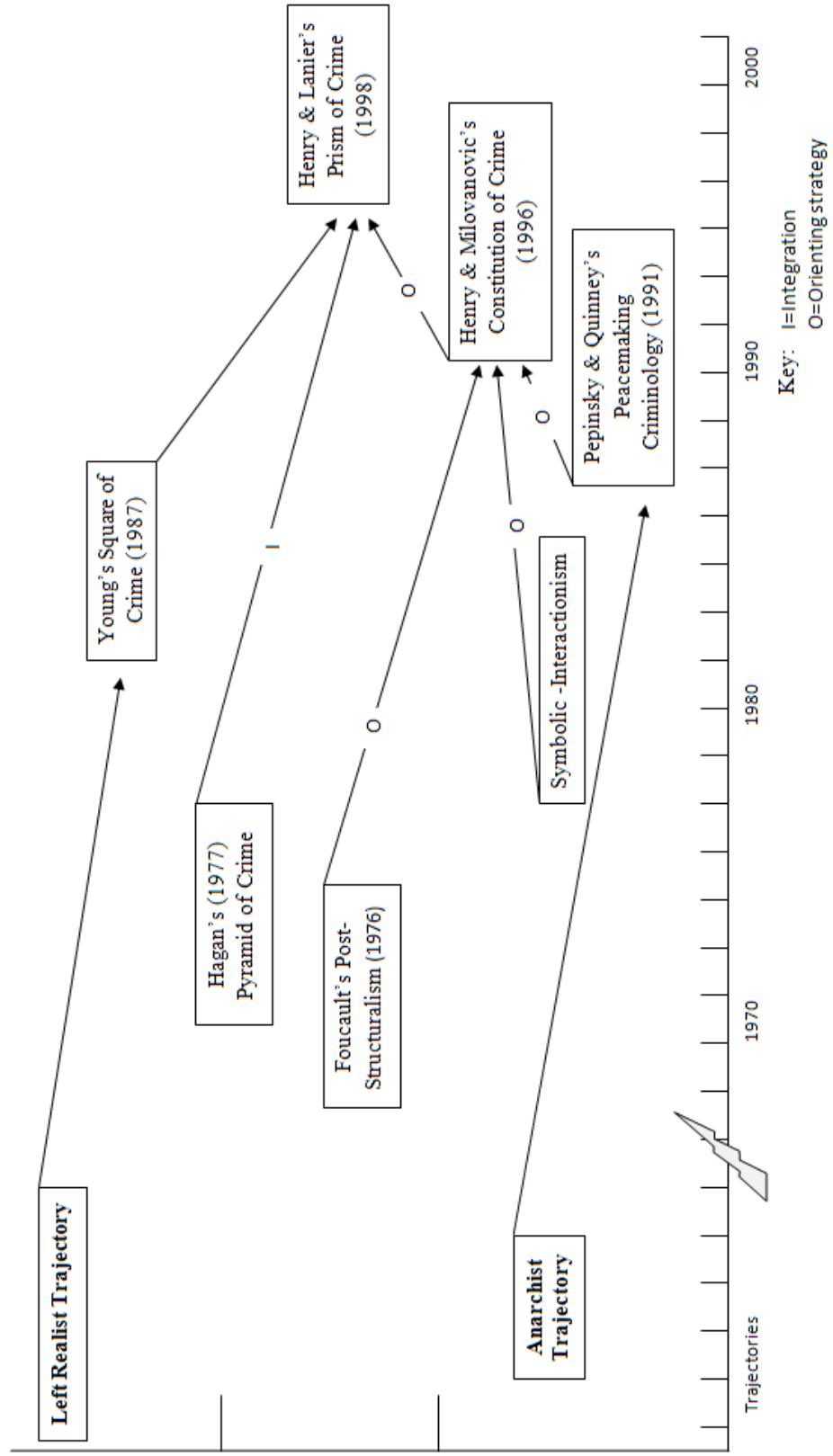
Henry and Milovanovic (1996) have started work on a new branch in the radical program called constitutive criminology (see Figure 10 on page 99). The orienting strategy at work here has been referred to as the "constitution of crime" (Henry and Lanier, 1998). The constitution of crime embraces an affirmative postmodern view, as opposed to a skeptical view, allowing them to avoid the 'nihilistic trap' that stands in the

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<sup>63</sup> These suggestions were influential in policy making, particularly in some of the "New Labor" policies in the U.K. in the late 1980s and 1990s. Further, political parties in other Western countries (e.g., Australia and Canada) also picked up these ideas and instituted similar policies. For a description and discussion of the various alternatives to confinement implemented in Canada, see Griffiths (2004). Arguably, the development of left realism as a program of research was buoyed because of its popularity with governments and wider society. Wagner (1984) suggests that political, cultural, and institutional factors like these can play a large role in theory growth.



**Figure 10:** Constitutive Criminology Trajectory



way of many postmodern efforts. An affirmative view also suggests that there should be no one master narrative or discourse (Rosenau, 1992). According to Berger and Zelditch (1993, 1997), the affirmative postmodern view would be a directive in the methodological working strategy. For example, the work of mainstream criminology is useful; however, knowledge gleaned from laypeople, even criminals themselves, is equally valuable. This change contributes to the diversity of the observational set since the data base of relevant observations has increased (Wagner, 1984).

Constitutive criminology marshals a number of philosophical and metatheoretical strands in criminology (and other areas) including elements of symbolic interactionism, structural Marxism, phenomenology, left realism, anarchist and peacemaking criminology, and post-structuralism (Henry and Milovanovic, 1996; see also Gibbons, 1994). This orienting strategy combines elements found in earlier critical, Marxist, and left realist theories (Henry and Lanier, 1998).

Many of the assumptions tend to have a multi-dimensional, integrated character. For example, the assumption of action here states that through symbolic representations and language, humans actively create their world. The point being made here is that humans shape their world, and are, in turn, shaped by it (Henry and Lanier, 1998). During this process, categories are constructed to present an illusion of order in something that would otherwise be regarded as chaotic (Henry and Milovanovic, 1996). In this initial assumption alone, it is relatively easy to detect hints of symbolic-interactionism, phenomenology, and post-structuralism.

The first major unit theory in the constitutive criminology program is called the prism of crime and was proposed by Henry and Lanier (1998; 2001). This formulation

provides an integrated framework for understanding the definition of crime (Henry and Lanier, 1998). Before describing this theory, a few points of clarification are in order. Some may question whether or not this actually fits the definition of unit theory proposed by Wagner (1984) since it is not directly concerned with explaining criminal behavior. In other words, what phenomenon is being explained? According to Bernard, Snipes, and Gerould (2010), criminological theories can also attempt to explain the behavior of the criminal law. Further, they argue that this is important in understanding and explaining criminality. In the following passage, Bernard and his colleagues (2010) describe why developing these theories will not only improve our understanding of criminal definitions and the criminal justice system but also existing theories of criminal behavior:

Theories of the behavior of the criminal law do not contradict theories of criminal behavior. More than anything else, they ask a different question: Why are some behaviors and people, but not others, defined and processed as criminal? However, that separate question has implication for theories that address the causes of the behaviors that are officially defined and processed as criminal. For example, Gottfredson and Hirschi's theory of criminal behavior (criminals have low self-control) implies a theory of the behavior of the criminal law (law enactment and enforcement officials define and process low self-control actions as criminal, but not high self-control actions). To the extent that their theory of the behavior of the criminal law is wrong, then their theory of criminal behavior is also wrong because low self-control would not be the same as criminal behavior. (pgs. 362-63)

Clearly, the development of theories about the behavior and activities of the criminal law (and the criminal justice system) is important and has been disregarded by most criminologists. Young's (1987, 1992) square of crime is an example of an effort to develop both types of theories simultaneously. Henry and Lanier's (1998, 2001) prism of crime is solely concerned with offering a definition of crime that can help shed light on the behavior of the criminal law and criminal justice system. In order to fully understand

this theory, it is necessary to be familiar with its forerunner: Hagan's (1977) pyramid of crime.

Hagan's (1977) pyramid of crime is concerned with producing a continuum of criminal definitions. This is accomplished by merging elements from several existing perspectives on criminal definitions including the legal consensus (Tappan, 1947) approach, sociolegal approach (Sutherland, 1945), cultural conflict approach (Sellin, 1938), the labeling perspective (Becker, 1963), and new deviancy theory (Taylor, Walton, and Young, 1973). From this integration a unit theory emerges that can be used to analyze and understand various forms of crime and deviance (including minor norm violations) (Hagan, 1977, Greer and Hagan, 2001).

After integrating these perspectives, Hagan (1977) elaborates upon them by suggesting that laws are defined through a combination of three distinct continuums. First, people disagree as to whether or not certain acts should be criminalized; this is especially true of what some call "victimless" crimes (e.g., drug use, illegal gambling, and prostitution). Hagan (1977) calls this the *degree of agreement about the wrongfulness of an act*. For example, most people tend to agree that homicide should be illegal; however, there is less agreement as to whether or not abortion or marijuana use should be against the law. This can be seen as the "moral dimension" of crime (Henry and Lanier, 1998).

Second, norm violations differ with regards to the *severity of the social response* they evoke (i.e. most norm violations are not formally punished and some crimes are punished more severely than others). This aspect can be seen as the criminal justice system's formal response to the act (Henry and Lanier, 1998). Third, the overall *societal*

*evaluation of the harm inflicted by the act* will vary. For example, many crimes are considered to be 'victimless' either because the consequences of such are more likely personal (e.g. drug abuse) or because all parties involved are willing participants (e.g. gambling). Conversely, some acts (e.g. violent crimes) have more interpersonal or social consequences. This facet of the pyramid is derived from the radical and critical contributions to the study of crime (Henry and Lanier, 1998).

Henry and Lanier's (1998, 2001) prism of crime can be seen as an extension of Hagan's (1977) theory (see Figure 11 on page 105). They begin by claiming that Hagan's (1977) formulation is lacking in critical awareness, and suggest three ways in which it could be elaborated (Henry and Lanier, 1998). First, they point out that in the original effort little attention is paid to the public awareness of crime or the realization that there has been a victim. To put it differently, some crimes are less obvious and more hidden than others. For example, corporate or white collar crimes result in harms that are often more difficult to detect or simply take longer to detect than most violent, street crimes.

Second, Henry and Lanier (2001) acknowledge differences in the extent of victimization between different crimes. Again, many forms of corporate crime can affect many people at once. Third, there is no appreciation of visual constraint on certain types of crimes in Hagan's (1977) original theory. For example, some crimes are taken much more seriously, regardless of the harm they cause, mostly because they receive a great deal of media coverage (Henry and Lanier, 2001). To illustrate these differences, Henry and Lanier (1998, 2001) add an inverted pyramid to the original pyramid; this bottom

portion of the structure represents the “hidden” crimes committed by the powerful and the elite.

In Wagner’s (1984) scheme, the prism of crime would represent an elaboration of Hagan’s (1977) pyramid of crime. It extends the ideas originally proposed by expanding the scope to include the crimes of the powerful. This theory also integrates and elaborates upon ideas from Young’s (1987, 1992) square of crime unit theory since it clarifies and explains how crimes are defined. It also suggests that in addition to the victim, offender, state and public, the media may be another important factor to consider in the crime equation originally proposed by Young (1987).<sup>64</sup> The interaction between the media and the other part of Young’s (1987, 1992) square of crime might be very important and a fruitful area of analysis. For example, crime is thought to be self-perpetuating and feeding on the public’s fear of crime and the political reactions to it (Henry and Milovanovic, 1996). Other criminologists have suggested that this might be the case:

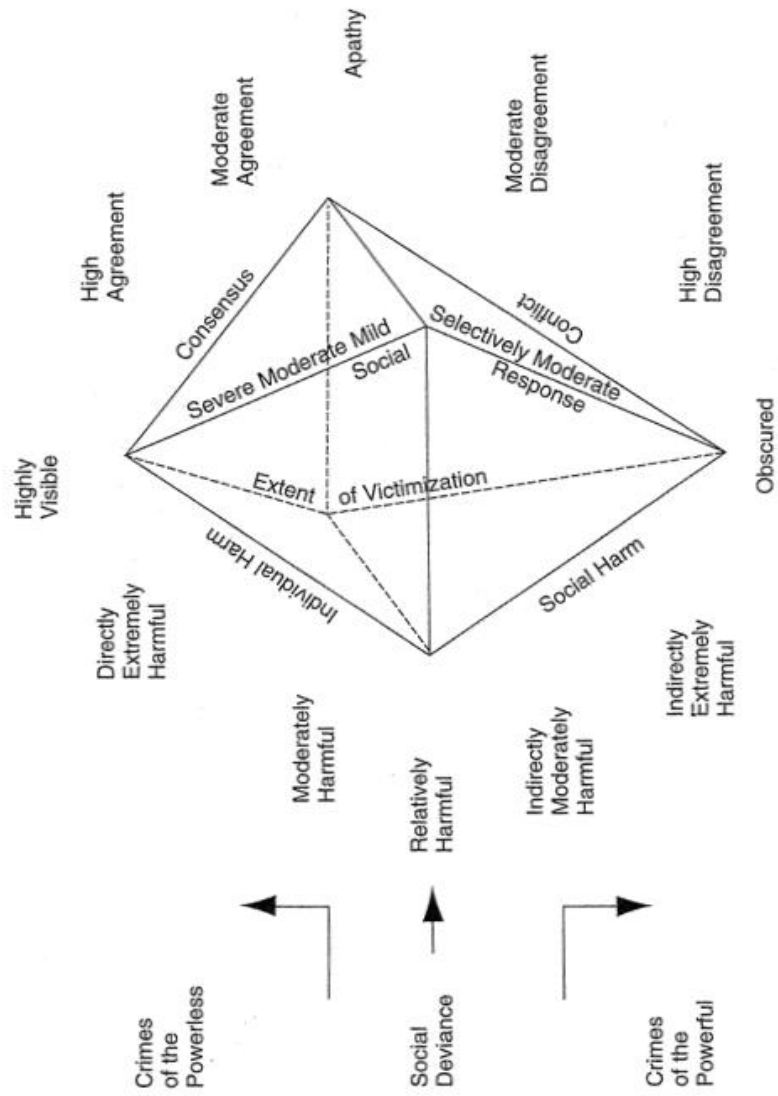
Although new reporting that focuses on the sensational is not erroneous, it does result in disinformation, since it is not balanced. The bias of the media toward sensational crimes, the tendency of the media to simplify issues related to crime and justice, and the tendency of the public to generalize from the specific events all contribute to an uninformed and misinformed public. Systems of corrections have so far been unsuccessful in countering and correcting the images that the media present to the public. (Griffiths, 2004: 17)

At this point, it is difficult to say much more about the impact of constitutive criminology on theorizing in criminology because it is a recent development. The core set still seems to be in the process of being worked out. This situation is not surprising

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<sup>64</sup> Despite the confusion it might cause, Young’s (1987, 1992) square of crime might be appropriately called the pentagon of crime.

Figure 11 – Lanier and Henry's Prism of Crime



Source: Mark M. Lanier and Stuart Henry, 1998. *Essential Criminology*. Boulder, Colo.: Westview, p. 28.

since, according to several theoreticians, the core “does not actually emerge fully armed like Athene from Zeus” (Lakatos, 1978, pg. 48 as cited in Burawoy, 1990: 779 and Wagner, 1992). Interestingly, constitutive criminology resembles early new deviancy theory because a number of existing strands of criminological theory are interwoven.

### **From Idealism to Anarchy**

The most important trajectory to emerge out of the idealist wing of Marxism is anarchist criminology. Anarchists believe that hierarchical systems of authority are always problematic, because power is taken out of the hands of the people. Not surprisingly, human beings are thought of as inherently good. Adherents of this perspective advocate more small community involvement in the implementation of criminal justice system policies and practices (Einstadter and Henry, 2006).

Perhaps the most important trajectory to emerge from this research is peacemaking criminology (see Quinney and Pepinsky, 1991). Some have argued that anarchist criminology and, consequently peacemaking criminology, are opposed to Marxism in a number of ways, implying disconnection (Einstadter and Henry, 2006). A quotation from Gibbons suggests otherwise (1994, pg. 171):

Peacemaking criminology is a derivative of critical analysis<sup>65</sup>. The pain and suffering about which peacemakers speak includes the suffering experienced both by law violators and by those whom against they offend. It also includes *economic suffering*, in which a favored few citizens are able to amass immense wealth at the same time that large numbers of other citizens are homeless, unemployed or underemployed, and often deprived of basic human rights. *Citizens also suffer at the hands of corporations* such as automobile companies that produce cars or trucks which explode in a ball of flames in collisions, due to design defects in their fuel systems; pharmaceutical companies that charge outrageously

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<sup>65</sup> The works of Nietzsche have also been an influence to many associated with this area (Quinney and Pepinsky, 1991)



inflated prices for drugs; and various other corporations that are engaged in unethical or immoral conduct. (italics added)

In this passage, hints of instrumental Marxism and ideas from the Frankfurt School of critical philosophy are still intact. This is not surprising since Quinney adopted a commitment to critical school thought in *Critique of the Legal Order* (1974). As mentioned previously, Quinney is often portrayed (usually in a negative light) as adhering to a perspective for a short period of time and then abandoning it in favor of some new trendy philosophical viewpoint (Einstadter and Henry, 2006; Gibbons, 1979; Lilly, Cullen, and Ball, 2008). This allegation may appear to be true on its face; however, a careful reading of his works reveals that perhaps his various conversions were not as irrational as they are made out to be.

Feminists have embraced this perspective more willingly than traditional forms of Marxism, which they view as being unconcerned with female victimization. Consequently, this has aided in the proliferation of a number of feminist ideas into criminology (Messerschmidt, 1986, 1993; Daly and Chesney-Lind, 1994).

Anarchist criminology has failed to offer any coherent theoretical research programs or unit theories in the study of crime and criminality. This is more than likely because anarchists believe that all hierarchical systems of authority and domination should be opposed. Given this commitment, and the fact that most anarchists consider

knowledge and information to be part of the “structure of domination” the lack of unit theories and research programs is not surprising.<sup>66</sup>

### **The Perils of Conflict: The Drawbacks of Competition and Division**

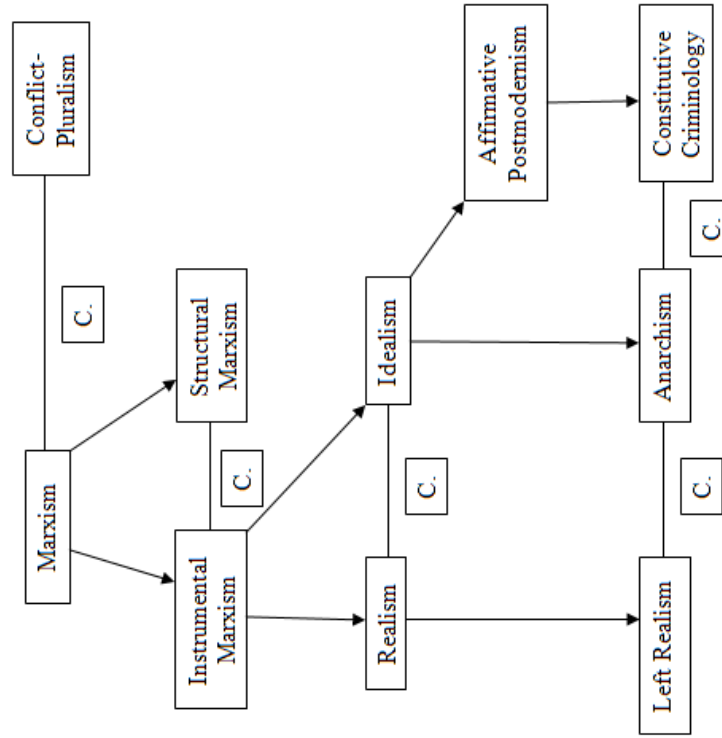
The radical criminology research program has been characterized by many divisions at both the unit theory and orienting strategy levels. At the unit theory level, there was some early competition between the variant theories produced by Turk (1969), Quinney (1969), and Chambliss and Seidman (1971). This activity was somewhat useful because the competition among these theories helped to refine the explanatory mechanisms at work in these theories.

The orienting strategies of these theories also displayed two major underlying philosophical conflicts (see Figure 12 on page 109). First, in Marxist criminology, there is a clear divide between structural and instrumental Marxists. Second, there is a further division within the instrumental Marxist camp between idealists and realists. Competition of this sort is not necessarily a bad thing as it can be helpful in refining the core strategy of the program. However, if these conflicts about orienting strategy linger, they seem to disrupt the development of unit theories in the research program. This happens because the discussion eventually degenerates into an irresolvable philosophical debate; soon unit theory production ceases, and progress grinds to a halt. Wagner (1992) describes a problem in sociology very similar to this one:

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<sup>66</sup> This is unfortunate. It seems as though criminological theories in general could greatly benefit from more efforts to understand crime through the eyes of its participants. This is a particular concern of Ferrell’s (1995) cultural criminology. In addition, this branch of criminology holds much in common with theories that attempt to gain a greater understanding of the “foreground of crime” (see fn 21). However, if all organized efforts to develop knowledge are viewed as antithetical to the anarchist tradition, the viewpoint will likely remain on the fringes of criminological theory and will fail to influence other orienting strategies and/or research programs.

Figure 12: Orienting Strategy Competition in Radical Criminology



**Key**

C. = competition

Theoretical sociology manifests what I call the “imperialism of perspective.” Not only is theoretical work more important to the discipline than empirical work, one’s own particular brand of theorizing (i.e., one’s own orienting strategy) is the only legitimate one. All others are fatally flawed; they are outdated, insufficiently comprehensive, or too unidimensional...Strong antagonisms often develop between members of the two cultures because of these imperial claims. Antagonisms almost as strong develop among members of different camps within the same culture because of these claims. (pg. 217)

Clearly, the radical criminology research program illustrates how adherents of similar orienting strategies can fail to work together. It is better to clearly state one’s assumptions, and move on to developing unit theories, rather than arguing about the correct Marxist view of human nature (Wagner, 1984, 1992).

Left realism seems to have avoided some of these problems for different reasons. First, assumptions about human nature are made with reference to facts known about crime. It is unrealistic to maintain that all (or even most) offenders are reacting against the unjust system of capitalism. Second, left realists were more willing to embrace uniform empirical procedures to develop their theories. More specifically, they have diversified their observational set and used more traditional forms of data (e.g., crime statistics and victimization surveys) to support and test their theories. The core unit theory of left realism, Young’s (1987, 1992) square of crime, is an integrated unit theory with a clearly defined orienting strategy.

Finally, another important problem in the radical criminology research program is that many of the efforts have failed to address important problem sets or explanatory domains crucial to criminology. For example, micro-level theorizing is almost

completely disregarded in favor of macro-level theorizing.<sup>67</sup> Explanatory domains relating to individual differences and criminal decision-making are ignored or deliberately downplayed because of a commitment to sociology and an emphasis on social structural factors related to crime.<sup>68</sup> Young (1986), a founder of left realism, makes a similar criticism:

...left idealism simply ignores crime as a problem of any significance. Disorder remains central to the study of society – left idealism has, at least, achieved that aim of radical criminology. But it is disorder purged of crime...We have seen how crime disappeared from being the subject matter of radical criminology. What replaced it was a focus upwards to the state and its agencies, coupled with an analysis downwards of their impact upon both offenders and non-offenders. And, of course, to the extent that crime was seen as a non-event of little impact, the latter distinction became increasingly difficult to make...Left idealist criminology thus centres around the nature of the state and its impact upon citizens. It does not concentrate on why people become criminals but how the state criminalizes people. Thus the impact of the administration of justice becomes paramount in a top-down fashion whereas the structural determinants of crime – so to speak from the bottom up – are ignored or relegated to the obvious. (pg. 17)

Some may argue that this critique is unfair because these theories were not intended to explain individual differences. However, the postclassical research program has managed to offer unit theories at many different levels of explanation and in many different problem domains while still retaining their focus on social structure. These theories, as well as their forerunners (i.e., neoclassical theories) and offspring (i.e., environmental criminology) are the subject of the next chapter.

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<sup>67</sup> Again, left realism seems to have avoided this problem somewhat; however, it is lacking the necessary unit theories to be a full-fledged research program.

<sup>68</sup> This is also related to the problem of “theoretical imperialism” identified by Wagner (1992) and discussed on the previous page.

## **CHAPTER 4: THINKING ABOUT THE CRIMINOLOGIES OF EVERYDAY LIFE**

### **A Challenge to Sociological Criminology**

For many years, criminological theory was dominated by sociological and social psychological explanations of criminality. This domination lasted for several decades, roughly from the start of the Chicago School in the 1920s until the 1970s. Starting in the mid-1970s, theorists from other social science disciplines (e.g., economics, political science) became involved in criminology and began to question the general direction of theorizing in the field. Eventually, the neoclassical-deterrence<sup>69</sup> and postclassical research programs grew out of this activity. The theorists in these programs challenged many of the foundational assumptions held by criminologists at the time.

Wagner's (1984) model of theory growth is particularly useful for an understanding of activity in this area of criminological theory. Theorists and theoreticians have frequently suggested that there is a great deal of misunderstanding about the exact relationships between these theories (Cornish, 1993; Einstadter and

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<sup>69</sup> Einstadter and Henry (2006) have cautioned against confusing "economic, neoclassical and postclassical" theories (Becker, 1968; Cohen and Felson, 1979; Clarke and Cornish, 1985) with "conservative theories" (Wilson, 1975; Van Den Haag, 1975). It seems that this distinction is not as clear as the authors imply as there are definite connections between these theories. Clearly, many Classical school ideas have become integrated into the orienting strategies of contemporary research programs in criminology. Further, as Tonry (2008) and Bushway and Reuter (2008) have pointed out, many of the economists (e.g., Gary Becker, Isaac Ehrlich) who have studied the deterrent effects of punishment are well-known and outspoken political conservatives. Harcourt (2001) also identifies many similarities between economists interested in crime and the work of James Q. Wilson (1975, 1982 and 1985). Consequently, the notion that economic/neoclassical, and conservative theories are radically different seems untenable.

Henry, 2007). For example, discussing the development of his routine activities theory, Felson (2008) claims that:

...the routine activity approach is sometimes misunderstood or trivialized by those who read the one-paragraph textbook version rather than the whole original paper, or who fail to read follow-up papers and books. The original routine activity paper in 1979 was clearly both a general intellectual statement and a middle-level theory of crime. In the general statement, crime was linked to a broad range of legal activities. Crime was interpreted as a part of the broad ecology of everyday life...Many people who cite the theory seem totally unaware of this general theoretical basis, or that the original paper presents diverse ideas about how society's technology and organisation affect crime. Thousands cite the routine activity approach but only a smattering of these seem to know more than offender, target, guardian. Indeed, many do not even know that the routine activity approach attributed America's massive crime wave to the dispersion of activities away from family and household as well as technological shifts in goods and services. Fewer realised the linkages to general ecological theory that could apply to other decades and centuries. (pg. 70-71)

Wagner's (1984) distinctions between orienting strategy and unit theory and Berger and Zelditch's (1993, 1997) further elaborations on the concept of orienting strategies are useful in addressing the misunderstandings identified by Felson (2008) and others. Indeed, it seems as though one could substitute 'orienting strategy' and 'unit theory' in the passage quoted above. As will be demonstrated shortly, increased attention to the distinction between unit theories and orienting strategies and the relationships between unit theories and their respective explanatory domains can help alleviate confusion about this area of criminological theory.

## **The Economics of Crime and Punishment**

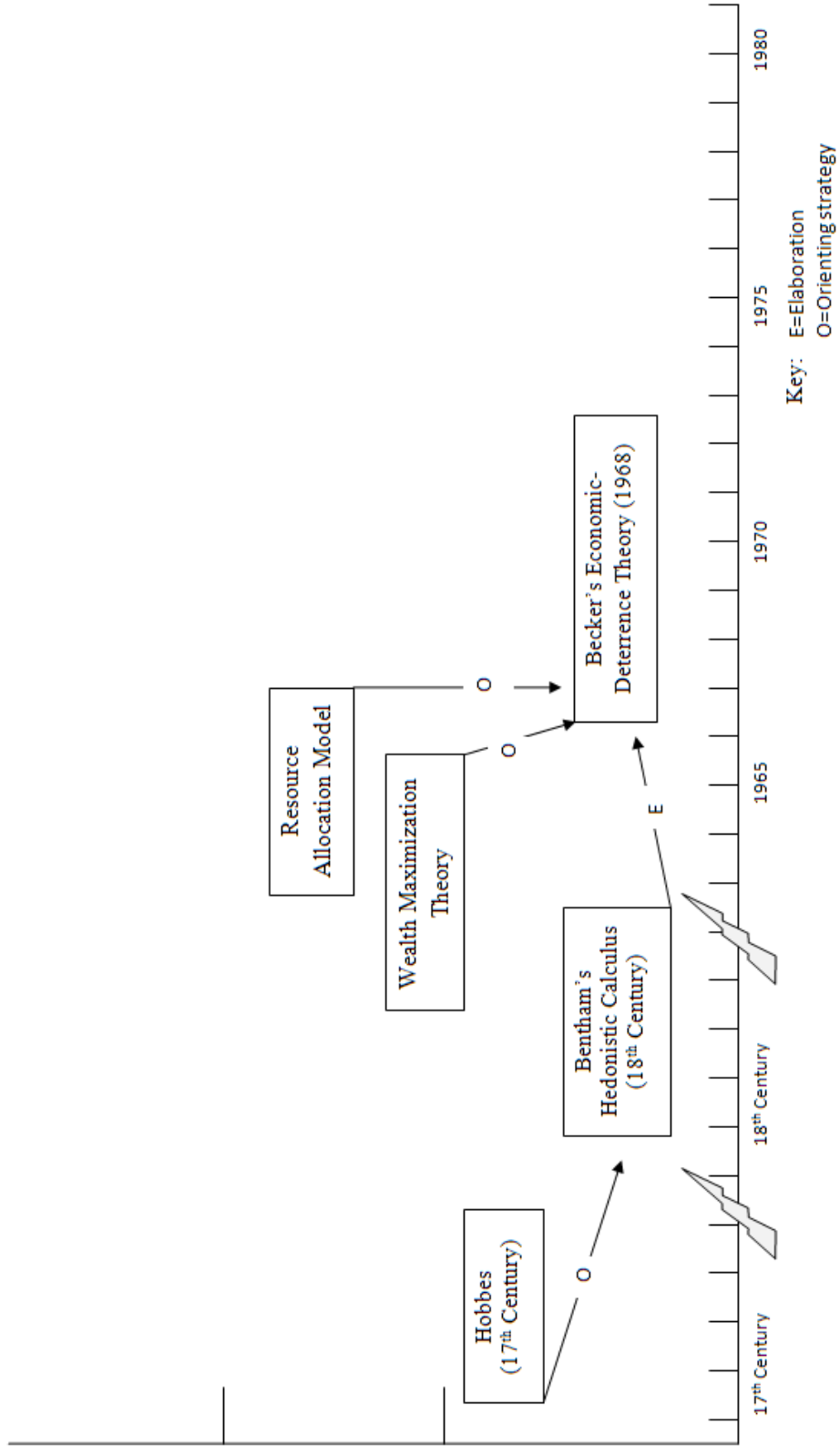
One of the earliest examples of the shift back to Classical School ideas comes from the field of economics<sup>70</sup> in Gary Becker's (1968) economic-deterrence theory of criminal behaviour. Becker (1968) used the utility principle from economics to expand upon the Classical School theory of the hedonistic calculus as an explanation for human behaviour (Akers, 2009). Beccaria (1764) and Bentham (1765) argued that people could be deterred from criminal activity by properly designed punishments, and suggested that there were three elements of deterrence: severity; celerity (or swiftness); and certainty. Essentially, this is the core unit theory offered by the Classical School. The new unit theory offered by Becker (1968) borrows from the "market or resource allocation model," which is part of "wealth maximization theory" or "price theory" in economics (Einstadter and Henry, 2006, pg. 52). Through this application of economics theory, Becker (1968) is attempting to further understand how severity, celerity, and certainty of punishment contribute to deterrence. The importation of economic principles to explain deterrent effects can be seen as an example of theory proliferation into the explanatory domains of criminology (Wagner, 1984). A graphical depiction of this theory can be seen in Figure 13 on page 115.

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<sup>70</sup> This work focuses on theories from economics that have affected the field of criminology, so I will not discuss elaborations of Becker's (1968) original model (Ehrlich, 1973) or applications of pure economic theories to criminological phenomena (Landes, 1971; Landes, 1974; Levitt, 1996; Levitt and Venkatesh, 2000; Levitt and Dubner, 2005). Several criminologists (some of whom are trained economists) have suggested that pure economic work often demonstrates a lack of familiarity with not only basic criminological knowledge and theories, but also criminological phenomena and the functioning of the criminal justice system (Bushway and Reuter, 2008; Tonry, 2008). According to Nobel Prize-winning economist, Ronald Coase (1978) "the lasting ability of economics to establish itself in new domains will depend on the extent to which the contribution is based on subject matter expertise...the techniques and theoretical approach of economists that can shed light on the study of crime can quickly be appropriated by criminologists and become part of criminology" (as cited in Bushway and Reuter, 2008, pg. 393).



Figure 13: Becker's Economic-Deterrence Theory



Bushway and Reuter (2008) clarify the nature of the orienting strategy from which this economic theory emerges:

Economists' study of human choice has a particular ideological slant. Economists have developed price theory, which implies that consumption of any good will decline when the price increases. With admirable conceptual clarity, economists can identify the costs or prices of any given choice, including the decision to commit a crime, and identify the expected relationship between punishment and crime. (390)

Becker (1968) asserted that people do not vary in their motivation to commit crime (as assumed by most sociological criminologists); rather, they vary in their perceived costs and benefits of committing crime (pg. 9). This is a foundational substantive assumption about human nature in the orienting strategy of the neoclassical-deterrence research program (Berger and Zelditch, 1993, 1997).

Becker's (1968) theory shifts the emphasis to examining how criminal justice resources can be most efficiently used to reduce crime. In short, he is trying to specify how offenders respond to the costs of crime imposed by the criminal justice system. The key underlying idea here is quite simple: behaviour can be directly affected through the costs of crime imposed by the criminal justice system (or severity). The focus of this theory is much more on punishing crimes than on directly changing offender motivations to commit crime. This is an early step in changing the problem directive from explaining criminality or criminal motivation to explaining criminal acts or crimes, and is an important change in the methodological directives in this (and future) programs. Offender motivation is less important than it was in previous explanations of criminality

offered by biology, psychology and sociology. This new emphasis is also important because of the implications it has for the functioning of the criminal justice system.<sup>71</sup>

Of course, these ideas were not completely new to criminology. Becker's (1968) economic-deterrence theory starts with the same Hobbesian assumption about human nature used by Beccaria (1764) and Bentham (1765) to formulate a theory of government control of human behaviour (Wilson, 1975, pgs. 241-242). At their heart, Classical School explanations of crime are deterrence theories, and form the basis for most modern criminal justice systems.

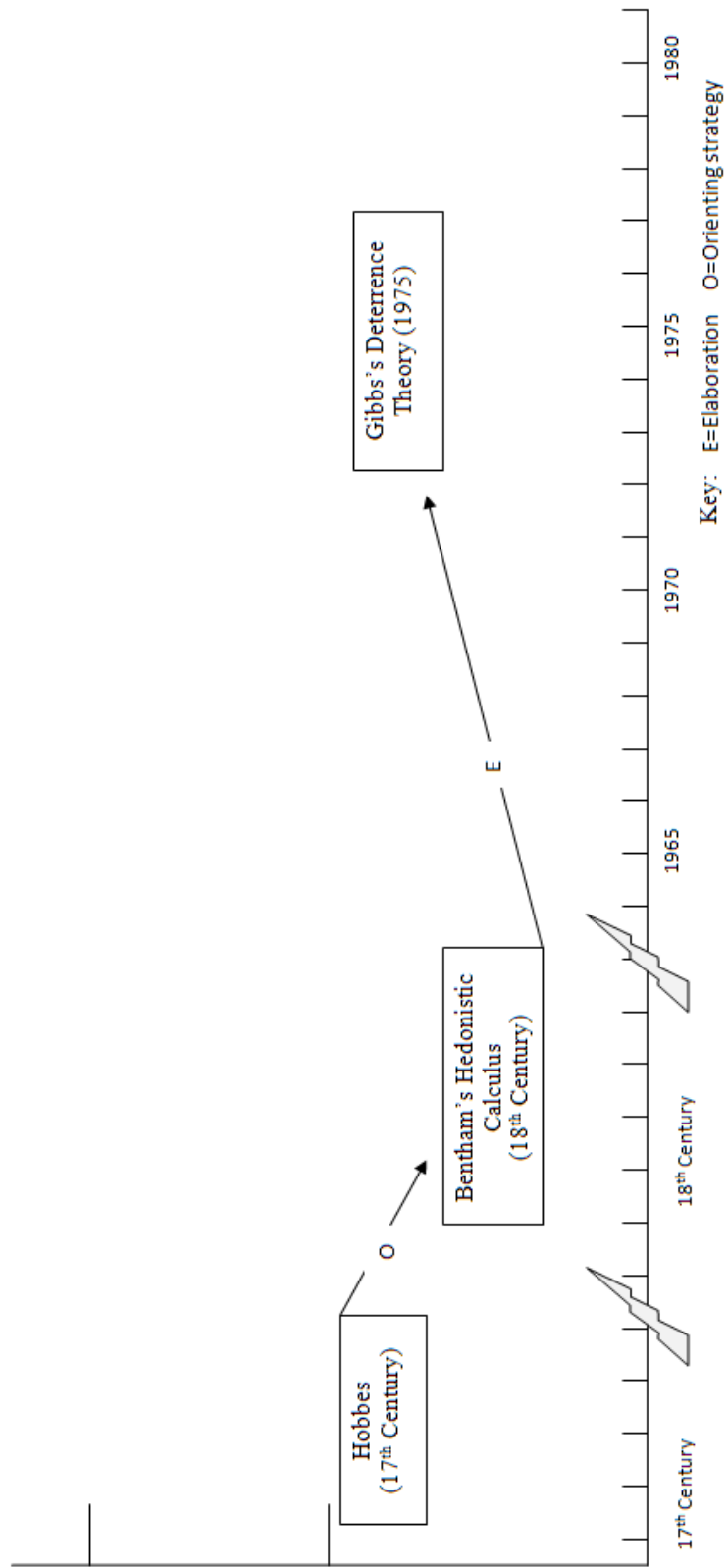
Interestingly, the deterrence theory proposed by the Classical School scholars was not scientifically tested until 1968 (Gibbs, 1975). To test deterrent effects, Gibbs (1975) produced a theory that attempted to account for the general preventive consequences of punishment (see Figure 14 on page 118). Like Becker (1968), Gibbs (1968, 1975) was also attempting to elaborate upon the core principles of deterrence. Gibbs's (1975) theory is an example of elaboration because he is attempting to make the theory more rigorous by formulating a set of testable propositions (Wagner, 1984).

Gibbs's (1975) deterrence theory can be used to generate several hypotheses that can be tested to specify how different types of deterrence function. He begins by asserting that deterrence is an unobservable phenomenon, and that this makes testing and prediction very difficult. For example, if a person does not commit crime it is impossible to tell if it is because they are deterred from doing so or because they would not have committed crime even if the threat of punishment had been removed (i.e., maybe they

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<sup>71</sup> A thorough discussion of these changes is beyond the scope of this dissertation. To summarize, this change in problem focus later contributes to the new emphasis on risk that characterizes modern criminal justice policy and practice (for discussions see, Feeley and Simon, 1992 and Garland, 2001).

**Figure 14:** Gibbs' s Deterrence Theory



had been socialized to reject such behaviour). In an attempt to remedy this problem, Gibbs (1975) identified several different aspects of deterrence. First, is absolute deterrence; this occurs when a person does not commit a particular criminal act throughout their life because they have perceived a risk of punishment for such an act. Second, is restrictive deterrence in which a person curtails certain criminal behaviours during periods when the perceived likelihood of being punished is high (Gibbs, 1975). These different aspects of deterrence can be used to expand upon the notions of general and specific deterrence and produce different categories (e.g., absolute general deterrence, restrictive general deterrence, absolute specific deterrence, and restrictive specific deterrence). This is an example of elaboration because the theorist is expanding upon important concepts in the original Classical School theory (i.e., general and specific deterrence) in order to produce more precise and testable hypotheses (Wagner, 1984).

One of the most influential examples of neoclassical-deterrence theorizing is found in Wilson's (1975) *Thinking about Crime*. In this work, Wilson (1975) questioned (among other things) the tendency of criminologists to emphasize causal analysis over policy analysis. He claimed that the "root causes" (e.g., class, gender, and race) of crime that many criminologists consider to be so important cannot be changed; consequently, they will be unable to inform criminal justice policies in any meaningful way.<sup>72</sup> The idea that criminologists should be policy analysts instead of causal analysts represents a significant part of the new orienting strategy that Wilson (1975) is proposing here

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<sup>72</sup> It seems that Wilson (1975) is either confusing correlation with causation or is deliberately misrepresenting the findings of sociological criminology to justify his own brand of theorizing. It is difficult to imagine a "pre-Wilson" criminologist arguing that being male or being black or being poor somehow causes crime directly. Rather, the point being made was that there is some kind connection between these characteristics and the likelihood that one will engage in crime. Studying these correlates is a method of uncovering any mediating variables that might play a role.

(Wagner, 1984). Wilson is suggesting a change to the way in which criminologists study crime and criminal behaviour. This is a clear challenge to a foundational methodological assumption that characterized criminology for a long period of time; specifically, the notion that criminologists should try to find the causes of criminal motivation (Berger and Zelditch, 1993, 1997).

Some attempts to convert criminological theories into social policy and practice support the assertion that explaining criminality with the hope of changing the behaviour is not a useful activity. For example, the War on Poverty and Mobilization for Youth Programs that were based on opportunity theories from sociological criminology (see A. Cohen, 1955 and Cloward and Ohlin, 1960) failed to stem rising crime rates during the 1960s (Moynihan, 1969). The ‘medical model’ and treatment programs based upon it were informed by psychological and psychiatric theories, and were also deemed to be ineffective in changing criminal behaviour (Martinson, 1974; Cornish and Clarke, 2008). Labelling theory also suggested various interventions including decarceration, deinstitutionalization, diversion, and decriminalization (see, for example, Lemert, 1951). Some of the suggestions that were tried (i.e., deinstitutionalization and diversion) seemed to create more problems such as net-widening (S. Cohen, 1985). While the shortcomings of labelling theory may have been overblown, the public mood clearly shifted and policymakers started to look for different approaches to crime control. The perceived failure of these interventions clearly played a role in the popularity of Wilson’s (1975) ideas.<sup>73</sup>

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<sup>73</sup> There is no clear evidence that all of these previous approaches were failures. Many of the evaluations (e.g., Martinson, 1974) have since been shown to be misleading or patently false.

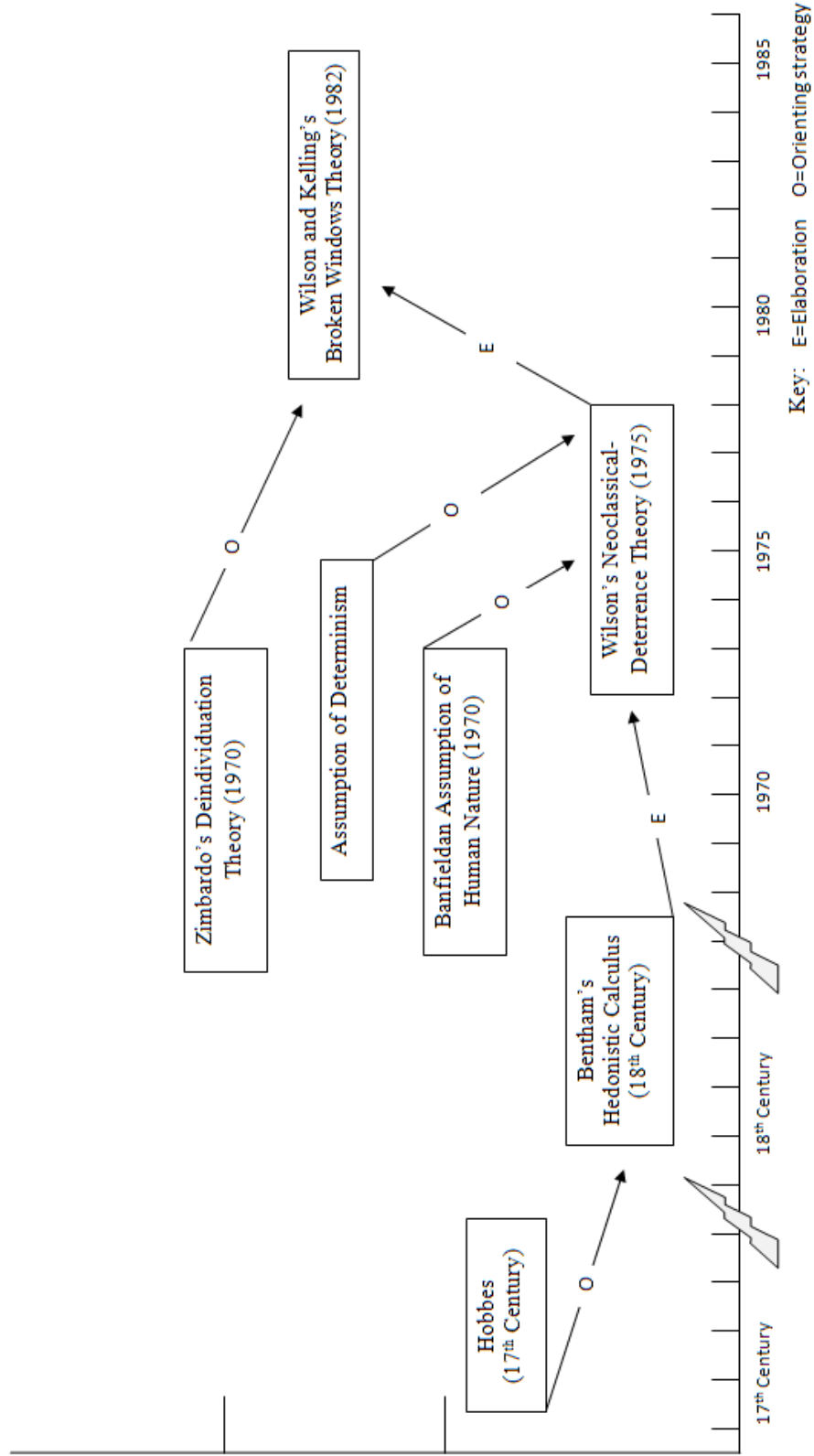
Like Becker (1968), Wilson (1975) was also working with the core unit theory of the Classical School proposed by Beccaria (1764) and Bentham (1765). In addition, he advocated a return to the examination of the Classical School and deterrence principles arguing that the criminal justice system must make crime more costly by increasing punishment. In this way, Wilson's (1975) work is compatible with Becker's (1968) economic unit theory. Wilson (1975) implicitly endorses Becker's (1968) more precise mathematical model in the following passage:

...the average citizen thinks a good way to reduce crime is to make the consequences of crime to the would-be offender more costly (by making the penalties swifter, more certain, more severe)...To some scholars, especially economists, the popular view is also the scientifically correct one – becoming a criminal can be explained in much the same way we explain becoming a carpenter or buying a car. (pg. 117)

Indeed, Wilson (1975) provides the framework (or orienting strategy) that was lacking in Becker's (1968) original, mathematical formulation. However, there is also a unit theory in Wilson's (1975) work. Wilson advises that efforts be made to experiment with the costs of crime (or punishments) to bring crime rates down. He cautions against making punishment too severe (similar to Bentham or Beccaria), and advises raising levels of certainty and celerity (Wilson, 1975, pg. 144). Becker's (1968) economic-deterrence theory and Wilson's (1975) neoclassical-deterrence theory can be thought of as variants of one another. The structure of the two theories is similar, and they deal with the same explanatory domain (Wagner, 1984). A graphical depiction of Wilson's (1975) unit theory can be found in Figure 15 on page 122.

To clearly understand other elements of the orienting strategy being proposed in Wilson's (1975) work, it is necessary to be familiar with his most important intellectual

Figure 15: Wilson's Neoclassical Theories





influence, Edward Banfield (Harcourt, 2001). Banfield's ideas not only informed Wilson's (1975) initial work, but also provided key substantive assumptions about human nature that impacted his later theorizing (see Wilson and Kelling, 1982; Wilson and Herrnstein, 1985). Banfield (1970, 1974) suggested that poor urban conditions are the result of a natural, almost evolutionary process called "the logic of growth". He claimed that urban centres tend to be populated by "lower class" people because motivated, educated, and successful residents eventually move to wealthier outlying areas like the suburbs.<sup>74</sup> The leftover "lower class" individuals tend to be present-minded or impulsive, and are prone to drinking, laziness and promiscuity. Given their nature and situation, these people will often neglect the upkeep of their homes and neighbourhoods; this creates the perfect conditions for crime to breed. In addition, these "lower class" people are prone to crime because of their impulsive nature (Harcourt, 2001).

Interestingly, this assumption about the nature and existence of these "lower class" humans characterizes all of Wilson's writings, but Banfield's (1970, 1974) influence is unacknowledged in *Thinking about Crime*. However, the influence of Banfield's ideas is readily apparent in his work as the following excerpt from Wilson (1975) demonstrates:

Lower-class persons (by definition, I would argue) attach little importance to the opinions of others; they are preoccupied with the daily struggle for survival and the immediate gratifications that may be attendant on survival and are inclined to uninhibited, expressive conduct. (38)

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<sup>74</sup> This holds some parallels to the social disorganization theory proposed by the Chicago School (Shaw and McKay, 1942). Bursik and Grasmick (1993) report a similar empirical finding in an article about demographic change in Chicago from 1960 to 1980. However, members of the Chicago School believed that environment affected individuals; for Banfield (1970, 1974), individuals create the environment.

Clearly, this is where Wilson's theorizing breaks with that of the Classical School scholars. For Wilson (1975), people who commit crime are portrayed as rational actors, but they are clearly different from "decent folk" or law-abiding citizens (see also Wilson and Kelling, 1982, pg. 31). By contrast, Bentham's (1765) focus is solely on the criminal act rather than on the offender, and people are thought to be similar in most ways.

The orienting strategy proposed by Banfield (1970, 1974), and elaborated upon by Wilson (1975), helped give rise to several unit theories including Wilson's (1975) neoclassical deterrence theory, Wilson and Kelling's (1982) broken windows theory<sup>75</sup> and Wilson and Herrnstein's (1985) biosocial theory<sup>76</sup>. Van Den Haag's (1975) deterrence theory also shares many of these foundational assumptions and directives as does Becker's (1968) unit theory. These orienting strategy elements are summarized in Table 2.

**Table 2: Key Foundational Elements in the Neoclassical-Deterrence Orienting Strategy**

- Offenders are rational actors
- Crime, by and large, is not the result of mental pathology
- Offenders act on the hedonistic principle and can be deterred by more severe criminal justice system punishment
- People vary in their motivation to commit crime

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<sup>75</sup>Some authors (Marshall, 1998; Einstadter and Henry, 2006) classify this as an ecological theory. While it does have some ecological elements, Wilson and Kelling's (1982) theory makes assumptions about human nature and motivation closer to unit theories within the neoclassical-deterrence program.

<sup>76</sup>Wilson's (1985) other attempt at formulating a unit theory (presented in *Crime and Human Nature* with Richard Herrnstein) will be covered later when the biosocial research programs are discussed. Given the later formulation's emphasis on the interaction of "constitutional and social factors" this classification seems most appropriate (Harcourt, 2001, pgs. 32-36).

Wilson and Kelling's (1982) broken windows theory<sup>77</sup> is perhaps the most important and influential theory produced by the neoclassical-deterrence research program. This unit theory draws upon ideas from Wilson's (1975) original neoclassical-deterrence framework and Zimbardo's (1970) deindividuation theory. Wilson and Kelling (1982) used Zimbardo's (1970) experiment as their main source of empirical support for their theory. The theory that underlies this experiment is part of larger social psychological research program with a long history in psychology.

Essentially, Wilson and Kelling (1982) suggest that public disorder results in situational cues that attract criminal behaviour. These cues send the message that crime is allowed in these disordered neighbourhoods, and "lower class" individuals are drawn to the area (e.g., panhandlers, drunks, addicts, rowdy teenagers, prostitutes, loiterers, mentally disturbed individuals) (Wilson and Kelling, 1982). The solution to curbing this disorder is "order maintenance" policing in which the police strive to establish relationships with the community, and alter their policing style based on knowledge of neighbourhood characteristics. In practice, the approach has turned into a "zero tolerance" approach with the enforcement of all laws, even the more minor ones (Sherman, 2004). Much less emphasis has been placed on other aspects mentioned as important in broken windows theory (e.g., community unity and gentrification of poverty-stricken areas). Wilson and Kelling (1982) explain their stance in the following quote:

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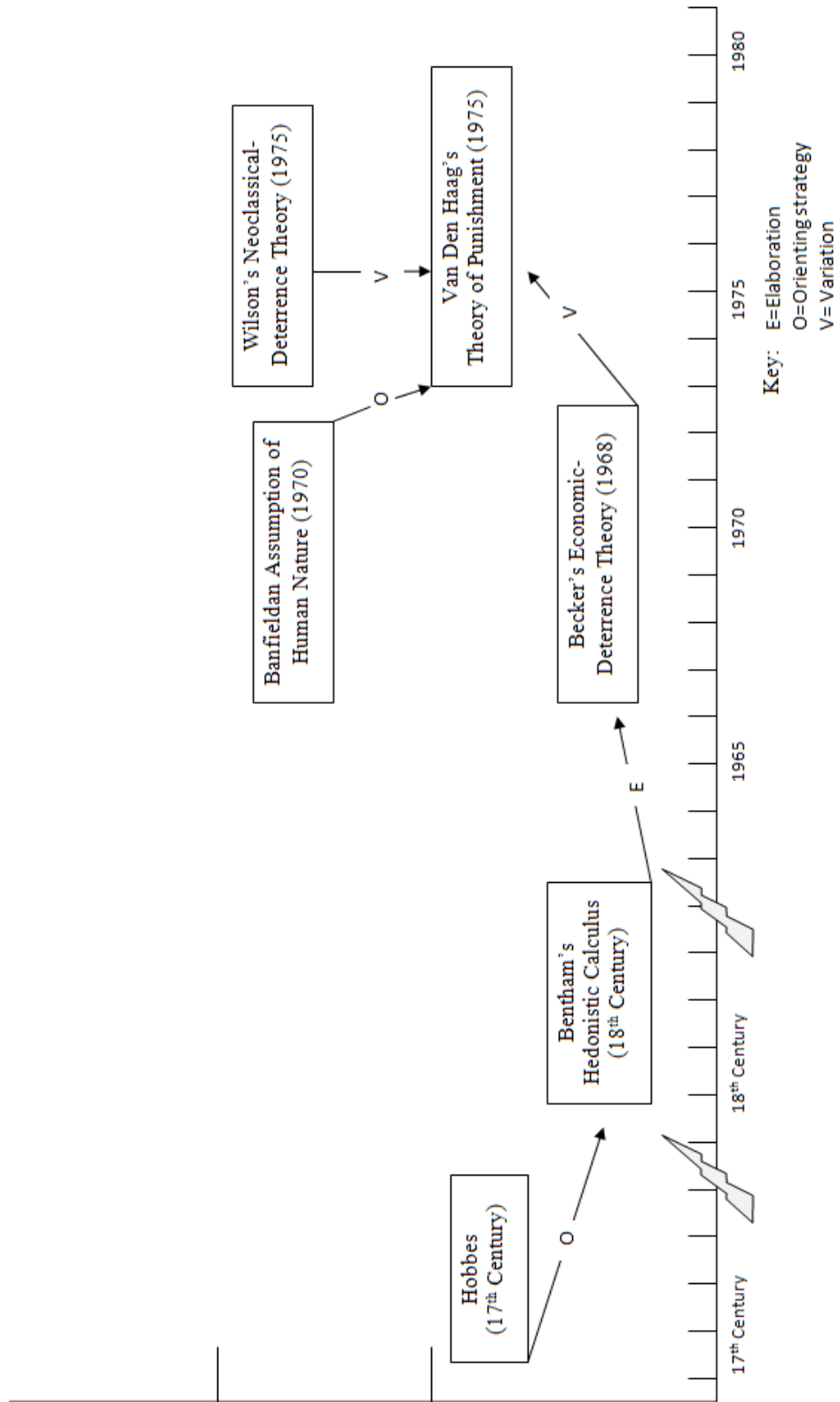
<sup>77</sup> Some may argue that broken windows is more of an approach to crime control than a true theory. However, this obviously implies an underlying theoretical logic to broken windows; that is what is being referred to here. More specifically, it is based upon a fusion of neoclassical and psychological principles.

Once we begin to think of all aspects of police work as involving the application of universal rules under special procedures, we inevitably ask what constitutes an "undesirable person" and why we should "criminalize" vagrancy or drunkenness. A strong and commendable desire to see that people are treated fairly makes us worry about allowing the police to rout persons who are undesirable by some vague or parochial standard. A growing and not-so-commendable utilitarianism leads us to doubt that any behaviour that does not "hurt" another person should be made legal. This wish to "decriminalize" disreputable behavior that "harms no one" -- and thus remove the ultimate sanction the police can employ to maintain neighborhood order -- is, we think, a mistake...A particular rule that seems to make sense in the individual case makes no sense when it is made a universal rule and applied to all cases. It makes no sense because it fails to take into account the connection between one broken window left untended and a thousand broken windows. (33)

Wilson and Kelling's (1982) unit theory can be seen as a further elaboration of older, Classical School ideas about deterrence that started with Becker's (1968) economic-deterrence unit theory, and continued on with Wilson's (1975) reformulation of classical school deterrence theory. In addition, ideas from Zimbardo's (1970) deindividuation theory were imported from psychology, and were grafted into the theory. Specifically, the idea that deterrence depends on situational dynamics is important here; this activity appears to be a change to the working strategy for this particular unit theory (Berger and Zelditch, 1993, 1997).

Van Den Haag's (1975) unit theory (see Figure 16 on page 127) is also informed by several of the same assumptions found in Banfield's (1970, 1974) writings, which are also reflected in the orienting strategy proposed by Wilson (1975). People who commit crime are thought to be rational and psychologically normal; however, people who are most attracted to crime are again differentiated from law-abiding citizens. The poor are thought to be the most tempted to commit crime since they have more to gain and less to

Figure 16: Van Den Haag's Theory of Punishment



lose than people who are not poor (Young, 1981). Van Den Haag (1975) elaborates on the criminally prone “other” in the following passage:

So because the temptation to break laws is unequally distributed, because of different personalities and different living conditions, the laws – and the punishments for violating them – must weigh or fall more heavily on some persons and groups. Those less favoured by nature or society are more tempted to violate laws and therefore suffer punishment for doing so more often. Unless society consists of identical personalities living in identical conditions, it cannot be otherwise. (46)

The first important distinction made by Van Den Haag’s (1975) theory is between two types of criminals: professional and non-professional. Professional criminals, he argues, choose crime as a career. This is a rational choice based on criminal opportunities available to them and their perceived costs of crime. Non-professional criminals are thought to be psychologically normal people who were either tempted into crime or committed a criminal act in a moment of irrationality. Mental illness is not thought to be an excuse for criminal behaviour because, according to Van Den Haag (1975), most mentally disordered people are not criminals. This is almost surely also a reaction to the ‘medical model’ of criminality that was popular during the 1960s and early 1970s; however, it is a gross distortion of the model. In reality, Van Den Haag (1975) is attempting to discredit rehabilitative attempts and is promoting an increase in punitive practices in the criminal justice system.

Two sets of factors are thought to influence the behaviour of offenders. According to Van Den Haag (1975), some offenders seem to be driven by intra psychic forces (e.g., personality traits). Other offenders are influenced by extrapsychic or situational factors (e.g., social context, environment, or passion [heat of the moment]).

He makes it clear that these two sets of factors are best conceptualized as continuums along which people may vary.<sup>78</sup>

An important assumption from Becker's (1968) economic theory is also readily apparent in Van Den Haag's (1975) orienting strategy. Becker assumes that: "Some persons become criminals...not because their basic motivation differs from that of other persons, but because their benefits and costs differ" (pg. 177). Van Den Haag (1975) derives several important propositions from this assumption. The propositions below appear in their original form:

1. Although some crime can be explained by the persistence of irrationality, some must be explained by the persistence of rationality.
2. No society can weed out all irrational people. Moreover, irrational acts occasionally are committed by ordinarily quite rational people. Who has never done anything irrational? Thus, some offenses would be committed even if they were irrational and the offenders rational. Others are committed because the offenders are irrational, and still others because the offenders are rational.
3. Rational crime is as unlikely to be eradicated altogether as irrational crime. No society is likely to succeed in making all crime disadvantageous (irrational) to everybody. However, societies can reduce rational crime by increasing the comparative cost and reducing the comparative benefit of crime wherever possible so that fewer offenders can rationally hope to achieve a greater gain from crime than from legitimate activity. Basically, this means two things: first, to make the opportunities for legitimate gain greater or more available, thereby reducing the comparative benefit of illegitimate activities; and second, to increase the chances of apprehension and conviction and severity of punishments for illegal activities, thereby adding to the costs of

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<sup>78</sup> These two continuums bear a great resemblance to those posited by many biosocial theories. Further, Van Den Haag (1975) argues that a general deterministic perspective is actually compatible within a deterrence theory framework (pg. 107-108). These statements seem to foretell some later developments in the area of biosocial theories as both neoclassical and post-classical research programs have contributed integrated unit theories to the biosocial research programs (see especially Wilson and Herrnstein, 1985 and Cohen and Machelek, 1988).

crime compared to legitimate activity, as well as reducing net benefits.

4. Rehabilitation of those for whom crime is rational is not likely to be effective. If they are rational, they cannot be cured of irrationality or exceptional character dispositions they do not possess. What must be “rehabilitated” are the circumstances that made crime rational.

(Taken verbatim from Van Den Haag, 1975: 79)

A careful reading of these propositions reveals that Van Den Haag (1975) is using the same orienting strategy found in Becker’s (1968) and Wilson’s (1975) work. First, all make similar assumptions about rationality, deterrence and their relationship to punishment. Criminals are, by and large, rational actors who are psychologically normal; consequently, deterrence can be enforced through proper punishment. Becker (1968) suggests that crime can be significantly reduced by focusing on increasing the costs of crime through punishment, while Wilson (1975, 1982) claims that certainty and celerity are most important to deterring future crime. He also makes clear that sharp increases in severity can result in sentences that are too long and can cause unnecessary suffering for the offender (Wilson, 1975). In contrast, Van Den Haag (1975) argues that severity and certainty are interrelated and mutually reinforcing. The punishment must be certain, but it also must be severe enough to discourage the criminal act.

According to Wagner’s (1984) model of theory growth, Van Den Haag’s (1975) theory of punishment can also be seen as a variant of both Becker’s (1968) economic theory and Wilson’s (1975) neoclassical-deterrence theory. Wilson and Kelling’s (1982) broken windows theory is an elaboration of the earlier theory proposed by Wilson (1975). All of these theories share a common orienting strategy and can be seen as elaborations



on Classical deterrence theory (Wagner, 1984). This research program was characterized by frequent elaboration, and is a good example of a linear program (Wagner and Berger, 1985).

The neoclassical-deterrence research program, and especially the work of Wilson (1975, 1982), changed the direction of both criminological theorizing and criminal justice system policy (Garland, 2001; Laub, 2003). For criminological theory, this abrupt change in theorizing is illustrated by the rise of the postclassical theories or, as Garland has called them (1996, 2001), the “criminologies of everyday life”.

### **The Orienting Strategy of the Postclassical Theories: Situation, Temptation and Opportunity**

The orienting strategy of the neoclassical-deterrence research program provides many of the key assumptions and directives for the orienting strategy used by the postclassical research program. These key elements are presented in Table 3.

**Table 3: Key Foundational Elements in the Postclassical Criminology Orienting Strategy**

- Offenders are rational actors
- Easy and/or tempting opportunities entice people into criminal action
- Offenders act based upon a complex situational calculation and can be deterred by situational and environmental controls
- Motivated offenders exist; reasons for motivation are not of primary concern

It is not difficult to demonstrate that there is indeed a common orienting strategy held by the unit theories in the postclassical research program. Routine activities theory, rational

choice theory, and environmental criminology<sup>79</sup> are often considered to be in the same group of theories because they make similar assumptions about human nature (Hirschi, 1989; Messner, Krohn and Liska, 1989). Felson and Clarke (1998) also suggest that these theories hold common orienting strategies:

The theory of crime settings rests on a single principle: that easy or tempting opportunities entice people into criminal action. This principle is found in each of the new opportunity theories of crime, including the routine activity approach, crime pattern theory, and the rational choice perspective. Even though they differ in orientation and purpose, they have many common assumptions. (pgs. 2-3)

Identifying these common assumptions should provide a rough sketch of the orienting strategy shared by the unit theories in this program.

First, like theories in the neoclassical-deterrence program, exponents of this set of theories assume that offenders are, for the most part, rational and psychologically normal (Clarke and Cornish, 1985; Felson, 1998).<sup>80</sup> Again, this is in stark contrast to the ‘medical model’ of criminality that had been dominant in criminology and the criminal justice system for decades prior to these postclassical theories. In the ‘medical model’, a key foundational assumption asserted that criminals were ‘sick’ or different from psychologically normal people in some way (Lily, Cullen, and Ball, 2007; Cornish and Clarke, 2008). The suggestion that criminals are free-willed and rational is a clear challenge to a foundational assumption that had characterized most criminological theories for some time (Berger and Zelditch, 1993, 1997).

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<sup>79</sup> This is also referred to sometimes as crime pattern theory.

<sup>80</sup> Cornish (1993) referred to this as a “theory of action”. To avoid confusion between this idea and the idea of a unit theory that explains criminality, crime rates, criminal acts or activities of the criminal justice system, I will refer to this as an assumption about motivation.

Second, these theories also all adhere to the Classical School notion of a ‘hedonic’ or ‘hedonistic’ calculus. In other words, people (and criminals) act to maximize their own benefits; people are naturally pleasure-seeking. Essentially, this is the same view held by most neoclassical-deterrence theories (Becker, 1968; Wilson, 1975; Van Den Haag, 1975). However, there is a subtle difference: postclassical theories are less concerned with criminal justice system deterrents, and focus more upon situational and environmental deterrents to crime (Einstadter and Henry, 2006). For example, one can make changes to architecture that may help prevent crime (Jeffrey, 1971) or one can make crime more difficult by installing burglar alarms or using anti-theft devices on cars (Clarke, 1983). In short, punishment is not always necessary (or sufficient) to curb crime rates. Consequently, the postclassical research program has a different orienting strategy than the neoclassical-deterrence program, but they still share many of the same Classical School assumptions.

Finally, the interest in criminal acts rather than criminality is retained and emphasized. In fact, most postclassical theories assume that there are motivated offenders and in doing so, dispense with any discussion of criminality or criminal propensity.<sup>81</sup> Any commitment to the Banfieldan (1970; 1974) assumption about human nature and the present-minded, criminally prone ‘other’ is dropped altogether. The “criminologies of everyday life” operate under the assumption that crime is a social fact and part of modern life; the best society can do is attempt to manage or control it (Garland, 2001).

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<sup>81</sup> Gottfredson and Hirschi’s (1990) general theory of crime could be seen as an exception to this rule because they derive a theory of criminality from characteristics of criminal events. I will discuss later how this theory could be seen as part of the postclassical research program.

Another important change took place in the observational set of this program (Wagner, 1984). Most neoclassical-deterrence theorists relied upon the use of official statistics to test deterrence theory (Becker, 1968; Gibbs, 1975; Wilson, 1975). Postclassical theorists incorporated ethnographies, victimization surveys and self reports in their observational set (Lilly, Cullen, and Ball, 2007; Williams and McShane, 2010). This has allowed rational choice and routine activities theorists to introduce new ideas into their theories based on insights offered by offenders and victims. Examples of this would include the idea emerging from self-report surveys that most people do actually commit some sort of crime at some point in their lives (Hindelang, Gottfredson and Garofalo, 1978), and the use of ethnographic research to understand the habits of burglars and other criminals (see, for example, Cromwell, Olson, and Avary, 1991).

### **Everyday People, Rational Choices: Understanding Criminals in Modern Society**

The postclassical research program has produced several unit theories including routine activities theory (Cohen and Felson, 1979; Felson, 1998) and rational choice theory (Cornish and Clarke, 1986). Felson and Clarke (1998) discuss the connections between the various theories in the postclassical research program:

The three theories of crime opportunity can be put in order according to where they give the most attention, ranging from the larger society (routine activities) to the local area (crime pattern theory) to the individual (rational choice). Together they tell us that the society and locality can change crime opportunity, while the individual offender makes decisions in response to these changes. (pg. 8)

Gottfredson and Hirschi's (1990) general theory of crime is a theory of individual differences, which has also clearly been influenced by these developments and can be

viewed as part of the postclassical research program.<sup>82</sup> These theories will be discussed in turn.

Cohen and Felson's (1979) routine activities theory is one of the earliest and most influential formulations in the postclassical research program (see Figure 17 on page 136). One goal of this unit theory was to explain changes in crime rates since World War II (Cohen and Felson, 1979). This is a partial statement of which types of crime are to be included within the heuristic set of the program. Thus, this is important to defining the scope and problem focus of the theory (Wagner, 1984).

Felson's (1998) theory is based upon three principles: offenders seek to gain quick pleasure and avoid imminent pain; the routine activities of everyday life set the stage for these illegal choices; and inventions, by altering daily routines, force crime to change (pg. 165). As has been previously illustrated, the first of the three principles characterizes other theories in this program, and is essentially a proliferation of Classical School ideas into the explanatory domain of crime rates (Wagner, 1984). The second two principles are drawn out of social ecology and sociology, and deserve more discussion.

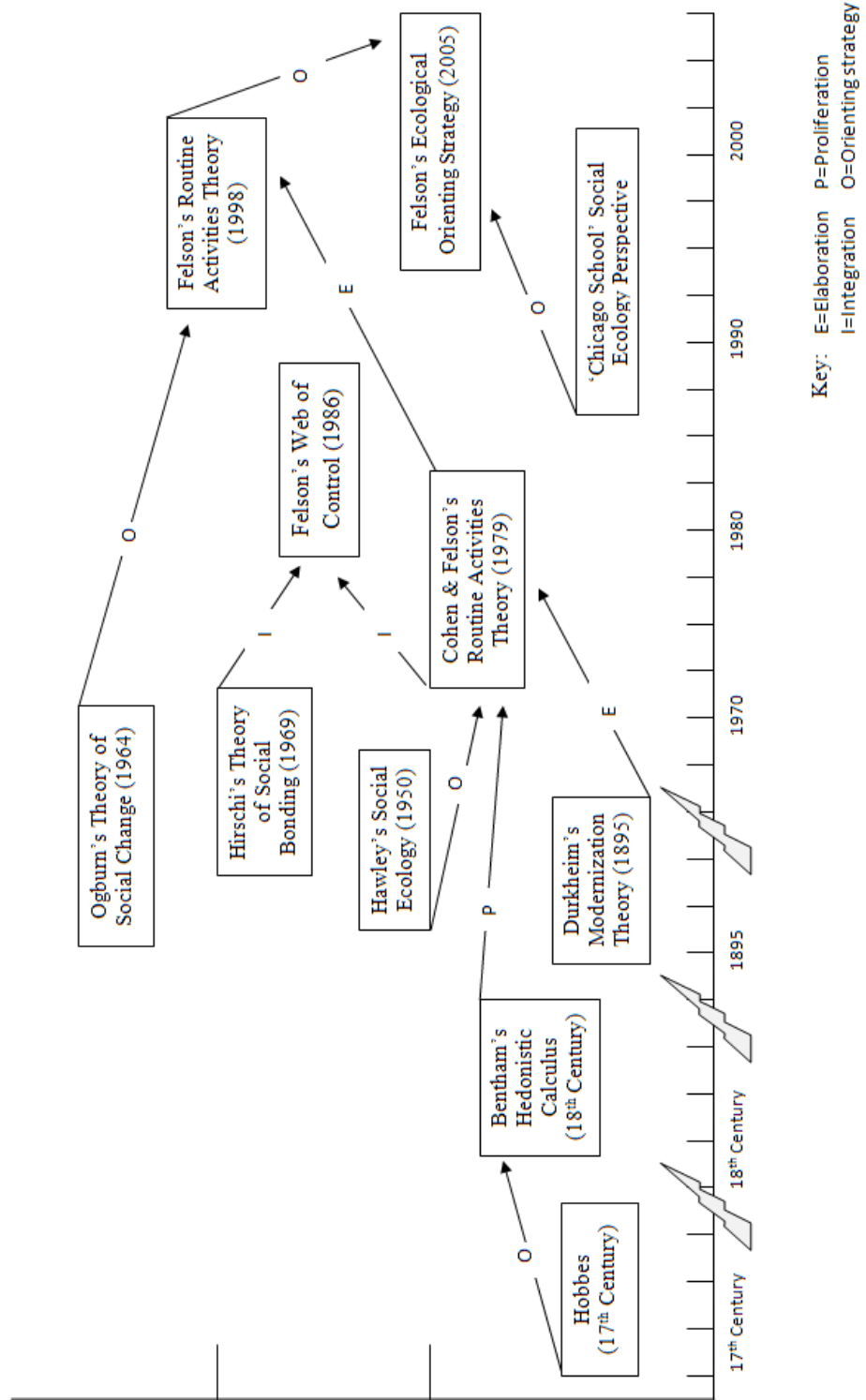
Routine activities theory is clearly a macro-sociological theory which draws heavily upon concepts outside of criminology, especially the work of Durkheim (1895), Hawley (1950), and Ogburn (1964).<sup>83</sup> Cohen and Felson (1979) argued that social

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<sup>82</sup> Cohen and Land (1987) also suggest that control and rational choice (or opportunity) theories share many common assumptions and could be ideal candidates for integration. Bernard and Snipes (1996) also argue that certain structure/process and individual difference theories are, in fact, complementary because they address different aspects of crime and criminality while still adhering to a common perspective or an orienting strategy.

<sup>83</sup> My summary of this theory's development may make it appear more orderly than it actually was. The influence of Durkheim (1895) and Hawley (1950) was quite clear in Cohen and Felson's (1979) and Felson and Cohen's (1980) early expositions of the theory. However, Ogburn's (1964) insights seem to have been incorporated later by Felson (1998), and related to the original Durkheimian portion of the theory. Clearly, theory-building is not a neat and linear process, and I do not want to portray it as such.

Figure 17: Cohen and Felson's Routine Activities Theory



change and technological advances are important to explaining and understanding changes in crime rates. This theory represents an extension and formalization of ideas from Durkheim's (1895) modernization thesis (Mutchnick, Martin, and Austin, 2009). To summarize, Durkheim (1895) claimed that human interaction and the patterning of social activities change as society becomes increasingly industrialized and technological. Specifically, as societies become more modernized, they move away from mechanical solidarity and drift toward organic forms of solidarity. Cohen and Felson (1979) argue that these ideas are also useful in understanding long-term changes in crime rates.

Felson (1998) incorporates the work of Ogburn (1964) to further elaborate upon Durkheim's (1895) modernization thesis. Ogburn (1964) suggested that inventions can also cause important social changes and alter patterns of interaction among members of society. Ogburn's (1964) ideas help clarify and specify how technological shifts affect crime and criminal activity. For Felson (1998), the concept of inventions is not limited to "high" technology or new gadgetry; simple inventions (e.g., barbed wire) or non-material inventions (e.g., money management techniques and architectural/design changes) can be relevant to explaining crime (pgs. 167-168).

Felson (1998) is not combining two clear unit theories here, so this does not constitute an example of theory integration (Wagner, 1984). Rather, he is synthesizing larger ideas, and uses the end result to elaborate upon the original unit theory offered in Cohen and Felson (1979). It is possible to argue that changes are really taking place on the level of orienting strategy; specifically, in the working strategy, and that these changes affect the nature of the unit theory that is being produced (Berger and Zelditch, 1993).

The conceptual scheme of this theory is quite straightforward, and has been referred to as “the chemistry for crime” (Felson, 1998; Lilly, Cullen, and Ball, 2007). Hawley’s (1950) ideas provide important core concepts of the routine activities theory (Wagner, 1984; Berger and Zelditch, 1993, 1997). The core unit theory of routine activities is partially derived from the following discussion of rhythm, tempo, and timing:

Recurrences exhibit various characteristics, three of which may be noted. There is the aspect of rhythm, the regular periodicity with which events occur. Tempo, a second characteristic, pertains to the number of events per unit of time or the rate of recurrence. Thus rhythms differ with respect to their tempos. Moreover, since in any defined situation there are manifold rhythms, many of which have different tempos, coordination or timing of their unlike pulsations is essential to the avoidance of confusion. Rhythm, tempo, and timing, therefore represent three different aspects in which the temporal factor may be analyzed, especially as it bears upon the collective life of organisms. (Hawley, 1950, p. 289)

Fluctuations in these characteristics are thought to be interrelated, and each manifests itself in a different way. The three types of fluctuations described by Hawley are physical, physiological, and functional. Functional fluctuations (i.e., an organism’s everyday habits involved with moving and securing food) are most important for Cohen and Felson (1979) as they determine the routine activities of groups of organisms. From the concept of functional fluctuations, Cohen and Felson (1979) proceed to derive a conceptual scheme for analyzing criminal acts:

We argue that structural changes in routine activity patterns can influence crime rates by affecting the convergence in space and time of the three minimal elements of direct-contact predatory violations: (1) motivated offenders, (2) suitable targets, (3) the absence of capable guardians against a violation. (pg. 589)



Many different propositions can be extracted from this conceptual framework. Cohen and Felson (1979) attributed rising crime rates during the 1960s and 1970s to several societal shifts that occurred after World War II, and point out that the routine activities of normal people changed greatly after this time. For example, crime rates rose as females moved out of the home and entered the labour force or further education because the number of capable guardians in the home was reduced. This provided many new criminal opportunities and suitable targets as more homes were left unattended during the daytime hours. Crime rates also rose as technological advances reduced the weight and size of high-priced electronic items such as car radios and television sets because there is an increase in suitable targets. Finally, crime rates can be affected by seasonal and weather conditions since some conditions will provide for more motivated offenders and suitable targets (i.e., victims). For example, in the summer months more people, including offenders, will be outdoors (Cohen and Felson, 1979; Felson and Cohen, 1980; Felson, 1998).

The sociological and ecological influences at work are clear: this model takes a more holistic approach to explaining crime by focusing on the elements necessary for a crime and the patterns of human interaction leading to crime. The problem focus of this macro-level, structural theory is crime rates (Bernard and Snipes, 1996: 337) as opposed to the situational aspects of the criminal event (Lilly, Cullen, and Ball, 2007: 269). The initial formulation, drawn partly from the work of Hawley (1950), could also be considered an example of the proliferation of ecological principles into the field of criminology (Wagner, 1984). It is also an elaboration of Durkheim's (1895) modernization theory. Cohen and Felson (1980) demonstrate the parallels between the

types of solidarity suggested by Durkheim and Hawley's (1950) concept of symbiosis from his theory of social ecology:

In human societies, symbiosis is often reflected in corporate groupings involving the division of labor and functional interdependency among roles (similar to Durkheim's organic solidarity), while commensalism is often manifested in categorical groups involving associations of functionally homogenous individuals (similar to Durkheim's mechanical solidarity). (pg. 391)

According to Wagner (1984), the more recent formulation of routine activities theory would be an example of a further elaboration upon the work of Durkheim (1895) using insights derived from Ogburn's (1964) work. In his theory, Felson (1998) formalizes and updates insights supplied by both Durkheim (1895) and Ogburn (1964) about the nature of society and its relationship to modernization and technological innovation.

Originally, the scope of this theory was limited to direct contact predatory crime (Cohen, and Felson, 1979). However, Felson (1986, 1998, and 2006) has integrated and elaborated upon the initial formulation several times in an attempt to broaden the scope. The earliest example of this activity was an attempt at integrating the principles of Hirschi's (1969) theory of bonding with his own routine activities theory. Felson (1986) argues that routine activities can affect a person's social bonds and therefore, may contribute to criminality. The logic behind the new integration is described by Felson (1986):

Hirschi's four elements are commitments, attachments, involvements and beliefs. He reviews these in another chapter of this volume, but I am going to summarize them with one word: *handle*. Society gains a handle on individuals to prevent rule-breaking by forming the social bond. People have something to lose if others dislike their behaviour, if their future is impaired, if their friends and families are upset with them, if they

are occupied with unconventional activities, or if their beliefs can be situationally invoked to make them feel bad every time they break a rule. The handle is a necessary condition for informal social control to occur. (pg. 121, italics added)

Felson (1986) introduces new concepts including intimate handlers and handled offenders to expand upon the “chemistry of crime” concepts of capable guardians and suitable targets. These new concepts are derived from Hirschi’s (1969) theory of social bonding. This creates a new theory that Felson (1986) calls the “web of informal social control”. Felson (1986) then goes on to describe how the four concepts relate to one another, how they are useful in understanding crime and criminality, and how routine activities and technology may serve to affect intimate handlers and handled offenders. For example, a criminally-inclined adolescent may have many intimate handlers, but they may be dispersed throughout the city in remote locations making handling more difficult. Tightly-knit communities experience lower crime rates because many potential offenders are “handled” and have intimate handlers all around them. Automobiles can disperse juveniles away from intimate handlers because it allows more freedom from parents, relatives and other adults who may help control their behavior (Felson, 1986, pgs. 122-126).

According to Wagner and Berger (1985), this type of theoretical synthesis represents a case of integration, specifically, the integration of proliferant theories. Hirschi’s (1969) control theory makes Hobbesian assumptions very much like Cohen and Felson’s (1979) routine activities theory; however, it has a different problem focus (i.e., criminality or criminal propensity) which emphasizes individual differences (Bernard and Snipes, 1996). Wagner and Berger (1985) argue that the integration of proliferant theories is likely to involve “the identification of properties which permit the interrelation

of disparate phenomena” (pg. 722). Felson (1986) achieves this by explaining how routine activities can affect social bonds.

Felson (2005) has taken steps to further develop the orienting strategy of the postclassical research program by importing more principles from ecology and clarifying how these principles may be applied to criminological phenomena. He has also suggests that criminologists attempt to use the methodology of the natural sciences to explain crime and criminal events (e.g., the use of taxonomies to help organize ideas about crime and criminal behaviour). This is clearly a new directive in his working strategy because it offers advice on how to theorize properly and how to construct theories (Wagner, 1984; Berger and Zelditch, 1993, 1997).

Stahura and Sloan (1988) have provided some empirical support for routine activities theory. Their study used 1972 and 1980 crime data from 676 American suburbs to evaluate Cohen and Felson’s (1979) routine activities theory. To do this, they operationalized the main concepts of the theory including criminal motivation (percent poor, percent unemployed, percent black<sup>84</sup>, and percent youth), criminal opportunities (employment concentration and percent multiple housing), and levels of guardianship (police employment and expenditure, and percent of female labor force participation). The findings generally supported the routine activities theory model and indicated that key concepts from the theory have direct and/or indirect additive effects on violent and/or property crime rates.

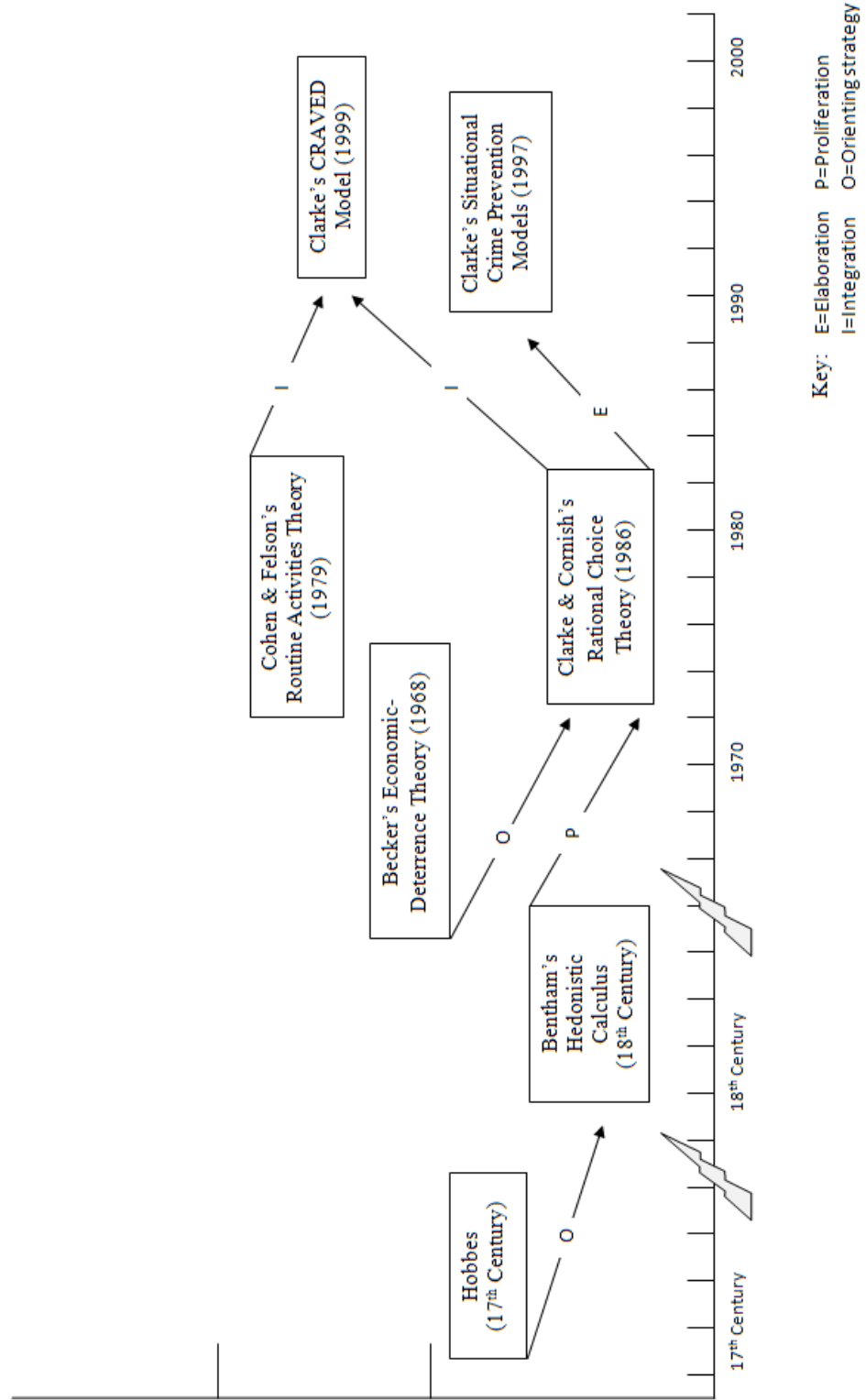
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<sup>84</sup> The authors of the study justify including percent of blacks in the area as an indicator of criminal motivation by referring to their overrepresentation in official statistics.

Sherman, Gartin, and Buerger (1989) have provided further support for routine activities theory. They used spatial data analysis to test the basic premise of routine activities theory or the idea “that criminal events result from likely offenders, suitable targets, and the absence of capable guardians against crime converging non-random in time and space” (pg. 48). To do this, they analyzed spatial data from police calls on over 115,000 addresses and intersections in Minneapolis throughout a one year period. They found that a small number of “hotspots” were responsible for a majority of the calls. This suggests that certain areas have characteristics that produce and/or attract criminal activity.

Another important theory in the postclassical research program is Clarke and Cornish’s (1986) rational choice theory (see Figure 18 on page 144). Rational choice theory stresses the similarities of offenders and non-offenders; specifically, they argue that criminologists tend to ‘over-pathologize’ crime by viewing it as something similar to a mental illness that can be treated. Like other neoclassical-deterrence and postclassical theorists, Clarke and Cornish (1985) draw their ideas about opportunities, choice, and decision-making from the field of economics (see especially Becker, 1968). However, the emphasis is clearly on the micro-level as the theory seeks to explain how offenders make decisions to commit crime (Felson and Clarke, 1998). This indicates some degree of influence from psychology. However, as Bernard and Snipes (1996: 334) argue, this is not an “individual difference” theory since variation in behavior is attributed to rewards and punishments offered by the criminal justice system rather than some individual characteristic of the offender.

**Figure 18:** Clarke and Cornish's Rational Choice Theory



Some refer to rational choice as a perspective rather than a theory because it is impossible to directly observe another person's thoughts and determine if they are rational. Because of this, rational choice theorists have also been accused of tautological or circular reasoning (Robinson and Beaver, 2009). In a sense, these criticisms are correct because proponents of rational choice theory assume that most offenders have some degree of rationality. This assumption allows them to make predictions about criminal-decision making. However, it is still appropriate to think of Clarke and Cornish's (1985) work as a micro-oriented theory that focuses upon explaining criminal acts rather than criminality. The assumption of rationality is not testable, but assumptions are not necessarily required to be testable; they are merely the basis for one's theorizing (Wagner, 1984). What is important is that the resulting models of criminal decision-making are testable and falsifiable, and they are. In addition, there is a wealth of empirical research suggesting that at least some types of crimes involve some planning and deliberation (see for example, Cromwell, 1990 and Wright and Decker, 1994).

The key propositions in rational choice theory are as follows:

1. Crimes are purposive and deliberate acts, committed with the intention of benefitting the offender.
2. In seeking to benefit themselves, offenders do not always succeed in making the best decisions because of the risks and uncertainty involved.
3. Offender decision making varies considerably with the nature of the crime.

4. Decisions about becoming involved in particular kinds of crime (involvement decisions) are quite different from those relating to the commission of the specific criminal act (event decisions).
5. Involvement decisions can be divided into three stages – becoming involved for the first time (initiation), continued involvement (habituation) and ceasing to offend (desistance) – that must be separately studied because they are influenced by quite different sets of variables.
6. Event decisions include a sequence of choice made at each stage of the criminal act (e.g., preparation, target selection, commission of the act, escape, and aftermath).
7. (Taken verbatim from Cornish and Clarke, 2001: 24).

The first proposition is obviously from the Classical School, and therefore, should require little explanation. The second proposition suggests that the decision to engage in crime is rational. To clarify this statement, the authors claim that this rationality is not perfect since offenders often make quick decisions with limited information. This sort of rationality is called “bounded rationality” (Clarke and Cornish, 2001). Consequently, most crimes are non-pathological and are committed by normal people. Further, offenders are assumed to be quite similar to normal people in many of their behavior patterns. Propositions three, four, five and six require further explanation as they distinguish Clarke and Cornish’s (1986, 2001) theory from other postclassical theories.

Proposition three implies that since different crimes fulfill different needs, it makes more sense to focus on crime rather than on offenders (or criminality) (Clarke and Cornish, 1986). Further, the theorists assume that different decision-making models will be required for different types of crime. This is an important difference in the methodological directives of their working strategy (Berger and Zelditch, 1993, 1997).



Clarke and Cornish (1986) also offer more specific “how-to” advice while discussing their method of theorizing:

The models of crime presented below also offer a way of synthesizing a diverse range of concepts and findings for the purpose of policy and research, but they are developed within the context of much more explicit decision making. They are not models in which relationships are expressed either in mathematical terms (as in e.g., Brantingham and Brantingham’s [1978] model of target selection). Nor are they even “decision trees” that attempt to model the successive steps in a complex decision process (see Walsh [1980] for an example relating to burglary). Rather, they are schematic representations of the key decision points in criminal and of the various social, psychological, and environmental factors bearing on the decisions reached. (163)

In this passage, the theorists are attempting to distinguish between their own empirical models for criminal decision-making from other empirical models of crime.<sup>85</sup> At the same time, they provide methodological advice about how to properly formulate decision-making models for different crimes. The substantive directive in the working strategy at work here is the notion that crime is not a unitary phenomenon; different crimes require different models of decision-making that can be drawn out of rational choice theory (Clarke and Cornish, 1986; 2001).

In propositions four, five and six, Clarke and Cornish (2001) differentiate criminal event decisions from involvement decisions in criminal acts. Involvement decisions (i.e., deciding to participate or continue to participate in criminal activity as well as deciding to desist from it) are thought to have less of a direct influence on the criminal event, whereas event decisions relate to how criminals make decisions to offend

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<sup>85</sup> Berger and Zelditch (1993) distinguish between specific empirical models intended to explain particular data sets, and the more abstract unit theories that underlie the models. Clarke and Cornish’s (2001) attempt to understand specific decision-making processes in burglary or repeat victimization would be examples of the former; rational choice theory is the guiding principle of the more specific decision-making models.

based on the characteristics of the criminal opportunity at hand. Background factors, current life circumstances, and situational variables are thought to affect decisions to participate in criminal activity (Clarke and Cornish, 1986, 2001).

According to Clarke and Cornish (2001), models of criminal decision-making can be used to inform policies and to make practical suggestions about how to reduce or prevent crime. The ultimate goal in rational choice theory is to reduce opportunities and rewards for certain crimes by focusing on specific aspects of the criminal event (Williams and McShane, 2010) while at the same time increasing the effort and risks associated with committing crime (Clarke and Cornish, 2001: 37). Rational choice theorists have offered a number of suggestions that are useful for reducing crime based on these principles. These practical applications are often referred to as situational crime prevention, and have, in some cases, greatly reduced the occurrence of certain types of crime, e.g., airline hijackings, bus driver robberies, credit card fraud, and reductions in graffiti (Clarke and Cornish, 2001).

Clarke (1999) has attempted to relate ideas from rational choice theory with Cohen and Felson's (1979) routine activities theory. The resulting unit theory has become known as the 'CRAVED' model (i.e., products desirable to criminals tend to be Concealable, Removable, Available, Valuable, Expensive, and Disposable). Specifically, Clarke (1999) tries to shed light on why some items are more sought after by thieves. Through an application of rational choice theory, Clarke (1999) has identified various properties that make some products more desirable than others.

Clarke and Cornish's (1986) rational choice theory can be seen as an example of proliferation in which a theory is applied to a different level of explanation (Wagner,

1984). In this case, economic principles originating in the Classical School, which were formerly applied to aggregate groups (Becker, 1968), are now being applied to individual decision-making processes (Clarke and Cornish, 1986).

There are a few examples of ethnographic research that lend credibility to Cornish and Clarke's (1985) rational choice theory and especially their notion of bounded or limited rationality. Cromwell, Olson, and Avary's (1991) research the decision-making processes involved is an exemplar in this area.<sup>86</sup> These researchers conducted interviews with 30 active burglars in the city of Midland, Texas. In addition, they went on "ride alongs" in which they visited crime sites while the burglars explained how the burglaries took place. They called this technique staged activity analysis.

The primary purpose of the study was to see whether or not rational choice theory was appropriate for explaining the crime of burglary. Do burglars carefully select their targets and plan their crimes? And if so, how rational is the process? The researchers were also interested in the effects of drug use on the decision making process and how this impacts the rational choice model. In addition, the study attempted to uncover the effects that accomplices have on burglary decisions and the fencing strategies used to dispose of the goods from the burglaries. Finally, the research also sought to gauge the effect of deterrence offered by punishments from the criminal justice system.

The researchers found that the data obtained in the interviews provided a great deal of support for the postclassical theories. In particular, the burglars seemed to make decisions based on situational dynamics that arose during the burglaries. The template

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<sup>86</sup> Another similar study conducted on a larger scale with more rigorous analyses can be found in the research of Wright and Decker (1994). The findings in both studies were almost identical.

for crime site selection and decision-making offered in the interviews was rational; however, they often altered the plan based on environmental cues and opportunities. This matches the notion of limited or bounded rationality offered by rational choice theorists and also provides support to routine activities theory. In addition, this research also supports the core ideas offered by environmental criminologists. These theories will be the focus of the next section of this chapter.

### **Crime Prevention through Environmental Design and the Orienting Strategy of Environmental Criminology**

Environmental criminology is another body of theory concerned with explaining aspects of criminal events. Like rational choice theory, environmental criminology (or crime pattern theory) is especially concerned with offering pragmatic solutions to crime.

Brantingham and Brantingham (1984) suggest that:

The study of criminal events – that is, of crimes – forms the meeting ground for criminologists and criminal justice scholars. In it are inherent both the intellectual appeal of a search for order and pattern (i.e., for prediction and explanation) and the utilitarian policy appeal of crime control. (pg. 20)

Like routine activities theory and rational choice theory, environmental criminology also assumes that people exist with the motivation to commit crime as a given; this motivation varies depending upon the person and the situation (Brantingham and Brantingham, 1984: 337).

Environmental criminology is rooted in the work of the ‘Chicago School’; this source provides several key assumptions to the trajectories being discussed here.<sup>87</sup> The ‘Chicago School’ also drew upon the work of several social philosophers to develop an orienting strategy; consequently, these also inform theorizing in environmental criminology. It would be folly to attempt to describe in detail all these influences here; however, some of the major intellectual contributors from the 19<sup>th</sup> and early 20<sup>th</sup> century can be briefly discussed. For example, Quetelet (1831) and Guerry (1833) were moral statisticians who attempted to find spatial patterns in criminal activities in France and Belgium, respectively (Williams and McShane, 1999). Ferri’s (1917) notion that crime can be explained, in part, by examining key geographic and spatial factors represents an important methodological commitment in the orienting strategy of this research program (Brantingham and Brantingham, 1978). The ecological and spatial emphasis in the work of Ernest Burgess (1925) of the ‘Chicago School’ is cited as a particularly important influence in this research program (Brantingham and Jeffery, 1991). All of these elements comprise the specialized orienting strategy of environmental criminology because they make assertions about the subject matter, offer conceptual schemes useful in studying the phenomena, and offer guidelines for selecting problems to study (Berger and Zelditch, 1993, 1997).

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<sup>87</sup> I am referring primarily to the work of Park (1925) and Burgess (1925). The later research from Shaw and McKay (1942) abandoned many of the ecological ideas present in the earlier work of the Chicago School (Brantingham and Jeffery, 1991). One could argue that routine activities theory also has roots in the Chicago School, especially considering that Felson obtained his doctorate from the University of Chicago (Mutchnik, Martin, and Austin, 2009). However, a careful reading of Felson’s (1979; 1980) earlier writings reveals that he relies less on Chicago School assumptions and directives and more directly upon Durkheim’s ideas. Felson’s more recent writing (2005) seems to be an attempt to import methodological principles used by the Chicago School.

Environmental criminology also makes use of many more recent contributions from scholars not so familiar to criminology. Journalist and freelance writer, Jane Jacobs, would make a significant contribution to the working strategy of this program. In her landmark book, *The Life and Death of Great American Cities* (1961), she examined structural changes that occurred during urbanization in city architecture and planning. She argued that these changes decreased the density characteristics of the city and eroded a once-strong sense of community. After a series of conversations with Jacobs, an architect named Oscar Newman wrote a book called *Defensible Space* (1972), which attempted to describe the connection between the new architecture and increased criminal activity. Like Guerry, Quetelet, Ferri, and Burgess, these more recent works in social ecology and urban planning also provide important assumptions (e.g., the notion that informal social control and criminal behavior can be affected by architecture, lighting and organization of urban areas) that help form the foundations of the orienting strategy of this program.

Perhaps most relevant to the field of criminology is the influence of C. Ray Jeffery (1965, 1971). Jacobs also inspired Jeffery after a series of conversations; however, he formulated his first important unit theory prior to their interaction.<sup>88</sup> To properly understand how Jeffery's (1971) ideas are relevant to environmental criminology, one must first understand the origins of Jeffery's (1965) unit theory. The influence of both Sutherland and Skinner is clearly evident in Jeffery's (1965) first formulation known as differential-reinforcement theory. He believed that a theory that

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<sup>88</sup> Although they did both speak frequently with Jacobs, Newman and Jeffery never actually discussed their ideas with one another (P.J. Brantingham, personal communication, March 25, 2004).

directly applied Skinner's (1953) operant conditioning principles would be capable of updating and replacing Sutherland's (1947) theory of differential association.

Jeffery (1965) agreed with Sutherland's basic thesis that criminal behavior was the result of learned behavior; however, he thought that Sutherland's formulation put too much emphasis on the social aspects of learning. In Jeffery's (1965) view, since these social aspects were also difficult to test quantitatively (a criticism often leveled at differential association theory), they ought to be discarded in favor of more concrete environmental cues.<sup>89</sup> Another problem with differential association theory was that the mechanism of learning was never clearly specified by Sutherland; Jeffery (1965) was attempting to fix this problem by introducing Skinner's ideas.

Skinner's (1953) principles of operant conditioning contend that behavior will continue as positive or negative reinforcement increases, and behavior will cease or decrease if it is positively or negatively punished. In order to make his own formulation more precise, Jeffery (1965) expanded upon Skinner's framework by adding two interrelated concepts called satiation and deprivation. These two concepts suggest that a person's schedule of reinforcement is influenced by the environmental conditions one has to endure. For example, a wealthy CEO of a successful corporation would be less likely to be reinforced by stealing small amounts of money than would a typical employee because, from a financial point of view, the CEO is more satiated and less deprived than the employee.

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<sup>89</sup> This was, in part, a reaction to the dominance of purely sociological explanations of crime popular during this era. Sutherland was attempting to stake out crime as the disciplinary territory of sociology. For an interesting discussion of Sutherland's efforts see Sampson and Laub (1991).

Jeffery's (1965) theory of differential-reinforcement is not a clear example of unit theory integration. Rather, like many criminological theories (e.g., Cloward and Ohlin, 1960), Jeffery (1965) was combining ideas at a metatheoretical level to produce a new unit theory. As suggested earlier, this formulation is most accurately conceptualized as a proliferation of Skinner's (1953) operant conditioning principles from psychology into the explanatory domain of criminology. This unit theory is also an example of elaboration upon operant conditioning because Jeffery (1965) introduced new concepts (i.e., satiation and deprivation) into the original Skinnerian framework. He then used the revised operant conditioning principles to elaborate upon Sutherland's (1947) original theory of differential association (Wagner, 1984).<sup>90</sup>

Jeffery (1971) would go on to propose a new approach called *Crime Prevention through Environmental Design* (CPTED) which drew heavily on his earlier unit theory.<sup>91</sup> It is at this point where the influence of Jane Jacobs (1961) reappears as there is a new emphasis on the importance of the physical environment in determining behavior. Specifically, Jeffery (1971) embraces a new assumption stating that the physical environment is responsible for determining human behavior. The theory of differential-reinforcement was still partially present as the core unit theory; however, the concepts of satiation and deprivation were dropped entirely. Additionally, as a result of the emphasis

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<sup>90</sup> Akers (1969, 1998) has done something quite similar with his social learning theory, although his formulation retains the social aspects through the inclusion of Banduran modeling from psychology. In addition, Akers's theory comes closer to an example of theory integration than did Jeffery's (1965) unit theory. Jeffery's (1965) theory greatly downplays the significance of social reinforcement by emphasizing biological and psychological aspects. Environment is important, but only in the sense that it has the power to mediate the effects biological and psychological predispositions may have on behavior (Williams and McShane, 2010). Akers's (1969, 1998) formulation remains more true to Sutherland's (1947) theory by maintaining that social reinforcement is the most important type of reinforcement.

<sup>91</sup> This is quite a complex area of theory and has a great impact on not only criminology, but also on the criminal justice system and even on private attempts to control crime. For a rigorous examination of the theoretical development of this particular area, see Robinson (1999).



on the physical environment (brought about by conversations with Jacobs, similar to Newman), Jeffery (1971) relates the remaining portion of his original unit theory to urban planning and environmental design. Because he emphasizes the ways in which the environment can reinforce certain types of behavior, Jeffery's (1971) work goes beyond that of Newman (1972) who focused purely on the architectural and urban planning aspects (Brantingham and Brantingham, 1978).

Many of Jeffery's (1971) suggestions can be seen as metatheoretical directives and assumptions. For several reasons, CPTED is probably most accurately characterized as an orienting strategy rather than a true unit theory (Wagner, 1984). First, CPTED makes assertions about the subject matter of crime (i.e., criminal acts are physically determined by the environment). Second, it describes what the goals of criminological theorizing ought to be and suggestions of how the problem of crime should be addressed. These statements are represented in his belief that crime can be prevented or reduced through the manipulation of the environment (Jeffery, 1971). As will soon be demonstrated, Jeffery's (1965, 1971) work (especially CPTED) would influence the research program of environmental criminology profoundly.

### **Criminological Theory in Transition: From the Sociological to the Geographical Imagination**

Environmental criminology distinguishes itself from routine activities and rational choice theory by seeking an understanding of space from an offender's point of view (i.e., subjective space). The previous ecologically-inspired theories of crime focused on objective space or the idea that, "Space exists in a fixed quantity, and people or groups are located in this fixed space." (Brantingham and Brantingham, 1984: 332). To gain a

deeper understanding of subjective space and the microspatial behavior of criminals, Brantingham and Brantingham (1984) integrate insights derived from behavioral geography, environmental psychology, and architecture.<sup>92</sup>

With the development of more unit theories, the orienting strategy of environmental criminology has also clearly evolved and changed.<sup>93</sup> A graphic depiction of the development of environmental criminology can be seen in Figure 19 on page 157. A number of the fundamental elements contained in the strategy can be seen as influences stemming from Jeffery's (1971) work on crime prevention through environmental design (see also Brantingham and Faust, 1976). However, it ought to be noted that while some important aspects suggested by Jeffery were retained, others were altered or dropped altogether. For example, the foundational conceptual model suggested by Brantingham and Faust (1976) is developed from preventive medicine. Three levels of prevention are delineated: primary prevention, aimed the modification of the social and physical environment; secondary prevention, focused upon intervention in an offender's life; and tertiary prevention, or attempts to prevent recidivism. Brantingham and Faust (1976) focus on primary prevention, and to a lesser extent, secondary prevention; it is suggested that the criminal justice system at the time concentrated on tertiary prevention.

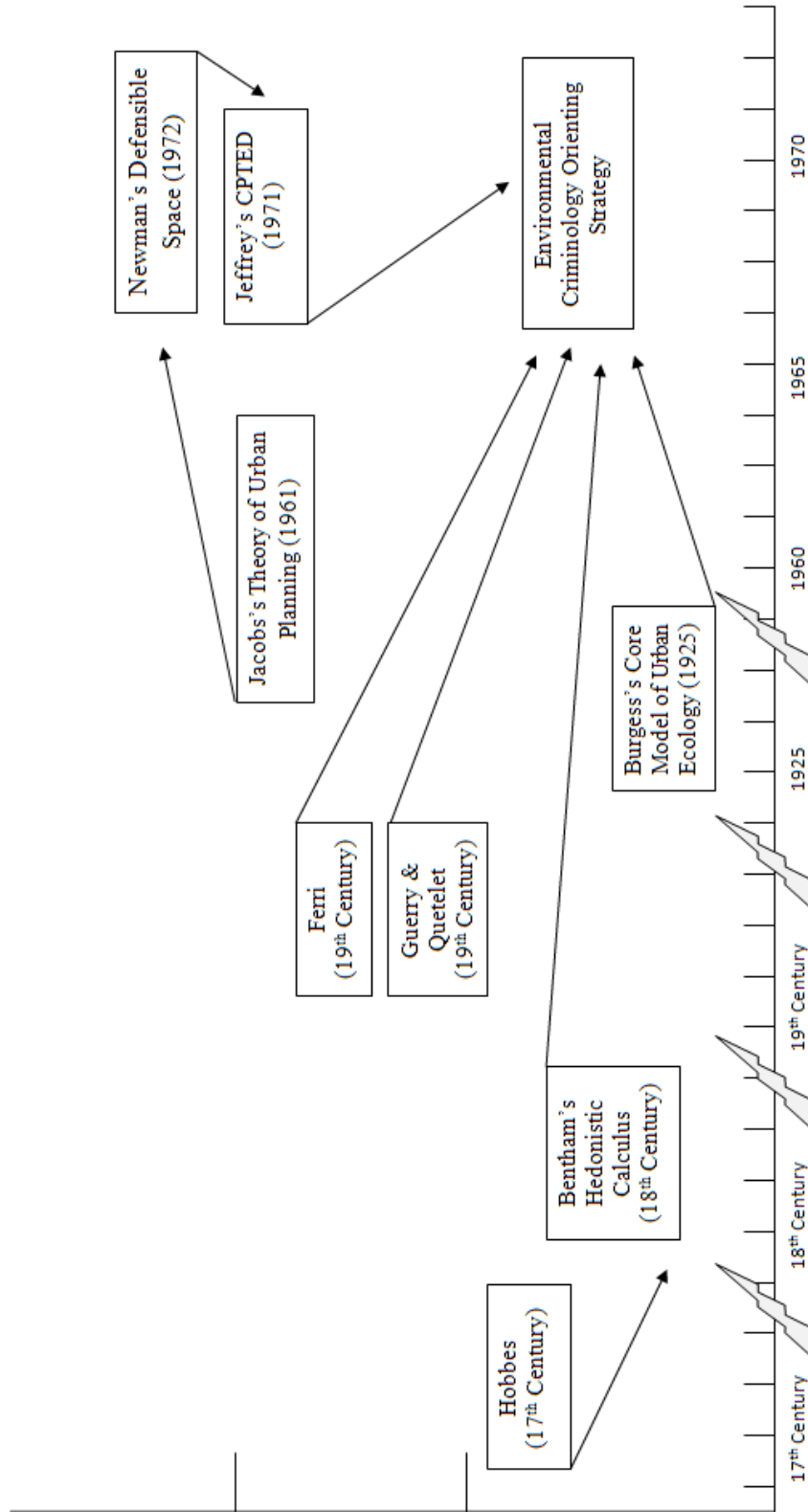
From this scheme, one can discern the problems that the theorists in this program meant to address or elements that will eventually be included in the heuristic set of the

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<sup>92</sup>Specifically, environmental criminology combines ideas from Jane Jacobs's (1961) work on urban planning and development, Jeffrey's (1971) notion of crime prevention through environmental design (CPTED) and Oscar Newman's (1972) concept of defensible space. These ideas inform the orienting strategy used by environmental criminologists.

<sup>93</sup>Most of the foundational elements from early social theorists (i.e., Guerry, Quetelet, Ferri, and Burgess) discussed earlier have been retained.

Figure 19: Development of Environmental Criminology Orienting Strategy



program. This discussion also helps to form the basis for the working strategy of environmental criminology since it provides a conceptual scheme that specifies what is important when analyzing the phenomenon (in this case crime and methods of crime prevention) and also contains directives describing how to select theoretical problems and devise solutions to those problems (Berger and Zelditch, 1993, 1997; Wagner, 1984, pg. 30).

Over time, environmental criminology has also incorporated ideas derived from the routine activities and rational choice theory from the postclassical program. This has allowed environmental criminology to grow into a research program all its own.<sup>94</sup> In addition, integration has occurred frequently, and proliferant theories were often candidates for integration. This growth is important; proliferation is often not recognized or is disregarded in the philosophy of science literature, and integration is extremely rare (Wagner, 1984; Wagner and Berger, 1985). All of this activity has generated a number of unit theories of the “middle range” (Merton, 1948; see Brantingham and Brantingham, 1978; 1991; 1993; 1999 for a few examples). In other words, these theories are expressed at the meso-level and are useful in explaining a variety of neighborhood crimes (Felson and Clake, 1998).

### **Unit Theories in Environmental Criminology: The Pattern of Crime**

The earliest unit theory articulated within the environmental criminology trajectory addressed the problem of understanding crime site selection (Brantingham and Brantingham, 1978). This initial theory would give rise to a number of subsequent unit

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<sup>94</sup> Environmental criminology still seems to have important connections to the postclassical theories. Arguably these are more important than the common assumptions held by the neoclassical-deterrence and postclassical theories.

theories that constitute environmental criminology (See Figure 20 on page 160). Before discussing this unit theory, two key assumptions require some discussion.

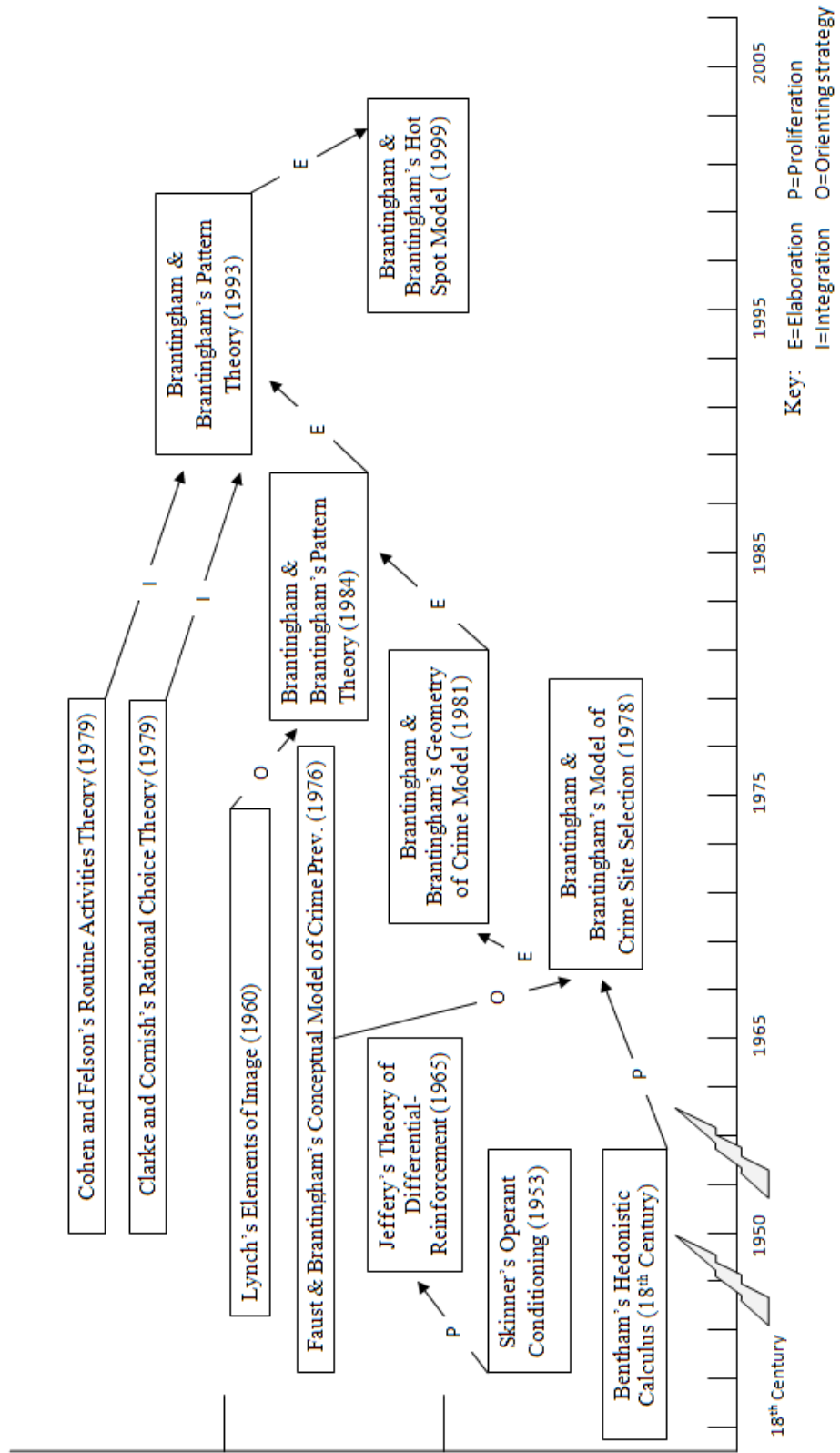
Strict environmental determinism (as suggested by Jeffery [1971]) is abandoned, and replaced with the notion of environmental probabilism:

Environmental probabilism asserts that a lawful relationship between the environment and behavior exist, but that these relationships are probabilistic rather than certain. (Brantingham and Brantingham, 1978, pg. 106)

This constitutes an important assumption in environmental criminology (Berger and Zelditch, 1993, 1997). Another key assumption within this theory is the notion of a motivated offender since the focus is on primary prevention techniques (Brantingham and Faust, 1976). The motivation or genesis of the criminal behavior (i.e., criminality) lies outside the problem focus or potential heuristic set of the theory (Wagner, 1984). These assumptions are crucial to understanding Brantingham and Brantingham's (1978) model of crime site selection.

Statements within this theory suggest that searches vary based on emotional involvement with the crime; when emotional involvement is high, the search will be simple and brief, whereas low emotional involvement will generate a longer, more calculated and complex search (Brantingham and Brantingham, 1978). Further, the environment emits cues (e.g., physical, cultural, legal) that inform motivated offenders about which areas are ideal for the commission of crime. These cues or signals are interpreted using knowledge acquired from previous experiences, or in some cases, are learned from others in a social context. More specifically, these cues alert the offender to the opportunities for crime and the risks of apprehension. Templates are constructed

**Figure 20:** Environmental Criminology Trajectory



from these cues, and they share a certain degree of similarity among different offenders. These templates are also self-reinforcing, meaning that they may encourage future behaviour, and will vary to a degree, but not to the extent that similarities cannot be identified.<sup>95</sup> For example, most people have commonalities in their perception of distance, exhibit consistent activity patterns (e.g., going to work or school regularly), and conceptualize city maps in similar ways (Brantingham and Brantingham, 1984: 349-358). These universal characteristics of criminal templates may be identified, and can be used to prevent criminal opportunities. The theory can be expressed mathematically as the following formula:  $C = f(M, O)$ ; this can be read as “Crime is a function of motive and opportunity” (Brantingham and Brantingham, 1991, pg. 240). The propositions of the theory are as follows<sup>96</sup>:

I. Individuals exist who are motivated to commit specific offenses.

(a) The sources of motivation are diverse. Different etiological models or theories appropriately may be invoked to explain the motivation of different individuals or groups.

(b) The strength of such motivation varies.

(c) The character of such motivation varies from affective to instrumentalist.

II. Given the motivation of an individual to commit an offense, the actual commission of the offense is the end result of a multi-staged decision process which seeks out and identifies, within the general environment, a target or victim positioned in time and space.

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<sup>95</sup> The concept of templates itself has also been elaborated upon in subsequent writings (For instance, see Brantingham and Brantingham, 1993).

<sup>96</sup> These propositions were reformulated and revised with each elaboration (Brantingham and Brantingham, 1981, 1984). I will only include the original statement here as subsequent formulations retain many of the same features of the original theory. I also should note that these lists of propositions contain some assumptions that are not testable. Brantingham and Brantingham (1981, 1984) are attempting to map out an explanatory domain here (criminal acts). This is common early on in research programs. Sutherland (1947) takes a similar approach in his differential association.

In the case of high-affect motivation, the decision involves a minimal number of stages.

In the case of high-instrumental motivation, the decision process locating a target or victim may include many stages and much careful searching.

III. The environment emits many signals, or cues, about its physical, spatial, cultural, legal and psychological characteristics.

(a) These cues can vary from generalized to detailed.

IV. An individual motivated to commit a crime uses cues (either learned through experience or learned through social transmission) from the environment to locate targets and victims.

V. As experiential knowledge grows, an individual motivated to commit an offense learns which individual cues, and sequences of cues, are associated with “good” victims or targets. These cues, cue clusters, and cue sequences (spatial, physical, social temporal, and so on) can be considered a template which is used in victim or target selection. Potential victims or targets are compared to the template and either rejected or accepted, depending on the congruence.

(a) The process of template construction and the search process may be consciously conducted, or these processes may occur in an unconscious, cybernetic fashion so that the individual cannot articulate how they are done.

VI. Once the template is established, it becomes relatively fixed and influences future searching behavior, thereby becoming self-reinforcing.

VII. Because of the multiplicity of targets and victims, many potential crime selection templates could be constructed. But because the spatial and temporal distribution of targets and victims is not regular, but clustered or patterned, and because human environmental perception has some universal properties, individual templates have similarities which can be identified.

(Taken verbatim from Brantingham and Brantingham, 1978: 107-108)



Brantingham and Brantingham (1978) use the idea of templates to explain how criminal learning occurs; this initial theory can be seen as a more specific elaboration of Jeffery's (1965) earlier work. As mentioned previously, Jeffery's (1971) later work provides some key components of the orienting strategy in the environmental criminology research program. Brantingham and Brantingham (1978) describe the relationship between the theories and the orienting strategy:

CPTED, while clearly having an applied side, can also be explored from a theoretical point of view. Criminal behavior involves motivation and action. Environmental design explores the variety of actions which occur and the complex interaction between individuals with biological and learned characteristics, and the environment. (pg. 116)

So, environmental criminology is an attempt to develop the theoretical basis of Jeffrey's (1971) notion of CPTED. These theorists seek to expand Jeffrey's (1971) CPTED approach into a more specific explanation of criminal acts. This illustrates the metatheoretical nature of CPTED, and clarifies its role as a contributor to the orienting strategy of environmental criminology (Wagner, 1984).

There is substantial empirical evidence supporting the model of crime site selection. For example, Brantingham and Brantingham (1981a) tested the plausibility of interrelationship between "the physical distributions of opportunities for crime, transportation flow patterns, and the awareness spaces potential criminals" (pg. 89). To do this, they mapped and compared the locations of major paths and landmarks to commercial burglaries in New Westminster, British Columbia. They found that burglaries generally corresponded to the locations of major landmarks and moderately traveled streets; more frequently traveled streets were thought to have higher levels of surveillance that served to deter burglary. Brantingham and Brantingham (1981a)

concluded that some landmarks and levels of traffic flow could be used to predict where burglaries occur.

The first major elaboration of the crime site selection unit theory was called the geometry of crime (Brantingham and Brantingham, 1981b). Referring to the propositions in the original crime site selection unit theory (Brantingham and Brantingham, 1978), Brantingham and Brantingham (1981b) explain how they accomplished the elaboration:

These propositions [in the original model] are not spatially specific. They posit that criminals engage in search behavior which may vary in intensity and that criminals use previous knowledge to select targets. The propositions do not describe the spatial characteristics of the search patterns or selection patterns. The model presented in this chapter will attempt to articulate these general propositions *spatially*. (pg. 29, italics in original)

The theory is made more rigorous and precise because a potential offender's movement is more specifically described with regards to spatial movement patterns. It is also suggested that most searches by offenders will be short, inexpensive, and easy. This could be seen as an early appearance of what later would become known as the "least effort principle".

The motivation assumption is revised because it is asserted that opportunity is as important as motivation (in most cases). As Brantingham and Brantingham (1981b) explain: "The model will use concepts of *opportunity* and *motivation* and will tie these together with concepts of *mobility* and *perception*" (pg. 28, italics in original). These alterations represent adjustments in the working strategy; specifically, the assumption of a motivated offender within proposition one is being revised (Berger and Zelditch, 1993, 1997). According to Brantingham and Brantingham (1981b) to understand how opportunities may motivate potential offenders, one must understand how offenders

perceive the world and how this affects their movements in time and space. This change in working strategy increases the heuristic set of the program by allowing more of a focus on the motivation behind crime rather than merely assuming a motivated offender as in the crime site selection model (see Brantingham and Brantingham, 1978). This shift opens up more opportunities to elaborate upon the core unit theory.

Brantingham and Brantingham (1981b) have expanded on their model to explain differences in searches undertaken by individual offenders and clusters of offenders. Further, they also distinguish between basic, complex, selective and dynamic search patterns. The model for basic searches takes into account the offender's home location, and posits search patterns based solely on this location, whereas models for more complex searches include the offender's home location, as well as frequently visited school, work, and leisure locations. Models for both basic and complex searches involve a uniform distribution of targets; selective and dynamic searches involve targets that are distributed unevenly. Like basic search models, selective search models are based on only the offender's home location. Dynamic searches, like complex searches, account for other frequently visited sites related to school, work, and leisure activities (Brantingham and Brantingham, 1981b, pgs. 30-47). This is elaboration because the theorists are specifying how search patterns vary and how different patterns of criminal activity emerge when different variables (e.g., numbers of offenders, frequently visited sites) are taken into account (Wagner, 1984).

In later elaborations of the theory, Brantingham and Brantingham (1984) continue to refine their orienting strategy by making several important assertions that constitute important methodological directives in their working strategy. They assume that targets

are not distributed uniformly throughout cities; however, they are not distributed at random either. Rather, targets occur in various patterns and crime is also thought to be patterned. One can use this idea to predict where criminal acts will most likely occur and where crimes will cluster.

To conceptualize the activity patterns of criminal offenders, several new concepts are introduced including nodes, paths, and edges. The work of Lynch (1960) seems to have had the most direct influence as several concepts are imported directly to supplement their core theory of crime site selection (Brantingham and Brantingham, 1978). Brantingham and Brantingham (1984) theorize that offenders construct cognitive maps based on their activity and awareness space. These maps have several important features useful to understanding and analyzing microspatial offending patterns. *Nodes* are centers of activity that draw in many people (including offenders) for various reasons. These sites may include centers of work, school, and leisure activity (e.g., bars, restaurants, malls). When traveling to and from these important points, most people use the same pathways or routes every day. *Paths* are defined as common routes (e.g., roads, walkways) that are used by people to travel between different nodes. According to Brantingham and Brantingham (1984), *edges* are “linear elements not used as paths” that help form boundaries where people tend not to venture (e.g., the street before a bad section of the city, railroads, and other physical boundaries) (pg. 359).

The space between the nodes and paths is called activity space. A criminal’s awareness space is the area within visual range of one’s activity space (Brantingham and Brantingham, 2008: 84). Criminals commit crimes in the vicinity of their everyday paths and nodes (i.e., awareness space) when suitable opportunities present themselves. The

distance traveled away from these points will also vary depending upon the type of crime committed (Brantingham and Brantingham, 1993). The use of the new concepts of nodes, paths, and edges is an example of theory proliferation. Ideas are being imported into the field of criminology and are brought to bear on a new explanatory domain (i.e., microspatial offending patterns, a problem subset within the criminal event). The resulting theory can also be seen as an elaboration of the theory of crime site selection because the theorists are further explaining the formation of templates for crime (Wagner, 1984; Wagner and Berger, 1985).

Brantingham and Brantingham's (1993) pattern theory seems to offer a first glimpse of unit theory integration. At this point, the notion that targets, and therefore crimes, occur in patterns becomes very important since this idea is elaborated upon by using concepts from outside theories. While this might at first appear to be another case of elaboration, it is more accurately characterized as theory integration. As Wagner (1984) suggests:

Integration presents a construction task very similar to elaboration. The task in this case is to unite two or more disparate formulations in a single theory while maintaining consistency with the original formulations. (pg. 70)

Not surprisingly, the integrated pattern theory is quite a complex model, so it would be a mistake to try to cover every nuance in this discussion; however, the basics of the theory need to be understood. The central argument is that there are many different variables which need to be taken into account when attempting to formulate an explanation of crime. If the conditions are not right, then crime will not occur:

The likelihood of a criminal event transpiring depends on the backcloth, the site the situation, an individual's criminal readiness, routine activity

patterns, and the distribution of targets. None of these elements can, independently, be expected to explain criminal events. They must be considered conjointly with special emphasis on how they shape choices. (Brantingham and Brantingham, 1993, pg. 266)

Brantingham and Brantingham (1993) add that to understand criminal behavior one must bear in mind the process of committing the crime, an offender's template and activities, and the readiness of the offender when the opportunity presents itself. These factors are all arranged on an *environmental backcloth* or "a term used for the variable, ever-changing context that surrounds the daily lives of individuals" (Brantingham and Brantingham, 1993, pg. 287, fn12). The environmental backcloth accounts for the changing external environment of individuals (structural elements), while the template focuses on individual decision-making.

At this point, integrative activity takes place in several areas. Ideas from rational choice theory and routine activities are drawn out to explain how aspects of the template or activity backcloth are formed (Eck and Weisburd, 1995). As stated previously, most offenders are thought to be rational, and it is assumed that they make decisions like law-abiding people.<sup>97</sup> It follows that crime will result if easy opportunities are available to potential criminals. Felson's (1987) "least effort principle" is also incorporated to help explain how decision-making occurs and the readiness or willingness of the offender.<sup>98</sup> Essentially, criminals prefer the easiest opportunities that lead to the biggest pay offs. The idea that offenders make rational choices and then act upon these decisions is central

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<sup>97</sup> Cornish (1999) has called this a theory of action, namely rational choice theory. Berger and Zelditch (1993, 1997) would call this a substantive assumption about the nature of the criminal located in the foundations of the program's orienting strategy. To avoid the confusion that would result in using the word "theory" to describe different elements in a research program, I will stay with the latter interpretation.

<sup>98</sup> While this principle was implied in earlier versions of the theory, this is the first direct mention of it.

to understanding what Brantingham and Brantingham (1993) call the “event process” of crime”. The authors are careful to point out that different types of crime will be characterized by different decision-making processes; criminal decision-making for the same crime may also be different depending upon the environment of the crime (e.g., shoplifting will vary if it is committed in a market rather than a department store).

Brantingham and Brantingham (1993) describe how ideas from routine activities theory are relevant to the template/activity backcloth portion of their pattern theory:

While forming patterns in the foreground, the event process rests on a general backcloth formed by routine activities (including repeat or routine criminal activities) and on a template that helps identify what a “great” chance is or what a good “opportunity would be or how to search for chances and opportunities”. (pg. 269)

The authors assert that routine activities also help shape offenders’ activity space and where and when suitable targets (i.e., victims) appear. Further, these routine activities help to shape offender’s (and normal people’s) patterns of travel throughout the day (Brantingham and Brantingham, 1993). In other words, an offender’s routine activities affect how templates form.

It is relatively easy to see how rational choice and routine activities theory are synthesized within pattern theory. Brantingham and Brantingham (1993) are explaining how routine activities can affect the distribution of offenders and targets. Further, routine activities theory is used to trace the daily activity patterns of offenders, and this helps to explain the spatial distribution of crime (Brantingham and Brantingham, 1993). More specifically, ideas from learning theory used in the model of crime site selection (Brantingham and Brantingham, 1978) are fused with concepts from routine activities. In addition, rational choice theory is used to help understand, and further elaborate upon,

how offenders make decisions and what these decisions will be. This integrative activity represents a “converging type of growth” in which ideas from different formulations are united into a single explanation (see Wagner, 1984, pg. 73).

Another example of a unit theory produced by the environmental criminology research program is the theoretical model of ‘hotspot generation’ (Brantingham and Brantingham, 1999). This is an example of elaboration upon the structural portions of pattern theory (Brantingham and Brantingham, 1993). The concepts of *crime generators* and *crime attractors* are of particular importance for an understanding this theory and are clear evidence of unit theory elaboration (Brantingham and Brantingham, 1999). Crime generators are places where people go to engage in non-criminal activities. Offenders may target these areas specifically because of the availability of opportunities and/or because it is a part of their daily activities. These areas may include malls, bus stops, subway/skytrain stations, and other places that attract large numbers of people. Places like slums, ‘red light’ districts, and drug areas that attract criminals because of an “ecological label” (i.e., bad reputation) are designated as crime attractors. When these areas begin to overlap with other environmental conditions that predispose an area to crime (e.g., poverty, traffic arteries, schools, and shops), crime “hotspots” are created. Clearly, ideas from routine activities are still present, and are being elaborated upon within this formulation. The theorists are specifying how a convergence of certain conditions can create high levels of crime within a particular area. Elements of routine activities theory are also used to clarify how distributions of targets may affect crime patterns. This activity produces a more precise unit theory focused on explaining a



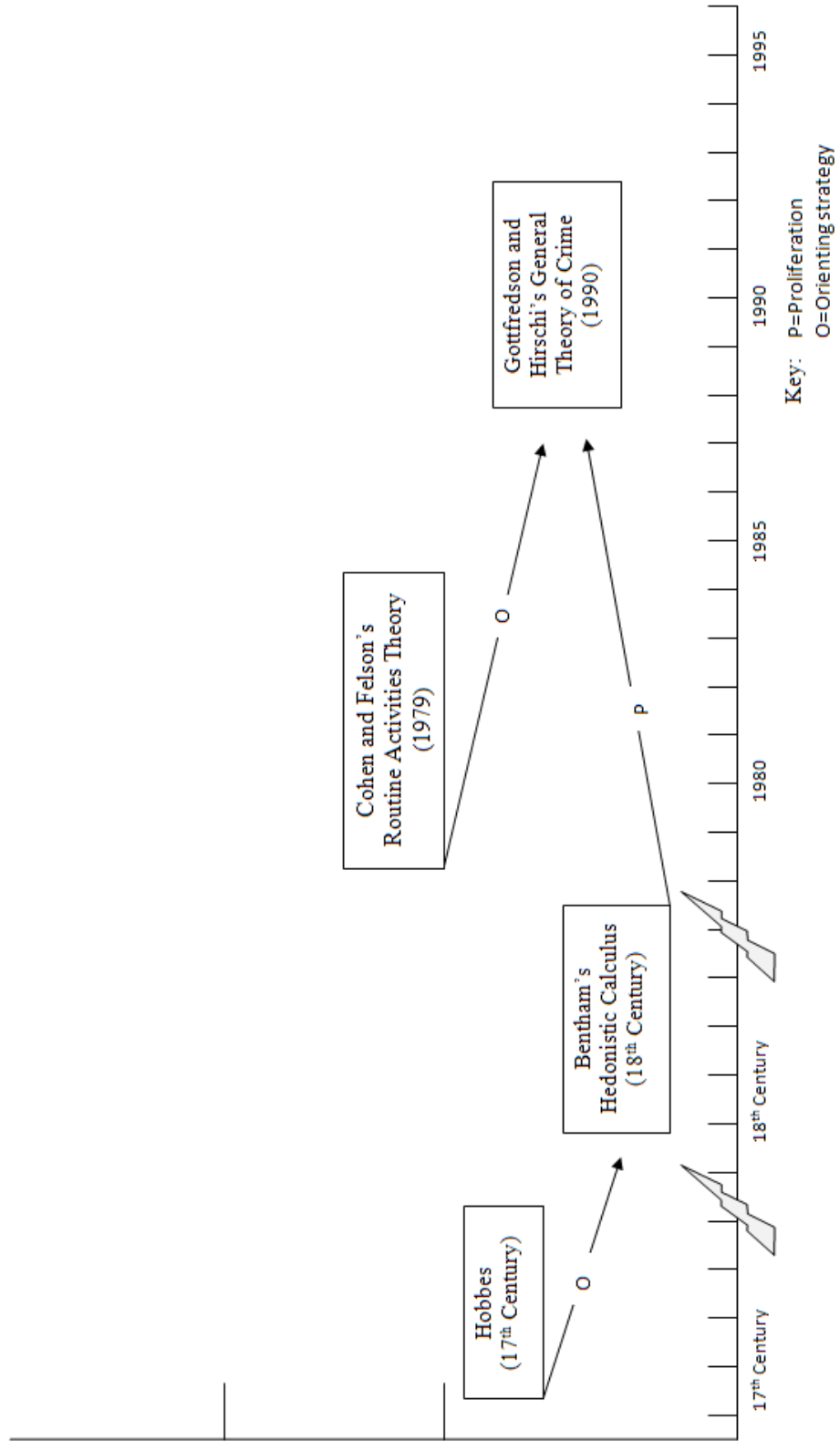
specific phenomenon (i.e., how certain areas become crime hotspots) (Wagner, 1984; Wagner and Berger, 1985).

The environmental criminology trajectory has produced a formidable number of unit theories capable of dealing with a variety of problems related to and resulting from crime. The variety of problems addressed within the heuristic set of this theory is quite extensive, and this has contributed to its rapid production of unit theories. Additionally, it has linked several theoretical traditions (i.e., differential association, operant conditioning, CPTED, routine activities, and rational choice theories) while demonstrating the connections between the core ideas contained within them.

The final unit theory to be discussed, Gottfredson and Hirschi's (1990) general theory of crime, is not traditionally included in reviews of postclassical theories (See Figure 21 on page 172). Instead, most theory textbooks include this under a discussion of control theories (Bernard, Snipes and Gerould, 2010; Williams and McShane, 2010; Akers, 2009; Lilly, Cullen and Ball, 2007; Einstadter and Henry, 2006). However, Hirschi (1989) has argued that his more recent theory is compatible with other postclassical theories:

...I think there is much life in the complex of theories that concentrate on variation in restraint and ignore or deny variation in criminal motivation. Indeed, it seems to me that the complementarities of the routine activities (Cohen and Felson, 1979), rational choice (Cornish and Clarke, 1986), and social control perspectives are such that they must be considered the same theory (Hirschi, 1986; Felson, 1986). Michael Gottfredson and I have begun to develop a general theory of crime that we feel is sufficiently compatible with this perspective. (pg. 44)

Figure 21: Gottfredson and Hirschi's General Theory of Crime



Gottfredson and Hirschi (1990) reassert this point in their main exposition of the theory:

Classical theories on the whole, then, are today called *control* theories, theories emphasizing the prevention of crime through consequences painful to the individual. (pg. 85, italics in original)

Clearly, if one considers the assumptions underlying routine activities theory, rational choice theory, environmental criminology and the general theory of crime, it becomes obvious that they share a common orienting strategy and are part of the same theoretical research program (Wagner, 1984). Major differences between these two theories are usually found within their working strategies (Berger and Zelditch, 1993, 1997).

While postclassical theories initially appear to be micro-level theories, if both routine activities and rational choice theory are closely examined, it becomes clear that they are more accurately conceptualized as aggregate-level theories (Bernard and Snipes, 1996). Further, Gottfredson and Hirschi (1990) themselves acknowledge that in addition to low self-control, a source of independent variation is changes in opportunities for crime brought about by social structural shifts like those pointed out by routine activities theory (e.g., economic and social changes) and rational choice theory (e.g., reduction of opportunities, increase in risk of apprehension) (Bernard and Snipes, 1996: 334-337).

Since routine activities theory, rational choice theory, and the general theory of crime all have differing levels of explanation (structure/process versus individual difference) they are compatible with one another (Bernard and Snipes, 1996). Similarly, even though they focus on individual differences, the unit theories offered by environmental criminology and the general theory of crime are compatible since the main focus of each theory is different. Specifically, environmental criminology is focused on the criminal event and activities of offenders (Brantingham and Brantingham, 1978,

1984, 1993, 1999) whereas the general theory of crime attempts to explain criminality through *examining the characteristics of criminal events* (Gottfredson and Hirschi, 1990: 15-22). To accomplish this, Gottfredson and Hirschi (1990) use Cohen and Felson's (1979) model (i.e., motivated offender, suitable target/victim, and absence of a capable guardian) to further understand characteristics that crimes (and therefore criminals) hold in common. The scope of Gottfredson and Hirschi's (1990) theory is "acts of force or fraud undertaken in the pursuit of self interest" (pg. 15). This fusion of the Classical and Positivist schools of thought allows them to examine criminality more holistically than pure positivist theories.<sup>99</sup>

Through this examination, Gottfredson and Hirschi (1990) find that most crimes are trivial or mundane and, "result from the pursuit of certain, immediate, easy benefits" (pg. 42). In addition, they note that there are behaviours that are "theoretically equivalent" to crime because they deliver some form of immediate gratification (e.g., drinking, smoking, illicit sex, and gambling). Crime and its theoretical equivalents are thought to be the result of the same underlying problem: low self-control. Low self-control, in turn, is a stable, natural, un-socialized state, and is directly associated with a lack or absence of socialization. Child-rearing is considered to be the main source of socialization followed by school experiences.

In the Wagnerian (1984) model of theory growth, the general theory of crime would be considered another example of a proliferation. Gottfredson and Hirschi (1990) have taken the principles of the Classical School that focused on the crime rather than the offender, and updated theorizing about criminal events (Cohen and Felson, 1979; Clarke

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<sup>99</sup> So, one could argue that the problem focus of this theory is criminality; however, criminality is understood through an examination of the criminal event.

and Cornish, 1986) to produce a theory of criminal propensity based on individual differences (i.e., self-control).

Numerous studies exist about the relationship between low self-control and criminal behaviour, many of which provide some support the theory (Burton, Cullen, Alarid, and Dunaway, 1998; Pratt and Cullen, 2000; Higgins, 2004). For example, Chapple (2005) used data from the Children of the National Longitudinal Survey of Youth (NLSY-Child and Young Adult data) to test this self-control theory. In addition, she was able to hold constant other well-known correlates of criminal behavior like sex, age, poverty and race. Self-control was measured through parental assessment and with reference to the Behavioral Problem Index (BPI), a well validated index from the developmental literature. In accordance with Gottfredson and Hirschi's (1990) theory, Chapple (2005) found that self-control predicted peer rejection in early adolescence and subsequent membership in delinquent peer groups. However, she also found that peer rejection completely mediated the effect of self-control on delinquency; this conflicts with predictions offered by self-control theory.

### **On the Ramifications of “Armchair Theorizing”**

The early neoclassical and postclassical research programs are illustrations of Feyerabend's (1976) “anything goes” principle in the field of criminology in that these theorists challenged established and accepted methods of studying crime and criminality. It is true that Classical School ideas were quite influential early on in the formation of the criminal justice system; however, in criminology, they were displaced by positivism, and dismissed as “armchair” theorizing (Williams and McShane, 2010; Akers, 2009; Lilly, Cullen, and Ball, 2007; Einstadter and Henry, 2006). Felson (2008), one of the founders

of the routine activities theory, recounts the reactions he received when first submitting his routine activities article (i.e., Cohen and Felson, 1979) for publication:

I wrote up the first drafts of the routine activity paper, and it was over three years before it was published...Even though the routine activity approach is now one of the most cited theories in criminology, the original article was rejected by six leading journals, including the top three sociology journals, the *American Sociological Review*, *American Journal of Sociology*, and *Social Forces*. Reviewers' comments included these:

'impressive empirical dribble'

'the human ecology approach goes nowhere'

'a bizarre paper'

'too cryptic...suspiciously glib'

'a bundle of paradoxes'

'long and somewhat boring'

'Can the analysis be saved? I doubt it.'

'[I] recommend that this obviously talented sociologist turn to a problem...more meaningful.' (pg. 72)

Clearly, many criminologists were not ready for this new perspective; however, the public was craving such an approach. In the U.S., Canada, and the U.K., crime rates had been steadily rising since the 1960s, and this continued on through the 1970s. During this period, there was a demand for practical solutions focused on reducing crime; people had lost faith in the ability of the penal-welfare approach to crime control (Garland, 2001). This provided an ideal environment for practical suggestions offered by this group of research programs.

Starting in the 1970s and continuing today, the policies and practices of the criminal justice systems in the U.S., Canada and U.K. have been affected, or at least justified, by ideas embodied in these research programs (Garland, 2001). However, the practical suggestions offered by the two research programs differed significantly. On the one hand, neoclassical theories emphasize deterrence through criminal justice system punishment; this, in turn, has been translated into increasingly severe penalties and longer prison sentences for both serious and minor crimes (Garland, 2001). On the other hand, postclassical theories and theories from environmental criminology emphasize deterrence through a manipulation of the immediate environment or moral sanctions (i.e., informal social control or situational control). Consequently, postclassical theorists suggest either altering the immediate environment to take away opportunities for crime or attempting to strengthen social institutions (e.g., family) responsible for informal social control (Felson and Cohen, 1980; Clarke and Cornish, 1986; Gottfredson and Hirschi, 1990; Einstadter and Henry, 2006).

While it is difficult to argue that criminological theorizing currently influences criminal justice system policy directly in any meaningful way, one can argue that it provides ideas for practices and justifications for the policies that are implemented. “Get Tough” approaches, mandatory minimum sentences, and zero tolerance policing share much of their underlying philosophy with neoclassical theories (Garland, 2001).

Empirical research demonstrates that these approaches have been implemented with questionable results. In both the American and Canadian contexts, many of these policies have been shown to be ineffective and misguided (see Zimring and Hawkins, 1995 for an American example and Gendreau, Goggin, and Cullen, 1999 for a Canadian

example). For example, longer prison sentences have been shown to be ineffective in substantially reducing rates of recidivism. Further, contrary to the beliefs of the proponents of neoclassical-deterrence theory, incarceration has been shown to be ineffective as a specific deterrent for all but high-risk, violent offenders (Zimring and Hawkins, 1995; Gendreau, Goggin, and Cullen, 1999). In addition, the American “Incarceration Binge” failed to reduce the crime rate in any meaningful or direct way (Austin and Irwin, 1997).

Skogan’s (1990) research provides some empirical support for broken windows theory and justifies the policies derived from it. This study involved resident in forty neighbourhoods in six U.S. cities and examined the links between perceptions of crime and disorder. He found that the two were causally related and that disorder was present before serious crime occurred in the neighbourhoods involved in the study.

Recently, there have been several research studies that have questioned the effectiveness of the policies suggested by broken windows approach. For example, Harcourt (2001) reanalyzed Skogan’s (1990) original data and reached very different conclusions. Most importantly, he found that the support offered by Skogan’s (1990) oft-cited study was really very weak and that there was actually little reliable evidence to support the logic of a broken windows approach to policing.

Currently, neoclassical theorizing in criminology seems to be at a ‘dead-end’. This is not to say that economic analyses of crime are not still undertaken; rather, there have been no concerted attempts to expand on the neoclassical-deterrence research program in recent years. Further, much of the economic research ignores research done on crime and criminality outside of economics (Bushway and Reuter, 2008; Tonry,



2008). The primary contribution of neoclassical theories in criminology seems to have been in the form of the orienting strategy. Key underlying assumptions in the neoclassical program reappear in the postclassical research program, and many of the core theoretical principles are still present. However, as described above, other assumptions have been either revised or dropped altogether.

The postclassical theories have suggested a number of practical solutions to crime. For instance, rational choice and routine activities theory have given rise to many different situational crime prevention approaches (Clarke and Cornish, 2001). Environmental criminology has also provided suggestions on how to improve law enforcement and policing tactics (e.g., focusing on hot spots). More specifically, Rossmo (1994, 2000) has used ideas from pattern theory to create a tool that can be used for geographic profiling of offenders. As discussed previously, the postclassical theories have consistently received substantial empirical support.

The postclassical research program and its environmental criminology branch have been characterized by frequent proliferation and a synthesis of new ideas. Classical school assumptions, directives and principles were used to form the orienting strategy and the core unit theories. These have become fused with ideas from other disciplines (e.g., social ecology and environmental psychology) to form new and unique theories. Some of this synthesis seems to be occurring at the philosophical level or amongst orienting strategies similar to the activity described by both Laudan (1977) and Ritzer (1981). However, there has also been a great deal of activity at the level of unit theory. The postclassical program has been characterized by frequent theory proliferation making it a good example of a branching program (Wagner, and Berger, 1985). Once the unit

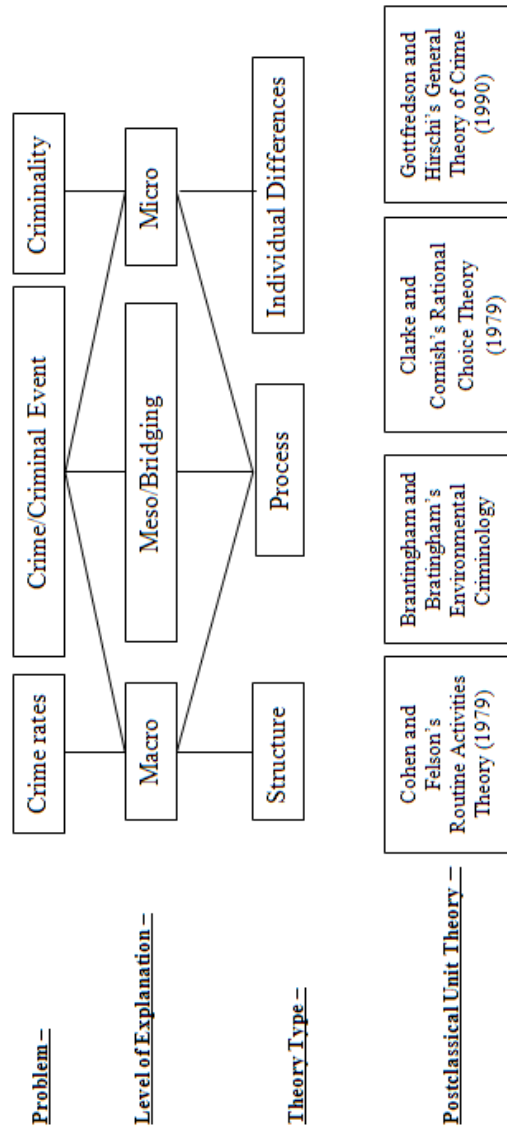
theories in the program were formulated, they branched and were applied to a number of different problem domains (e.g., crime rates, criminal events, criminal decision-making) and across different levels of explanation (e.g., offering structure/process and individual difference explanations) (Bernard and Snipes, 1996). As Wagner (1984) explains:

...proliferation may involve several distinct subtypes. Specifically, proliferation may occur when the theorist attempts to deal with (1) the same problem at a different level of analysis, (2) a different problem at the same level of analysis or, (3) a different problem at a different level of analysis. (pg. 49)

Postclassical proliferations illustrate all of these relations. See Figure 22 on page 181 for a graphic depiction of the relationships between problem focus, level of explanation, and theory type, and how these relate to the postclassical research program. First, routine activities theory uses classical school principles to explain crime rate changes at the macro or societal level (Felson, 1998). Second, rational choice theory addresses the process of criminal decision-making through application of classical school logic at the micro or individual level (Clarke and Cornish, 1986). Third, environmental criminology (Brantingham and Brantingham, 1978, 1981, 1984, 1993, 1999) offers several meso-level or “middle range” explanations of specific problem subsets (e.g., crime site selection, spatial patterning of criminal offending and hot spot formation) (See, also, Felson and Clarke, 1998).

Brantingham and Brantingham’s (1993) pattern theory is also an example of what Liska, Krohn, and Messner (1989) called cross-level integration or integration across levels of explanation. This is because they integrate both rational choice and routine activities theory into their own pattern theory (Brantingham and Brantingham, 1993). Essentially, cross-level integration equates to integration of proliferant theories from

**Figure 22:** Relationship between Problem Focus, Level of Explanation and Theory Type in the Postclassical Research Program



DERIVED FROM: Brantingham and Brantingham (1978, 1984, 1993); Gottfredson and Hirschi, (1990); Bernard and Snipes (1996); Felson and Clarke (1998); Williams and McShane (2010); and Akers (2010)

different levels of explanation (see Wagner, 1984: 72). This is of particular importance since scholars have been debating for some time about not only the merits and drawbacks of cross-level integrations, but also about how to accomplish such a task and what such a theory might look like (Liska, Krohn, and Messner, 1989; Bernard and Snipes, 1996; Sampson, 2000; Laub, 2006). Finally, Gottfredson and Hirschi's (1990) general theory of crime is an individual difference theory asserting that the characteristic of low self control leads to crime (see also Bernard and Snipes, 1996).

The postclassical research program has been especially effective at uncovering new puzzles and problems for criminologists to solve indicating that the program has produced a variety of proliferations. This activity has contributed greatly to the research program's *breadth*, or the diversity of the phenomena and explanatory domains the program's unit theories are able to explain, and *density*, or the completeness of the explanations of the problems dealt with by the program's unit theories (Wagner, 1984). Brantingham and Brantingham's (1993) pattern theory seems to have developed from the crime site selection model, or the core unit theory, through elaboration and integration of complementary unit theories like routine activities and rational choice theory. In many ways, the environmental criminology branch could be seen as an independent research program.

Wagner's (1984) model of theory growth, and its elaborations (Berger and Zelditch, 1993, 1997), seem to be very useful in explaining theoretical activity in the postclassical research program. The distinction between unit theory and orienting strategies allows one to distinguish between the assumptions and directives of a theory and its testable hypotheses. The various theoretical relations (i.e., elaboration,

proliferation, integration, and variation) identified by Wagner (1984), and the constituent parts of orienting strategies (i.e., assumptions, directives, working strategies and foundations) are both helpful in understanding the problem focus, level of explanation and other key differences between the theories in this area.

While some of the theories in the neoclassical-deterrence and postclassical research programs incorporated psychological ideas and concepts like deindividuation and social learning theory, psychological theories of criminality had little direct impact on these programs. The next chapter will focus upon theories from psychology that are relevant to or have directly influenced mainstream criminological theorizing.

## **CHAPTER 5: PSYCHOLOGICAL RESEARCH PROGRAMS AND CRIMINOLOGY**

### **The Many Faces of Psychology**

Criminal behaviour has been an area of interest in psychology since the formation of the discipline in the mid-19<sup>th</sup> century. Early on, criminality was linked with a form of insanity, known as moral insanity (Shoemaker, 1990). Later, IQ tests were introduced and psychological researchers began to argue that low intelligence was connected to criminal behaviour (see, for example, Goddard, 1913). Of particular importance in the development of psychology was the emergence of Freudian psychoanalysis occurring around the turn of the 19<sup>th</sup> century. Freud, like Marx, wrote little about criminality per se; however, later adherents, called Neo-Freudians, applied Freud's concepts and ideas to the study of criminality (see Healy, 1915; Aichhorn, 1925; Alexander and Healy, 1935; Frielander, 1947; Redl, 1951; Abrahamsen, 1944, 1960; Halleck 1967; Halleck and Bromberg 1968).

Freudian thought did not go unchallenged, and the emphasis soon shifted from the mind or consciousness to observable behaviours with the rise of behaviourism. In the late 20<sup>th</sup> century, psychology returned to approaches emphasizing mental processes as cognitively-oriented perspectives started to gain popularity. According to Bartol and Bartol (2011), these shifts illustrate the cyclical nature of psychology: "A psychology of the mind is followed by a psychology of action and behaviour (behaviourism) from which a psychology of mind and consciousness reemerges" (pg. 86). While these shifts were taking place, some theorists also begin to blend the two perspectives; this

approach is exemplified in the work of the Yale School of Psychology and the neo-behaviorist theories (Hull, 1931, 1943; Dollard, Miller, Doob, Mowrer, and Sears, 1939; Miller and Dollard, 1941; Mowrer, 1950, 1960; Eysenck, 1952, 1960, and 1967). This orienting strategy activity is depicted in Figure 23 on page 186.

Some might argue that these constitute paradigmatic shifts (Kuhn, 1962); however, it seems relatively obvious that the rise of behaviourism did not extinguish all Freudian thought. Similarly, behaviourism was not fully displaced by the renewed interest in cognitive processes that occurred in the late 20<sup>th</sup> century. All of these approaches have remained popular and have produced different sets of interrelated unit theories. Indeed, psychoanalysis, behaviourism, and cognitive psychology can all be thought of as orienting strategies in the field of psychology (Wagner, 1984).

Psychological theories of criminality are derived from more general psychological theories of personality.<sup>100</sup> A review of the psychological literature reveals that there are a variety of readily distinguishable orienting strategies and theoretical research programs in psychology some of which are relevant to modern theories of criminality.

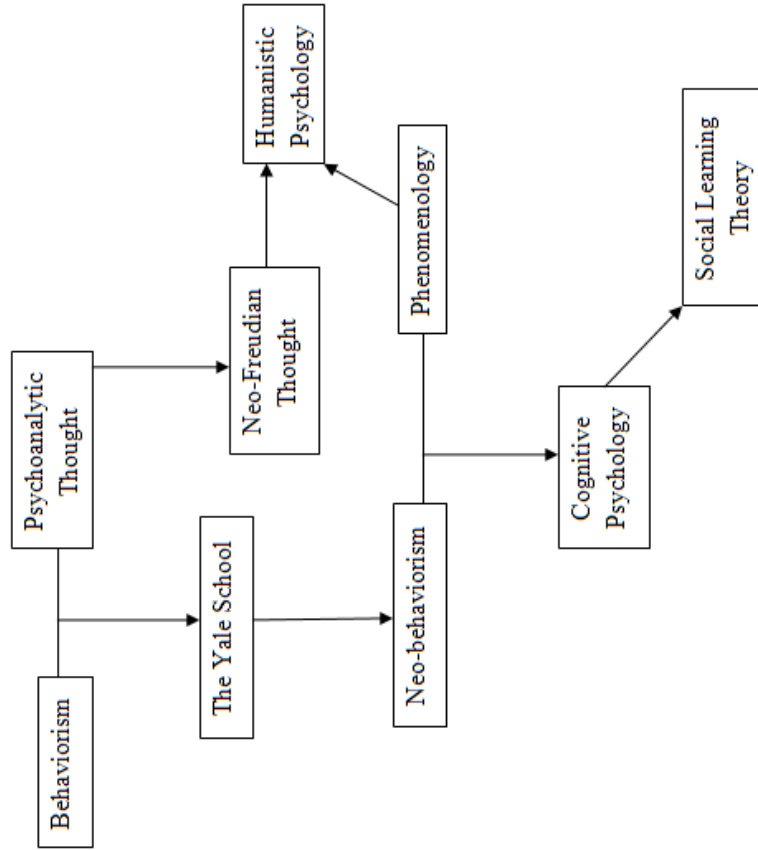
As Zimbardo (1980) states:

Psychology is *pluralistic*; it intentionally encourages different approaches and tolerates a wide variety of viewpoints on the nature of human nature. The long-range hope is that as this young social science matures, its many strands will combine and form a solid core of knowledge. (pg. 20, italics in original)

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<sup>100</sup> Hall and Lindzey (1970) categorize learning and conditioning theories under personality theories because they seek to explain aspects of personality formation. Personality theories are juxtaposed against other psychological theories that attempt to explain other phenomena such as perception, motor learning and memory.

**Figure 23:** Orienting Strategy Development in Psychology



DERIVED FROM: Zimbardo (1980), Shoemaker (1990), Blackburn (1993), Bonta and Andrews (2003), Bartol and Bartol (2011).



Zimbardo isolates four different approaches to human nature or “forces” in psychology, including Freudian psychodynamics, behaviourism (Pavlov, 1897; Watson 1913; Skinner, 1938), cognitive psychology (Rotter, 1954; Bandura, 1976), and humanistic psychology (Maslow, 1954).<sup>101</sup> One could update and build upon this categorization scheme by adding the moral development<sup>102</sup> perspective (Piaget, 1932; Kohlberg, 1969; Gibbs, 1979).

Hall and Lindzey (1970) argue that personality theorists challenged mainstream psychological thought in a number of ways:

*It is clear that personality theory has occupied a dissident role in the development of psychology. Personality theorists in their own times have been rebels. Rebels in medicine and in experimental science, rebels against conventional ideas and practices, rebels against typical methods and usual practices, and most of all rebels against accepted theory and normative problems. (pg. 4, italics in original)*

This characterization is reminiscent of Feyerabend’s (1976) maxim, “anything goes”, because scientific advancements in the discipline of psychology can be attributed to challenges to the dominant mode of theorizing.

In the following Chapter each of the research programs in psychology will be discussed, beginning with a description of the key aspects of their orienting strategies. After the orienting strategy has been identified, the key unit theories in the area will be discussed and their connections to criminology will be explained. Finally, the Chapter will close with a brief discussion of the practical ramifications that psychological theories have had for the criminal justice system.

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<sup>101</sup> The Neo-Freudian Movement contributed to both the psychodynamic approach and humanistic psychology (Zimbardo, 1980; Bohm, 2001).

<sup>102</sup> Some also refer to this as the cognitive development perspective (see, for example, Blackburn, 1993).

## **I, Me, Mine: The Psychodynamic Research Program in Criminology**

The psychodynamic theories of criminal behavior share several common foundational assumptions that form the core of the orienting strategy in this area (Berger and Zelditch, 1993, 1997). In fact, Popper (1957) claimed that psychoanalysis was not a true theory because it is untestable and impossible to refute. However, he was also careful to point out that this did mean that it was unimportant or incorrect since scientific theories all evolve from myths and assumptions about reality. Further, he suggested that psychoanalytic explanations could eventually be formulated in a testable form, and therefore could contribute to the advancement of science. Essentially, Popper was arguing that psychoanalysis is an orienting strategy which has the potential of producing testable unit theories about specific phenomena (Wagner, 1984). Shoemaker (1990) provides some support for the existence of a foundational entity for psychoanalytic explanations of criminality in the following passage:

The field of psychiatry is quite broad, encompassing several different orientations and approaches to an understanding of human personalities. One of these psychiatric perspectives is referred to as the psychoanalytic perspective. Although derived from a single source, the seminal teachings of Sigmund Freud, it has developed different orientations, which can lead to different causal explanations of delinquency. (57)

This description implies that there is clearly a cluster of different psychodynamic unit theories, and these share a common set of assumptions or orienting strategy. These common assumptions are summarized in Table 4 on the following page.

The key assumptions in the psychodynamic orienting strategy are as follows. First, behavior is thought to be determined and is not viewed as a product of free will. The second assumption is the belief that biological drives and instincts (e.g., self-preservation, aggression, and reproduction) and their interactions with the

**Table 4: Key Foundational Elements in the Psychoanalytic Orienting Strategy**

- Behavior is determined and is not the result of free will
- Personality is formed and regulated through the interaction of a person's biological drives (e.g., survival and sex) and their environment
- Humans are inherently antisocial, and must be socialized to suppress socially unacceptable desires
- Concrete actions are often by one's unconscious desires

environment are responsible for the formation of personality and the control of behavior (Blackburn, 1993). In other words, humans are inherently antisocial, and must be socialized to suppress socially unacceptable desires.<sup>103</sup> Finally, proponents of a psychoanalytic perspective believe that a person's concrete actions represent their true feelings even if the person is not consciously aware of these feelings; so, they emphasize the importance of unconscious processes and their effects on observable behaviors (Zimbardo, 1980).

To understand the unit theories in the psychodynamic research program one must first be familiar with Freud's (1920, 1927) theory of personality. This furnishes many of the assumptions described above and specifies the level of explanation, level of data analysis and scope of the criminological theories derived from it. Freud (1920) suggested that there are three components of personality: the id, the ego and the superego. The instinctual and primitive part of human nature is the id. This part of the personality operates on the pleasure principle and comprises one's libido and other inner, hedonistic urges (Shoemaker, 1990; Einstadter and Henry, 2006).

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<sup>103</sup> This assumption originates in Darwin's (1859, 1871) theories of natural and sexual selection. It is also very similar to assumptions made about human behaviour in the control theories of criminology (e.g., Hirschi, 1969) and postclassical explanations of crime discussed in Chapter Four. This assumption also resurfaces later in criminological thought, and will be a main topic of discussion in the Chapter Six which focuses on the biosocial research program in criminology.

The ego is based upon the reality principle and helps to mediate conflicts between the id and superego. In most cases, conflicts in these personality components produce guilt that is relieved through one of many ego defense mechanisms.<sup>104</sup> For example, sublimation occurs when the drives of the id are channeled to activities approved by the id. In reaction formation, one takes the opposite belief of the undesirable impulse (e.g., repressed homosexuality may result in homophobia). Another example of an ego defense mechanism is projection, which involves a person attributing their unwanted or unacceptable impulses to other people. Finally, rationalization takes place when one makes up excuses that serve to justify one's own unacceptable behaviors (Freud, 1936).

The superego forms last and is a result of the internalization of group standards or norms; it consists of two parts: the conscience and the ego-ideal. The conscience functions according to moral rules; impulses that conflict with these rules are either neutralized or are controlled by the ego defense mechanisms described above. The ego-ideal refers to one's standards and provides the ego with values and goals (Blackburn, 1993).

As mentioned previously, Freud wrote very little about criminal behavior specifically; however, some general principles about criminality can be derived from his writings (Blackburn, 1993; Bohm, 2003; Williams and McShane, 2004). According to Freudian thought, there are three main sources of criminal behavior.

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<sup>104</sup> These ego defence mechanisms have had a great impact on criminological theory and practice. They form the basis for Redl and Wineman's (1951) techniques of ego defence which inspired Sykes and Matza's (1957) influential neutralization theory in criminology. There are several other theories that contain very similar mechanisms (e.g., Bandura, 1990; Gibbs, 1993). Some commentators have pointed out that these connections are often missed in reviews of criminological theories (Maruna and Copes, 2004). Efforts will be made later in this chapter to describe these connections in greater detail.

First, a person may fail to develop a superego thereby allowing the id to dominate the personality (Miller, Schreck, and Tewksbury, 2011). According to Blackburn (1993), “a weak superego has long been associated with a psychopathic personality, and the notion of an egocentric, impulsive, guiltless, and unempathetic individual is, in fact, a psychodynamic portrayal” (pg. 114). In some situations, criminal behavior is also thought to arise from an overly harsh superego. In these cases, the superego dominates and represses the id in the individual; later, the person may eventually commit crime out of guilt, feeling that they deserve punishment (Miller, Schreck, and Tewksbury, 2011). Finally, one’s superego might develop normally, but may reflect a “deviant identification” of some kind (Blackburn, 1993). For example, one may have a positive relationship with a parent who is a criminal. The tension triggered by this contradiction may trigger the ego defense of introjection in which one incorporates external values into their own ego structure in order to eliminate them as external threats (Zimbardo, 1980). So, a child may adopt a parent’s criminal values to legitimize the positive relationship that they have with them.

The observational set of the psychodynamic theories is clinical in nature and consists primarily of observations of subjects (i.e., clients, patients, and incarcerated offenders). This method of evaluation was very important in corrections, and formed the basis for early treatment and rehabilitation interventions. These interventions will be discussed in more detail later in this chapter.

Now that the orienting strategy and observational set of the psychodynamic program has been identified, more specific explanations of delinquent personality

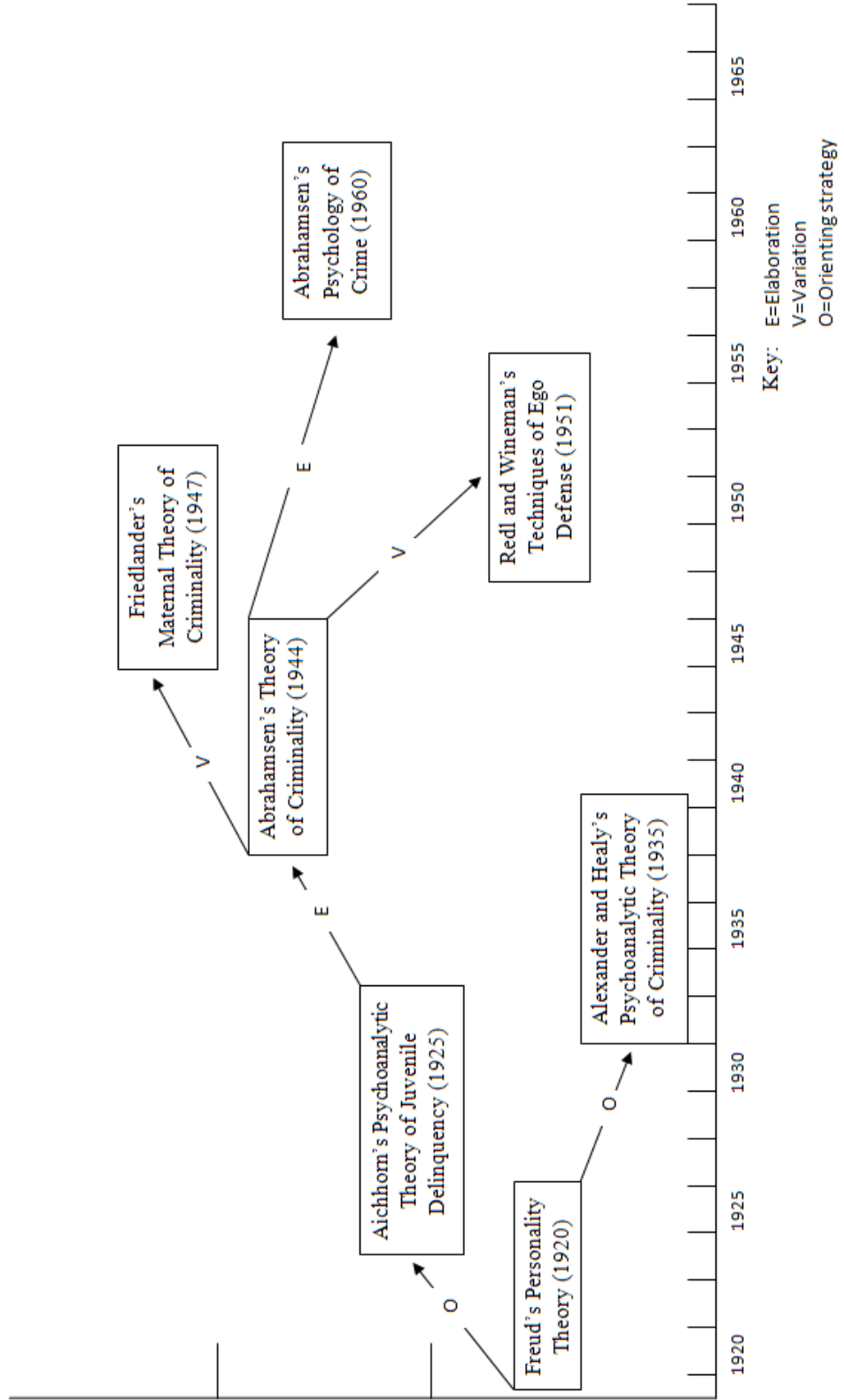
formation and behavior can be explored. This set of interrelated unit theories is the topic of discussion in the following section.

### **Childhood, Delinquency and Criminality: Unit Theories in the Psychodynamic Program**

A number of Freud's followers first sought to apply his theory directly to juvenile delinquency and criminal behavior. These attempts can be seen as a set of interrelated unit theories or a theoretical research program (Wagner, 1984). The development of these theories is depicted in Figure 24 on page 193. The psychodynamic explanations of criminality are micro-level and focus on the formation of personality and how this may affect behavior. Consequently, these theories focus on individual differences rather than structures and processes that contribute to criminal behavior (Bernard and Snipes, 1996). The scope of these theories is geared towards individual criminality; group forms of criminality and antisocial behavior are left unaddressed.

Aichhorn (1925) offers the earliest direct application of Freudian principles to criminality with a special focus on juvenile delinquency. Aichhorn's theory suggests that criminal behavior is the result of an unregulated id and an undeveloped ego and superego. The lack of development in the ego and superego is thought to be the result of uncaring or absent parents or weak parents who fail to socialize their children properly (Einstadter and Henry, 2006). Several different causes of delinquency are also identified. First, delinquency can be caused by an "excess of love" on the part of the parents. In other words, spoiling a child can impede the development of the reality principle and cause the individual to be controlled completely by the pleasure principle. Second, an "excess of severity" on the part of parents may give rise to

Figure 24: Psychodynamic Research Program



criminal behavior. This is illustrated by parents who are strict disciplinarians and respond to minor infractions with severe punishment. Finally, inconsistent discipline may be a problem. For example, the father may be very strict and the mother may be overly lenient. This situation serves to disrupt the development of the reality principle by allowing the child to escape punishment (by fleeing to the protection of mother) and avoid motherly demands in the interest of protection that run counter to the pleasure principle (by appealing to father) (Aichhorn, 1925).

This theory represents a clear case of elaboration. Aichhorn (1925) is proposing a psychoanalytic unit theory by refining Freud's earlier thoughts on criminal behavior. Specifically, he is clarifying how different parenting problems may give rise to delinquency.

Another elaboration of Freud's (1920, 1927) work was proposed by Alexander and Healy (1935). This theory can also be considered a variant of Aichhorn's (1925) earlier formulation since the two focus on the same explanatory domain and have similar assumptions but posit slightly different explanatory mechanisms (Wagner, 1984). Alexander and Healy (1935) suggested that criminal behavior results from a lack of development caused by an "infantile dependence and receptiveness" which is similar to the ego and superego problems identified by Aichhorn (1925). Like their predecessor, these theorists agree that spoiling or overindulgent parents can contribute to delinquent behavior by initiating an "ego split". Alexander and Healy (1935) explain further what this concept means:

Long indulgence makes it difficult to abandon the dependent attitude, and yet the adult portion of the personality reacts with a sense of inferiority to these infantile claims. Thus in the ego a split is created between the wish for the comfortable dependent situation and the ambition for



independence, the latter being reinforced by attitude of the environment, which is no longer willing to allow the same privileges to the adolescent or adult as it had allowed to the child. (286)

In addition to spoiling, two more factors in the formation of a delinquent ego are offered. First, early intimidations of instinctive life resulting from brotherly rivalry and Oedipus conflicts are thought to be important. Thus, the behavior of some delinquents can be seen as an attempt to gain back a perceived loss of self-esteem. Second, early deprivation might cause a child to act out in the form of protest, which may manifest itself in criminal behavior; these delinquents are trying to compensate for a lack of love and belonging felt in their youth.

The theory offered by Alexander and Healy (1935) devotes most of its focus to male forms of delinquency. Many forms of criminality are considered to be attempts to justify one's masculinity.<sup>105</sup> In general, this theory suggests that one's cultural and social environment plays an important role in the development of criminality but fail to clearly specify any mechanisms at work.

Abrahamsen (1944) also proposed a unit theory derived from psychodynamic thought. This can be characterized as an elaboration upon the work of Alexander and Healy (1935). In Abrahamsen's (1944) formulation, there is less focus on juvenile delinquency as it also addresses adult criminality. So, this is an elaboration because it attempts to explain more cases, making the theory more general (Wagner, 1984).

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<sup>105</sup> This seems to be the theory's greatest strength and weakness. Alexander and Healy (1935) were very far ahead of their time in speculating on the importance of masculinity and how culture can influence behaviour. This notion would later resurface in the Messerschmidt's (1993) work on masculinity theory. However, after reading Alexander and Healy's (1935) work, one might think that female criminality does not exist since there is little to no discussion of it.

The theory offered here suggests that the instability of three important factors – criminalistic tendencies, mental resistance, and the situation – can explain criminality. Like Alexander and Healy (1935), Abrahamsen (1944) places much more emphasis on social factors than an orthodox Freudian might, and claims that one's ego and superego are shaped by their environment. This theorist suggests that the superego is not absent, weak, or undeveloped; rather, it is actually damaged by some precipitating traumatic event.

Abrahamsen (1960) has also proposed a further elaboration based on his own theory. In this formulation he suggests that criminality is the result of the interplay of social and psychological factors or one's personality interacting with one's environment. To further formalize his theory Abrahamsen (196) proposed two laws:

Law No. 1

A multiplicity of causative factors go into the making of criminal behavior. Since these causative factors vary qualitatively and quantitatively with each case, the causation of criminal behavior is relative.

Law No. 2

A criminal act is the sum of a person's criminalistic tendencies plus his total situation, divided by the amount of his resistance.

$T+S$

This law can be put into a formula:  $C = \frac{T+S}{R}$ . (pgs. 30 and 37)

This is obviously a form of elaboration because Abrahamson (1960) is formalizing his theory, which is an attempt to make it testable.

Friedlander (1947) formulated another unit theory that focused upon the importance of maternal relationships.<sup>106</sup> This theory is an elaboration of Aichhorn's (1925) work but emphasizes the mother's role in the origin of criminality. In addition,

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<sup>106</sup> Friedlander was a student of Freud, Aichhorn and Healy (Lilly, Cullen and Ball, 2008).

this is also a variant of Abrahamsen's (1944, 1960) formulation described previously since the explanatory mechanism is slightly different (i.e., the emphasis is on the mother) (Wagner, 1984). The central concern in Friedlander's (1947) unit theory is the instinctive development of a child as a whole. The mother-child relationship is thought to contribute greatly to the formation of the superego and the control of criminal and antisocial behavior. To be more specific, this relationship is the basis of the child's understanding of the pleasure and reality principles and how they function. Because of this, Friedlander (1947) argues that if there are problems in this relationship, the individual will be at an increased risk to engage in crime.

Another variant of Abrahamsen's (1944, 1960) and Friedlander's (1947) theories is Redl and Wineman's (1951) unit theory. Like its forerunners, Redl and Wineman's (1951) formulation is also an elaboration on Aichhorn's (1925) earlier work (Wagner, 1984). Support for this contention is offered early on by Redl and Wineman (1951):

The original inspiration for the work we are reporting here comes, of course, from August Aichhorn. His inimitable skill in handling wayward and aggressive youngsters remains unforgettable; his search into the motivations of their behavior and his effort to design new treatment channels for them are, by now, recognized as a classic contribution to the field. (7)

This elaboration is achieved by increasing the precision of the original theory offered in Aichhorn's (1925) work by specifying how the ego and superego function to control behavior. The superego is responsible for principled behavior and acts on morals and ethics, while the ego operates on the reality principle and responds to formal punishment. Redl and Wineman (1951) argue that a failure to form attachments with parents can impair one's superego development and contribute to the formation of a delinquent superego. In this formulation, the ego is not absent, but rather it is not

functioning properly. They also identify several mechanisms that are thought to control assaults on the ego by one's conscience that result in guilt and shame for the offender. The end-product greatly resembles theories that would come later in criminology and other areas of psychology, most notably Sykes and Matza's (1957) neutralization theory.

### **Psychoanalysis and Its Discontents: The Humanist Force in Criminology**

Freud's original psychoanalytic theory received a great deal of criticism even from its adherents. Eventually, some Neo-Freudians began to offer alternative theories of personality. This activity laid the groundwork for a new field called humanistic psychology (Zimbardo, 1980). For example, Adler (1927) rejected Freud's emphasis on sexual urges and the importance placed upon the pleasure principle. Instead, Adler suggested that one's inherent need to feel superior to others was more important to understanding human behavior. Fromm (1947) believed that Freudian psychoanalytic theory overemphasized the biological aspects of personality at the expense of social factors. Therefore, he focused on how the need to belong can affect personality formation and subsequent behavior. Erik Erikson (1963) placed much more emphasis on later stages of life than Freud who focused on early childhood development. Building on the work of the Neo-Freudians, Abraham Maslow (1968) posited the existence of a hierarchy of needs that is common to all human beings. He suggested that all people have in-born needs (e.g., physiological, safety, love/belonging, self-actualization, transcendence) that are arranged in a hierarchical fashion.

It could be argued that the humanist theories also share a common set of core assumptions that could be considered an orienting strategy. Key assumptions in this orienting strategy are presented in Table 5.

**Table 5: Key Foundational Elements in the Humanist Orienting Strategy**

- Internal psychological events are influenced by external forces acting upon the individual
- One cannot truly understand behavior without looking at the person as a whole
- Self-actualization is the most important human drive

First, these theories of personality all rely upon what is known as an “open-field” approach. Great emphasis is placed upon understanding the private world of the individual or what some call one’s “phenomenal field”. Internal psychological events are thought to be influenced by external forces acting upon the individual in various ways. Second, humanistic psychologists take a holistic view of personality; they believe that one cannot truly understand behavior without looking at the person as a whole. Finally, these theories all stress the importance of self-actualization, rather than sex or survival as the basic human drive (Zimbardo, 1980).

According to Bohm (2001), it is possible to derive criminological theories from humanistic psychology; however, the humanist perspective has only recently begun to influence criminological thought in a meaningful way (see, for example, Ward and Maruna, 2007). For example, an Adlerian theory of criminality would examine how criminality results from a drive for superiority and a fear of inferiority. A theory of criminality based on the work of Erikson (1963) might argue that offenders,

(especially gang members and organized criminals, commit crimes to gain a reputation to overcome a sense of inadequacy (Bohm, 2001).

An early attempt to apply these ideas directly to criminality can be found in the work of Halleck (1967, 1968). Building on the work of Fromm (1947), Halleck (1967) focuses on the importance that a lack of freedom or oppression can have on criminality. Halleck suggests that there are objective and subjective forms of oppression. Objective oppression can be measured and may be perpetuated by society in the form of racism, sexism, and homophobia. For instance, denying one the right to vote or marry could be seen as an example of objective oppression. Subjective oppression does not have an obvious source in the environment and usually results from internal problems. For example, a person may experience subjective oppression from internal superego pressures or may misinterpret their situation and feel a form of projected oppression.

For Halleck (1967), crime is one of the many different adaptations to the stress caused when one experiences oppression. Other adaptations include conformity, activism and mental illness.<sup>107</sup> Crime is thought to be an attractive option since it provides certain advantages, including pleasure and immediate gratification, relief from feelings of helplessness, excitement, status, and belonging. Two propositions emerge from this framework:

- (1) The more the offender's behavior is a response to severe oppressive stress, the more unreasonable is his criminality likely to be
- (2) The more

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<sup>107</sup> There are some interesting logical parallels here with Merton's (1939) strain theory. Merton focused on economic oppression, or oppression that is tied to one's social status. He suggested that this created stress or strain, and that people would have to adapt in various ways including conformity and criminal behaviour (which he called innovation). He also claimed that some people adapt through rebellion which could include many forms of activism. Mental illness might also be compared to Merton's adaptation of retreatism.

indirect or unrealistic the oppression to which the offender is responding, the more unreasonable his criminality will be. (200)

Halleck (1967) goes on to make several practical suggestions for a more humane and rational criminal justice system. These include abolishing the death penalty, making sentencing more flexible, making correctional institutions less punitive, expanding treatment facilities, and relying upon a more scientific approach to criminal behavior.<sup>108</sup>

### **Better Behavior through Science: The Behaviorist Program**

The second area of psychology relevant to modern criminological theories is the behaviorist research program. This set of theories is also referred to as stimulus-response (S-R) theory since the response to environmental stimuli forms the basis for behaviorism (Bartol and Bartol, 2011). Without using the exact words, other commentators have also argued that this area is a research program as defined by Wagner (1984):

Actually there is no single S-R theory, but rather a cluster of theories all resembling each other more or less, but at the same time each possessing certain distinctive qualities. These systems began as attempts to account for the acquisition and retention of new forms of behavior that appeared with experience. It is thus no surprise to find that the learning process is given predominant emphasis. (Hall and Lindzey, 1970, pg. 417)

The beginnings of the behaviorist program can be traced to the work of John B. Watson (1913) who is responsible for importing these ideas into American psychology. The true origins of behaviorism can be found in Pavlov's (1871) research on classical conditioning as this influenced Watson's (1913) work (Hopkins-Burke,

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<sup>108</sup> Ward and Maruna (2007) have also formulated a theory based on a humanist approach; however, this is really a theory of rehabilitation or correctional intervention rather than a theory of criminality

2005; Bartol and Bartol, 2011). Hall and Lindzey (1970) explain the relationship between Pavlov's (1898) and Watson's (1913) work in their review of psychological theories:

The process of classical conditioning, in the hands of a number of American psychologists, became a means of building an objective psychology that dealt only with observables. John B. Watson (1916, 1925) was the leader of this movement. He rejected the then dominant conception of psychology as a unique type of science, aimed at discovering the structure of consciousness by introspection. Psychology, he proposed, should study behavior, using the same types of techniques as the other natural sciences. He seized upon Pavlov's principle of conditioning and, combining this with the ideas he had already developed, presented to the world a position he called "behaviorism." This objective and environmentalistic point of view quickly came to typify American psychology and even today it is closely linked with the most distinctive features of psychology in this country. (418)

It is relatively easy to see how the discussion above relates to the concept of an orienting strategy. The activity described above is clearly an emergence of new directives and assumptions about human nature based upon the logic of the experiment. The orienting strategy presented here is modeled on the natural sciences. It also relies upon methods and techniques from the natural sciences and can be clearly distinguished from the unit theories that grew out of it (Wagner, 1984).

The behaviorist program has two distinct branches, which will be discussed later, but these branches share a common set of foundational assumptions that form the core of the orienting strategy (Berger and Zelditch, 1993, 1997). The key assumptions can be found in Table 6 on the next page. First, observable physical actions form the basis for social reality; so behavior is the starting point of this set of theories. Second, behaviorists believe that the environment provides the consequences for actions, and that human behavior is determined by rewards and punishments. Basically, this means



**Table 6: Key Foundational Elements in the Behaviorist Orienting Strategy**

- Observable physical actions form the basis for social reality
- The environment provides the consequences for actions, and that human behavior is determined by rewards and punishments (i.e., environmental determinism)
- There is no inherent human nature; humans are “blank slates”

that when formulating their theories, behaviorists focus on how an organism responds to stimuli in its environment (Zimbardo, 1980). Third, behaviorists assume that there is no inherent human nature; humans come into the world as “blank slates” (or *tabula rasa*) and are shaped by their environmental influences.

This program is composed exclusively of process theories, as opposed to structural explanations (like the radical theories from sociology) or theories based on individual differences (as in the neuroscientific or psychodynamic theories) (Bernard and Snipes, 1996). Consequently, these theories are couched at the meso-level or middle range. The observational set consists of primarily quantitative data, and the experimental method is preferred over other modes of inquiry (Zimbardo, 1980; Blackburn, 1993).

The branches in the behaviorist program emerge primarily from changes in the working strategy of the various theories (Berger and Zelditch, 1993, 1997). The first branch is known as “radical behaviorism” and its most vocal proponent was Skinner (1953). This can be seen as a pure form of behaviorism with a great emphasis on applied behavioral analysis (Blackburn, 1993). Radical behaviorists claim that there

are no real differences between animal and human behavior.<sup>109</sup> Consequently, similar to biological research, behavioral research on “lower” forms of life (e.g., pigeons and rats) is considered to be of great value, and is thought to be generalizable to human behavior. In this branch, behaviorism is both a method of science and a perspective on human nature (Bartol and Bartol, 2011).

The second branch is often referred to as “neo-behaviorism” and can be found in the work of the Yale School (Hull, 1931, 1943; Dollard, Miller, Doob, Mowrer, and Sears, 1939; Miller and Dollard, 1941; Mowrer, 1950, 1960) and Hans J. Eysenck (1952, 1960, and 1967). Like radical behaviorists, neo-behaviorists embrace behaviorism as a method of science; however, they derive their ideas about human nature from Freudian and Neo-Freudian ideas. In this way then, Neo-behaviorists integrate traditional behaviorist principles with concepts from psychodynamic thought (Zimbardo, 1980; Andrews and Bonta, 2003). This can be thought of as another example of orienting strategy or research tradition integration as described by Laudan (1977) Ritzer (1981).

The differences between radical and neo-behaviorism can be seen as differences in substantive working strategies (Berger and Zelditch, 1993, 1997). To put it another way, the theories within the two branches are, for the most part, compatible but take different positions on human nature.

Now that the orienting strategy, and various branches and working strategies of the behaviorist research program have been discussed, a thorough examination of the

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<sup>109</sup> This assumption can be traced back to Darwin’s (1859, 1871) theories of natural and sexual selection.

various unit theories that populate the program is in order. The two branches and their unit theories are summarized in Figure 25 on page 206.

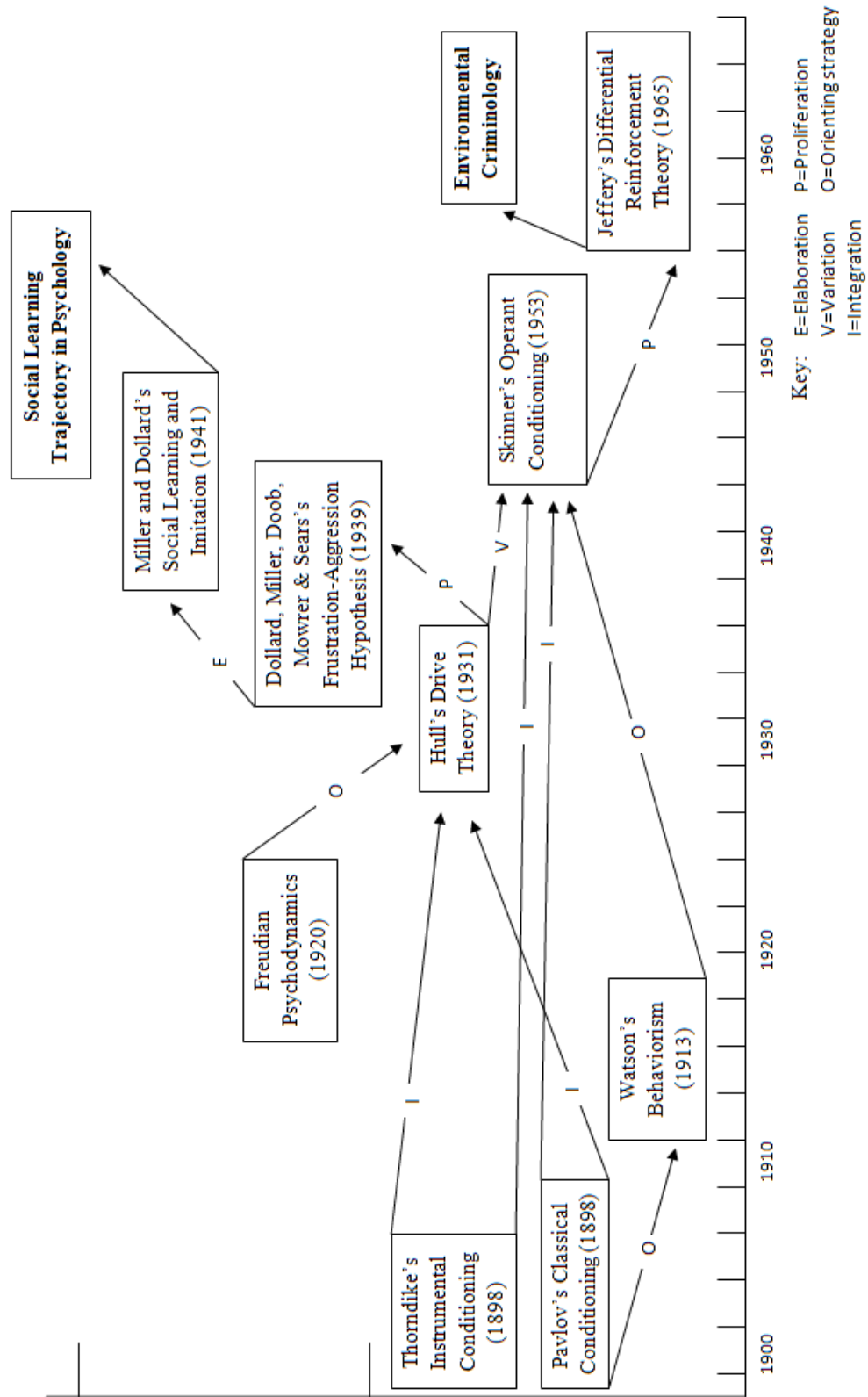
Pavlov's (1898) theory of classical (or respondent) conditioning provides the starting point for theorizing in the behaviorist program; the unit theories in both branches of this program can be traced back to this important piece of research. The principle of classical conditioning was discovered, almost by accident, while Pavlov (1898) was studying the digestive tracks of dogs. Zimbardo (1980) summarizes the theory in the following passage:

Pavlov found that when he presented meat powder to a dog and observed the automatic, unlearned response of salivation, it was not long before other stimuli occurring shortly before actually putting the food in the dog's mouth (sight of food, sight or sound of the experimenter) also became capable of eliciting salivation. When salivation was then elicited by these other previously irrelevant and weak stimuli, salivation was called a conditioned or conditional response (CR). (41, italics in original)

In classical conditioning, the organism learns to associate two previously unrelated stimuli to one another through past experience. In Pavlov's (1898) case, the new stimulus that elicited salivation was the ringing of a bell which was a signal that food would be served to the dogs. If a neutral stimulus, like the ringing of a bell, is repeatedly paired with a significant stimulus, like food, animals will begin to associate the two stimuli. Eventually, the neutral stimulus alone will become capable of eliciting the behavior, in this case salivation, without the significant stimulus taking place.

Another important unit theory, Thorndike's (1898) law of effect, emerged at almost the same time as Pavlov's (1898) theory of classical conditioning, and can be viewed as the beginning of instrumental learning theory. Instrumental learning

Figure 25: Behaviorist Research Program



suggests that behavior can also be shaped through the consequences of behavior, and is sometimes referred to as operant conditioning.<sup>110</sup> Thorndike (1898) performed experiments on cats, and observed that they seemed to be capable of learning despite the fact that they lack the ability to reason.<sup>111</sup> He found that if placed in a box, cats could eventually learn to work a latch to escape from the box. Further, as the feline subjects gained experience opening the latch, they escaped in successively shorter periods of time. According to Thorndike, the behavior became “stamped in” because it was followed by the reward of opening the door to freedom. From this research, he was able to graph a learning curve that supported his theory. The law of effect would become one of the cornerstones in the American investigation of learning processes in “lower” animals (Zimbardo, 1980).

Hall and Lindzey (1970) suggest that at this point, the program started to branch. In their text, Skinner’s (1953) operant conditioning theory is presented separately from the contributions of the Yale School of psychology (Hull, 1931, 1943; Dollard, Miller, Doob, Mowrer, and Sears, 1939; Miller and Dollard, 1941; Mowrer, 1950, 1960) because while the two have similarities and clearly belong to the same family of theories, they also make very different assumptions about human nature. In any case, a new branch emerged from Skinner’s (1953) operant conditioning theory and has been applied to criminal behavior (Jeffery, 1965; Burgess and Akers, 1966).

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<sup>110</sup> There seems to be some confusion between instrumental learning and operant conditioning. For example, Zimbardo (1980) claims that instrumental learning can be equated with operant conditioning theory. However, when one speaks of operant conditioning, most think of Skinner’s (1953) seminal work in the area. Operant conditioning seems to be most accurately characterized as an elaborated and integrated version of instrumental learning principles.

<sup>111</sup> Understanding animal problem-solving had been a problem for a very long period prior to this research. In fact, Darwin (1859) argued that humans and other “lower” animals were not that different; however, the problem had been virtually ignored until Thorndike’s (1898) work (see Skinner, 1953, pgs. 59-60 for a discussion).

Skinner (1953) integrated ideas from both Pavlov (1898) and Thorndike (1898) to formulate his theory of operant conditioning. More specifically, this theory attempts to explain how the process of “stamping in” occurs by borrowing concepts from Pavlov’s (1898) classical conditioning theory (Skinner, 1953, pgs. 62-65). The key difference between the two theories is that operant conditioning, like instrumental learning, focuses upon the consequences of behavior rather than responses to environmental stimuli. Rewards or reinforcers are thought to be most important in explaining behavior, and Skinner (1953) suggests that control over behavior can be achieved through the manipulation of reinforcers. The schedule of reinforcement refers to the pattern of the administration of reinforcement; this pattern can be based upon the amount of work required to get the reward (i.e., ratio scheduling) or timing of the reward (i.e., interval scheduling). In addition, reinforcement may be given at fixed or varied points. For example, variable ratio schedules provide reinforcement at unpredictable points and represent “exciting gambles” (Zimbardo, 1980). Slot machines and other forms of gambling are examples of variable ratio scheduling, and this particular reinforcement schedule can exert a great deal of control over behavior in all animals, including humans.

As mentioned previously, Burgess and Akers (1966) imported Skinner’s (1953) operant conditioning principles into criminology and have integrated them within the framework of Sutherland’s (1949) differential association theory. This theory demonstrates several different theoretical relations described by Wagner (1984). First, the importation of these principles is an example of proliferation since they are being applied to a new explanatory domain, criminal behavior. Second, they are formalizing

Sutherland's (1949) theory by making it more easily testable. Taken together, these actions can be seen as integration since propositions from operant conditioning are incorporated within the framework of differential association theory. This theory has given rise to a prominent research program in the field of criminology. Later, Akers (1998) would also incorporate aspects of Bandura (1963, 1977) social learning theory as well.<sup>112</sup>

The second branch of psychological behaviorism, called neo-behaviorism, originated in Hull's (1931, 1943) drive reduction theory (Blackburn, 1993). This theory can also be seen as a variant of Skinner's (1953) operant conditioning theory (Wagner, 1984). Like Skinner (1953), Hull (1931, 1943) attempted to formulate a theory that combined aspects of the classical conditioning and instrumental learning theories. His goal was to produce a theory that would make Thorndike's (1898) law of effect applicable to behavior in both humans and animals. He was especially concerned with variables that may intervene and affect behavior. Consequently, he paid more attention to variables associated with the internal aspects of the organism than previous learning theorists did. In his drive reduction theory, Hull (1943) posited the existence of a unit of learning between stimulus and response that he called "habit strength" (Zimbardo, 1980). Habit strength refers to the effect that prior learning can have on behavior. He also suggested that it is important to consider how biological drives can affect learning and motivation. More specifically, reinforcers are thought to gain some of their effectiveness by reducing an organism's existing biological drive. The notion of drive is especially important in this theory because it gives rise to

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<sup>112</sup> Bandura's (1963, 1977) social learning theory will be described later in this chapter.

a branch in the program. This is clearly an adjustment to the orienting strategy that changes the nature of the unit theory being produced by the program. The incorporation of psychodynamic theory amounts to a shift in traditional behaviorist assumptions about human nature. This is also an example of orienting strategy integration described in the work of Laudan (1977) and Ritzer (1981).

Dollard, Miller, Doob, Mowrer, and Sears's (1939) frustration-aggression hypothesis is an attempt to apply Hullian principles to human aggression.<sup>113</sup> In order to do this, they formulate a principle of aggression, and, like Hull (1943), they rely upon psychodynamic thought. More specifically, Dollard and his colleagues (1939) suggest that aggression is a form of the "thanatos" or the death instinct as suggested by Freud. The central argument here is that aggression is a biological drive that is acquired in response to frustration. (Zimbardo, 1980). Their theory consists of three main propositions:

1. The strength of instigation to aggression varies directly with the amount of frustration. Variation in the amount of frustration is a function of three factors: (1) strength of instigation to the frustrated response; (2) degree of interference with the frustrated response; (3) the number of response sequences frustrated.
2. The inhibition of any act of aggression varies directly with the strength of the punishment anticipated for the expression of the act. Punishment includes injury to loved objects and failure to carry out an instigated act as well as the usual situations which produce pain.
3. In general it may be said that, with the strength of frustration held constant, the greater the anticipation of punishment for a given act of aggression, the less apt that act is to occur; and secondly, with anticipation of punishment held constant, the greater the strength of the frustration, the more apt aggression is to occur. (Dollard and Miller, 1939: 37-38)

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<sup>113</sup> The link between aggression and certain forms of criminality should be readily apparent. Indeed, Dollard and Miller (1939) devote an entire chapter to the subject of criminality. It is surprising that this link is rarely discussed in texts about criminological theory.



Dollard and his colleagues (1939) also offer some more specific propositions about criminality in their work:

Criminality is here viewed, not as a function of the absolute level of frustration nor the absolute degree of anticipated punishment, but as a function of the discrepancy between the two. With a low degree of anticipated punishment, criminality does not result if the frustration is also sufficiently low; likewise, given a high degree of frustration, criminality does not result if punishment is sufficiently high. But when anticipation of punishment deviates in the downward direction and frustration deviates upward, the magnitude of the resulting discrepancy carries with it a correspondingly increasing expectancy of criminal behavior. (141)

Interestingly, by drawing upon Bonger's (1916) work on Marxism and criminality, the authors attempt to reconcile the social and psychological approaches to criminality by explaining how frustration may be related to one's economic status, chosen vocation, and level of education.<sup>114</sup>

Eysenck's (1964) theory of the criminal personality developed out of his general theory of personality (Eysenck, 1952, 1960).<sup>115</sup> His general theory of personality is really an extension of Pavlovian and Hullian principles, and therefore, has much in common with earlier neo-behaviorist theories in psychology (Hull, 1931, 1943; Dollard, Miller, Doob, Mowrer, and Sears, 1939; Miller and Dollard, 1941; Mowrer, 1950, 1960). However, Eysenck (1952, 1960, and 1964) relies upon a hierarchical trait approach to explain personality differences (Zimbardo, 1980). The most general level is composed of archetypes, which represent different personality types. According to Eysenck (1952, 1960, 1967), people may vary on a continuum of

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<sup>114</sup> Like Halleck's (1967) psychodynamic-humanist approach, this portion of Dollard and Miller's (1939) work has similarities to Merton's (1939) strain theory of criminality.

<sup>115</sup> This theory laid some of the groundwork that later gave rise to the biosocial research program in criminology. According to Rafter (2008), Eysenck's (1989) later version of his theory (formulated with Gundjonsson) is more clearly biosocial and therefore is discussed in Chapter Six.

extraversion and introversion. The concepts of extraversion and introversion that make up this continuum originated in the work Carl Jung (1921).<sup>116</sup> A visual representation of the development of Eysenck's (1952, 1960, 1964, and 1967) theory is offered in Figure 26 on page 213.

There is clearly a change in the working strategy being used by Eysenck (1960). When describing a diagram of traits in his later work, Eysenck (1967) implies the use of Jungian concepts is a metatheoretical aspect of his theory:

The work summarized in this Figure was almost entirely of a subjective character; in other words, what these various philosophers, physicians, and psychologists were doing was to look for uniformities of conduct in the lives of people whom they were able to observe, and reduce these uniformities to a description of a categorical or a continuous type. They made no attempt to formulate specific theories about the formal structure which was so described in their word picture, and they made no attempt to demonstrate by experimental or statistical means the accuracy or otherwise of their hypotheses. (34-35)

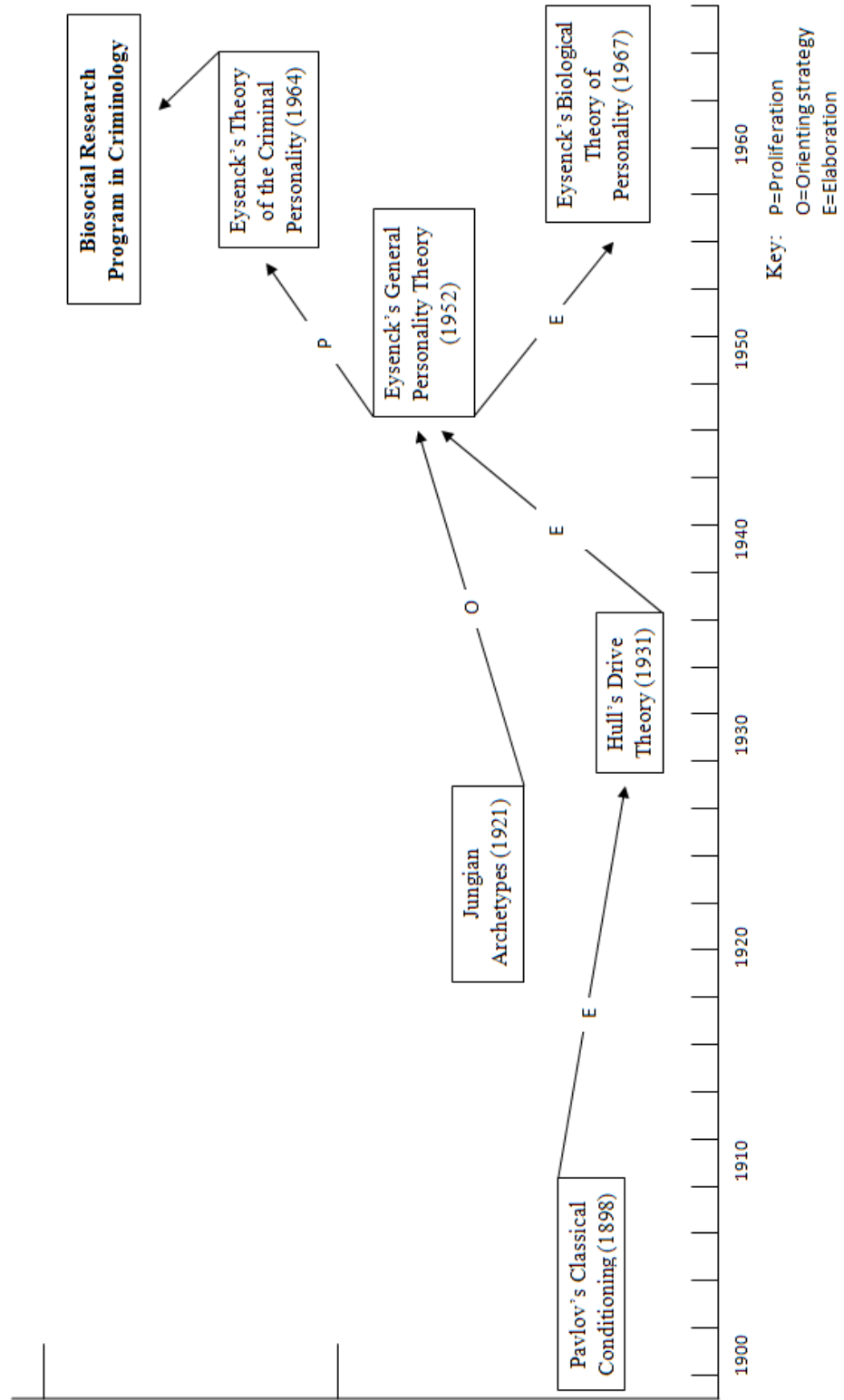
According to Eysenck (1952, 1960, 1964, and 1967) people with different personality types may also vary on various traits including impulsivity, shyness, and excitability. Traits are thought to have biological underpinnings as well and are often connected to differences in brain function.

To fully understand Eysenck's (1964) theory of the criminal personality, one must be familiar with his general biological theory of personality. Eysenck's (1952, 1960, and 1967) general theory of personality can be seen as an elaboration of Pavlov's (1898) work on classical conditioning. Eysenck's (1964) unit theory of criminal personality is an example of a proliferation of his own general theory of personality

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<sup>116</sup> The notion of archetypes has a lengthy genealogy that can be traced back the Greek physician, Galen. Other earlier contributors to this idea are Immanuel Kant and Wilhelm Wundt (Eysenck, 1967).

Figure 26: Eysenck's Criminal Personality



into the explanatory domain of criminality.<sup>117</sup> The scope of Eysenck's general theory is overlapping; it addresses the formation of personality (i.e., individual differences) and how this affects the conditioning process (i.e., specifically the process involved with the formation of a criminal personality); the same could be said of his theory of the criminal personality as well (Bernard and Snipes, 1996).

Eysenck's (1964) theory of the criminal personality can be best understood by breaking it down into three sets of interrelated propositions. The first set of propositions asserts that there are four higher factors of personality including general intelligence (g), extraversion (E), and neuroticism (N) (Eysenck, 1964, 1967).<sup>118</sup> As mentioned previously, people are thought to vary on all of these dimensions of personality. For example, a person high on the E dimension will be outgoing, gregarious and assertive, while those who score lower will be withdrawn, quiet, and less social. People with high levels of neuroticism are sensitive, easily overstimulated and react poorly to stressful situations. Those low in neuroticism are calm, stable, and show lower physiological levels of arousal even when under stress (Bartol and Bartol, 2011).

The next set of propositions suggests that there is a biological basis of personality and explains that people vary on levels of both E and N, so there can be a number of potential personality types. Eysenck (1964) argues that E is related to the activity of the neurons located in the reticular activating system, which is located in the central

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<sup>117</sup> Trasler (1962) proposed a variant of Eysenck's (1964) theory emphasizing parental discipline and family interaction as key factors in explaining criminality. This theory is very similar to Eysenck's (1964) in most other respects and will not be discussed in detail here (for detailed discussions, see, Taylor, Walton and Young, 1976; Blackburn, 1993).

<sup>118</sup> General intelligence is relevant to criminality since intelligence is often correlated with higher rates of criminality. Psychoticism (P) was introduced later and is very relevant to criminality. Unfortunately, P is also the least understood of Eysenck's various personality dimensions (Eysenck and Gundjonsson, 1989; Blackburn, 1993).

nervous system. People with low levels of activity will be extraverts and will seek stimulation such as going out to parties and pubs, and interacting in other social situations, whereas those with high activity will be introverts and will avoid further stimulation by keeping to oneself, staying at home, and avoiding interaction.

Levels of neuroticism are linked to activity in the autonomic nervous system, which is composed of the sympathetic and parasympathetic nervous systems. The sympathetic and parasympathetic nervous systems help organisms respond to emergencies. The sympathetic system activates processes that help the organism stay vigilant (e.g., increases in heart rate, blood flow, and respiration) while the parasympathetic system helps decrease arousal by bringing the body back to a normal state of functioning. These systems are under the control of structures in the limbic system of the brain (i.e., the hippocampus, amygdala, hypothalamus, and cingulum). People who are highly neurotic have oversensitive limbic systems that become easily over stimulated when responding to stress (high sympathetic activity), and have problems returning to normal levels of arousal (poor parasympathetic functioning) (Bartol and Bartol, 2011).

Different combinations of traits emerge from these propositions, and the different combinations contribute to different personality types. For example, people low in E and N will be easier to condition than the other types; people with high levels of E and N will be particularly difficult to condition (Eysenck, 1964). Higher levels of N, P, and to a lesser extent E, have also been shown to be correlated with an increased risk of criminality (Blackburn, 1993; Hopkins-Burke, 2005).

The last set of propositions contains a theory of socialization (Blackburn, 1993). Like Freudians and control theorists in criminology, Eysenck (1964) assumes that people are naturally unsocialized, and are primarily concerned with fulfilling their own needs. He also believes that these socially unacceptable desires are controlled through the formation of a superego or conscience (Blackburn, 1993). This conscience formation takes place when we are young children through parental discipline; this process is similar to classical conditioning (Bartol and Bartol, 2011). He goes on to argue that most people are socialized to avoid crime in an almost reflexive way; in other words, they automatically associate the negative aspects of punishment with rule-breaking behavior. Consequently, he emphasizes the importance of classical conditioning over instrumental conditioning in understanding criminality (Eysenck, 1964).

Given the emphasis on the biological aspects of personality formation, it is not surprising that Eysenck's (1964) theory is partly responsible for the genesis of the biosocial research program in criminology (Rafter, 2008). Eysenck and Gunjondsson (1989) have proposed an integrated, biosocial version of Eysenck's earlier theory that seeks to incorporate aspects of evolutionary and neuropsychological theories of crime. This integrated unit theory is reviewed in detail in Chapter Six.

Support for Eysenck's (1952, 1960, and 1967) general biological theory of personality has been quite strong (Bartol and Bartol, 2011); however, research on the theory of criminality has yielded mixed results. One major problem is that the P dimension is not well understood but is most directly correlated to criminality (Bartol and Bartol, 2011). Classical conditioning has also not been conclusively shown to be

responsible for the formation of conscience and superego (Blackburn, 1993). Clearly, many important factors are shown to be involved in the formation of personality, including modeling and other cognitive processes. These cognitive aspects form the basis for the next important research program relevant to criminology: social learning theory.

### **Breaking Away from Behaviorism: Bandura's Social Learning Theory**

As implied in the last lines of the previous section, the social learning research program can be seen as a reaction to the dominance of behaviorism in psychology. Bandura's (1963, 1977, 1986, and 1997) work provides the foundation for this set of theories. Indeed, he is also the main proponent and unit theorist in the social learning program. Many textbook writers mistakenly characterize his work as being rooted in the behaviorist work that took place at Yale, and later at the University of Iowa (Hull, 1931, 1943; Dollard, Miller, Doob, Mowrer, and Sears, 1939; Miller and Dollard, 1941). However, it is important to understand that this is an inaccurate representation of his work. Bandura (n.d.) discusses common misconceptions about the origins of social learning theory in the following passage:

In the early writings I acknowledged the phenomena encompassed under the labels of conditioning and reinforcement. But what text writers and those relying on secondary sources were missing is that I conceptualized these phenomena as operating through cognitive processes. 'Reinforcement' affected behavior by instilling outcome expectations rather than by stamping in responses. See pages 16-22 in *Social Learning Theory* (1977). I also conceptualized instrumental and classical conditioning in terms of acquisition of expectancies rather than coupling responses to stimuli. See chapter 10 in *Principles of Behavior Modification* entitled, 'Symbolic Control of Behavioral Changes.

Bandura (n.d.) continues to describe how these misconceptions were the result of widespread confusion about his intellectual influences and background:

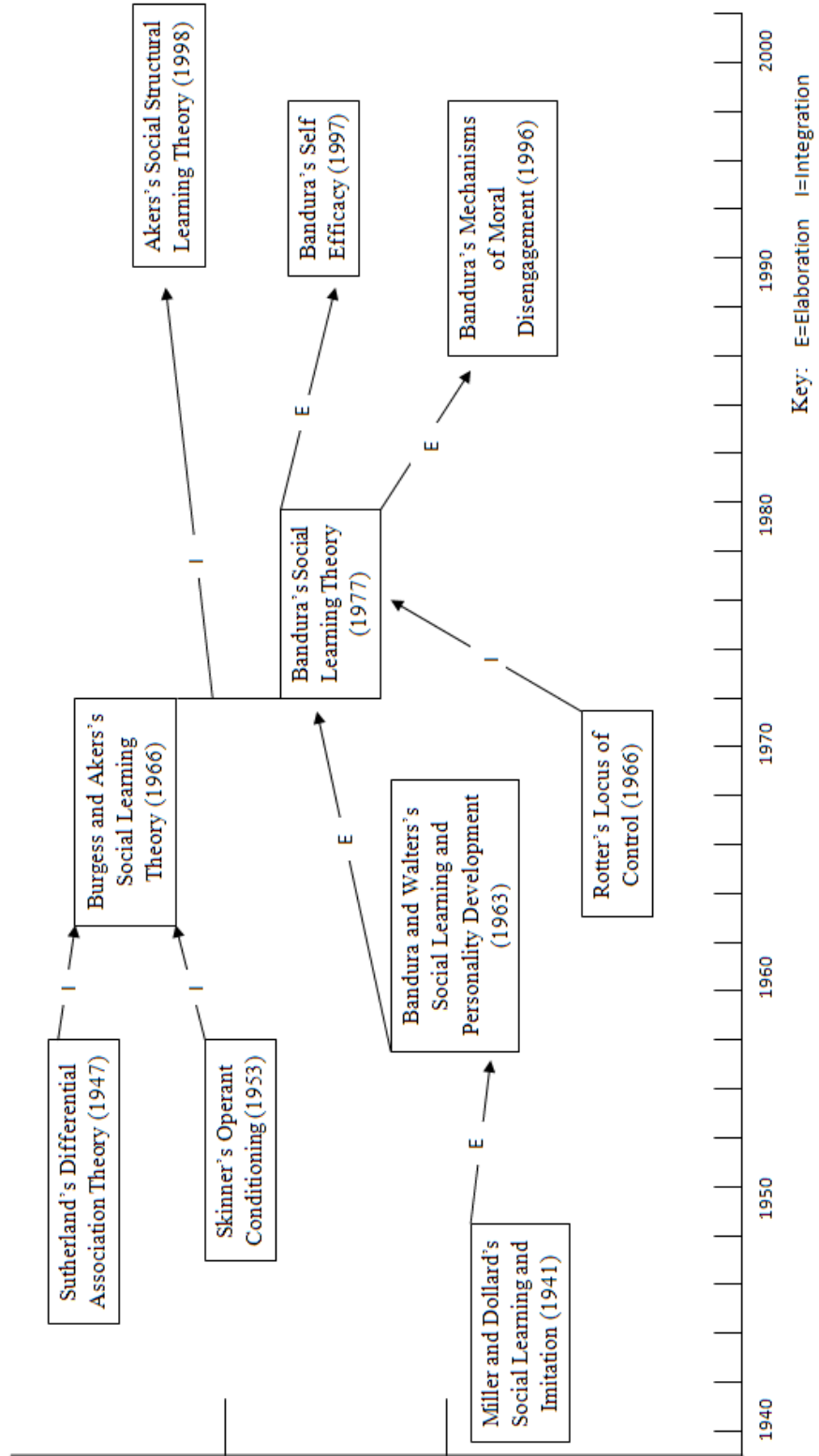
The explanatory issue of interest is not my transformation from behaviorism to sociocognitivism, but rather why authors of psychological texts continue to mischaracterize my approach as rooted in behaviorism. You ask how I would describe my early position? Social cognitivism. It emphasized that learning is embedded in social networks and that environmental influences are largely mediated through cognitive processes. To correct another error in many textbooks, I was not a student of Kenneth Spence. He was the dominant force in the Iowa Department, but Arthur Benton was my academic advisor. (<http://www.des.emory.edu/mfp/banconversion.html>)

Numerous statements could be made about this quotation. First and foremost, it illustrates the importance of understanding the effects of scholarly chains on explaining theory growth. Early on, Bandura (1959, 1963) was clearly influenced by the intellectual atmosphere at the University of Iowa; however, he was, in fact, reacting against the research they were doing. This is another example of Feyerabend's (1976) "anything goes" maxim at work. It also supports Hall and Lindzey's (1970) characterization of personality theorists as "scientific rebels" in their discipline. Bandura (1963) was clearly challenging established thought in psychology by proposing a theoretical framework that questioned the assumptions of behaviorism.

Social learning theory has become quite popular and influential in contemporary psychology, and some have argued that it could be considered another paradigm in this discipline (see, for example, Zimbardo 1980). The name social learning theory, however, is a bit of a misnomer. In reality, there are several distinguishable unit theories in this framework that focus upon interrelated phenomena. These interrelations between these different theories are summarized in Figure 27 on page 219. Bandura (1977, 1986, and 1997) makes frequent reference to "explanatory



**Figure 27:** Social Learning Research Program



mechanisms” when discussing social learning theory. Mechanisms have been defined as:

...one of the processes in a concrete system that makes it what it is – for example, metabolism in cells, interneuronal connections in brains, work in factories and offices, research in laboratories, and litigation in courts of law. Because these mechanisms are largely or totally imperceptible, they must be conjectured. Once hypothesized they help explain, because a deep scientific explanation is an answer to a question of the form ‘How does it work, that is, what makes it tick – what are its mechanisms?’ (Bunge, 2004, pg. 182)

Referring to this group of mechanisms as “social learning theory” is similar to referring to “evolutionary theory” when referring to Darwin’s (1859, 1871) theories of natural and sexual selection. The mechanisms described by Bunge (2004, 2006) and Wagner’s (1984) unit theories are essentially the same thing insofar as they explain specific phenomena. The problem here is that orienting strategies, or metatheories, are not being distinguished from specific explanations, and the word “theory” is being used in a very confusing way. This helps to illustrate the usefulness of Wagner’s (1984) model of theory growth because it distinguishes between specific explanatory mechanisms or unit theories, and larger philosophical structures that guide scientific inquiry or orienting strategies. Before describing the unit theories in the social learning research program, an attempt will be made to clarify changes that occurred in the behaviourist orienting strategy contributed to the formation of the social learning orienting strategy, sometimes also referred to as social cognitive theory (Bandura, 1986, 1997).

The social learning orienting strategy can be seen as a bridge between behaviorism and phenomenology. Phenomenology is an approach that emphasizes

“the unique personal experiences of the individual.” (Zimbardo, 1980, pg. 24). The orienting strategy being described here is based, in part, on a cognitive model of behavior. Cognitive psychologists acknowledge that internal cognitive processes play an important role in behavior (Hopkins-Burke, 2005). Indeed, this is a redirection of the behaviorist philosophy; many of the concepts are retained, but they are fundamentally altered by changes occurring in the orienting strategy of social learning theory.<sup>119</sup> The important elements in this orienting strategy can be found in Table 7.

<p><b>Table 7: Key Foundational Elements in the Social Learning Orienting Strategy</b></p> <ul style="list-style-type: none"> <li>• Internal cognitive processes play an important role in behavior</li> <li>• One’s behavior affects one’s environment and one’s environment affects future behavior (i.e., reciprocal determinism)</li> <li>• Modeling is a key component to explaining human behavior</li> </ul>
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One important specific change in the assumptive framework of social learning theory is the replacement of strict environmental determinism with the notion of reciprocal determinism. This new view of determinism can be summarized as follows:

In the social learning view of interaction, analyzed fully later as a process of reciprocal determinism, behavior, other personal factors, and environmental factors all operate as interlocking determinants of each other [B ↔ P ↔ E]. The relative influences exerted by these interdependent factors differ in various settings and for different behaviors. There are times when environmental factors exercise powerful constraints on behavior, and other times when personal factors are the overriding regulators of the course of environmental events. (Bandura, 1977, pgs. 9-10)

The view of human agency offered here is comparable to the notion of “soft” determinism offered in Matza’s (1964) drift theory. According to Bandura (1997),

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<sup>119</sup> The retention of older behaviourist concepts probably also contributed to the confusion described earlier over the connections between social learning theory and behaviourism.

past behavior can affect one's environment and one's environment affects the person and future behavior. In short, this is an attempt to acknowledge the free will of humans and the effects it can have on environment and subsequent behavior.

Interestingly, Bandura (1977) adopts a perspective that has parallels with control theories in criminology.<sup>120</sup> People are thought to naturally act out of their own self-interest, but can be controlled in several different ways. First, they may internalize morals leading to the formation of a conscience. Second, informal sanctions (e.g., loss of status or attachments as a result of the behavior) also help keep socially unacceptable impulses in check. Finally, formal sanctions (or laws), can serve to constrain individual behavior.

The problem foci of the theories in this program include what Bandura (1986, 1997) refers to as the neglected cognitive elements of learning including observational learning, symbolic learning, and various self-regulatory processes. This research program is clearly a collection of process-oriented theories; however, in later formulations, Bandura (1997) pays much more attention to social structure and structural aspects that influence individual behavior (Bernard and Snipes, 1996). These different problem sets have each given rise to their own unit theories.

Now that the key assumptions, problem foci and scope of the program have been discussed, it is necessary to discuss the specific unit theories in the program. Despite Bandura's contention that his program is completely separate from other forms of behaviorism and neo-behaviorism, still uses many of the concepts from this earlier set of theories. Consequently, the unit theories in this program are, in fact, connected to

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<sup>120</sup> This is remarkable because, in criminology, control and learning theories are often portrayed as fundamentally incompatible (see Hirschi, 1979).

the behaviorist unit theories. The key differences here relate to the orienting strategy being used.

All of the unit theories in the social learning program are derived from the work of Dollard and Miller (1939, 1941) and Rotter (1954). As Hall and Lindzey (1970) state:

In their 1941 book, *Social learning and imitation*, Miller and Dollard had recognized the significant role played by imitative processes in personality development and had sought to develop explanations of certain kind of imitative behavior. But, Bandura and Walters point out, few others interested in personality have attempted to incorporate the phenomenon of observational learning into their learning theories and even Miller and Dollard made few references to imitation in their later publications. Bandura and Walter set out to address this neglect. (463)

Therefore, Bandura's (1963, 1977, 1986, and 1993) social learning program can be seen as a collection of unit theories that attempt to elaborate upon the concept of imitation by specifying the cognitive mechanisms through which it functions. To accomplish this elaboration, he incorporates and builds upon concepts offered by Rotter (1966). However, Bandura (1977, 1986, and 1997) emphasizes the social aspects of learning much more than Rotter (1966) who was primarily concerned with individual differences in social learning. Essentially, he is integrating different propositions and concepts from both of these theories (Wagner, 1984).

The first and most prominent mechanism identified by Bandura (1977) is observational learning.<sup>121</sup> Traditional behaviorists claimed that meaningful reinforcement was direct in the sense that the individual has to experience it in order for it to impact their behavior. Bandura (1977) argues that reinforcement can also be

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<sup>121</sup>The terms modeling and imitational learning are used interchangeably with observational learning (Bartol and Bartol, 2011).

vicarious in nature meaning that if one observes a model being rewarded or punished, then the observer's behavior may also be affected. The likelihood of behavior being affected depends upon the characteristics of both the observer and model being observed. On the one hand, observers are more likely to imitate behavior if they lack confidence, self-esteem, or are dependent on the model in some way. On the other hand, a model's behavior is more effective in influencing other people's behavior if they have status or prestige in the eyes of the observer. Models can be drawn from a variety of sources including family members, friends, and even mass media figures (e.g., television and movie stars, musicians and other entertainers) and professional sports athletes (Bandura, 1977, 1986).

The second mechanism identified by Bandura (1963, 1977) is known as symbolic learning. This refers to how humans use abstract symbols to manipulate their environment. Symbols allow us to put our observations into general categories and form principles that guide our behavior across a variety of situations. Put differently, people learn that the environment may determine whether certain types of behavior are tolerated. These variations are called "action-outcome contingencies" in which certain behaviors are performed on the basis of expected behavioral outcomes (Zimbardo, 1980). It is easy to detect a reliance upon concepts from Rotter's (1966) expectancy theory here. A central tenet of Rotter's (1966) theory is that a person's behavior is shaped, in part, by their expectations of what the outcome will be (Bartol and Bartol, 2011). Again, it is important to note that these are not the same theory; instead, Bandura (1997) is using the same concepts in a new and different way.

The last mechanism posited by Bandura (1977) helps to uncover the self-regulatory processes that affect behavior. The most important of these is self-efficacy,<sup>122</sup> which is defined as one's belief in their ability to cope with environmental demands (Zimbardo, 1980). Bandura (1997) goes to great lengths to distinguish his concept of self-efficacy from Rotter's (1966) locus of control; however, while different, self-efficacy is still an elaboration upon this earlier concept. Locus of control refers to beliefs about how one's actions will affect outcomes whereas self-efficacy represents beliefs about one's ability to produce actions to affect outcomes (Bandura, 1997; see, also, Akers, 1998). Clearly these are not the same, but they are related to each other. Akers (1998) suggests that this theory has parallels to theories like Gottfredson and Hirschi's (1990) self-control theory:

Since self-efficacy is directed toward accounting for the initiation and presence of "coping" behavior, its application to the explanation of law and norm violation is not clear and would appear to be restricted only to that part of deviant and criminal behavior in which self-assessment of coping ability is a factor. But as part of the general process of self-regulation it demonstrates one of the ways in which social learning theory incorporates the process and content of self-control. (75)

This passage seems to imply that self-control is either compatible with social learning theory or that self-control is really just a smaller part of social learning theory. In criminology, these theories have traditionally been pitted against each other, and portrayed as competitors when, in reality, they may just be pieces of a much larger

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<sup>122</sup> Criminologists have applied the concept of self-efficacy the macro-level to explain neighbourhood variations in criminal activity; this new theory has been referred to as "collective efficacy" (see, Sampson, Raudenbush and Earls, 1997). This is an example of proliferation of Bandura's (1993) concept into criminology (Wagner, 1984). This theory is not discussed here because it falls outside of the scope of this dissertation, which focuses upon explanations of crime and criminality.

puzzle. Perhaps it is best to think of these as two examples of self-regulatory processes.

Bandura (1996) has proposed another unit theory, which is often referred to as the mechanisms of moral disengagement; this formulation may be the most directly relevant to criminological theory. The focus here is to identify the methods used to diffuse the bite of conscience, thereby freeing oneself to partake in behavior that is known to be wrong or unethical. These mechanisms include moral justification, the use of euphemistic language, the use of advantageous comparisons, diffusion and displacement of responsibility, distortion of consequences, attribution of blame, and dehumanization of person or victim (Bandura, 1996).

Interestingly, the mechanisms of moral disengagement bear a striking resemblance to Sykes and Matza's (1957) techniques of neutralization and earlier formulations drawn out of Freudian thought (Redl and Wineman, 1951). However, Bandura (1990, 1996) fails to make reference to any previous work done in criminology, and appears to be unaware of these earlier formulations (Akers, 1998). This seems to be a clear opportunity to integrate or synthesize this body of work in some way. For example, one could propose an integrated that attempts to subsume all of these formulations under one integrated unit theory that acknowledges the existence of other similar formulations in other disciplines. Further, while there are areas of overlap between the different theories, some suggest mechanisms or techniques that the others do not. This would also in all likelihood have practical ramifications as these sorts of ideas are commonly used in correctional programming to identify and



diffuse problematic thinking patterns in offenders. Maruna and Copes (2004) have also noted similarities between these theories.

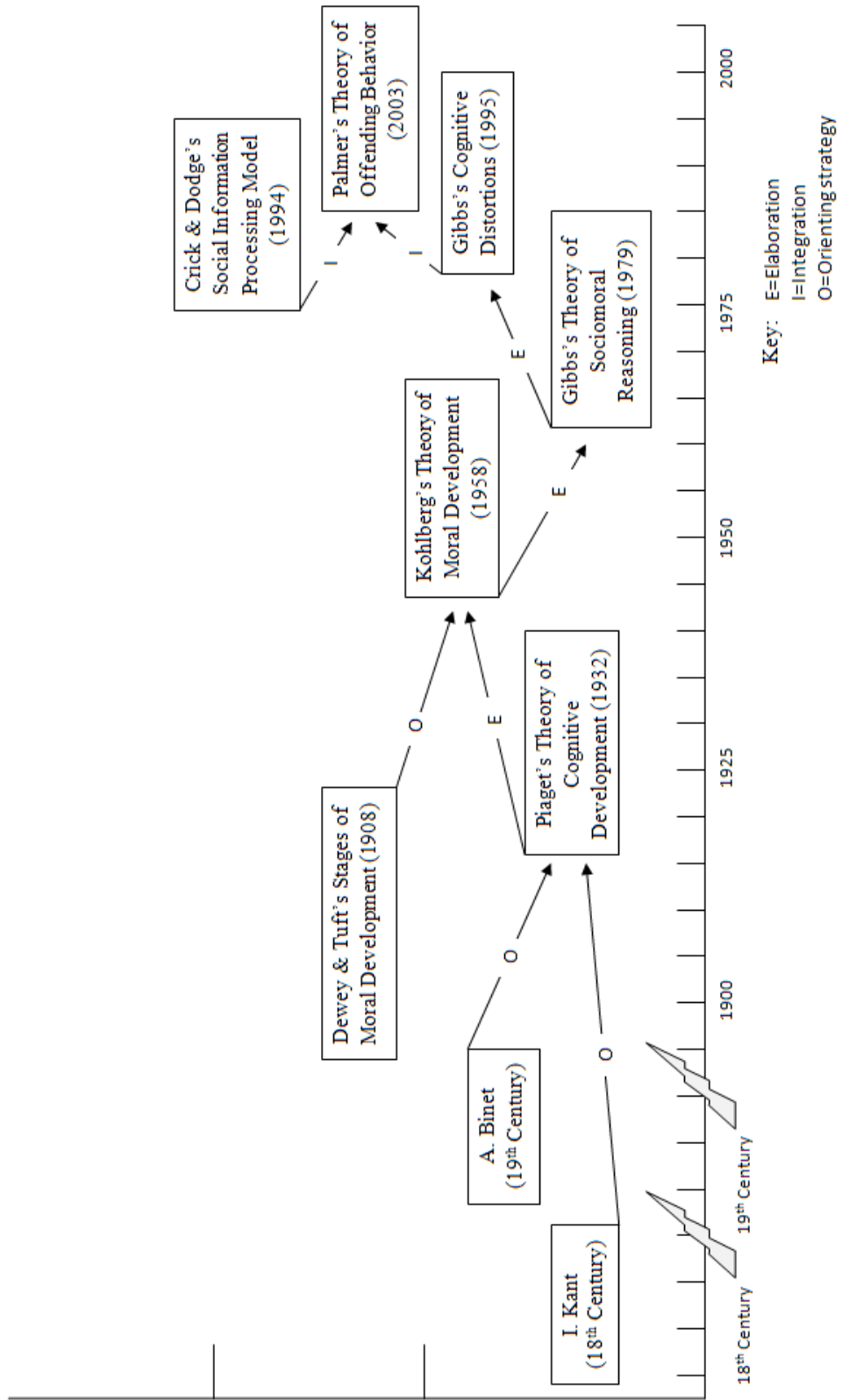
### **The Good, the Bad, and the Criminal: The Impact of Moral Development in Criminology**

The last major psychological research program that has contributed to criminological theory is the moral development program. There are two branches of moral development: one based upon the cognitive-developmental work of Kohlberg (1958) and Gibbs (1979), and another based on affective states found in the work of Hoffman (1983, 1986). The focus here will be on the former as they seem to have had more of an impact on criminological theory. The development of this program is represented in Figure 28 on page 228. The orienting strategy of this program is based upon the work of Piaget (1932, 1965); however, it has undergone minor changes as new unit theories have emerged. The key assumptions in this orienting strategy can be found in Table 8.

**Table 8: Key Foundational Elements in the Moral Development Orienting Strategy**

- During their lifespan, people proceed different stages or levels of development
- People begin life as “naïve realists” (i.e., they believe in what they see and assume that appearance defines reality)
- Advances in moral reasoning correspond to advances in logical reasoning

**Figure 28:** Moral Development Research Program



Piaget's (1932) work presented a challenge to the socialization model<sup>123</sup> that was dominant when he proposed his theory (Blackburn, 1993). Again, the tendency to rebel against the established scientific norms is readily apparent here (Hall and Lindzey, 1970; Feyerabend, 1976). According to Piaget, people start out as "naïve realists"; they believe in what they see and assume that appearance defines reality (Zimbardo, 1980). Eventually, they come to know and understand the world on a deeper level through interaction, interpersonal problem-solving, and learning. The assumption here is that advances in moral reasoning correspond to advances in logical reasoning (Palmer, 2003).

The notion of stages is a consistent characteristic in all of the moral development theories discussed here; people are thought to proceed through different stages (or phases or levels). This can be seen as a key conceptual scheme in the moral development orienting strategy (Wagner, 1984). This helps form the foundation of the orienting strategy being used here. Piaget was also methodologically influenced by Binet while the two worked together developing intelligence tests for children. It was while evaluating these tests that Piaget became interested in how children learn (Bergin and Cizek, 2001).

Piaget (1932, 1965) claimed that development occurs in four stages including the sensorimotor stage, pre-operational thought stage, concrete operations stage, and formal operations stage. The sensorimotor stage consists of the formation of basic reactions and reflexes to stimuli that are developed in infancy. In addition, very basic

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<sup>123</sup> This model suggests that morality is unnatural and can only take hold in individuals who have been properly socialized. Similar assumptions are found in the work of Darwin, Hobbes, Freud, and Durkheim. In criminology, this assumption is a characteristic of the control trajectory (Reiss, 1951; Reckless, 1955; and Nye, 1958, Hirschi's, 1969). Finally, this assumption is also found in many of the neoclassical-deterrence and postclassical theories of crime reviewed in Chapter Four.

reasoning develops towards the end of this stage (the realization of object permanence and trial and error behavior). In the pre-operational stage, the child has a considerable grasp of language but still displays a high level of egocentricity. Children in this stage assume their actions cause everything to happen (e.g., night falls because it is time for them to go to sleep). In the concrete operations stage, the child learns to manipulate symbols and numbers to express relationships. In addition, children start to classify objects by appearance or function during this stage. Finally, in the formal operations stage, the manipulation of symbols and numbers becomes considerably more sophisticated. Here people seem to begin to take different perspectives and are able to see things from other peoples' points of view (Zimbardo, 1980).

Two important processes, assimilation and accommodation, were identified by Piaget (1932, 1965) to explain how a person navigates through the stages of development. Assimilation occurs when a person attempts to understand their experiences by using what they have learned in the past. Accommodation takes place when a person modifies their existing cognitive structure in order to adapt to their environment. These processes can also be seen as part of the core assumptions in the moral development orienting strategy because other theories (e.g., Kohlberg, 1958; Gibbs, 1979) all posit similar processes.

The observational set of the moral development program includes the moral judgment index (MJJ) which is used to assess the level of moral reasoning in individuals (Blackburn, 1993). In addition, the moral development program makes use of methods and data common to developmental psychology like longitudinal and sequential studies (Zimbardo, 1980).

Kohlberg's (1958) theory of moral development represents an important case of elaboration of Piaget's (1932) earlier developmental theory (Blackburn, 1993; Kurtines and Gewirtz, 1995; Bartol and Bartol, 2011). Kohlberg's (1958) original intention was to replicate Piaget's (1932) work and extend it to explain development beyond the adolescent years (Palmer, 2003). To do this, Kohlberg (1969) proposed a new scheme of development which includes three levels of moral reasoning each with two stages. This new scheme incorporates Dewey and Tufts's (1908) conceptual scheme which posits three stages of development including the impulsive, group-conforming, and reflective stages of moral development. Dewey and Tufts (1908) were arguing for the importance of education in moral development. This is clearly an example of integration occurring amongst research traditions or orienting strategies because Kohlberg (1958) is combining two different conceptual schemes to form the basis for his theory (Laudan, 1977, Ritzer, 1981).

At the pre-conventional or "hedonic" level, there is no distinction made between moral and self-serving values and rules are viewed as external to oneself (Blackburn, 1993). In the first stage of the pre-conventional level, called heteronomous morality, the individual attempts to avoid punishment and unquestioningly obeys perceived authority figures. In the second stage, the focus is still on one's own needs; however, other people's needs are recognized. It is during this stage that notions of fairness and exchange start to emerge (Kohlberg, 1969).

The importance of conformity and social expectations start to arise at the conventional or "pragmatic" level. During the third stage, the needs of one's close others become more important; this is also known as "good child morality" (Kohlberg,

1969). The focus here is on maintaining one's important relationships through loyalty (Palmer, 2003). Later, in the fourth stage, the individual begins to consider the needs of society and the importance of upholding laws and doing one's duty in order to avoid breakdowns in the system. This is a "law and order" stance based on a respect for authority and society (Blackburn, 1993; Palmer, 2003).

The post-conventional or "principled" level involves distinguishing between the individual and rules of society. At stage five, the person starts to clearly understand the social contract or the idea that membership in society requires one to sacrifice some of their individual freedoms for the good of all. However, individuals on this level also start to realize that laws can be broken under certain circumstances (e.g., if the laws hurt people, are unfair, or are inhumane). Finally, in stage six, people start to use self-chosen, universal, ethical principles to guide their behavior. According to people in this stage, the law must adhere to these principles as well; laws that do not should be disobeyed (Kohlberg, 1969).

Kohlberg's (1958, 1969) theory has received two main criticisms since it was proposed. First, feminists have suggested that it is gender-biased because of its emphasis on traditionally masculine notions of justice and fairness as hallmarks of positive development as opposed to other indicators of development including caring and empathy. Second, the theory was accused of being elitist and culturally-biased because more highly-educated people tended to receive better scores on the moral judgment index (MJI) (Gibbs, 2003).

To counter some of these criticisms, Gibbs (1979) developed a revised version of this theory, often referred to as a theory of sociomoral reasoning (Palmer, 2003).

According to Gibbs (2003), Kohlberg (1958) erred when he chose to incorporate Dewey and Tufts's (1908) conceptual scheme with Piaget's (1932). He argued that this distorted the true nature of the Piagetian scheme and left Kohlberg's (1958, 1969) model vulnerable to criticism. This is mainly attributed to the post-conventional level proposed by Kohlberg (1958) which he derived from Dewey and Tufts's (1908) work. Some have argued that the post-conventional phase is not a natural part of moral development, and usually only occurs as a result of post-secondary education or exposure to Western liberal philosophical ideas (Palmer, 2003).

Gibbs (1979) attempted to reformulate Kohlberg's (1969) theory by suggesting that there are immature and mature phases of moral development. The immature stages encompass Kohlberg's (1969) first two stages of development while stages three and four represent the mature stages. Gibbs (1979) argues that during stages three and four an individual may develop "second order" thought which leads to the post-conventional phase. Again, it is important to note that the key difference here is the notion that the post-conventional phase is not a natural part of human moral development. According to Gibbs (1979, 1995, 2003) these changes should adequately address some of the criticisms of Kohlberg's (1958, 1969) original theory. The reformulation of the stages ensures that people at the mature level will not be limited to university graduates and those who have studied and adhere to Western liberal political philosophies.

Gibb's (1979) theory of sociomoral reasoning is a clear example of an elaboration of Kohlberg's (1958, 1969) earlier theory of moral development. The

reformulated theory provides a better fit with data and social reality as it is able to more accurately classify people across cultures and social classes (Wagner, 1984).

Gibbs (1993, 1995) has also further extended his own theory to explain how moral reasoning may be related to one's social cognitions. He suggests that some people will remain stranded at a lower level of moral development because they are egocentric. High levels of egocentricity impede one's ability to take another person's perspective, and often result in the use of cognitive distortions to rationalize bad behavior (Palmer, 2003). Cognitive distortions include blaming others (causal attributions), assuming the worst (interpreting others' actions as hostile), and the minimization and labeling of one's behavior and its consequences.<sup>124</sup>

Neither Kohlberg (1958, 1969) nor Gibbs (1979) offer a specific theory of criminality based upon moral development (Blackburn, 1993). However, one can derive justifications for crime at all stages of moral development (Palmer, 2003). For example, at stage one criminal behavior would be acceptable if punishment could be avoided. In stage two, criminal behavior could be justified if the rewards outweighed the punishments of an act. At stage three, crime could be committed if it helps to maintain a relationship. Individuals in stage four could rationalize crime if it is in the interests of society or is sanctioned by a social institution. Crime can be justified in stages five and six if it protects human rights and helps to further the goal of social justice (Palmer, 2003b). It is important to note that crime can be justified and rationalized more easily and more often at the lower stages of moral development.

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<sup>124</sup>This theory fits with other theories that address the thought process of criminals and other people who behave in socially unacceptable ways (Redl and Wineman, 1951; Sykes and Matza, 1957; Bandura, 1996). As mentioned previously, there seems to be the potential to create an integrated unit theory that combines these ideas (see footnote 27)



Therefore, it is believed that offenders exhibit a lower level of moral development than most non-offenders.

An extension of Kohlberg's (1958) moral development theory and Gibbs's (1979) theory of socio-moral reasoning can be seen in Palmer's (2003a) moral reasoning theory of offending. According to Palmer (2003a), moral development is just a part of a constellation of social cognitive factors that mediate the link between parenting and offending behavior. In other words, one's level of moral reasoning is thought to be one important variable in criminal behavior. Palmer (2003a) is careful to acknowledge that there are many external and internal factors that are relevant to explaining offending behavior (e.g., biological/genetic factors, sociocultural risk factors, and parenting factors); however, moral development is considered to be of central importance in explaining criminal behavior. Family factors (e.g., negative interaction patterns, lack of parental attachment, harsh and inconsistent discipline) are thought to raise children's aggression levels and impede proper moral development leading to criminality or 'offending behavior' (Palmer, 2003b).

At this point, Palmer (2003a) integrates Gibbs's (1993) theory of cognitive distortions within Crick and Dodge's (1994) model of social information processing. To summarize, people with low levels of moral reasoning are thought to process information and interpret social situations differently than people with higher levels of moral reasoning. Specifically, they tend to attribute hostile motives to the actions of others more frequently and place an emphasis on their own needs during social interactions (i.e., they hold goal orientations based on self-interest). Finally, those with lower levels of moral development have access to fewer appropriate social

responses to draw upon in different social situations (i.e., aggressive responses are easily justified because these individuals have developed few other responses). So, offending behavior is justified differently at each stage of development and egocentric biases are pervasive in social interactions at lower stages (Palmer, 2003a). To further justify offending behavior, it is suggested that many offenders rely upon Gibbs's (1993) cognitive distortions (e.g., blaming, misattribution, mislabeling).<sup>125</sup>

The moral development research program has been characterized by elaboration, and therefore, demonstrates a linear pattern of growth (Wagner and Berger, 1985). According to Bernard and Snipes (1996), theories of moral development would be an example of a set of theories that focus upon individual differences. More specifically, they focus on the problem of criminality and seek to understand how people learn to be moral beings.<sup>126</sup> This implies that they are couched at the micro-level of explanation since structural and societal factors are given little to no consideration. However, they do attempt to address some of the social processes involved in the formation of morality (Bernard and Snipes, 1996).

### **A Brief History of Psychological Interventions**

Psychological research programs have had an unrivaled impact on modern correctional system interventions especially in the area of rehabilitation and treatment

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<sup>125</sup> Palmer (2003a) identifies the link between these ideas Sykes and Matza's (1957) techniques of neutralization. Bandura's (1996) work on moral disengagement alluded to by Andrews and Bonta (2003) also seems important to take note of here.

<sup>126</sup> Psychopathy can be seen as the inverse of moral development. Some theoreticians (Shoemaker, 1990; Bartol and Bartol, 2011; Bernard, Snipes, and Gerould, 2011) imply that psychopathy constitutes a criminological theory. However, a clear mechanism or specific unit theory is rarely ever discussed, and it is debateable as to whether or not one actually exists. This does not mean that psychopathy has no underlying theoretical basis; it can be found in the theories described above (see especially Eysenck, 1964; Eysenck and Gundjonsson, 1989). In addition, Hare's psychopathy checklist constitutes an important practical ramification of psychological theorizing and will be discussed in more depth in the final section of this chapter.

(Andrews and Bonta, 2003). Perhaps the most well-known is the use of the medical model during the 1970s and 1980s (Blackburn, 1993; Griffiths, 2004; Miller, Schreck, and Tewksbury, 2011). Some have suggested that with the rise of the risk paradigm and “the criminologies of everyday life”, the influence of the medical model has greatly declined (Feeley and Simon, 1992; Garland, 2001). However, one could also argue that the influence of the medical model has merely been transformed by this activity.

In its early years, correctional treatment consisted largely of vocational and work programs intended to keep prisoners busy while giving them the skills and discipline that might make them employable upon release (Griffiths, 2004). By the 1930s, the notion of rehabilitation had worked its way into the criminal justice systems of the UK, U.S., and Canada. An important driving force behind the introduction of treatment was the influence of the Progressive Movement during this period (Griffiths, 2004; Batollas, 1985; Cullen and Gilbert, 1982). In the medical model, treatment was individualized and clinical, and was based primarily on psychology and psychiatry (Kendall, 2004). Specifically, many of these earlier rehabilitation techniques were rooted in psychodynamic thought (S. Cohen, 1985). However, these approaches as a whole were found to be ineffective for most offenders (Andrews and Bonta, 2003).

From the 1970s to the mid-1980s, very little progress was made in the area of correctional treatment. However, social learning theory would eventually become influential with the rise of the cognitive behavioral approaches to treatment. This approach is exemplified in the work of Andrews and Bonta (2003) and the Reasoning and Rehabilitation Program developed by Ross and Ross (1995). More recently, Ward

and Maruna (2007) have proposed a humanist approach to treatment intended to be complementary to the cognitive-behavioral interventions.

There has also been some interest in the application of theories of moral development in corrections. These include the implementation of “just communities” in correctional institutions and also forms of peer group counseling meant to encourage problem solving and positive social interactions (Palmer, 2003). Some have also argued that post-secondary education can raise levels of moral development (Duguid, 2000).

Another major area of psychologically-inspired interventions deals with the assessment and prediction of risk. The theories and methods of psychology have been applied to develop instruments that are designed to measure the risk of recidivism amongst offenders and make predictions about future criminal behavior; the most prominent and widely discussed is the psychopathy checklist-revised (PCL-R) (see, for example, Hare, 1980). Many of these new risk assessment tools are based on actuarial prediction meaning that they make predictions about future behavior based on risk factors from groups of offenders rather than on individual assessments of risk that characterize clinical prediction approaches (Feeley and Simon, 1992; Andrews and Bonta, 2003). Many methodological problems have surfaced during the time that these instruments have been in use including issues with both the reliability and validity of the instruments, their tendency to over predict risk, and difficulties that arise from attempting to predict individual behavior by relying upon group indicators of risk (i.e., the ecological fallacy). There are also problems that plague these tools

apart from methodological inadequacies. These issues will be the topic of discussion for the final section of this Chapter.

There is reason to believe that recent psychological theories of criminality and their resulting criminal justice system interventions have ignored a group of social and contextual factors integral to attaining a full understanding of criminality.<sup>127</sup> Some have argued that factors from social psychology and sociology which result from situation and context have been disregarded in favor of an “antiquated model of human behavior” that overemphasizes “psychological individualism” (Haney, 2002: 3; see also Zimbardo, 2007). Others have suggested this emphasis is a side-effect from the domination of an economic view of human behavior in legal scholarship, the criminal justice system, and consequently, criminology (Hanson and Yosifson, 2003; Ross and Shestowsky, 2003). It seems obvious that this is also tied to the rise of the risk paradigm and “criminologies of everyday of life” in the criminal justice system and the field of criminology (Feeley and Simon, 1992; Garland, 2001).

The tendency to disregard situation and context may also arise, in part, from a growing ‘criminal justice orientation’ in the field of criminological theorizing in recent years. Specifically, the main concern in criminology in recent years has been to offer efficient methods of control (Garland, 2001; Frauley, 2005). In criminology, the drive to understand, explain, and correct criminal behaviour has been supplanted by the urge to control it. This shift is obvious when one considers the emphasis on individual differences in contemporary theories of crime and criminality (Gottfredson and

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<sup>127</sup> This applies much more to the theories of criminality and criminal behaviour than to theories of crime and the criminal acts. The latter set of theories focuses almost exclusively on situational and contextual factors. However, it is interesting to note how consideration of the situation and context of the crime disappears when attempting to explain and address criminality.

Hirschi, 1990; Farrington, 1992; Moffit, 1993; Agnew, 2005). Foucault (1977) anticipated this phenomenon early on:

...the need to measure, from within, the effects of the punitive power prescribes tactics of intervention over all criminals, actual or potential: the organization of a field of prevention, the calculation of interests, the circulation of representations and signs, the constitution of a horizon of certainty and proof, the adjustment of penalties to ever more subtle variables; all this leads to a an objectification of criminals and crimes. In either case, one sees that the power relation that underlies the exercise of punishment begins to be duplicated by an object relation in which are caught up not only the crime as a fact to be established according to common norms, but the criminal as an individual to be known according to specific criteria. (pgs. 101-102)

One might speculate that this ever-increasing focus on influencing criminal justice system practices has influenced the nature of theories produced by criminologists. While it is important for criminological theories to supply practical solutions to crime and criminality, these solutions ought to be based on a full understanding of all the factors that contribute to a phenomenon. Finally, the content of criminological theories should not be dictated by the criminal justice system. The trend away from theories that address social structural differences, power inequalities, and the social context of crime can be seen, in part, as a result of the movement to control and contain crime rather than to explain and understand it.

Many of the early theories in these psychological research programs, like Pavlov's (1898) classical conditioning theory, were informed by assumptions similar to those in Darwin's (1859) theory of natural selection. However, specific evolutionary theories were never directly applied to criminality. The next chapter describes the reemergence of evolutionary theory in criminology and the resulting biosocial research program.

## **CHAPTER 6: THE RISE OF BIOSOCIAL THEORIES**

### **Controversy in Criminological Theory**

In the late 1970s, an interest in the biological differences between offenders and non-offenders resurfaced after an exceptionally long hiatus. For many years before this, biological explanations of criminality were a “taboo” topic in criminology (Jeffery, 1978; Ellis and Hoffman, 1990; Walsh, 2003, 2009). It is important to note that this focus on the biological aspects of criminality took place alongside a renewed interest in the criminal act embraced by the postclassical theorists.

The interest in both the criminal act and biological influences seem to have been furthered by a ‘two-pronged assault’ on the social solutions to crime (rehabilitation and programming in prisons and social welfare and programs for the poor) (Garland, 2001). This attack was waged by members of both the political right and left. The assault from the right related to the system’s perceived inability to control crime and a demand for more “get tough” crime policies (Garland, 2001). Left-wing criminologists disparaged the state’s attempts at correctionalism, and portrayed these efforts as pointless, and in some cases, counterproductive (Taylor, Walton and Young, 1976). In addition, certain practical suggestions from labeling theorists (e.g., deinstitutionalization, diversion, and due process) were implemented, but did the

opposite of what they were intended to do, making the system more harsh and punitive (see S. Cohen, 1985 for a discussion of this activity).<sup>128</sup>

Clearly, in the 1980s and 1990s criminological theorizing was dominated by a renewed interest in individualistic explanations of criminality. Like postclassical theories then, the biosocial theories can be seen as a reaction to sociological theories of criminal behavior (Jeffery, 1978; Ellis and Hoffman, 1990; Walsh, 2002, 2009). However, this new emphasis on the biological aspects of criminality is also due, at least in part, to wider cultural shifts that took place in Western society during the 1980s and 1990s (Lilly, Cullen and Ball, 2007). Technological advances allowed for new observations of brain structures and neurochemistry, which eventually led to discoveries of how these affect human behavior (Rafter, 2008). These new revelations have given rise to the widespread cultural assumption that all aspects of human behavior can be easily explained by biology (Rose, 2000). This stands in stark contrast to the popularity of the environmentalist and sociological approaches to crime in the mid-20<sup>th</sup> century that helped form the basis of the penal-welfare systems in North America and the U.K. (Garland, 2001; Rafter, 2008).

Biosocial theories have also become popular because of their utility in predicting risk and dangerousness. Like the neoclassical theories or “criminologies of everyday life”, these theories have demonstrated a potential to influence criminal justice system practice (Rose, 2000; Garland, 2001; Rafter, 2008). Most unit theories in the biosocial research program focus on explaining and identifying persistent forms of criminality,

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<sup>128</sup> Part of the problem here could have been that the labelling perspective that informed these approaches produced few testable unit theories and was mainly composed of metatheoretical claims. This does not mean the ideas were not useful or were inaccurate, but rather the specific mechanisms were not clearly defined.



antisocial behavior, and sometimes psychopathic behavior. According to Feeley and Simon (1992), the risk paradigm now holds sway in Western criminal justice systems. The goal is to prevent crime before it happens and the long-term incapacitation of habitual offenders has been proposed as a way to achieve this type of crime control.

Some biosocial theorizing could be thought of as a scientifically-justified version of “the criminology of the other”. The notion of the “criminology of the other” was originally introduced by Garland (2001). He characterized this as an emotional overreaction to rising crime rates and increasing fear of crime. These developments were accompanied by a new perception that certain people (i.e., chronic or serious offenders) were beyond rehabilitation and needed to be incapacitated for long periods of time. He also suggested that this new movement was antiscientific and made efforts to distance itself from non-moral explanations of crime and criminality. Interestingly, Garland (2001) also argues that Wilson’s (1975) work forms the basis for this movement. Wilson and Herrnstein (1985) have, in fact, proposed a biosocial unit theory that received a great deal of attention both inside and outside criminology. This must be seen as, at least in part, an extension of Wilson’s (1975) earlier work.

While Wilson’s (1985) later work is scientifically questionable, it was highly influential. As will be demonstrated throughout this chapter, if they do make policy suggestions, most of the more popular biosocial theories (Wilson and Herrnstein, 1985; Eysenck and Gundjonsson, 1989) provide a justification for increases in the severity of punishment and length of imprisonment of frequent offenders. At first glance this may seem like a viable option; however, it is difficult to distinguish between dangerous habitual offenders and offenders who are involved with crime

sporadically or during certain periods of their lives. In addition, the focus is almost always on street level criminals; the activities of frequent corporate or white collar offenders are often ignored or are left unexplained. This new emphasis on predicting dangerousness led to the rise of a more punitive approach in criminal justice systems in North America and Britain.

It seems that this new version of scientific criminology has produced what might be thought of as a new medical model. Ironically, this is much closer to the distortions of the older medical model offered by critics of the rehabilitative-treatment approach.<sup>129</sup> Garland (2001) describes these representations of the earlier medical model in his book, *Culture of Control*:

The correctional criminology that flourished in mid-century Britain and America was quite removed from the caricature versions that were later presented by its critics. Most correctional reformers and criminologists had no serious commitment to strict determinism, nor did they claim that the typical delinquent was 'sick' or deeply 'pathological'. (43-44)

While most biosocial theorists are not strict determinists, they do suggest that criminals have biological or psychological defects that cause them to commit crime. Further, many biosocial theorists also argue that there are clear differences between criminals and non-criminals (Wilson and Herrnstein, 1985; Eysenck and Gundjonsson, 1989). In some more extreme cases, it has been argued that criminality is a form of mental illness (Raine, 1993; Lykken, 1995). The key difference is that in the new

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<sup>129</sup> It is important not to paint these theories with too wide a brush. Some proponents of biosocial theories (Jeffery, 1978; Cohen and Machalek, 1994; Vila, 1998; Robinson and Beaver, 2009) do attempt to balance the tendency to label and imprison with more "nurturant" crime prevention strategies. Nurturant crime strategies focus on alleviating crime by offering social and community programs that target the root factors leading to criminality.

medical model, criminality is rarely viewed as treatable; the only solution is to imprison chronic offenders for long periods of time until they age out of crime.

Many criminologists have resisted this new trend toward biologically-based explanations, and remain committed to the traditional sociological and related explanations of criminality (e.g., strain, control, and learning theories) (Ellis and Hoffman, 1990). This should come as no surprise since many criminologists are trained in sociology, and are unfamiliar with biological and psychological theories that are relevant to explaining criminality (Ellis and Walsh, 2003; Andrews and Bonta, 2003). However, even amongst sociological criminologists, strict adherence to pure sociological explanations has started to come into question. Francis T. Cullen (2009), a staunch sociological criminologist, states: “Although I have trumpeted its value, I am equally persuaded that sociological criminology has exhausted itself as a guide for future study on the origins of crime. It is a paradigm for a previous century, not the current one” (pg. xvi). Many observers have suggested that biosocial theorizing represents a new paradigm in criminology (Jeffery, 1978; Ellis and Hoffman, 1990; Cullen, 2009). In a similar vein, Walsh (2009) argues that criminology is actually in a “prescientific” stage characterized by competing quasi-paradigms. He identifies “radical environmentalism” as the dominant quasi-paradigm in criminology, and claims that this has more to do with the ideological preferences of criminologists than the scientific legitimacy of the underlying model.

The description offered by Walsh (2009) has much in common with the model of theory growth being used in this dissertation. Indeed, one could substitute Wagner’s (1984) notion of orienting strategies for quasi-paradigms, and make a more coherent

and cogent argument to explain the activity in this area. First, as in other areas of theory, the interrelations between the theories are revealed with an application of Wagner, Berger and Zelditch's (1984, 1985, 1993, 1997, and 2007) model of theory growth. Second, distinguishing between unit theories and orienting strategies will also help to explain the complex patterns of growth in this area. Specifically, the growth and development of an orienting strategy is readily apparent throughout the biosocial literature. This is because integration often takes place across disciplines and levels of explanation resulting in a branching, interdisciplinary type of growth.

Feyerabend's (1976) notion of "anything goes" as the primary catalyst for scientific breakthroughs is particularly relevant to biosocial criminology; there are many examples of this available throughout the literature. For example, early proponents of biosocial theorizing were ridiculed and referred to as "Neo-Lombrosians". In some cases, they were accused of endorsing simplistic theories that led to the Eugenics Movement (Jeffery, 1978, Walsh, 2009; Wright, 2009). Siegel (1990) describes how even the suggestion of a biological basis to criminality could ruin one's career and cause one to be associated with extreme right-wing zealots. More recently, Ellis (2003) provides a sort of "survival guide" for biosocial criminologists, which provides tips for avoiding on-the-job discrimination on the basis of their theoretical perspective.<sup>130</sup>

Much of this controversy is related to the orienting strategy embraced by biosocial criminologists. In the next section, an attempt will be made to provide a detailed

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<sup>130</sup> Certain biosocial theories are associated with racism and sexism (see Gould, 1981 for a review and critique of some of these theories). People who openly endorse such theories have been discriminated against in various ways (Walsh and Ellis, 2003; Wright, 2009). While some of these theories are based on questionable assumptions, it is still important that they be tested and either revised or discarded.

description of the orienting strategy of biosocial criminology beginning with a description of its problem focus and continuing with a discussion of its development and more substantive aspects of the strategy. This chapter concludes with a detailed examination of the unit theories that make up the various branches of the program.

### **Redefining the Problem: Criminality, Antisocial Behavior, and Psychopathy**

Early biological theories of criminality tended to rely upon a general theory of behaviour and often dealt with very specific criminal behaviours that were chronic, uncontrollable and/or remorseless. More recent biosocial theories of criminality have expanded in both scope and focus; specifically, they seek to explain many different types of criminality (Rafter, 2008, pgs. 240-241; see also Robinson, 2004). Wilson and Herrnstein (1985) define criminality as “stable differences across individuals in propensity to commit criminal (or equivalent) acts” (pg. 23). One of the main concerns is to distinguish between “victimful”<sup>131</sup> and “victimless” crime, with the former being the primary focus (Eysenck and Gundjonsson, 1989; Ellis and Hoffman, 1990). Fishbein (2001) endorses a similar approach but specifies that criminological theorists should focus on “the measureable dimensions (phenotypes) of antisocial behaviour that increase risk for criminal activity and stigmatization” (pg. 13). Raine (1993) and Lykken (1995) take the most extreme stance and suggest that criminality can be viewed as a special form of mental illness with connections to antisocial personality disorder.

Most biosocial theorists caution against focusing on criminal acts over criminality because crime is a socio-legal concept and not a true behavioural construct (Eysenck

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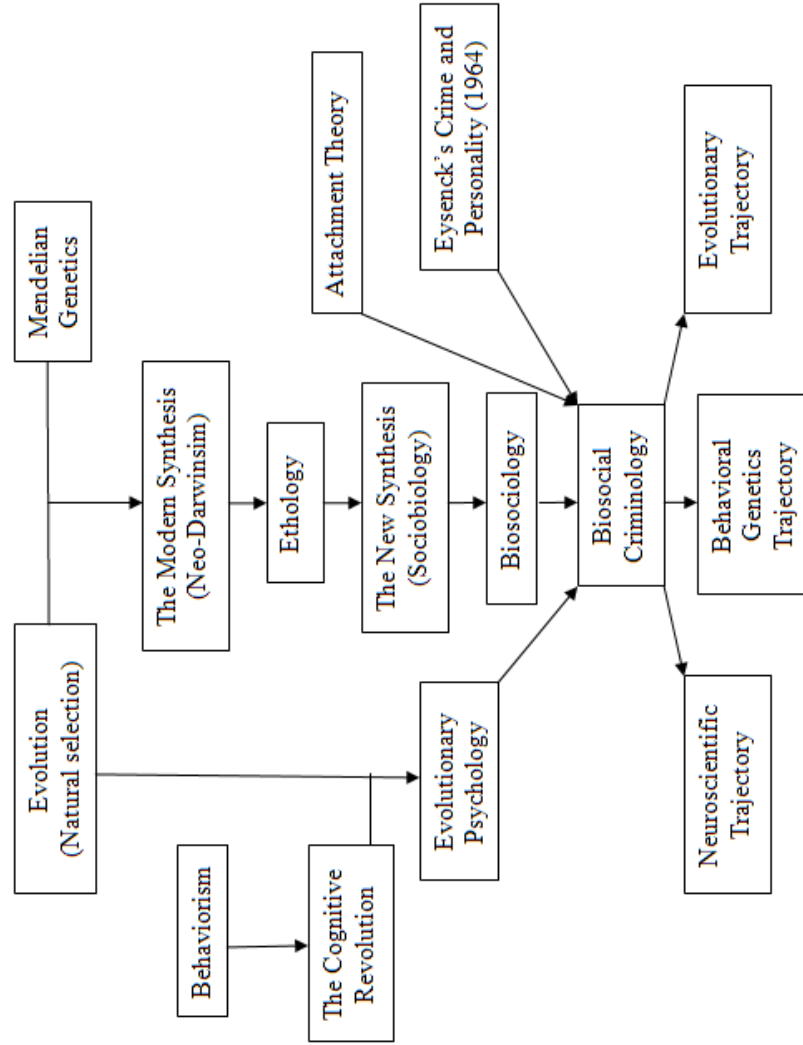
<sup>131</sup> Victimful crime refers to crime that involves victims.

and Gundjonsson, 1989; Ellis and Hoffman, 1990; Fishbein, 2001). Robinson (2004) advises theorists to concentrate on the behaviour of individuals that is harmful to themselves and others regardless of whether or not the act is officially defined as a crime. To summarize, it seems that most biosocial theorists advocate a focus on antisocial behaviour or persistent forms of “victimful” crime. Others suggest criminologists consider conceptualizing criminality as a mental disorder (Raine, 1993; Lykken, 1995). However, many of the theories fail to account for most forms political, white collar, and corporate crime (see Robinson and Beaver, 2009 for a notable exception). In any case, it is easy to see how the “criminology of the other” could potentially fuse with the old medical model, the risk-prevention paradigm, and punitive movements in North American and British criminal justice systems creating a new strategy of control (see Feeley and Simon, 1992; Rose, 2000; Garland, 2001).

### **Evolution of the Biosocial Orienting Strategy**

Now that the problem domain of the biosocial criminology research program has been identified, it will be useful to examine the orienting strategy being used in this program. To understand the orienting strategy of the biosocial research program in criminology, one must be familiar with several important developments that took place in the biological and psychological sciences, and how some of these developments affected theories in other disciplines. These shifts are summarized in Figure 29 on page 249, and help clarify important aspects of how the biosocial orienting strategy has manifested itself in criminological theory. These changes occurred not in the theories or models in biology, but rather in what Kuhn would call the “dominant paradigm” of the biological sciences. Oddly, both Kuhn (1962) and

**Figure 29:** Development of Biosocial Criminology Orienting Strategy



DERIVED FROM: Eysenck (1964); E.O. Wilson (1975); Buss (1990, 2008); Lykken (1995); Walsh (2002, 2009); and Rafter (2008).

Lakatos (1970) claim that these sorts of modifications are not possible in a mature science.

In a discussion of research traditions<sup>132</sup>, Laudan (1977) suggests that this sort of change is actually very common if one considers the history of the sciences:

If one looks at the great research traditions in the history of scientific thought – Aristotelianism, Cartesianism, Darwinism, Newtonianism, Stahlian chemistry, mechanistic biology, or Freudian psychology, to name only a few – one can see immediately that there is scarcely any interesting set of doctrines which characterizes any one of these research traditions throughout the whole of its history. Certain Aristotelians, at times, abandoned the Aristotelian doctrine that motion in a void is impossible. Certain Cartesians, at times, repudiated the Cartesian identification of matter and extension. Certain Newtonians, at times, abandoned the Newtonian demand that all matter has inertial mass. But need it follow that these seeming “renegades” were no longer working within the research tradition to which they earnestly claimed to subscribe? (pg. 97, italics in original)

Clearly, Laudan is referring to challenges being made to the dominant paradigm in the preceding passage. In other words, the evolution of knowledge in these areas was precipitated by scientists rebelling against established assumptions in their fields. This holds parallels with Feyerabend’s (1976) notion of “anything goes”. Interestingly, many of these “breakthroughs” resemble attempts to integrate or graft orienting strategies to one another similar to the integration of research traditions described by Laudan (1977). There are many examples of this type of activity in the history of the natural sciences.

A good place to start this review is with a development known as the “modern synthesis” as this seems to have been the first major revision of Darwin’s (1859)

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<sup>132</sup> As mentioned in Chapter Two, research traditions are similar to Kuhnian paradigms or the notion of orienting strategies suggested by Wagner (1984). Many social scientists also refer to them as ‘metatheories’. I will refer to these structures as orienting strategies throughout this chapter.



original general evolutionary theory. The modern synthesis refers to the fusion of evolutionary and genetic principles that took place during the 1930s and 1940s. According to Buss (2008), Darwin originally believed that inheritance resulted in a blending of traits consistent with the blending theory of inheritance. However, Mendel's (1865) work on inheritance actually proved this theory to be incorrect. Mendel did attempt to alert Darwin to his findings; unfortunately, Darwin either did not read them or did not realize their significance (Buss, 2008). The "modern synthesis" is not a clear unit theory; rather, it supplies a framework for theories in this area. In Wagner's (1984) terms this resembles an orienting strategy more than a unit theory.

Natural selection is the core unit theory in this area, and it provides the basis from which several evolutionary theories of criminality are derived (Walsh, 2009). Darwin formulated this theory as an attempt to solve the puzzle surrounding the struggle for existence that emerged from Malthus's (1798) work on population growth. There are three key elements crucial to understanding natural selection. First, is the observation that organisms exhibit variation in different traits. Second, the notion of heritability suggests that trait variations that are of the most interest are passed from parent to offspring. Third is the process of selection, which states that successful organisms inherit traits that help them survive and reproduce (Buss, 2008). Selection can be seen as the central explanatory mechanism in the theory (Bunge, 2004). Darwin was aware that traits varied from organism to organism, but did not correctly identify the reason for this variation (Walsh, 2009). As noted previously, Mendel's work on genetics

explained what Darwin's theory could not, and eventually scientists came to the realization that they were compatible and complementary.

The modern synthesis revealed that evolution ultimately causes changes in genes. More specifically, mutations cause DNA to produce new alleles; these changes are precipitated by random copying errors or external mutagens. Most of these mutations are either maladaptive or neutral. However, in rare cases, a beneficial mutation can lead to an adaptation which provides an evolutionary advantage that will likely be passed down (Buss, 2008; Walsh, 2009). There are two other products of the evolutionary process that are important to understanding the modern synthesis. First, preadaptations (or exadaptations) are features that arose by chance and did not necessarily arise for their present roles (e.g., feathers on dinosaurs were originally used for warmth and mating displays not flying). Second, by-products (or concomitants) are characteristics that are not useful for survival and have no real adaptive function (e.g., the whiteness of bones) (Buss, 2008). Finally, the modern synthesis suggests two important processes that help explain how traits emerge. Recombination (or reshuffling) takes place when sex cells divide during meiosis; this results in new combinations of alleles, and possibly new adaptive traits. Genetic flow occurs when a new individual moves into a population and alters the gene pool through the introduction of new genes (Walsh, 2009).

The ethology movement grew out of an application of evolutionary principles from the modern synthesis to animal behavior. This focus on behavior means that ethology has particular relevance to theories of criminality, which are the focus here. Founders of this movement include Konrad Lorenz and Niko Tinbergen. Lorenz

(1941) discovered imprinting, which is the first important mechanism uncovered in this area. Imprinting refers to the tendency of some animals (e.g., ducklings) to become attached to and follow the first object they see moving (Buss, 2008). Later, Tinbergen (1951) offered a set of orienting strategy directives which have become known as the ‘four “whys” of behavior’.<sup>133</sup> The first directive suggests that one consider the immediate influences on behavior. For example, in Lorenz’s (1941) theory of imprinting this would be the movement of the mother and how it affected the baby ducks he was studying. The second directive advises the theorist to examine developmental influences or events during an organism’s life that caused behavioral changes. The “function” or adaptive purpose the behavior is meant to fulfill is the third key element. The last suggestion directs the theorist to contemplate the evolutionary or phylogenic origins of behavior; this refers to the sequence of events that explain the emergence of various adaptive mechanisms (Buss, 2008).

The emergence of the field of ethology eventually provided the groundwork for Bowlby’s (1969) attachment theory. Attachment theory combines ideas from Lorenz’s (1941) theory of imprinting and Tinbergen’s (1951) work on instinct (Bretherton, 1992). In addition, Bowlby makes some use of psychoanalytic concepts (e.g., separation anxiety, object relations).<sup>134</sup> The main focus of this theory is to understand how attachment contributes to survival and how this contributes to the formation and development of personality. Bowlby (1969) suggested that prolonged

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<sup>133</sup> These are used explicitly by some biosocial theorists (see for example Belsky, 1980 and Wilson and Herrnstein 1985). Most theorists in this area seem to adhere to at least some of these guidelines as well.

<sup>134</sup> The core of attachment theory is clearly ethological theory, but the psychoanalytic influence is also prominent. Bowlby (1969) incorporates several other aspects of other theories as well including control system theory, cybernetics, the notion of an internal working model of social relationships, and cognitive development.

separation from one's mother early in life could lead to an insecure attachment adaptation which would impair personality development and lead to behavioral problems. Later, Ainsworth, Blehar, Waters, and Wall (1978) identified several different insecure attachment styles which could be seen as an example of elaboration upon the original theory (Wagner, 1984). Ijzendoorn and Tavecchio (1987) have also argued that attachment theory is an example of a Lakatosian research program because of the existence of core set of ideas that have evolved through a clear line of research. Further, work in this area is clearly relevant to criminology since criminal behavior is one of many behavioral problems that could potentially emerge as a result of insecure attachments early in life. In fact, Bowlby's (1940) early research focused on juvenile thieves. He compared them to a group of "normal" children and found that 86 percent of the thieves diagnosed as affectionless psychopaths also had experienced prolonged maternal separation when they were young. More recently, Moretti, Da Silva, and Hollland (2004) have applied attachment theory to aggression in girls. These researchers found that males and females displayed different patterns of attachment, and that these differences are caused by gender-typed socialization practices. In each different pattern, aggression manifests itself in different ways and for different reasons. The theory guiding this research can be seen an attempt to elaborate upon attachment theory by specifying how gender plays a role in attachment and aggression (Wagner, 1984).

There are few direct attempts to apply Bowlby's (1969) theory in the criminological literature; however, Katz (1999, 2002) has called attention to its potential for use in integrated models. This theory also seems to be compatible with

Hirschi's (1969) theory of social bonding as both emphasize the effect attachments have on behaviour.

For several decades, there was little revolutionary activity in the biological sciences. Finally, E.O. Wilson (1975) proposed a new synthesis called "sociobiology". Essentially, sociobiology attempted to reduce the findings of the social and behavioral sciences to biology (Lilly, Cullen and Ball, 2007). This was a clear challenge to social scientists (especially Marxists) and those embracing "radical environmentalism" (Buss, 2008). Perhaps more importantly, Wilson's work synthesized numerous concepts and several important theories under a general framework. The unit theories subsumed under this theoretical umbrella included inclusive fitness theory (Hamilton, 1964), reciprocal altruism theory (Trivers, 1971), parental investment theory (Trivers, 1972), and parent-offspring conflict theory (Trivers, 1974). In addition, much of Wilson's previous work in biology is also accommodated by this framework (e.g., MacArthur and Wilson, 1967).

Clearly, E.O. Wilson's (1975) initial work on sociobiology seems to be an example of metatheoretical activity; specifically, it is an attempt to formulate an orienting strategy. He suggests the proper conceptual schemes important to the study of behavior and makes assertions about the nature of the subject matter under investigation (Wagner, 1984). Indeed, Buss (2008) points out that Wilson (1975) had little to no empirical evidence<sup>135</sup> to support his views on humans. Instead, Wilson relied upon theoretical extrapolations from research on animals to inform his views about human behavior. It is important to bear in mind that drawing on data in this

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<sup>135</sup> One characteristic of orienting strategies is their inability to be directly tested. The success of an orienting strategy usually depends on whether it can uncover new puzzles for theorists to solve (Wagner, 1984).

fashion is not necessarily a problem; rather, it is part of a particular orienting strategy and gives the theorist a starting point from which to further develop unit theories dealing with specific phenomena.

Despite scathing critiques from sociologists and “radical environmentalists” in other areas such as psychology and anthropology, sociobiology has influenced theories in these areas. Specifically, a variant orienting strategy has emerged in sociology under the label “biosociology” (Walsh, 1995). One could argue that biosociology also fits into the category of orienting strategy since it is a perspective responsible for guiding theory construction. Biosociology is much less ambitious than sociobiology and is concerned with a different group of phenomena. Sociobiology seeks to explain the behavior of all animals (including humans) whereas biosociology focuses on explaining the behavior of humans specifically. Further, biosociology focuses on explaining the “hows” of behavior, rather than the “whys” of human behavior which are the focus of sociobiology. Sociobiology is more concerned with very general, distal explanations while biosociology focuses on proximate causes and mechanisms (Walsh, 1995).

The final development relevant to the biosocial research program in criminology is the rise of evolutionary psychology. Evolutionary psychology has been developed by several biological and psychological theorists. Some key founders include Tooby and Cosmides, Buss, and Pinker (Buss, 2008).

Evolutionary psychology arose out of a flurry of intellectual activity in psychology.<sup>136</sup> Psychology, like biology, went through a series of changes throughout

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<sup>136</sup> These events are described in greater detail in the previous chapter on psychological research programs.

the 19<sup>th</sup> and 20<sup>th</sup> centuries. Sigmund Freud and William James, pioneers in the field of psychology, were greatly influenced by Darwin's theories. However, during the early-20<sup>th</sup> century, psychology entered a phase of "radical behaviorism" characterized by an abundance of learning theories.<sup>137</sup> Starting in the 1960s, anomalies began to crop up in the general learning model embraced by most psychologists. This eventually led to a "cognitive revolution" in psychology during the 1970s and 1980s. The new emphasis was on the functioning of the brain and cognitive processes that influence behaviour. Soon psychologists realized that biological knowledge (i.e., the modern synthesis) was very useful in understanding brain functions and other aspects of cognition. Evolutionary principles were applied to further understand these problems and evolutionary psychology was born.

Perhaps the earliest trace of a biosocial influence on theories of criminality is found in Eysenck's (1964) personality theory of criminality. This theory is a proliferation of Eysenck's (1952) general theory of personality and is, at its core, a psychological theory.<sup>138</sup> However, there is certainly some metatheoretical activity relevant to the biosocial orienting strategy in Eysenck's (1964) work as well. Rafter (2008) notes: "No significant change [in criminology] occurred until Eysenck published *Crime and Personality*, with its interactive, biosocial model. *Although Eysenck himself ignored this model's implications until very late in life*, others picked

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<sup>137</sup> Sociological explanations of criminality have received a great deal of criticism for their adherence to similar ideas. It seems particularly important to point out that psychology was also characterized by a preoccupation with environmental-learning explanations, and that this likely has much to do with the social context in which the disciplines developed. It could be argued (and many have) that the current preoccupation is explanations of behaviour that emphasize individual differences, risk factors, and control of behaviour (through crime prevention tactics or punishment) (See Feeley and Simon, 1992 and Garland, 2001 for interesting reviews of this current phenomenon).

<sup>138</sup> See the chapter about psychological explanations of criminality for an in-depth discussion of this earlier theory.

up on it, and today it dominates biocriminology ”(pg.246, italics added). This quotation implies that Eysenck’s (1964) work offered not only a unit theory but also some metatheoretical elements that contributed to the formation of a biosocial orienting strategy. Foremost amongst these was the notion that it is important to examine the interaction of biological and environmental factors to fully understand behavior. Eysenck and Gundjonsson (1989) eventually did propose a more outwardly biosocial theory that will be discussed toward the end of this chapter.

The developments described previously provide many of the key conceptual schemes and assumptions for the orienting strategy in the biosocial research program. For example, Buss (1990) has proposed that there are three main biological modes of analysis for studying personality and behavioral phenomena. These include evolutionary, behavioral genetic, and neuroscientific (or psychophysiological) approaches. According to Buss (1990), these represent different levels of explanation each with distinct assumptions and theories. Walsh (2002, 2009) has suggested that this conceptual scheme is also useful for organizing the biosocial research program in criminology. This conceptual scheme fits nicely within the model of theory growth that is being used in this dissertation. A quote from Buss (1990) can clarify this assertion:

Many misunderstandings surround the biological study of personality. One is that there is “a” biological perspective – a single, unified, monolithic approach. This view errs for two reasons (a) There are several distinct levels of biological analysis (e.g., evolutionary, behavioral genetic, and psychophysiological), each with distinct theoretical assumptions, content and methods, and (b) within each level, there are often competing theories about the same set of observations. (2)



This assessment seems correct; there is clearly a need to distinguish between different levels of analysis and to account for the various theories in each area. Buss (1990) seems to be referring to different branches within a theoretical research program. Indeed, interrelations will start to emerge between the biosocial unit theories of criminality with the application of Wagner's (1984) model of theory growth.

Evolutionary approaches are couched at the macro-level and are especially concerned with similarities amongst humans or groups of humans. In addition, theories in the evolutionary branch resemble Bernard and Snipes's (1996) notion of structural theories since they examine the structure of populations and seek to explain behaviors through distributions of various traits. These characteristics set the evolutionary theories apart from the behavioral-genetic and neuroscientific approaches as they focus more on processes and individual differences and appear to be more micro-oriented. However, each of these three approaches and their constituent theories can be seen as complementary because their principles are consistent across levels (Walsh, 2002, 2009; Walsh and Beaver, 2009). Bernard and Snipes's (1996) categorization scheme also supports this line of argument as they suggest that structure-process and individual differences theories are complementary. There are some striking similarities between this relationship and the one between the levels that emerged in the postclassical research program (i.e., routine activities theory, rational choice theory, environmental criminology, and low self-control theory). They address the same problem at different levels of explanation and analysis, but have a common orienting strategy.

To summarize thus far, three trajectories, (i.e., evolutionary, behavioral-genetic and neuroscientific) have emerged in this area offering complementary theories at different levels of analysis. Given that these theories are proposed at different levels of explanation and/or analysis, some aspects of their orienting strategies will be different; however, they also hold many common assumptions. These are depicted in Table 9. I will attempt to identify the common assumptions to clarify the orienting strategy used in this program.

First, all biosocial theories assume that behavior results from an interaction between biological and environmental factors (Eysenck and Gundjonsson, 1989; Ellis

**Table 9: Key Foundational Elements in the Biosocial Orienting Strategy**

- Behavior results from an interaction between biological and environmental factors
- Genetic and environmental influences on behavior are mediated through neurological and neurochemical factors
- Early childhood development is the key to explaining criminality

and Hoffman, 1990; Fishbein, 1990, 2001; Walsh, 2002, 2009; Robinson, 2004; Robinson and Beaver, 2009). Second, most biosocial theorists agree that genetic and environmental influences on behavior are mediated through neurological and neurochemical factors (Jeffery, 1978, 1990; Ellis and Hoffman, 1990; Robinson and Beaver, 2009). Third, biosocial theorists assume that there is a core set of universally condemned criminal acts, and that these should be the focus of theories attempting to explain criminality. Proponents of biosocial theories do not believe human actors have complete free will; however, they do not characterize actors as fully determined

either. Instead, they believe in conditional or “soft” determinism, and embrace a risk factor approach to theorizing (Fishbein, 1990, 2001; Lilly, Cullen and Ball, 2007). Finally, these theories use a developmental approach derived from psychology in that they assume early childhood development is of the utmost importance when attempting to explain criminality (Fishbein, 1990, 2001; Walsh, 2009; Walsh and Beaver, 2009; Robinson, 2004; Robinson and Beaver, 2009).<sup>139</sup>

### **Better Understanding through Science? The Observational Set of the Biosocial Research Program**

The biosocial criminology research program has made some notable contributions to the observational set of criminology. Wagner (1984) defines an observational set as the observational techniques, the database of observations, and their relevance to the unit theories in the theoretical research program. The stronger the observational set, the easier it is for theorists to clearly evaluate and fine-tune their theories; this can help to promote more efficient theory growth. The majority of these new data and observational techniques have come from the biological sciences. These new additions to the observational set fall into five main areas and will be described in turn.

First, the introduction of heritability research in the area of behavioral genetics (i.e., twin and adoption studies) has allowed biosocial theorists to gauge the impact of genetics and environment on criminality and antisocial behavior (see Christiansen, 1974, 1977; Mednick, Gabrielli, and Hutchings, 1977, 1984). More specifically, these

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<sup>139</sup> This should be distinguished from the developmental-life course approach embraced by theories in the developmental-life course (DLC) research program. DLC theorists believe that a person’s entire life course trajectory is important to understanding criminality and pay more attention to adolescent periods and adulthood transitions. These theories will be discussed in the next chapter.

studies suggested that certain traits that put people at risk for criminal behavior (e.g., impulsivity, aggressiveness, low IQ) may be passed down from parents to children. However, they have also indicated that these traits manifest themselves differently depending upon one's social environment (Raine, 1993; Fishbein, 2001; Walsh, 2002, 2009).

Second, biosocial theorists in criminology have imported research linking low autonomic nervous system activity and high skin conductance to antisocial behavior into criminology (Eysenck, 1964; Eysenck and Gundjonsson, 1989; Fowles, 1980, 1987). These observations are made using an electroencephalogram (EEG) which is "a reading of rhythmical and transient fluctuations of the electrical activity of the brain" (Hare, 1970, pg. 20). Third, recent advances in molecular genetics have made it possible to pinpoint genetically influenced biological mechanisms that produce different traits. In particular, DNA sequencing has allowed scientists to identify genetic markers that provide the location of specific traits such as aggression and impulsivity that may be involved with criminality (Walsh, 2009).

Fourth, more recent brain imaging techniques imported from the field of neuropsychology have provided scientists with detailed images of the brain. These images have given rise to a greater understanding of the structures and function of the brain (Fishbein, 2001; Walsh, 2009). Techniques for studying structural aspects of the brain include computerized tomography (CT) and magnetic resonance imaging (MRI). Functional aspects of the brain are typically studied using positron emission tomography (PET), regional cerebral blood flow (RCBF), and functional magnetic resonance imaging (fMRI) (Raine, 1993; Fishbein, 2001).

Evolutionary theories of criminality could potentially make use of several specialized observational sets. Archaeological records and life history data gathered from public records can be used to track changes in diet, marriage, causes of injury, disease, and death (Buss, 2008). Initially, it may not be clear how these sources of data are relevant to the study of criminal behavior; however, definite links can be identified. For example, changes in marriage and mating routines may influence family structure, which is known to have an impact on crime and criminality. Some have argued that increases in single-parent families resulting from more incidence of divorce have given rise to higher rates of delinquency and crime (Gottfredson and Hirschi, 1990). Changes in diet (e.g., more sugar and increased exposure to lead and toxins), especially in childhood, have been linked to juvenile behavioral problems (e.g., conduct disorder and attention deficit disorder), which can later translate into risk for adult criminality (Raine, 1993; Robinson, 2004; Anderson, 2007; Walsh, 2009).

Data from contemporary hunter-gatherer societies is also useful in evaluating evolutionary hypotheses since many are not directly testable (Buss, 2008; Walsh, 2009). This information could also be used to gauge the effects of modern society on various forms of human behavior, including criminality. Finally, simply paying attention to changes in human products and inventions (e.g., technology and food) can provide insight into diet and sexual behavior (Buss, 2008). Again, these changes in habit and taste can indirectly affect criminality in myriad ways. For example, the advent of the Internet has led to increased cases of identity theft and has provided new

opportunities for sex offending. Viewing these shifts through an evolutionary lens could produce new opportunities for theorizing about crime.<sup>140</sup>

Now that the observational set of the biosocial research program and its relevance to criminology has been clarified, a review of the specific unit theories in this program is in order. As alluded to previously, biosocial theorists in criminology have suggested that there are three complementary levels of explanation, each with different unit theories and assumptions, but all sharing several common principles or an orienting strategy (Fishbein, 2001; Walsh, 2009). These various branches will be covered in turn starting with behavioral genetics and continuing with the evolutionary theories of criminality, and ending with a discussion of neuroscientific unit theories of criminal behavior.

### **Behavioral Genetics and Criminality: Understanding the Dynamics of Genes and Environment**

Many of the theories in the area of behavioral genetics cannot be easily separated from the other major theories of the biosocial research program. The reason for this is the fusion of evolutionary and genetic principles or the modern synthesis. Genes are inherited, and different combinations of genes form different traits. Traits that provide advantages by encouraging survival and successful reproduction will be passed down to future generations; this is the basis of evolutionary theory. Further, it is clear that neuroscientific traits such as executive function problems and neurotransmitter imbalances can also be passed down. Criminality is not a result of genes per se, but

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<sup>140</sup> This approach is reminiscent of that taken by many postclassical theorists, especially those who embrace the routine activities approach (see, for example, Felson, 2002). However, these theorists focus more on ecological aspects of crime and how changes in society affect opportunities for crime (i.e., target distribution, routines of victims) and motivated offenders.

rather the result of particular combinations of traits and their interactions with the environment that produce specific types of behavior some of which may be criminal (Fishbein, 2001; Walsh, 2009). So, to a certain extent, criminality, or more appropriately predispositions for criminality can be inherited. It is possible to identify some models and unit theories from the field of behavioral genetics that have filtered into the field of criminology.

The area of behavioral genetics provides some theoretical models which offer guidelines for formulating theories of criminality. Examples include Lykken's (1995), Fishbein's (2001) use of the diathesis-stress model, and Walsh's (2002, 2009) use of gene-environment interaction and correlation. The diathesis-stress model was originally proposed by Zubin and Spring (1977) to explain schizophrenia. This model suggests that individuals may have biological weaknesses that may lead to certain types of negative behavioral responses, which may interact with environmental risk factors to produce pathologies or problematic behaviors. Fishbein (2001: 12-13) mentions several different ways in which nature and nurture can interact with one another including biochemistry plus social hierarchy, temperament plus learning, genetic liability plus family functioning, neurotoxicity plus environmental enrichment, and cognitive ability plus experience. This provides a number of starting points from which one can start to theorize using the diathesis-stress model.

Lykken's (1995) use of this model is more precise as he specifies that criminality is a result of the interaction of between one's level of conscientiousness, impulses created by criminal opportunities, and a lack of proper socialization or inadequate parenting. A low level of conscientiousness is conceptualized as a trait and is thought

to make one prone to giving to temptations, which can lead to the person becoming involved with crime. Proper socialization and effective parenting can both function as external controls, so people with low levels of conscientiousness are not destined to be criminals.

Walsh's (2002, 2009) use of gene-environment interaction (GxE) and gene-environment correlation (rGE) has much in common with the diathesis-stress model. GxE interaction describes how genes and "accumulated experience" (i.e., phenotypes) interact with the environment to produce different behaviors (Walsh, 2009: 37). rGE can be thought of as shorthand for what is really genes + accumulated experience/environment correlation. Three distinct types of rGE correlations are also discussed: passive, reactive, and active. Passive correlations occur in an individual's formative years and refer to when the environment exerts an influence on an individual. For example, a child with educated and intellectual parents will, in most cases, be exposed to an environment that encourages learning and intellectual pursuits and will also receive related genes that produce higher intelligence. Evocative correlations reveal how a child's traits may elicit positive or negative responses from parents, teachers, and peers. Finally, active correlations, also called "niche picking", refer to how mature individuals seek out certain environments based upon their pre-existing traits (Walsh, 2002; 2009).

According to Wagner's (1984) model of theory growth, Lykken's (1995) and Fishbein's (2001) use of the diathesis-stress model and Walsh's (2002; 2009) application of GxE interaction and rGE correlation can be seen as examples of proliferation into the field of criminology. In other words, an existing theory from an



outside discipline is being applied to a new explanatory domain. They could also be considered variants of one another because they contain similar explanatory mechanisms.

More often than not, specific behavioral genetic theories attempt to identify some genetic trait or a suite of traits, and suggest that they are related to criminal or antisocial behavior. In some cases, these theories are little more than simple correlations. To put it differently, no real explanatory mechanism has been identified; instead, the gene or trait itself is thought to put an individual at an increased risk for criminal behavior (Bunge, 2004, 2006).

Perhaps the earliest and best-known example of a genetic trait that has been connected to criminal behavior is the controversial and well-publicized XYY “supermale” syndrome.<sup>141</sup> In 1961, researchers discovered a man with an extra ‘Y’ or male sex chromosome; a paper was later published about this discovery in a prestigious medical journal (Anderson, 2007). Following this, many people (including scientists and researchers) jumped to the conclusion that this abnormality would lead to increased “maleness”, which would later translate into an increased tendency to commit aggressive and antisocial types of behavior. Soon, studies started to surface that reported that prisoners had higher than expected levels of the XYY syndrome. The media misrepresented these findings, claiming that scientists had discovered a “criminal gene”.

Of course, there were serious problems with the methods that were being used and the conclusions being drawn from them. For example, the samples used in many of

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<sup>141</sup> This syndrome is unusual because it cannot be passed on to one’s offspring because it results from random mutation (Raine, 1993; Anderson, 2007). Since it is not heritable, it has no connection to evolutionary theory.

the studies lacked proper control groups. In many cases, researchers examined men in institutions for the criminally insane, and found that the men in these institutions who also had XYY syndrome were exceptionally violent. When studies were done that corrected these problems, the findings were quite different. While slightly more prone to commit crimes, the men with XYY syndrome in normal populations were by no means more violent than their counterparts (Raine, 1993; Anderson, 2007). In addition, the effect of environment and peer interaction was almost entirely ignored. For example, because of the characteristics of the syndrome (e.g., severe acne, slight mental retardation and large size), a boy with XYY syndrome may be treated differently by his peers and may deal with problems in different ways than a non-XYY child. XYY males may be teased and bullied (because of the acne and retardation) and may be more likely to respond aggressively because they tend to be bigger and stronger than other males. Parents may also treat an XYY child differently as compared to another child (Anderson, 2007). It should be made clear that more often than not problems arising from the XYY syndrome can be mediated through proper parenting and a positive environment.

There are several other traits that researchers have connected to criminal behavior; these include low IQ or intelligence (Walsh, 2003) and the underarousal of the autonomic nervous system (ANS) (Eysenck, 1964; Mednick, 1977). In addition, many neurochemical abnormalities connected to antisocial and aggressive behavior have been located in the genes; these include monoamine oxidase A (MAOA) promoter polymorphism (Brunner, 1993), the 5HTTLPR serotonin transporter polymorphism (Beaver, Ratchford, and Ferguson, 2009), DRD2 dopamine receptor

polymorphism, (Delisi, Beaver, Vaughn and Wright, 2009) and DAT1 dopamine transporter and 5HTT serotonin transporter polymorphisms (Vaughn, Delisi, Beaver and Wright, 2009). While these discoveries do provide valuable information that can be used as a basis for further theorizing, they do not represent a set of interrelated unit theories. Instead, they can be seen as examples of empirical research meant to specify correlations between various genetic traits and criminality.

### **Rediscovering Man as a Part of Nature: Evolutionary Theories of Criminality**

The evolutionary trajectory of the biosocial criminology research program contains various interrelated unit theories (Walsh, 2009). According to the model proposed by Bernard and Snipes (1996), these theories appear to be structurally oriented, meaning that independent variation in criminal behavior is attributed to variation in one's physical environment and the influence this has on the heritability of certain traits. Most of the unit theories in this area can be seen as extensions and proliferations of Darwin's (1871) theory of sexual selection.<sup>142</sup> In addition, there have been efforts to develop aspects of an orienting strategy that are particular to the unit theories in this area. This seems to be happening alongside, and in response to, unit theory development.

The initial challenge for all of these theories is to explain how antisocial and criminal behavior can be conceptualized as adaptive responses to one's environment. Most people fail to understand how these sorts of behaviors could possibly be

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<sup>142</sup> Darwin's (1859) theory of natural selection is also relevant, and is technically a unit theory; however, the principle of natural selection is assumed to be true (Buss, 2008). This indicates that it has become such an important core idea in the program that it might be better thought of as part of the orienting strategy (Wagner, 1984). Incidentally, Popper (1976) has also argued that Darwinism is closer to a "metaphysical research program" than a true theory.

advantageous to survival (Raine, 1993; Anderson, 2007; Walsh, 2009). Indeed, early criminologists using evolutionary theory assumed that criminals were less evolved than law-abiding citizens (Lombroso, 1876). From a modern point of view, antisocial and criminal behavior seem to lead to more disadvantages since most serious criminals are caught and punished at some point. Apprehension and conviction may also result in a loss of or alienation from family, friends, and society in general, and a reduction in advantages crucial to survival and reproduction. The key is to imagine how these negative sorts of behaviors might have provided advantages during earlier periods of human history, and why these behaviors persist in modern day settings. Before discussing specific unit theories in this area, it is important to be familiar with some key concepts from evolutionary theory.

Reproductive fitness is at the heart of most theories in the evolutionary trajectory and has obvious connections to Darwin's (1871) theory of sexual selection, and its elaboration, and Trivers's (1972) parental investment theory. The notion of reproductive fitness merely refers to an organism's potential for genetic representation in the next gene pool. In many cases, males will resort to alternative reproductive strategies that emphasize mating effort over parenting effort. Overemphasis on mating behavior often results in a tendency towards antisocial behavior (Raine, 1993; Ellis, 2003). The lack of emphasis on parenting effort raises the likelihood that children will be at risk for antisocial behavior because they will not be socialized properly.

Another important concept is the idea of "selfish genes" (Dawkins, 1976). Most evolutionary theorists believe that selfishness is a natural state since it contributes to

an organism's overall fitness (Raine, 1993).<sup>143</sup> Given that selfishness seems natural from an evolutionary point of view, some observers have pointed out that any kind of altruistic or selfless behavior requires a special explanation; inclusive fitness (or kin selection) and reciprocal altruism are concepts from theories that attempt to explain why organisms help each other. Inclusive fitness theory was originally proposed by Hamilton (1964) and suggests that organisms will help other organisms that share their genes (even if they are not directly related). Reciprocal altruism theory was proposed by Trivers (1971), and explains the conditions under which mutually beneficial relationships between non-kin can evolve. As will be shown later, these theories are especially important to understanding how antisocial behavior strategies emerge in human populations.

One of the earliest attempts to use evolutionary theory to explain criminality is Ellis's (1987) r/K theory of criminal behavior. This theory is actually an extension of Rushton's (1985) differential K theory which is a direct theoretical elaboration of MacArthur and E. O. Wilson's (1967) concept of r and K strategies of reproductive selection.<sup>144</sup> According to Wilson (1975), r and K strategies represent the two extremes of the reproductive continuum in organisms. r-strategists produce many offspring and invest little effort and resources in parenting whereas K-strategists produce very few offspring and invest a great deal of time and energy in caring for their young. In MacArthur and Wilson's (1967) original work, r-strategists are conceptualized as "opportunistic species" that are adapted for life in hostile and

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<sup>143</sup> This is strongly reminiscent of control theories in criminology that assume people are naturally selfish or pleasure seeking.

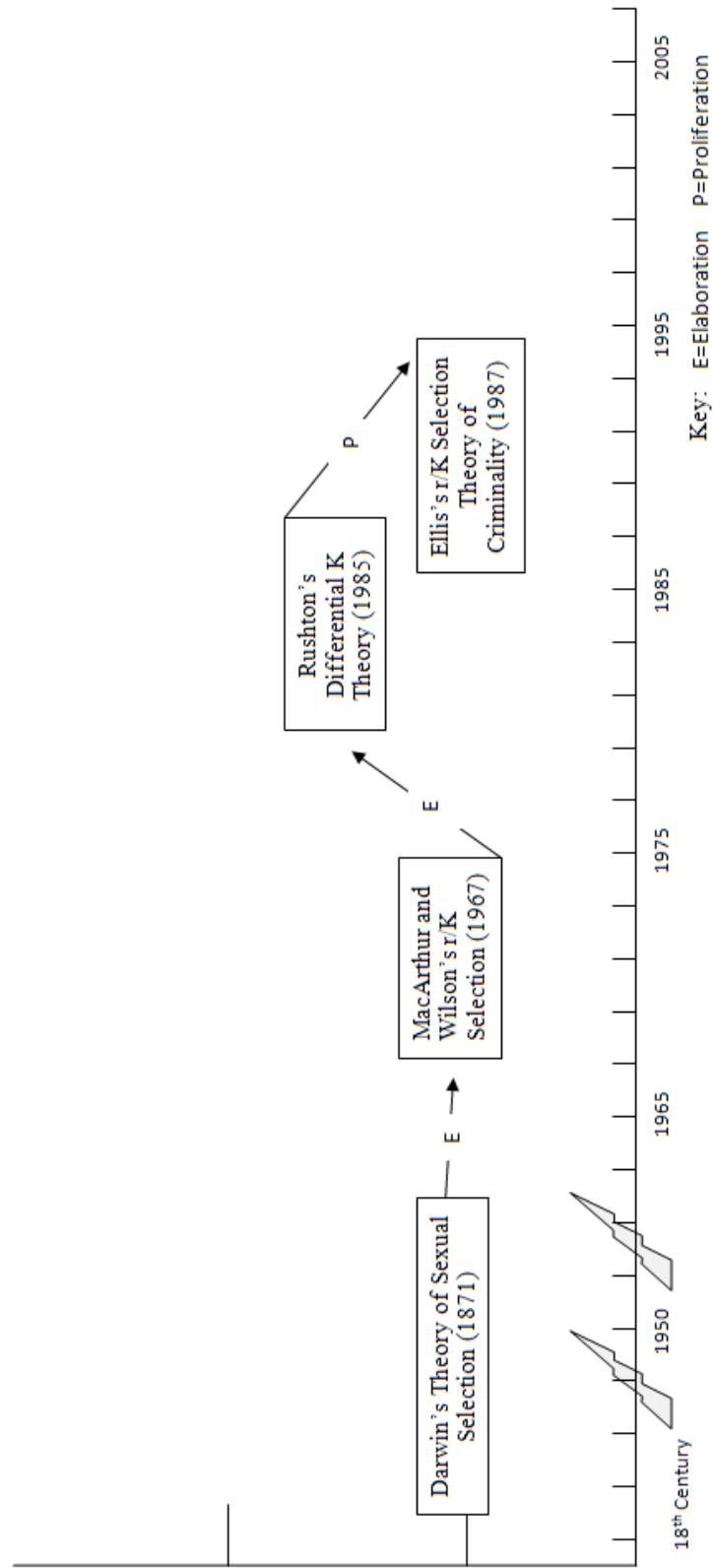
<sup>144</sup> This idea was later subsumed under Wilson's (1975) sociobiological framework.

unpredictable environments (e.g., oysters and insects). K-strategists are would be exemplified by larger mammals, especially apes, including humans (Wilson, 1975).

A graphical depiction of the development of r/K theory can be seen in Figure 30 on page 273. Rushton (1985) was particularly interested in individual and within species differences in r and K strategies. Specifically, he claims that humans vary on the r/K continuum, and that individuals prone to assume r strategies will also exhibit certain characteristics (e.g., larger families, low IQ or intelligence, stronger sex drives, high levels extraversion, and lower levels of law-abidingness). Further, Rushton suggests that racial differences in r and K strategies can be observed in humans. Mongoloids (or Asians) are thought to be at the extreme K-end of the spectrum, Negroids (or Blacks) are at the r-end, with Caucasians (or Whites) somewhere in the middle.

Ellis's (1987) r/K theory of criminal behavior argues that victimful criminal behavior is r-selected, and that many of the r-selected traits are correlated to criminality. For example, people with criminal histories tend to have shorter gestation periods, earlier onset of sexual activity, higher levels of promiscuous sexual behavior, less stable bonding patterns, lower levels of parenting effort, and shorter life expectancies. Conversely, K-selected strategists are more likely to be non-criminal and parent non-criminal offspring. This is a clear example of the proliferation of Rushton's (1985) earlier differential K theory into the explanatory domain of criminality. Ellis has taken the original theory and applied it to explain differences in criminality between racial groups (Wagner, 1984).

Figure 30: Ellis's r/K Theory



While certain aspects of this application of r/K theory are interesting, there are clearly problems with theories that propose causal connections between race and crime. These concerns are all interrelated to a certain degree but can still be broken into some general categories. There are three broad areas of concern including methodological problems, problems with the internal consistency of the application of the central theory, and external problems related to sociology of knowledge issues.

Numerous methodological problems plague Rushton's (1985) original work on differential K theory; these have been passed on to other theories and research that use his formulation as a starting point (Ellis, 1987; Walsh, 2004, 2009; Wright, 2009). First, several commentators have pointed out that there is little empirical evidence<sup>145</sup> to back up claims of the existence of consistent differences between various racial groups (Zuckerman and Brody, 1988; Gabor and Roberts, 1990; Lieberman, 2001). Second, some of the statistical techniques used by Rushton (1985a, 1985b, and 1988) are, at best, questionable, if not highly problematic. For example, he uses weighted means when evaluating international data on racial crime rates based on Gray's (1975) reformulations of Eysenck's (1967) dimensions of personality. To summarize, Rushton (1985) found that Negroid (or Black) ranked highest on measures of disinhibited (E) and lowest on measures of inhibited (N) indicating a stronger tendency towards criminality than other races.<sup>146</sup> However, Rushton (1985) does not report that he obtained these findings by weighting Ugandan data more heavily than

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<sup>145</sup> Problems in Rushton's (1985) original work are cogently pointed out by the authors cited above, and require no further discussion here. However, there also seems to be citation problems with more recent work on race on crime. Walsh's (2004) treatise on race and crime includes in-text citations, but lacks a proper bibliography.

<sup>146</sup> As in the original differential K theory, it was found that Asians, followed by Whites, had the lowest tendency to commit crime.



Nigerian data; this served to artificially inflate the mean of his Negroid category.<sup>147</sup> Further, when other researchers adjusted the method by using non-weighted means and added the category of psychoticism (P) to the analysis, the differences between races disappeared (Zuckerman and Brody, 1988). Psychoticism is normally considered to be more relevant to differences in restraint and impulsivity than either extraversion or anxiety. Some argue that this is the most accurate personality predictor of violent and serious crime (Eysenck, 1967; Eysenck and Gundjonsen, 1989). Indeed, Buss (2008) asserts that there is actually more variation internally amongst various African populations than between African populations and other racial groups (i.e., Caucasians and Mongoloids).

Third, there are issues with the sources these theorists use to support their claims. For instance, Gabor and Roberts (1990) point out that in later work Rushton (1988) cites statistics that were reported in the British newspaper, *The Daily Telegraph*, claiming that Blacks accounted for 50 percent of crime in the U.S. and Britain<sup>148</sup> This is obviously a considerable exaggeration as official statistics from the U.S. Department of Justice contradict this claim with regards to the U.S., and suggest that Blacks were charged for roughly 30 percent of all reported crime in the U.S (Roberts

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<sup>147</sup> The higher rates of crime and violence in Uganda might be attributable to the military dictatorship imposed under the rule of Idi Amin. His rule lasted from 1971-2003, and was characterized by a great deal of violence and disorder. Nigeria is also known to be one of the more economically successful African nations. It seems obvious that weighting the statistics from a war-torn country more heavily while minimizing statistics from a more successful and peaceful African country would make it appear that Blacks are prone to violence and crime.

<sup>148</sup> Curiously, Walsh (2004: 25) also uses a quote from *The Daily Telegraph* which claims that Blacks are responsible for 80% of violent crime in the U.K. The quote is credited to a former Commissioner of the London Metropolitan Police and has an in-text citation to Darbyshire (1995). Given the problems with Rushton's (1988) earlier use of a statistic from the same paper pointed out by Roberts and Gabor (1990), it seems as though one must question the source and accuracy of these statistics. However, since Walsh's (2004) *Race and Crime* contains no bibliography, it was nearly impossible to further research the legitimacy of the more recent statistic (a basic Internet search on Google yielded no results).

and Gabor, 1990). Even if using race as an independent variable was not problematic when using official statistics, a sole reliance on official statistics without any reference to other observational sets (e.g., victimization surveys and self-reports) is itself an issue. Indeed, when these other sources of data are included in the analysis, racial differences begin to disappear (Roberts and Gabor, 1990).

In addition to the various methodological problems already discussed, there are several important concerns with the internal logical consistency of the racial portion of differential K theory. The theory rests on the assumption that there is a connection between crime and race which is mediated through IQ. The underlying theoretical argument here is that IQ is connected to cranial capacity and that cranial capacity varies with race. Specifically, individuals in the Negroid groups are thought to have the smallest cranial capacity, and therefore the lowest IQs making them more prone to criminal behaviour. Caucasoids are in the middle, with Mongoloids on top of the racial hierarchy (Rushton, 1985b; Ellis, 1988; Walsh, 2004, 2009; Wright, 2009).

There are problems with the general explanation of how cranial capacities developed. The standard explanation seems<sup>149</sup> to be a modified version of the *Out of Africa theory* (OOA) of human origin and migration (Buss, 2008; Wright, 2009). OOA theory suggests that roughly 50,000-100,000 years ago a group of more intelligent<sup>150</sup> humans migrated out of Africa into the more hostile Eurasian climates. According to the theory, in order to adapt to these conditions, the migrating

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<sup>149</sup> I use “seems” because it is not at all clear where Wright (2009: 140-141), a proponent of this theory, is getting his information. He makes many claims and then fails to support them with any citations.

<sup>150</sup> At one point, Wright (2009) claims that the humans who migrated were more intelligent than the humans that stayed behind in Africa. Later, he argues that the harsh environmental conditions experienced by the migrating humans eliminated all but the most ingenious individuals from the group thereby increasing intelligence in humans that would later become Europeans and Asians. He never makes clear which was more influential in developing what he assumes is the superior intelligence of Europeans.

populations (which later became Europeans and Asians) developed larger brains, more sophisticated tools and dwellings, and showed a greater overall adaptiveness than those who stayed behind in Africa (i.e., Black people) (Wright, 2009). These differences are thought to be reflected today in the overrepresentation of Black people in the criminal justice system and also their lower IQ scores (Ellis, 1988; Rushton, 1988; Walsh, 2009).

While this argument may appear at first glance to be somewhat valid, upon closer examination there are certain anomalies that require further explanation. A good example is the overrepresentation of Natives in North American criminal justice systems (LaPrarie, 1989; Griffiths, 2010 as cited in Roberts and Gabor, 1990). The OOA theory proposed above makes the opposite prediction as Natives are most closely related to Asians, and therefore should be less criminally prone than both Whites and Blacks (Roberts and Gabor, 1990). Based on the theory presented by Rushton (1988) and supported by Walsh (2004), Wright (2009) and others, one would assume that the early North American migrants also faced at least as harsh (if not harsher) environmental conditions as the Eurasian populations. This means that Natives should actually have higher IQs and low rates of criminal justice system involvement; however, this is clearly not the case (Roberts and Gabor, 1990). It is important to bear in mind that the experiences of Natives and Blacks hold much in common. Both had an alien culture imposed upon them, both were exploited, both have historically occupied the lower rungs in the social hierarchy and both have faced hundreds of years of institutionalized racism and discrimination in North America. In addition, both races were at one time characterized as savages and less evolved than

White people. Further, high concentrations of both groups live in the most undesirable and crime-ridden areas of the U.S. and Canada (i.e., reservations and inner-city ghettos). It seems abundantly clear, that some sort of sociological explanation is required here (Roberts and Gabor, 1990).<sup>151</sup> It is not hard to see the relevance of social disorganization, strain, control, social learning and labelling theories to explaining differences in the criminal justice system overrepresentation of these groups.

Finally, proponents of this theory never seem to mention that this classification system mysteriously changed sometime during the 20<sup>th</sup> century. In earlier psychological research, Whites occupied the top of the hierarchy followed by Asians with Blacks at the bottom. Curiously, a shift in the classification system occurred when many Asian countries (e.g., Japan, Korea, and China) were growing economically and gaining in political power globally (Lieberman, 2001). This illustrates how social context can affect ostensibly “scientific” activity.

The last point provides a transition into the last (and perhaps most disturbing) set of problems which pertain to sociology of knowledge issues. Proponents of racial explanations of criminality often don the “mantle of science” to defend themselves against the charges of racism that are often levelled by their critics. Some biosocial theorists portray themselves as the modern day descendents of Galileo and Darwin who are valiantly fighting against the wilful ignorance of sociologists and other members of society who take issue with their theories (Ellis and Hoffman, 1990, 2003;

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<sup>151</sup> Proponents of these racial theories of crime do pay lip service to sociological explanations; however, they give little credit or consideration to them. Rather, sociological explanations are typically portrayed as naive excuses offered by liberal academics for the moral shortcomings of certain racial groups (see, for example, Walsh, 2004).

Walsh, 2003, 2004, 2009; Wright, 2009). While there may be a kernel of truth in their argument, a careful reading of the biosocial literature on racial connections to criminality reveals numerous oversights, misrepresentations of the work of others (especially anyone offering a critique of their theories), and suspicious funding affiliations, all of which will be described in turn.

As Rafter (2008) suggests, many biosocial criminologists demonstrate an ignorance of or lack an understanding of the work that came before them. Further, they rarely fully address the critiques levelled at their work (Gabor and Roberts, 1990; Lieberman, 2001). In fact, some of the responses to criticisms offered by biosocial theorists are merely misrepresentations of the original critique or theory.<sup>152</sup> An excellent example of this is Walsh's (2004) discussion of the work of Diamond (1997).

Diamond's (1997) theory of development presented in *Guns, Germs, and Steel*, for example, suggests that Asians and Europeans have dominated the world more through chance than by virtue of being more intelligent than other races. Specifically, he claims that geographical location, technological advancement, resistance to disease, and access to valuable resources tipped the scales in favour of Asians and Europeans. Walsh (2004) seriously distorts this argument by taking a quote out of context, and makes it sound as if Diamond (1997) is arguing that Black people are genetically superior to White people. In the passage quoted by Walsh (2004), Diamond (1997: 21-

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<sup>152</sup> There are also numerous examples of misrepresentations of prominent Black sociologists and leaders (e.g., W.E.B. DuBois, Martin Luther King, and William Julius Wilson) throughout the biosocial criminology literature (for example, see Walsh, 2004, 2009). More specifically, quotes are regularly taken out of context and then are used to justify a connection between race and crime. In many cases, these Black leaders are referring to problems in Black families that were likely created by slavery, and economic changes taking place during the 1960s and 1970s that led to widespread poverty in Black communities in the United States. No examples were found in which the Black leaders were suggesting that Black people were genetically inferior and more prone to crime than other races.

22) is discussing possible explanations for differences in wealth between Europeans and New Guineans. He makes it clear that it is *his belief*, based on his personal experience, that people from hunter-gatherer societies have superior intelligence compared to people living in modern societies. This is actually an evolutionary argument and is also not necessarily based upon race, since Diamond (1997) claims that the comforts of modern society have eliminated many of the dangers that would select for high intelligence (e.g., avoiding predators, finding food in the wild, and chronic tribal warfare). Diamond (1997) implies that people of European and Asian descent happen to enjoy these benefits at higher rates than those of African ancestry. However, it would be difficult, if not impossible, to test this argument so Diamond (1997) embraces a different theory. In fact, Diamond is not making a genetic or evolutionary argument but rather an environmental-ecological argument that minimizes the differences between races.

Lastly, the funding affiliations of some prominent biosocial theorists and researchers are quite suspicious (Rose, 2000). Rushton is the current president of the Pioneer Fund, an organization that regularly funds research devoted to proving a connection between race and IQ. The Pioneer Fund also happens to be on the Southern Poverty Law Center's (SPLC)<sup>153</sup> watch list of hate groups (Mehler, 1999). The SPLC website contains the following the entry about the Pioneer Fund under intelligence files about hate groups:

Started in 1937 by textile magnate Wickliffe Draper, the Pioneer Fund's original mandate was to pursue "race betterment" by promoting the

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<sup>153</sup> The Southern Poverty Law Center is a non-profit legal organization devoted to fighting hate, bigotry and discrimination and is internationally known for its tolerance education program. It is generally considered a reliable source about white supremacist and other racist groups in the U.S. and Canada.

genetic stock of those "deemed to be descended predominantly from white persons who settled in the original thirteen states prior to the adoption of the Constitution."(<http://www.splcenter.org/get-informed/intelligence-files/groups>)

The Pioneer Fund has responded to some of these allegations with a link on their website titled "Controversies" (<http://www.pioneerfund.org/Controversies.html>). In most cases, these responses consist of attempts to deflect any allegations of racism by suggesting that grantees of the Pioneer Fund are purely objective scientists who are not particularly interested in finding specific racial connections to traits like IQ and criminality. Rather, grantees and members are portrayed as "race-realists" or researchers who believe that race is "a natural phenomenon to observe, study, and explain." (<http://www.pioneerfund.org/Controversies.html>, question #8). They believe that human race is a valid biological concept, similar to sub-species or breeds or strains." In addition, they dismiss both critical academic reviews and negative media coverage as political propaganda.

The various problems with differential K theory and r/K theory mentioned above are not meant to imply that these theories have absolutely nothing to offer or to deny that there are clearly some superficial differences between races. However, it seems reasonable that we should expect biosocial theorists to adequately address criticisms leveled at their theories; they have clearly failed to do so (Roberts and Gabor, 1990). Further, the complete omission of sociological factors from these theories will inevitably lead to racist explanations of criminality and racist crime control policies when the theories are translated into practice. It is important to bear in mind that this does not mean that all evolutionary and biosocial explanations are racist or focus

solely on race. Indeed, to dismiss all as such would be a great loss to our understanding of criminal behavior.

Belsky's (1980, 1991) theory of conditional adaptation is an excellent example of an attempt to introduce more environmental and sociological factors into an evolutionary theory of criminal behavior. The development of this theory is depicted in Figure 31 on the next page 283. In the initial article by Belsky (1980), the emphasis is more on metatheorizing than on proposing a unit theory.<sup>154</sup> Specifically, Belsky (1980) seems to be refining an orienting strategy for his theory because he is using Tinbergen's (1951) ideas that were originally part of the ethology movement. As described earlier, Tinbergen suggested four important aspects to understanding behavioral development. These aspects are immediate, developmental, functional (or adaptive) and evolutionary (or phylogenetic) influences on development. Burgess (1978) applied these ideas in his model of child maltreatment.

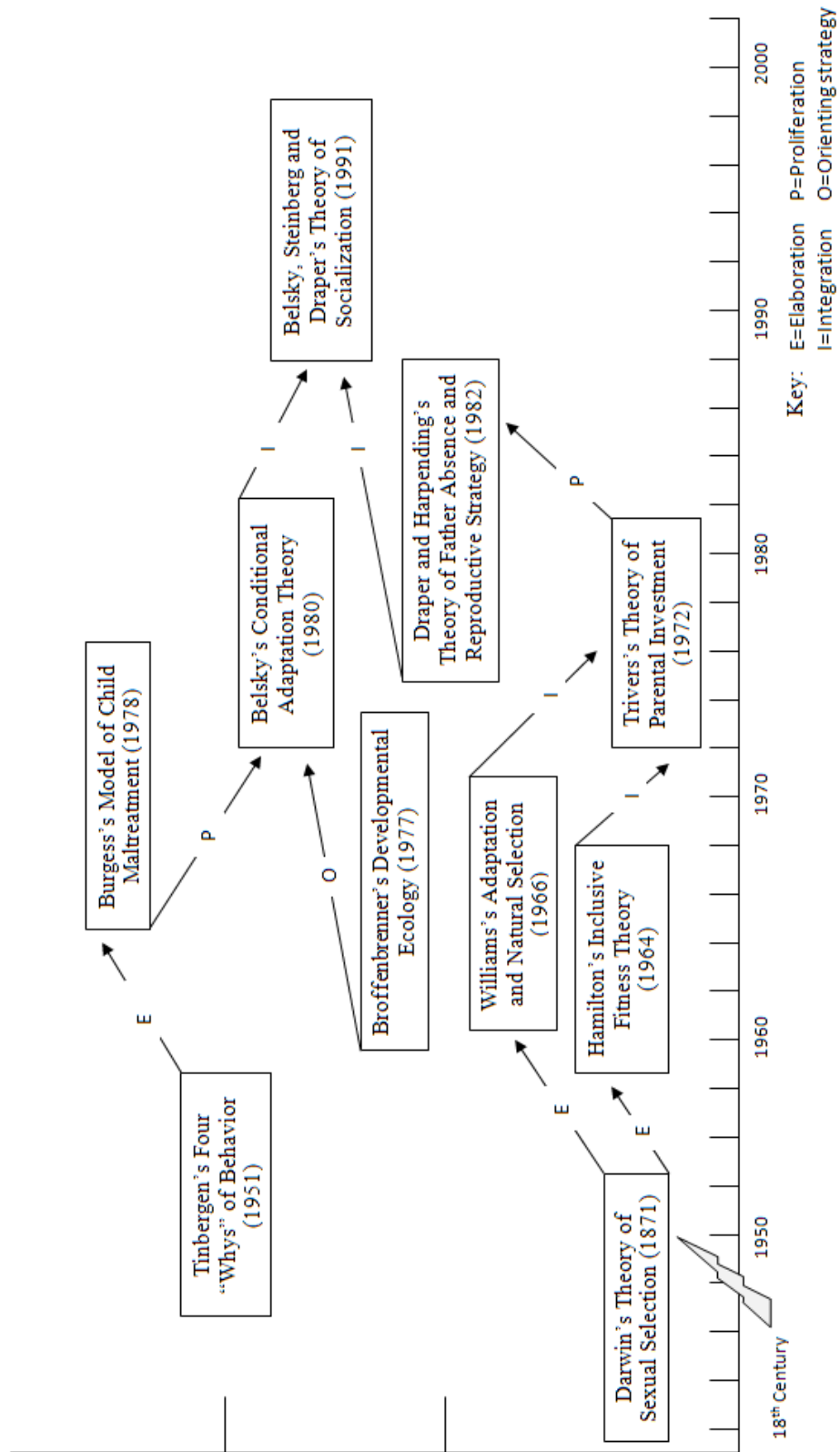
Belsky (1980) extends Burgess's original model and fuses this with ideas from Bronfenbrenner's (1977) developmental ecology. Bronfenbrenner was concerned with the context of development, and suggested that there are four important levels of ecological space that also help shape behavior including the ontogenic development and the micro, macro, and exogenic levels. So, Belsky's (1980) theory examines several different explanatory levels starting with the ontogenic developmental factors or the background characteristics suggested by Tinbergen (1951), but he also extends the scheme by looking at how micro (e.g., family), macro (e.g., community), and exo-

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<sup>154</sup> It is important to realize that the explanatory domain of the early version of conditional adaptation was on child maltreatment. Later, Belsky, Laurence and Draper (1991) proposed a more specific unit theory and shifted the emphasis to socialization which is relevant to understanding the emergence of antisocial or criminal behaviour.



**Figure 31:** Belsky's Conditional Adaptation Theory



systems (e.g., cultural context) may influence the development of maltreatment behaviors. This can be seen as a proliferation of Burgess's (1978) original theory of child maltreatment since it applies the same theory to a new level of analysis (i.e., the ecological level). While there is a rudimentary unit theory proposed here (based on Burgess's [1978] model), it also seems clear that orienting strategy elements (from Tinbergen [1951] and Bronfenbrenner [1977]) are being combined to produce a new unit theory. This is another example of orienting strategy integration or, as Laudan (1977) called it, a fusion of research traditions (see also Ritzer, 1981).

In a follow-up article, Belsky, Laurence and Draper (1991) propose an elaboration of the original conditional adaptation theory. This is achieved through the integration of Draper and Harpending's (1982) extension of Triver's (1972) theory of parental investment. Like many evolutionary theories based on sexual selection, Belsky and his colleagues (1991) claim that humans embrace strategies that encourage reproductive success; the type of strategy adopted depends largely on the experiences in the first five to seven years of life. The importance placed on interactions between the individual and their family environment and its role in determining mating strategy is clear:

Individuals whose experiences in and around their families of origin lead them to perceive others as untrustworthy, relationships as opportunistic and self-serving, and resources as scarce and/or unpredictable will develop behavior patterns that function to reduce the age of biological maturation (within their range of plasticity), accelerate sexual activity, and orient them toward short-term, as opposed to long-term, pair bonds.... (Belsky et al., 1991: 650)

Two developmental pathways emerge here: the first type of individual embraces a sexual strategy emphasizing mating behavior while the second type of individual will

focus on parenting effort. The former will also exhibit higher levels of antisocial criminal behavior while the latter tends to be more law-abiding and non-aggressive. At this point, the integration of Belsky's (1980) theory of conditional adaptation and Harpending and Draper's (1982) extension of Trivers's (1972) parental investment theory should be readily apparent: family context and interaction coupled with community and cultural factors may encourage some individuals to pursue a sexual strategy that emphasizes reproduction. Belsky and his colleagues (1991) describe the integration and the various factors involved in the following passage:

What is unique about our theory, however, is that it integrates rather diverse developmental phenomena – including contextual stress, rearing patterns, attachment styles, behavior problems, pubertal timing, sexual activity, and pair bonding processes – in a manner that extends, rather than violates, these other perspectives. (654, italics added)

According to Wagner (1984), this would be an example of an integration of proliferant theories since it connects seemingly disparate phenomena through an integration of different unit theories. Belsky (1980, 1991) combines various ideas to explain how child maltreatment eventually gives rise to antisocial and criminal behavior.

### **Neuroscientific Approaches: The Brain's Role in Behavior**

The last trajectory to be discussed is the neuroscientific branch. Neuroscientific theories focus primarily on aspects of the brain (e.g., cortical arousal, neurotransmitter levels and hormonal imbalances). At first glance, it may be unclear as to how this area of theories is considered to be biosocial, and not purely biological. It must be kept in mind that practically all neuroscientists acknowledge that the human brain has a certain level of plasticity and is shaped by its environment (Jeffery, 1978, 1990; Raine, 1993; Walsh, 2009). However, this branch of theory does represent an “extreme

micro view” meaning that these theories are clearly based on individual differences (Raine, 1993: 81-82; Bernard and Snipes, 1996).

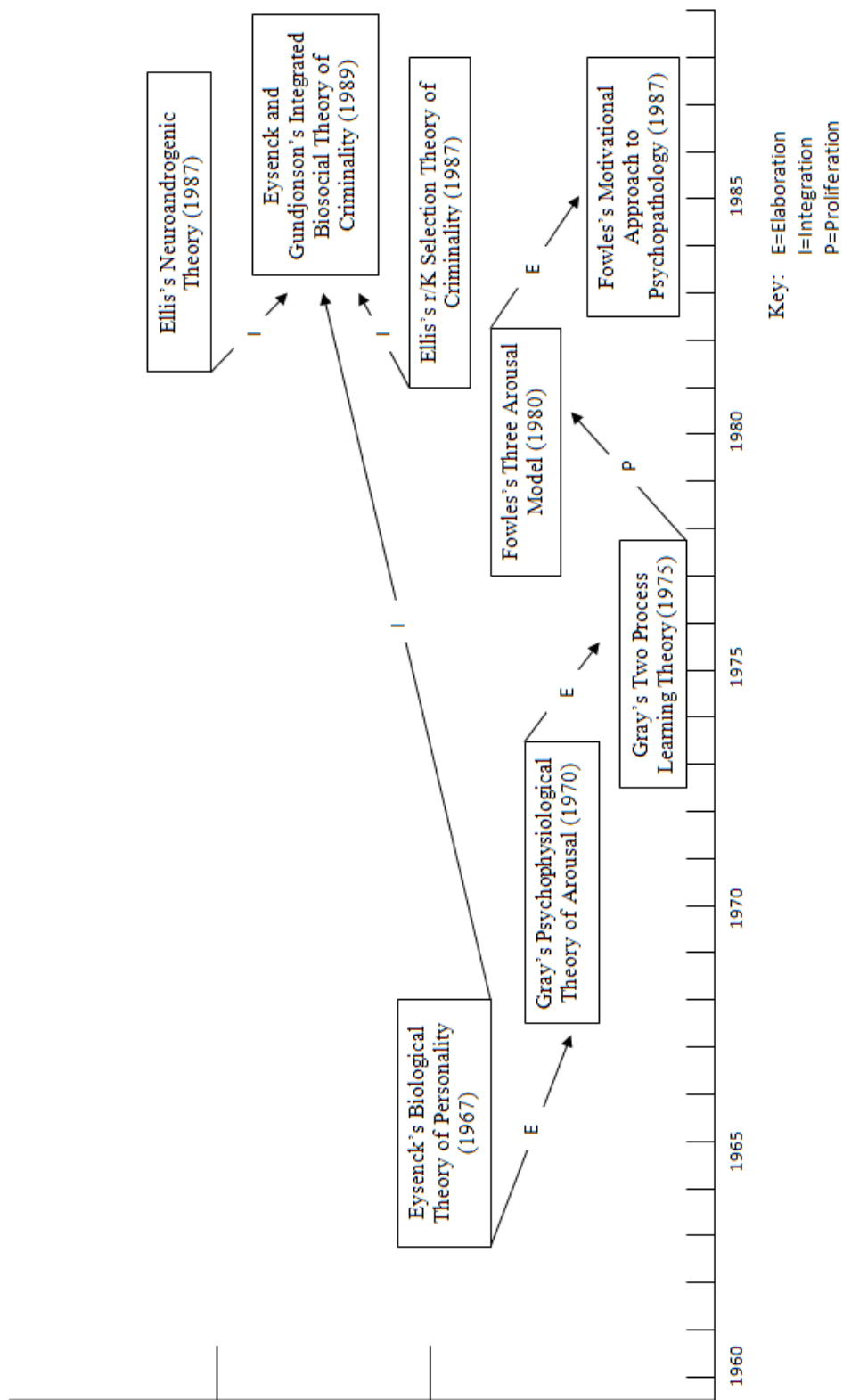
While this area does contain a wealth of knowledge about the biological causes of criminal behavior, the influence of social and environmental factors is still not completely clear in many of the formulations. This may be due to the fact that research in this area is relatively recent and is more correlational than causal in nature. Despite this, there are still several unit theories in this area that deserve discussion. These recent neuroscientific unit theories include reward deficiency theory (Blum, Noble, Sheridan, Montgomery, Ritchie, Jagadeeswaran, Nogami, Briggs, and Cohen, 1990; Blum, Cull, Braverman, and Comings, 1996; Blum, Braverman, Holder, Lubar, Monastra, Miller, Lubar, Chen and Comings, 2000; Comings and Blum, 2000), reward dominance theory (Gray, 1970, 1975; Fowles, 1980, 1987), and evolutionary androgenic theory (Ellis, 1986, 1987, 2003).<sup>155</sup> The various relationships and interconnections between these theories are summarized in Figure 32 on page 287. Given that all of these theories use correlations of neurotransmitters and hormone levels as a springboard for theorizing, it is necessary to be familiar with how these biochemicals are related to antisocial behavior and some forms of criminality.

Dopamine has perhaps received the most attention by researchers and theorists, in part, because it is most directly associated with reward systems. When a cue in the environment corresponds to a reward, there is a conditioned response that triggers reward-seeking behavior. Most of the literature indicates that increased dopamine

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<sup>155</sup> Some of these unit theories (Blum et al, 1996, 2000; Comings and Blum, 2000) also have connections to behavioural genetics since some attempt to identify genes that help form the neural mechanisms responsible for transporting or receiving various neurotransmitters. However, the focus is more clearly on explaining how the neural mechanisms affect behaviour rather than explaining how different genes influence behaviour.

**Figure 32:** Neuroscientific Trajectory



levels correspond to higher levels of violent and aggressive behavior (Raine, 1993; Fishbein, 2001; Anderson, 2007). Norepinephrine, a chemical produced from dopamine, has also received some attention in the literature. While high levels of norepinephrine do seem to create elevated states of arousal, there is no direct relationship between this neurotransmitter and aggressive or violent behavior. Rather, higher levels of norepinephrine seem to lead to more impulsive and sensation-seeking behavior. Serotonin is another neurotransmitter that has been linked to aggression, impulsivity, and depression. As levels of serotonin drop, dopamine levels rise, and the likelihood of antisocial behavior increases. Finally, unusually high or low levels of monoamine oxidase (MAO), an enzyme responsible for breaking down serotonin, norepinephrine, and dopamine neurotransmitters, has been linked to aggression and loss of self-control. There are actually two forms of MAO, MAOA and MAOB; MAOA is more directly connected to antisocial behavior (Fishbein, 2001; Anderson, 2007). Brunner (1996) identified a gene responsible for passing on abnormalities in MAOA that can eventually lead to violent and antisocial behavior in males.

There are several hormones also thought to be related to criminality and antisocial behavior. First, elevated testosterone levels are known to increase aggressive behavior. Given that testosterone is the male sex hormone and levels of this hormone are particularly high during adolescence, it is not surprising that young males typically have higher rates of criminal offending when compared to other groups (Boyd, 2000). Low levels of cortisol, a stress hormone, have also been observed in many psychopaths. This suggests that psychopaths react differently to stress, meaning that they either do not experience stress like normal people or have not been conditioned to

avoid stress (Raine, 1993; Fishbein, 2001). This also corresponds to findings that psychopaths tend to have lower heart rates, higher galvanic skin responses, and a generally lower level of arousal (Eysenck, 1964; Hare, 1970; Hare and Schalling, 1978; Eysenck and Gundjonsson, 1989).

The first clear unit theory relevant to understanding criminal behavior is called reward deficiency syndrome (RDS) or the “cascade theory of reward” (Blum et al, 1990, 1996, 2000; Comings et al., 2000).<sup>156</sup> Originally, RDS was used to explain alcoholism; alcoholism is thought to be linked to a variant form of the D<sub>2</sub> dopamine receptor located on the A<sub>1</sub> allele (Blum et al., 1990). Many readers of the research incorrectly interpreted this finding as proof of an “alcohol gene”. Eventually, Blum and his colleagues (1996) clarified that the gene affected much more than alcoholism, and that it actually was connected to many different patterns of addiction and impulsive behaviors. They claimed that this was because people with the D<sub>2</sub> dopamine receptor abnormality experience behavioral rewards differently than normal people because reward centers of the brain in the limbic system (i.e., nucleus accumbens and globus pallidus) fail to receive the appropriate neurotransmitters (e.g., dopamine and serotonin). This causes anxiety, anger and other negative feelings because of an inability to experience pleasure (Blum et al., 1996). As suggested previously, this problem can lead to a variety of maladaptive behaviors and mental illnesses including antisocial personality disorder (or conduct disorder in children), gambling, compulsive overeating, attention deficit disorder, excessive smoking, and drug abuse.

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<sup>156</sup> Anderson (2007) has referred to reward deficiency as a theory. The founders of RDS do not refer to it as such, but they do refer to their “cascade theory of reward”. In any case, it seems reasonable to suggest that RDS can also be thought of as a unit theory derived from the cascade theory.

This unit theory is especially interesting when one compares it to Gottfredson's and Hirschi's (1990) general theory of crime, a seemingly unrelated theory in criminology. Gottfredson and Hirschi (1990) suggest that low self-control leads to criminal behavior. Interestingly, they also claim that other "theoretical equivalents of crime" like substance abuse (i.e., alcoholism and drug abuse), smoking, gambling, speeding, and promiscuous sexual activity<sup>157</sup> are the result of low levels of self-control; this sounds remarkably similar to reward deficiency theory. These parallels indicate that these unit theories, even though they are from entirely different disciplines and are based upon vastly different research, may be compatible to some degree and possible candidates for cross-disciplinary integration.

Gray's (1970, 1975) reward dominance theory is another unit theory relevant to understanding antisocial and criminal behavior. In reality, this theory is actually an extension of Eysenck's (1967) biological theory of personality.<sup>158</sup> Gray (1975) explains that his theory:

...is to serve as a scaffolding for an eventual theory of the physiological basis of personality. The relation between such a theory and a theory of learning may be expressed in this way. Learning theory is the attempt to describe the general structure of the conceptual nervous system which is common to all members of a given species (or even a group of species). A theory of personality is an attempt to account for differences in behavior between individual members of the species in terms of systematic variation in the properties of the subsystems or components which go to make up this general conceptual nervous system. If one can then go one step further and align these subsystems with neural and/or endocrine structure and function in the real neuro-endocrine system, one has constructed a theory of the physiological basis of personality. (348)

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<sup>157</sup> This element also seems to have connections to some of the evolutionary theories of criminality described earlier. Mealey's (1995) cheater theory springs to mind.

<sup>158</sup> Eysenck's theory is covered in the chapter devoted to psychological explanations of criminality.



It seems clear that this an example of elaboration since Gray is working with concepts originally proposed in Eysenck's personality theory (Wagner, 1984).<sup>159</sup> Specifically, Gray (1970) uses Eysenck's (1952, 1967) dimensions of personality but proposes rotating the factors of neuroticism (N) and extraversion (E) 45 degrees to understand how internal behavioral regulation systems contribute to behavioral conditioning. This creates new categories of personality types including impulsivity (N+E+) and anxiety (N+E-). Impulsivity indicates an increased sensitivity to rewards, while anxiety is thought to reflect an increased sensitivity to punishments (Eysenck, 1990). From this, Gray (1970, 1975) posits the existence of two underlying internal regulation systems: the behavioral activation system (BAS) and behavioral inhibition system (BIS). The BAS is sensitive to rewards and works to activate behavior. BAS activity is located in the dopaminergic pathways, and acts upon the mesolimbic system, especially the nucleus accumbens. The BIS inhibits behavior in response to potential punishments and works to inhibit behavior. BIS activity occurs in both the noradrenergic and serotonergic pathways, and acts upon the limbic system, especially structures that feed into like the pre-frontal cortex and hippocampus (Raine, 1993; Walsh, 2009).

Fowles (1980, 1987) has applied Gray's (1970, 1975) theory to antisocial behavior and psychopathy.<sup>160</sup> More specifically, he suggests increased heart rate (HR) is strongly related to activity of the BAS, and that electrodermal skin activity (EDA)<sup>161</sup> increases when the BIS is activated. Decreased HR and EDA are also characteristic of

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<sup>159</sup> It seems important to note (why is it important?) that Gray was also a former student of Eysenck.

<sup>160</sup> Trasler (1980) has proposed a psychological variant of this theory; this is discussed in the chapter on psychological research programs in criminology.

<sup>161</sup> Electrodermal skin activity is the same as galvanic skin response or skin conductance .

psychopathy. Further, psychopaths exhibit less of a response to painful and threatening stimuli than normal people do. Fowles (1980) relates factors proposed in Gray's (1970, 1975) theory to the clinical features of psychopathy, and suggests that psychopaths have a deficient BIS. This is clearly an example of proliferation since an existing unit theory is being used to explain a new problem set in criminology (Wagner, 1984).

Fowles (1987) has also elaborated upon this unit theory by further specifying how heart rate and skin conductance fluctuations relate to activation and inhibition systems. In addition, he explains how his motivational theory applies to other areas of psychopathology (e.g., drug abuse, depression, schizophrenia) outside of psychopathy. He also suggests that the field of psychology needs to offer more theories to explain various forms of psychopathology.<sup>162</sup>

One of the leading hormonal theories of criminality is Ellis's (1986, 1987, 2003) evolutionary neuroandrogenic theory. This unit theory focuses on the connection between gender and crime, and suggests that males commit more crime because they have higher levels of testosterone. More specifically, Ellis's (1986) theory claims that high levels of testosterone can negatively influence the developing fetal brain. For example, unusually high testosterone levels can impair development of executive function, may cause hemispheric shifts in brain function, and are often linked to low levels of cortical arousal. These characteristics are all known to be connected to increased potential for criminality and other forms of antisocial behavior (Ellis, 2003).

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<sup>162</sup> Moffitt (1993), following Morey (1991), has suggested a similar need to develop taxonomic explanations of mental disorders. Moffitt addresses antisocial personality disorder and criminality in her developmental theory. This theory is discussed in detail in the chapter on the developmental-life course research program in criminology.

Perhaps more importantly, the change in testosterone level may increase the likelihood that these males will resort to an alternative reproductive strategy which may lead to the emergence of r-type selection strategies in certain populations. This represents another case of integration of two unit theories; ideas from Rushton's (1985) differential K theory are being combined with simple theories connecting testosterone to antisocial behavior and criminality.

### **Integrated Biosocial Theories**

Eysenck and Gundjonsson (1989) have proposed a more complex integrated biosocial theory of criminality. This is essentially an integrated version of Eysenck's (1964) psychological theory of criminality.<sup>163</sup> Eysenck and Gundjonsson's (1989) integrated unit theory is based upon the notion that low cortical arousal, which manifests itself in a reduced sensitivity to pain and a lower resting heart rate, is a key correlate of criminality. According to these theorists, this anomaly is related to differences in the functioning of the ascending reticular formation which is part of the reticular activating system in the brain. People with lower levels of cortical arousal seem to condition differently and tend to be extraverted, and in some cases,

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<sup>163</sup> Eysenck's (1989) later theory is more clearly biosocial than Eysenck's (1964) original theory. Some theoreticians classify both as personality theories (Einstadter and Henry, 2006) or both as biosocial theories (Lilly, Cullen and Ball, 2007; Rafter, 2008). As discussed towards the beginning of this chapter, the original theory contributed more to the orienting strategy of the earlier biosocial theories in criminology by opening up the area for inquiry. As Rafter (2008) notes, before Eysenck's (1964) work, there was very little interest in understanding the biological aspects of behaviour and how these were connected to psychological and sociological factors.

psychotic.<sup>164</sup> Interestingly, as mentioned previously, psychopaths exhibit lower heart rates, less sensitivity to pain, and a generally lower level of arousal compared to other people. At this point, the problem focus of the theory becomes particularly important. While Eysenck and Gundjonsson (1989) clearly point out that their concern is with victimful rather than victimless crimes (see Ellis and Hoffman, 1990), the theory still seems to run the risk of conflating psychopaths with chronic offenders and possibly minor criminals who offend frequently.<sup>165</sup> It is important to keep in mind that the majority of people commit crime at some point in their lives, and that this is usually confined to adolescence and young adult years. Indeed, Moffitt (1993) found that abstaining from delinquent behavior during one's teenage years is actually abnormal.

Three interrelated propositions explain how low cortical arousal increases one's risk for criminal behavior. The first proposition states that people with low cortical arousal may simply fail to form a conscience because of an inability to learn right from wrong stemming from their insensitivity to punishment. The second proposition suggests that extraverts and psychotics may be more inclined to seek arousal in ways that are not socially approved. The third proposition asserts that people with lower levels of arousal are deterred less by pain and tend to overvalue rewards, both of which may lead to criminal behavior (Eysenck and Gundjonsson, 1989).

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<sup>164</sup> Another personality characteristic which varies from individual to individual and is thought to be related to criminality is neuroticism. These people tend to overreact to stress, and this can create behavioral problems which may lead to criminality (Bartol and Bartol, 2011). This seems to be of less importance to Eysenck and Gundjonsson's (1989) theory than extraversion and psychoticism, so I will not discuss it in detail here (see the chapter on psychological research programs in criminology for a detailed discussion).

<sup>165</sup> One could argue, as many routine activities and rational choice theorists have, that most chronic offenders and minor criminals commit crime in response to situational factors like the presence of easy opportunities.

Eysenck and Gundjonsson (1989) also explain how this central theory is connected to other biosocial theories by describing how the propositions are interrelated, and how the constituent theories might be usefully integrated. First, they claim that low cortical arousal is caused by higher testosterone levels linking their theory to Ellis's (1986, 1987) evolutionary neuroandrogenic theory. As previously described, Ellis pointed out that higher levels of testosterone may cause changes in mating strategy that would lead to the emergence of r and K strategies in human populations. One can easily see the chain of causation being proposed here and how the three levels of explanation are being addressed. Increased exposure to testosterone in vitro causes changes in brain function later reflected in a lower level of cortical arousal. Both of these factors are connected to increases in aggression and changes in mating habits that later produce different behavioral strategies including criminal behavior.

Eysenck and Gundjonsson (1989) have proposed a cross-level integrated theory; specifically, they are integrating proliferant theories across different levels of explanation and analysis. Eysenck's (1964) theory of criminality should be considered a proliferation of Eysenck's (1952) biological theory of personality into the field of criminology. Ellis's (1986) neuroandrogenic theory and (1987) r/K theory are also a proliferations (Wagner, 1984; Bernard and Snipes, 1996).

An example of an integrated unit theory that has infiltrated the explanatory domain of biosocial theories from an outside research program is Wilson and Herrnstein's (1985) rational choice-biosocial theory presented in *Crime and Human Nature*. Like Eysenck (1964), Belsky (1980), Cohen and Machalek (1988) and Vila

(1994), the work of Wilson and Herrnstein (1985) must be seen, in part, as an example of an attempt to develop aspects of an orienting strategy that are particular to their unit theory. The authors clarify the multidimensional nature of their theory in the following quote:

We suggest that most of the common theories purporting to explain criminal behavior are but special cases of some more general theory. Specifying that larger theory is useful because, to the extent that it is correct and comprehensive, it will keep before our eyes the full range of factors that cause individual differences [in] criminality. This, in turn, will restrain our tendency to give partial explanations of crime or to make partial interpretations of the findings of criminologists. Ideally, of course, a theory must do much more than this. In principle, a theory is a testable statement of the relationships among two or more variables, so that, knowing the theory, we can say with some confidence that if we observe X, we will also observe Y...If, given this state of affairs, "theory" sounds too grand a term for the systematic speculations we and others have produced, consider what we offer as an organized perspective on the causes of crime. (42)

It seems clear from this that Wilson and Herrnstein (1985) are partly concerned with developing an orienting strategy as opposed to a clearly testable theory (see also page 66).

The unit theory offered by Wilson and Herrnstein (1985) is another example of the integration of proliferant theories. However, this is different from the Eysenck and Gundjonsson's (1989) unit theory in which the integration took place across levels of explanation and analysis. Here, we see the integration of proliferants across problem sets because the authors are using propositions derived from rational choice theory to

explain criminality.<sup>166</sup> Wilson and Herrnstein (1985) identify a key assumption in their theory in the following passage:

Our theory rests on the assumption that people, when faced with a choice, choose the preferred course of action. This assumption is quite weak; it says nothing more than that whatever people choose to do, they choose to do because they prefer it. In fact, it is more than weak; without further clarification, it is a tautology. (43)

So the theorists are using parts of rational choice theory from the neoclassical-deterrence research program (see especially Wilson, 1975). This notion of rational choice is then integrated with propositions derived from psychological theories of learning, specifically Pavlov's (1927) classical conditioning and Skinner's (1953) operant conditioning theories. To explain how and why people make the choices they do, the theorists posit the existence of two types of reinforcers: primary and secondary. Primary reinforcers are biological rewards based upon innate drives (e.g., sex and hunger). Secondary reinforcers are learned and are often culturally reinforced (e.g., a preference for certain foods). The propositions that emerge from this integration can be summarized as follows:

The larger the ratio of rewards (material and nonmaterial) of noncrime to the rewards (material and nonmaterial) of crime, the weaker the tendency to commit crime...The strength of any reward declines with time, but people differ in the rate at which they discount the future. The strength of a given reward is also affected by the total supply of reinforcers. (Wilson and Herrnstein, 1985: 61)

Classical conditioning functions internally and is connected to one's conscience; operant conditioning governs actions by influencing ones reactions to stimuli and the

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<sup>166</sup> Rational choice theory and its related theories focus on the criminal act or the criminal event, and are part of the postclassical research program in criminology. Gottfredson and Hirschi's (1990) low self-control theory is another example of an attempt to apply these principles to criminality. However, Gottfredson and Hirschi (1990) downplay biological and biosocial aspects and focus on sociological factors, specifically the absence of socialization and how it contributes to criminal behaviour.

perceived consequences of behavior. In other words, some people avoid committing crime because they have been socialized against such behavior (i.e., classical conditioning) while other people avoid crime because they fear the consequences of getting caught (i.e., operant conditioning). All actors are making rational choices based upon their perceptions of primary and secondary reinforcers. The influences on this theory can be seen in Figure 33 on page 299.

Following Tinbergen (1951), Wilson and Herrnstein (1985) point out that various constitutional factors (e.g., gender, age, intelligence, and personality) and some developmental factors (e.g., family, school, and peer experiences) predispose some individuals to involvement with crime.<sup>167</sup> The use of Tinbergen's (1951) work is similar to a set of directives offered by the orienting strategy being used here (Wagner, 1984; Berger and Zelditch, 1993, 1997).<sup>168</sup> According to Bernard and Snipes (1996), these theorists are combining an integrated structure-process theory (i.e., rational choice-learning theory) with a theory of individual differences based upon constitutional and developmental factors.

Cohen and Machelak's (1988, 1994) evolutionary-expropriative theory of criminal behavior combines evolutionary ideas with an ecological perspective. Like Belsky's (1980) early work on conditional adaptation, Cohen and Machelak's (1988) initial presentation of their theory contains a great deal of metatheorizing. Much of their work is devoted to suggesting important conceptual schemes and providing directives to guide theorizing so this work appears to be more in the realm of orienting

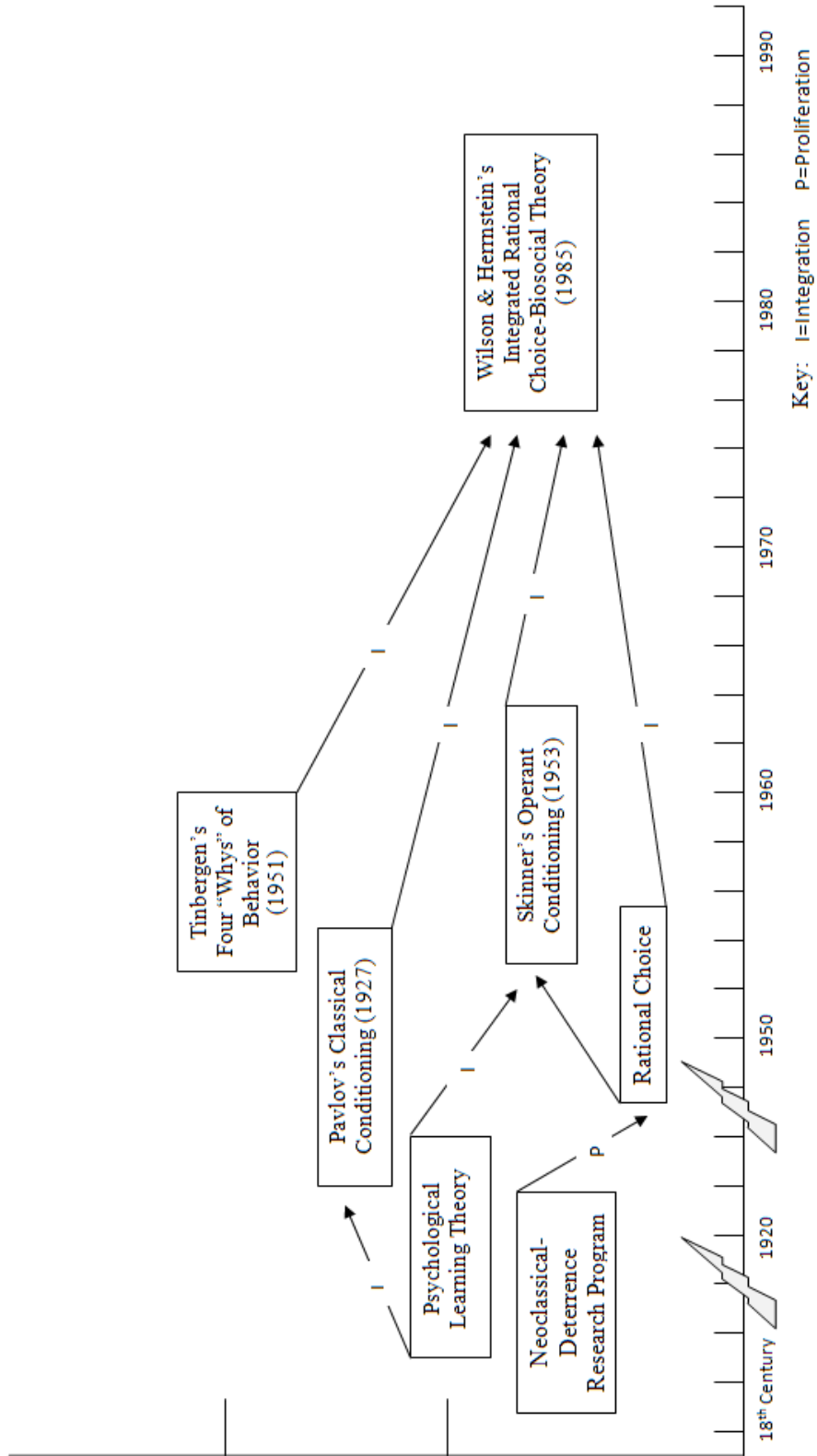
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<sup>167</sup> The authors do mention other possible social factors (e.g., community, culture, labor markets, and the media) but portray them as relatively unimportant. A discussion of how these factors interact with the preferred biological and developmental factors would have been very useful.

<sup>168</sup> See the earlier discussion of Belsky (1980) for another use of Tinbergen's (1951) directives in an orienting strategy.



**Figure 33:** Wilson and Herrnstein's Integrated Rational Choice-Biosocial Theory



strategy creation than true theorizing (Wagner, 1984). This approach also seeks to synthesize many previous criminological theories (e.g., social learning, strain, and routine activities) under an overarching theoretical framework.<sup>169</sup> Further, Cohen and Machelak (1988) mention that their theory may be difficult to test; this suggests that this work is closer to a metatheory or orienting strategy. Vila (1994, 1997) later refined this work; however, Robinson's (2004) integrated systems theory is the first example of an attempt to derive a specific unit theory from the evolutionary-ecological paradigm.

One can identify a bundle of assumptions in biosocial criminology that are comparable to a group of elements that compose an orienting strategy (Wagner, 1984) or possibly a working strategy (Berger and Zelditch, 1993, 1997). First, the authors embrace the notion offered by Durkheim that conceptualizes crime as normal and a social fact. They extend this notion and claim that crime is usually committed by normal people in unexceptional social systems (Cohen and Machelak, 1988). Second, behavioral strategies, not individual actors, are designated as the proper unit of analysis for criminologists. They then clarify that some individuals will embrace expropriative behavioral strategies, which include behaviors that are sometimes considered criminal. While the theorists do assume that people make rational decisions, they also point out that these cannot be understood as simple cost-benefit calculations (as many rational choice theorists assume) because the decisions are being made with reference to the behavioral strategies used by other actors in a population.

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<sup>169</sup> In the natural sciences, general theory often refers to a synthesizing perspective. Cohen and Machalek's (1988) early work has much in common with Wilson's (1975) sociobiology because they both supply guidelines for future theory-building and synthesize previous unit theories under a common theoretical umbrella. Specifically, Wilson's (1975) work subsumes theories from Hamilton (1964) and Trivers (1971, 1972, and 1974).

Consequently, decisions made by some criminals may appear to be pathological from an outsider's point of view, but are actually quite reasonable when other characteristics of the population are taken into account (Cohen and Machelak, 1988). There are some obvious connections here to Clarke and Cornish's (2001) notion of bounded rationality.

The idea that behavioral strategies evolve in response to other strategies in a population was originally offered by Maynard-Smith (1974, 1982) when he integrated games theory with evolutionary ideas to explain how behavioral strategies evolve in animal populations.<sup>170</sup> More specifically, Maynard-Smith (1982) integrated Trivers' (1971, 1972) theories, derived from Darwin's (1871) theory of sexual selection, with Von Neumann and Morgenstern's (1959) formalization of games theory. The key to understanding Cohen and Machelak's (1988, 1994) evolutionary-expropriative theory is their use of Maynard-Smith's concept of resource holding potential (RHP).<sup>171</sup> RHP is defined as a composite of traits (e.g., strength, speed, size, and intelligence) which provide advantages to an organism in evolutionary contests over resources and reproductive opportunities. Asymmetries in RHP may affect an organism's choice of behavioral strategy. To explain how behavioral strategies evolve in a given population, Cohen and Machelak (1988) introduced the ideas of pure and mixed strategy populations. Populations composed of pure strategists embrace one type of behavioral strategy whereas organisms in mixed strategy populations use a variety of strategies. These may be subpopulations of individuals using one strategy with other

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<sup>170</sup> Maynard-Smith originally spoke of evolutionary strategies that provide clear benefits to survival and reproduction. However, Cohen and Machalek (1988) extend this to include behavioral strategies used by humans to secure symbolic and material benefits as well.

<sup>171</sup> Cohen and Machalek (1988) use the term resource holding potential; however, Maynard-Smith (1982) used the term "resource holding power". They appear to mean the same thing.

individuals using a different strategy or populations where individuals employ a variety of different strategies (See Cohen and Machalek, 1988: 474).

Several important principles of behavioral diversity flow out of these distinctions. First, populations of pure strategists are inherently unstable and are very susceptible to invasion by alternative strategists. Second, differences between individuals are less important than how frequently various behavioral strategies are employed in a population. Third, the interactional setting may encourage behavioral diversity (e.g., an animal may behave differently in an unfamiliar environment than it would in its home). Fourth, behavioral uniformity creates niches and contributes to behavioral diversity.

Cohen and Machalek (1988) import these assumptions and principles into the field of criminology and suggest using them to explain expropriative forms of crime. Further, the use of these ideas allows the authors to subsume several sociological theories of criminality into one coherent theoretical framework. For example, criminal opportunities are created in conformist populations of humans in which the emphasis is upon production. If a population of humans produces a vast surplus of goods and is characterized by mostly law-abiding people, assuming an expropriative strategy will offer many easy advantages. Interestingly, the underlying logic behind Cohen and Felson's (1979) routine activities theory is the same; in short, great prosperity may give rise to increases in crime rather than decreases in crime (Cohen and Machelak, 1988).

Strain and conflict explanations can also be absorbed into this framework. For instance, evolutionary-expropriative theory would also predict that an unequal

distribution of resources would result in more crime because of the effects it could have on RHP asymmetry in human populations. If resources are concentrated amongst one sector of the population (e.g., owners or elites), other groups (e.g., workers or the proletariat) may adopt new expropriative behavioral strategies to level the playing field. An unequal distribution of resources could also result in strain for those groups that are less prosperous which may lead them to adopt new expropriative behavioral strategies. It is relatively easy to see the connection to the conflict and strain theories of criminality, and how Cohen and Machelak's (1988) framework could accommodate them. Finally, behavioral strategies themselves are assumed to be passed down through processes such as social learning, operant and classical conditioning. These ideas are readily apparent in a host of popular criminological theories including Sutherland's (1949) differential association theory and Akers's (1998) social learning theory.

The theorists are suggesting that ideas from evolutionary theory – Maynard-Smith's (1974) evolutionary games theory – might be useful in explaining criminality and how various factors interact with one another. For example, socio-cultural, developmental, and constitutional factors affect an organism's RHP which influences its behavioral strategy. More specifically, one's location in the social structure may affect their RHP and opportunities to commit crime, which may influence the decision to commit a crime. Similarly, certain constitutional factors may affect a person's ability or tendency to commit crime (e.g., body type, I.Q., aggressiveness, impulsivity)

and the type of crime a person chooses to commit.<sup>172</sup> According to this theory, one's developmental factors (i.e., one's experiences) will be mediated through socio-cultural and constitutional factors, and can affect both criminality and the adoption of an expropriative strategy. Responses from the criminal justice system in the form of counterstrategies to crime may also elicit changes in behavioral strategies based on expropriation, or give rise to new expropriative behavioral strategies. For example, changes in surveillance in an area may cause criminals to displace to another area; advances in technology that provide new forms of target hardening may cause criminals to change the ways in which they commit crime (consider identity and car theft).

Vila (1994) proposed a general paradigm for criminal behavior which extended and modified Cohen and Machalek's (1988) earlier work. Like Cohen and Machalek (1988), he describes various factors that contribute to criminal behavior. However, he qualifies this by saying that rather than looking at these factors as discrete variables, criminologists need to consider their interactive nature and influences on one another. This is the ecological portion of theory; Vila is especially concerned with understanding the ecology of criminal behavior and its self-reinforcing nature. Like Cohen and Machalek (1988), Vila (1994) also conceptualizes people as strategists, and states that the selection of a strategy is guided by various factors. These statements are examples of Vila's (1994) attempts to further develop the orienting strategy initiated by Cohen and Machelak (1988): Vila is describing preferred concepts useful

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<sup>172</sup> This is common sense. A small, weak individual will probably not make a very effective robber or thug. A person with a low IQ will probably not have the opportunity to become involved with white collar crime.

to formulating a theory and is directing the theorist to important variables which require attention.

Vila (1994) also expands the scope of evolutionary-expropriative theory. Instead of merely explaining expropriative crime, Vila's paradigm attempts to account for all types of crime requiring intent. This is accomplished by suggesting that people develop "suites of behavioral strategies that are compatible and synergistic"; these collections of strategies are called strategic styles (Vila, 1994: 323). The term criminality refers to the extent that a person's strategic style involves the use of force, fraud or stealth to obtain resources. According to Vila, a good theory of criminality must distinguish between crime and criminal behavior because definitions of crime vary and some acts that are not criminal sometimes have similarities to criminal acts (e.g., corporate exploitation).

Vila (1994) also spends a great deal of time explaining how various counterstrategies instituted in response to crime by the criminal justice system can elicit different behavioral strategies, and how this might influence the mix of behavioral strategies in a population. He identifies three types of counterstrategies including protection/avoidance, deterrence, and nurturance. Protective/avoidant (e.g., certain forms of target hardening, and suggestions that normal people change their routines to avoid crime) and deterrent strategies (e.g., tougher legislation meant to deter crime, and certain forms of crime prevention) are the most common strategies used by the criminal justice system. Nurturant strategies (e.g., educational, healthcare and childcare programs) receive more attention from Vila (1994) because they seem to be less common ways of controlling crime in modern society. Vila does acknowledge

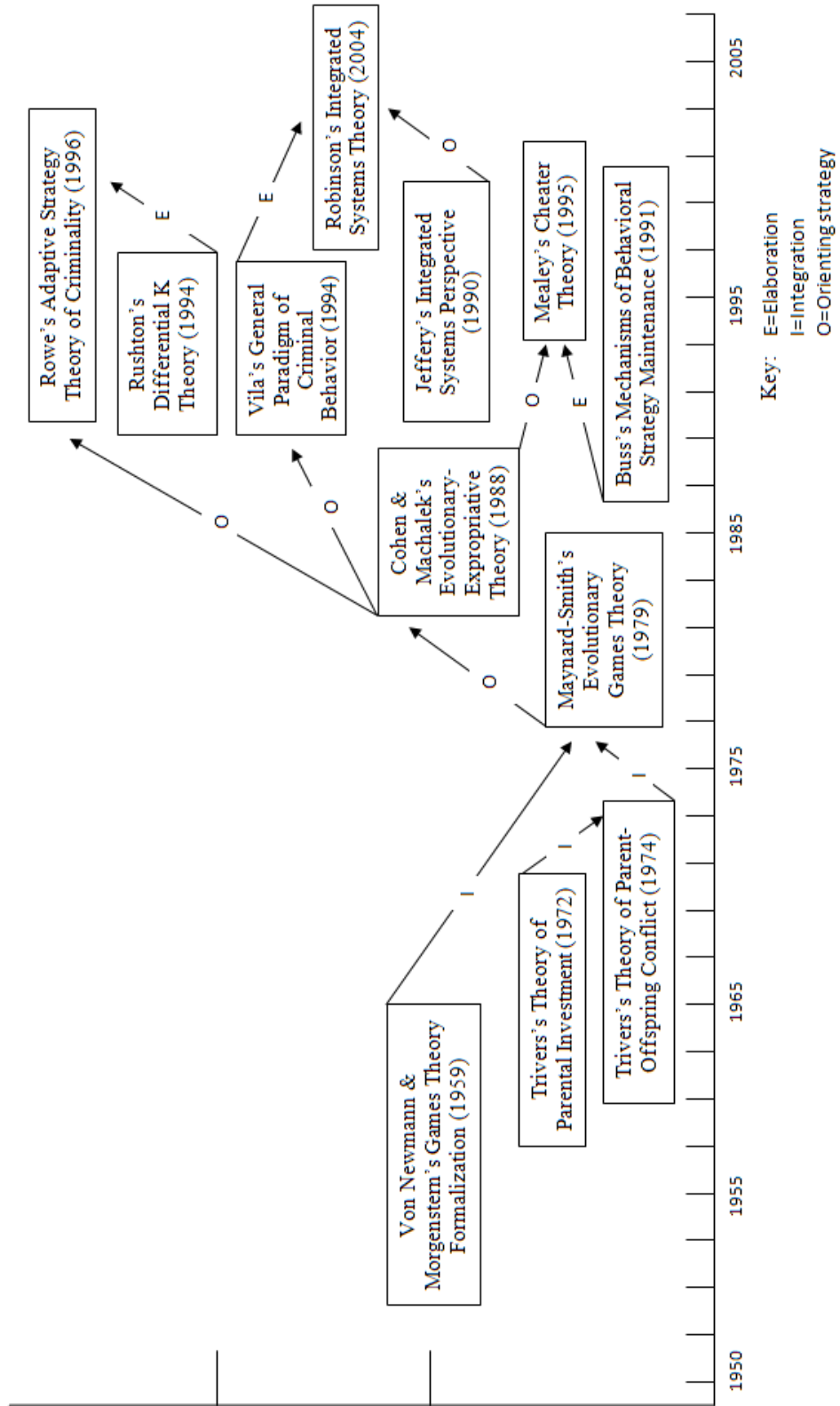
that some of these programs have been tried in the past but failed to significantly reduce crime. He explains this by suggesting that increases in the standard of living of most people have also been accompanied by higher levels of social disorganization and higher concentrations of wealth and poverty (i.e., a vanishing middle class). He also claims that the lack of positive evidence of the ability of social welfare programs to reduce crime could be related to time-lag effects. Many of these nurturant strategies take a long time to work; they cannot be shown to be effective a few years after they are implemented.

Cohen and Machalek (1988) and Vila (1994, 2003) are refining an orienting strategy that provides a basis theorizing (Wagner, 1984). These ideas have helped give rise to a number of unit theories including Mealey's (1995) cheater theory and Rowe's (1996) alternative adaptation theory. Robinson's (2004, 2009) integrated systems theory of antisocial behavior also embraces this orienting strategy but integrates a number of different ideas. While it is true that evolutionary-ecological theories were influenced by evolutionary theory, they must be distinguished from other evolutionary explanations of criminality (Belsky, 1980; Ellis, 1987) because they incorporate ecological and systems theory ideas into their orienting strategy. Consequently, like Brantingham and Brantingham's (1978, 1981, 1984, 1993, and 1999) environmental criminology, this area could be seen as an independent research program. The growth patterns of these theories and their connections to Cohen and Machelak's (1988) and Vila's (1994) work are depicted in Figure 34 on page 307.

Mealey's (1995) cheater theory, like Cohen and Machalek's (1988, 1993) evolutionary-expropriative theory, embraces the notion of evolutionary behavioral



**Figure 34:** Evolutionary-Ecological Theories



strategies. Cheater theory focuses specifically on reproductive strategies, and uses them to explain the existence of male sociopaths.<sup>173</sup> Mealey, similar to proponents of r/K theory, suggests that males embrace one of two types of reproductive strategies and can be grouped into the categories of “cads” (similar to r-strategists) and “dads” (similar to K-strategists). It is assumed that male sociopaths will fall into the “cad” category. From this, she posits the existence of two types of sociopaths: primary and secondary. Primary sociopaths (also known as psychopaths) are thought to be genetically different from normal people, while secondary sociopaths appear to learn the “cad” strategy (and other criminal and antisocial behaviors) (Mealey, 1995). Secondary sociopaths will often age out of crime, and also commonly restrict the use of the “cad” strategy to their adolescent and young adult years (Anderson 2007). Primary sociopaths are predicted to commit crime throughout their lives, and will adhere to the “cad” strategy.<sup>174</sup>

This theory also draws upon the work of Buss (1991) to explain how mixed strategy populations arise and how “cad” and criminal behavioral strategies are maintained. Buss (1991) suggested that the maintenance of mixed evolutionary strategies could be achieved in four different ways:

- (1) through genetically based, individual differences in the use of single strategies (such that each individual, in direct relation to genotype, consistently uses the same strategy in every situation);
- (2) through statistical use by all individuals of a species-wide, genetically fixed, optimum mix of strategies (whereby every individual uses the same statistical mix of strategies, but does so randomly and unpredictably in relation to the situation);
- (3) through species-wide use by all individuals of

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<sup>173</sup> The unit theory proposed by Lykken (1995) is very similar to Mealey’s (1995) theory, and could be thought of as a variant theory. Given the similarities, between the two theories and the fact that Mealey’s (1995) has had more of an impact on criminology, I will only review cheater theory here.

<sup>174</sup> One should note the similarities between this and Moffitt’s (1993) developmental taxonomy. This theory will be reviewed in the following chapter.

a mix of environmentally-contingent strategies (such that every individual uses every strategy, but predictably uses each according to circumstances); (4) through the developmentally-contingent use of single strategies by individuals (such that each individual has an initial potential to utilize every type of strategy, but, after exposure to certain environmental stimuli in the course of development, is phenotypically canalized from that point on, to use only a fraction of the possible strategies). (as cited in Mealey, 1995: 6)

Mealey (1995: 6) posits a fifth mechanism: “(5) genetically based individual differences in response to the environment, resulting in differential use by individuals of environmentally-contingent strategies (such that individuals of differing genotypes respond differently to environmental stimuli in the course of development and are thus canalized to produce a different set of limited strategies given the same, later conditions)”. From this she concludes that sociopaths are a variant of the cheater-defector archetype from games theory. Mealey (1995) qualifies this claim by suggesting that the behavior of primary sociopaths is maintained by the first mechanism proposed by Buss (1991), and that the behavior of secondary sociopaths is maintained by her fifth mechanism. So, in other words, primary sociopaths exhibit genetically based individual differences and embrace an antisocial behavioral strategy with little variation, while secondary sociopathy results from differential responses to one’s environment, and is characterized by the use of both cooperative and antisocial behavioral strategies.

Mealey’s (1995) cheater theory is a clear example of theory elaboration (Wagner, 1984). She is working with the ideas proposed by Cohen and Machelak (1988) and uses Buss’s (1991) mechanisms of behavioral strategy maintenance as a vehicle for theoretical elaboration. She hypothesizes that there is a fifth mechanism based, and applies it to the explanatory domain of psychopaths.

Another theory growing out of Cohen and Machalek's (1988) evolutionary-expropriative orienting strategy is Rowe's (1996) adaptive strategy theory of crime and delinquency.<sup>175</sup> Like Mealey's (1995) cheater theory, Rowe's theory also makes use of the Cohen and Machalek's (1988) concept of behavioral strategies. However, rather than emphasizing differences between racial groups (like Rushton, and later Ellis) Rowe (1996) focuses upon within race genetic variation. Like other unit theories in this branch (Belsky, 1980; Rushton 1985; Ellis 1987; and Mealey, 1995), this theory embraces the hypothesis that criminals tend to emphasize mating over parenting effort. Rowe's (1996) formulation, similar to Cohen and Machalek's (1988) theory, suggests examining various factors from different levels of explanation and their interactions with one another. Some of the factors designated as important are constitutional traits (e.g., IQ, impulsivity, and aggressiveness), social learning processes (e.g., peer and family interactions), and ecological conditions (e.g., population composition and resource availability).

This theory represents yet another example of elaboration. Rowe (1996) is extending ideas proposed by Rushton (1985) and within the context of Cohen and Machalek's (1988) orienting strategy. Since these are essentially different versions of evolutionary theory, Rowe (1996) is elaborating by further specifying how various factors influence the adoption of either a mating or parenting behavioral strategy, and how this relates to persistent criminality (Wagner, 1984).

Belsky's (1980, 1991) conditional adaptation theory, Ellis's (1987) r/K theory, Mealey's (1995) cheater theory, and Rowe's (1996) adaptive strategy theory can all be

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<sup>175</sup> This theory has also been referred to as alternative adaptation theory (Fishbein, 2001; Lilly, Cullen and Ball, 2007; Walsh, 2009) and alternate adaptation theory (Anderson, 2007). I will use the author's original name for the theory.

seen as variants of one another. According to Wagner (1984), variants differ in the sense that they “incorporate slightly different working mechanisms,” but still share a great deal of their theoretical structure (pg. 42). All of these theories focus on mating and parenting effort and are derived in some way from Darwin’s (1871) theory of sexual selection.

More recently, Robinson (2004) proposed an elaboration of Vila’s (1994) general paradigm. Robinson is deriving a unit theory from the orienting strategy offered by Vila. A quote from Robinson (2004) supports this claim:

Vila’s paradigm (what he defined as “a pre-theory whose role is to help us see a previously obscure puzzle in a new way”, p. 338) is very important, but does not give us a theory with specific testable propositions per se. Specific theories, however, can be derived from this paradigm (or at the very least they can be consistent with it). (260)

Robinson (2004) likens Vila’s (1994) concept of strategic style to the notion of personality. In addition, he also introduces the notion of systems theory to aid in his integrative attempt.

Jeffery (1990) originally used systems theory as a tool to organize the findings about crime and criminal behavior in an effort to propose a new criminological perspective. Robinson (2004) uses systems theory as organizational tool, except here it is to organize the levels of explanation and their key factors in his integrated systems theory of criminality.<sup>176</sup> He identifies the different levels of explanation and attempts to identify important variables from each level which he claims are important to understanding criminality. Here is another example of orienting strategy or metatheory integration discussed by Laudan (1977) and Ritzer (1981). Robinson

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<sup>176</sup> Interestingly, Robinson was a student of Jeffery’s.

(2004) is combining ideas from different research traditions or paradigms, namely integrated systems theory and Vila's (1994, 1997) evolutionary-ecological paradigm. The result is a cross-level, integrated unit theory that combines many different ideas from a number of different disciplines.

The various levels from most basic to most complex can be summarized as follows: the cellular level (i.e., genetic explanations); the organ level (i.e., focusing on the brain and its relevance to explaining criminality); the organism level (i.e., biological and psychological variables like personality, intelligence, drug use, and diet); the group level (i.e., social learning and family factors); the community level (i.e., social disorganization, routine activities, deterrence, and labeling factors); and the societal level (i.e., strain, criminal subcultures, race, and class factors). From these various factors Robinson derives 22 interrelated propositions that explain how the various levels interact with one another.

Robinson's (2004) integrated systems theory represents a clear attempt to fully account for the role of both genes and environment in criminality. This is somewhat unusual as other biosocial theories tend to downplay the role of one's social environment in behavior (Eysenck, 1964, Wilson and Herrnstein, 1985; Ellis, 1987; Mealey, 1995; Rowe, 1996). In addition, this is a clear attempt to integrate across levels of explanation. Robinson (2004) starts at the lowest level of explanation, biological and psychological variables that focus on individual differences, and ends with social and cultural variables that can influence criminality. Consequently, this formulation integrates individual differences and structure process theories while specifying how some of the variables interact with each other. For example, genes

influence a person's brain chemistry and hormones in the body. Various neurotransmitters, enzymes, and hormones play a role in criminal and antisocial behavior. In addition, factors like parenting style and family conditions can impact attachment levels which may, in turn, influence brain chemistry. Further, conditions associated with social disorganization (e.g., poverty, residential mobility, and broken families) can cause stress or strain on parents, and this may alter the way in which they treat their children which may affect behavior. Routine activities in a community can also affect levels of social disorganization. It is not hard to see the potential interrelationships between factors that were once thought to be unrelated. Future work in this area would definitely include further specification of the relationships between the numerous variables accounted for by this theory.

### **Towards a Biosocial Criminology?**

The previous review of unit theories in the behavioral genetics, evolutionary, and neuroscientific trajectories indicates that the biosocial research program in criminology is thriving. The program offers many different theories that address both individual differences and processes that contribute to criminal behavior; some aspects of unit theories in the evolutionary trajectory also resemble Bernard and Snipes's (1996) structure-process theories. This program also contains some interesting examples of theory variation and integration. There seems to be a great deal of branching in the program as well, spurred on by frequent proliferation from areas outside of criminology including sociobiology, evolutionary theory, psychological learning theory, and neuroscience. There are also numerous examples of existing theories being applied at different levels of explanation and analysis and also to new

problem sets (Belsky, 1980, Fowles, 1980; Wilson and Herrnstein, 1985; Ellis, 1987; Cohen and Machalek, 1988; Fishbein, 2001; Walsh, 2002, 2009).

Alongside the unit theory activity, one can also observe a great deal of metatheorizing or attempts to develop particular aspects of an orienting strategy (Eysenck, 1964; Belsky, 1980; Wilson and Herrnstein, 1985; Cohen and Machalek, 1988; Vila, 1994; Robinson, 2004). Often this development has occurred because theorists were combining aspects of orienting strategies to produce a ‘seedbed’ from which new unit theories could grow (Laudan, 1977; Ritzer, 1981). In addition to the development of new knowledge, biosocial theories challenged the sociological theories (e.g., strain, control, and social learning/differential association) that were dominant in the study of crime for so long.

While the biosocial research program has clearly done much to advance knowledge in criminology and reinvigorate theorizing in the field, it is also plagued with problems and shortcomings that need to be addressed. The reaction to the dominance of the sociological explanations of criminal behavior seems to have created a blind-spot with regards to the importance of environmental and social factors on criminality. Indeed, Jeffery (1977), an early proponent of biosocial theorizing, suggested that sociological theories of criminal behavior ought to be “dropped”. This appears to be a somewhat of an extreme reaction; it seems obvious that the major sociological trajectories (i.e., strain, control, and social learning/differential association) still have something to offer. Further, existing sociological theories of criminality need not be viewed as incompatible or competing with biosocial theories. Instead, the emphasis should be on finding parallels and areas of agreement between



seemingly unrelated theories.<sup>177</sup> This will open up new possibilities for integration and offer new theoretical puzzles for researchers to solve.

Finally, biosocial theorists should offer more commentary on the practical applications of their theories. While many proponents of these theories appear to be genuinely interested in advancing criminological knowledge, they are often silent about how their theories ought to be used and the policy implications that they may have. This will likely not lead to a neo-Eugenics Movement, but it could produce a new strategy of control resulting in the fusion of the biosocial theories with the risk paradigm and a “criminology of the other” which may have very negative consequences (Rose, 2000; Garland, 2001).

Interestingly, this sort of scenario is already on the horizon. Bernet, Vnencak-Jones, Farahany, and Montgomery (2007) have described how testimony regarding gene x environment interactions may be used in criminal court proceedings. Much of this applies to low levels of activity in MAOA gene (responsible for metabolizing serotonin, dopamine, and norepinephrine) and SLC6A4 gene (indicating poor functioning of the serotonin system). The question here is if the presence of such abnormalities should be considered mitigating or aggravating circumstances in criminal court trials. Depending on one’s point of view they could fall into either category and would certainly affect the severity and length of sentences handed out. Given the emphasis on risk in modern Western criminal justice systems, this could

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<sup>177</sup> For example, consider the possible compatibility of Gottfredson and Hirschi’s (1990) low self control theory and Blum and Comings’ (2000) reward deficiency theory described previously. Cohen and Machelak (1988) have also done an admirable job of relating their evolutionary-expropriative orienting strategy to traditional sociological theories of criminality (i.e., strain, conflict, and social learning).

result in the ultimate, scientifically-justified “criminology of the other” (Feeley and Simon, 1992; Rose, 2000; Garland, 2001).

The biosocial research program in criminology represents a change toward integrative theorizing in criminological theory. Shortly after this, the developmental-life course program surfaced. Like the biosocial theorists, developmental-life course theorists sought to combine ideas from biology, psychology, and sociology in new and different ways. These efforts will be the subject of the following chapter.

## **CHAPTER 7: EXAMINING THE IMPACT OF THE DEVELOPMENTAL AND LIFE COURSE (DLC) THEORIES**

### **A New Age of Criminological Theory?**

In recent years, a new research program has emerged in the field of criminology. Farrington (2003) has dubbed this set of interrelated unit theories the “developmental and life course (DLC) theories of criminology” (p. 203). This group of theories has done much to restore vitality to criminological theorizing, and has been successful in both stimulating interest in explaining criminality and generating new intellectual “puzzles” to solve. This activity is, at least in part, a result of criminology becoming increasingly interdisciplinary (Cullen, Wright, and Blevins, 2007). Consequently, integration has occurred frequently in this research program.

As will be demonstrated in this chapter, the DLC program has provided a method for integrating different theories across levels of analysis in a logical and consistent way. Some theories are clearly examples of structure/process integrations<sup>178</sup>, other formulations seek to integrate individual difference theories with process theories. Some theories devote attention to all levels of analysis (Bernard and Snipes, 1996). In addition, some of the theories attempt to integrate theories from different problem sets of criminology (i.e., criminal acts and criminality). In some cases, ideas from different orienting strategies or research traditions have also been combined to produce new theories. Before discussing how the program has produced these various

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<sup>178</sup> So, in other words, they integrate ideas from the control, social learning/differential association, and strain programs.

examples of integration, it is important to be familiar with the history and origins of this complex research program.

### **Key Debates and the Origins of the DLC Research Program**

The orienting strategy of the DLC theories has a number of different influences. Farrington (2003, pgs. 221-222) has suggested that there are four major “paradigmatic” influences in the DLC research program: the risk factor/prevention paradigm, the criminal career paradigm, developmental criminology, and the life course perspective.<sup>179</sup> Before understanding how these different approaches have influenced the DLC research program, it is important to understand their history and the debates that surround them.

In contemporary criminology, explicit endorsement of the risk/prevention factor paradigm can be traced to Bernard and Snipes’s (1996) call for theoretical integration (see also Bernard, 2001). However, implicit use of the risk factor approach has a long and often unacknowledged history.<sup>180</sup> The early origins of this approach appear in the work of Glueck and Glueck (1950, 1952) and Reckless (1955). While the Gluecks did not propose a clear unit theory, their multidisciplinary research suggests numerous biological, psychological and social correlates of criminality, all of which could be regarded as risk factors. In fact, they claimed that the risk factors uncovered by their research could be used to make predictions about criminal behavior in individuals.

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<sup>179</sup> Life course perspective is sometimes referred to as life span-developmental psychology (Baltes, 1987).

<sup>180</sup> Early use of the risk factor approach seems to have been overlooked because of the dominance of the sociological approach to criminal behavior initiated by Sutherland’s (1947) differential association theory. After formulating his theory, Sutherland attacked attempts to incorporate biological or psychological factors in the explanation of criminality (for a discussion of this see Laub and Sampson, 1991)

Reckless (1955) also used what one might call an ‘implicit’ risk factor approach in his containment theory. He suggested that behavior is influenced by pushes (e.g., frustration, need for immediate gratification or poverty) and pulls (e.g., illegitimate opportunities, delinquent others) that can motivate a person to commit crime. These are held in check by one’s inner and outer containments; these are similar to protective factors that insulate one against becoming involved with crime. Inner containment included social psychological ideas such as self-concept, goal orientation, frustration tolerance and norm retention. Outer containment consisted of primarily societal level variables and attempted to assess the role of larger social groups in controlling and regulating behavior. Since this element of the theory focuses on factors that serve to integrate individuals into society and regulate their behavior, this element of the theory is Durkheimian in nature. After Reckless’s (1955) work, the risk factor approach lay dormant in criminology for many years. During the 1980s, a debate about the merits of theory integration in criminology arose (see, Meier, 1985 and Messner, Krohn, and Liska, 1989 for discussions of theory-building and integration in criminology). This debate would help lay the groundwork for a resurgence of the risk factor approach in criminological theory.

The origins of the integration debate in criminology, and of the DLC program, can be found in a theory proposed by Elliott and his colleagues (1979, 1985a). The goal here was to combine ideas from the major sociological theories of criminality (i.e., social disorganization, strain, learning/differential association, and control) into an elegant model capable of explaining more facets of criminal behavior. In reality, this

integration contains two unit theories since it suggests two different pathways to delinquency.

Some have argued that the theory proposed by Elliott and his colleagues (1979, 1985a) represents an example of propositional integration (Miller et al., 2011). The foundation of this theory is clearly derived from control theory, so it seems that aspects of this theory's orienting strategy are derived from control theory. It is connected to the DLC program because it is concerned with properly ordering key factors from existing criminological theories in order to understand how their influences varies throughout an individual's life. For example, Elliott and his colleagues (1979, 1985) argue that attachment and family variables are very important early in life, but as a person reaches adolescence, peer groups become more important. The influence of the various theories is easy to see if one summarizes the theory in a set of propositions.

The first proposition is that the probability of delinquency is highest when an individual experiences less control early in life. The notion of control here is similar to Hirschi's (1969) conceptualization of the social bond. Basically, Elliott and his colleagues are using concepts that are central to control orienting strategy developed by Hirschi (1969). Two aspects of the social bond are posited, one external and one internal. The external component is referred to as integration, and describes the attachments one has to other people and society in general. In terms of Hirschi's (1969) social bonding theory, integration is the equivalent of the attachment and involvement strands of the social bond. The internal element is called attachment, and

refers to the internalized aspect of the bond. This element of the theory encompasses the concepts of commitment and belief in Hirschi's (1969) theory.

The second proposition suggests that social disorganization in the home and community can cause strain that may serve to weaken the bond. Once these social connections are disrupted, the individual's behavior is less regulated allowing them to partake in delinquency and crime with little to no guilt. Strain is conceptualized as it is in Merton's (1939) strain theory and refers to the stress created by the inability to achieve socially defined goals (Elliott et al., 1979, 1985a).

The third proposition introduces differential association/social learning theory into the equation, and offers two different pathways that may lead to delinquency. In the first pathway, an individual fails to form strong attachments early in life and this leaves them vulnerable to the influences of their delinquent peers early in their adolescent years. In the second pathway, an individual has formed strong social bonds; however, these bonds are weakened through strain (e.g., an inability to achieve success in school) and the individual is free to associate with delinquent peer groups, which leads to criminal behavior (Elliott et al., 1979, 1985a).

Elliott's (1979, 1985a) integrated theory combines several variant theories originating in sociological criminology. It incorporates aspects of Merton's (1939) strain theory, Burgess and Akers's (1966) social learning theory, and Hirschi's (1969) theory of bonding. Wagner (1984) claims that integration of variant theories typically involve "the specification of conditions for the application of each variant" (pg. 70). This is accomplished by specifying how the variables apply at different points in the life course.

The theory proposed by Elliott and his colleagues generated a great deal of controversy in criminology. Hirschi (1979) leveled a number of criticisms against the new integrative method of theory-building. Most importantly, he suggested that the theories used were incompatible with one another and could not be combined. Elliott et al. (1985a) countered that the oppositional tradition based on falsification had failed, and that the explained variance of any one of the sociological theories of criminal behavior such as strain, control, or social learning was embarrassingly low. Elliott (1985b) further argued that there are obviously different causes of criminal behavior, and that none of the theories is necessarily wrong. Instead, they might be better viewed as complementary rather than competing with one another (Elliott, 1985b in Meier; see also, Bernard, 2001).

Later, Bernard and Snipes (1996) carried Elliott's (1985b) argument further by suggesting that the various theories in criminology simply identify risk factors for criminality. However, they were speaking not only about the traditional sociological explanations of criminal behavior but also about the various biological and psychological theories that attempt to explain criminal and antisocial forms of behavior. According to Bernard and Snipes (1996), the task is to figure out which theories are the most important, and how they fit together. For example, it seems obvious that some theories are more adept at explaining certain crimes than others because different theories in criminology often focus upon different types of problems. That is, social learning is quite effective at explaining crimes that take place in groups (e.g., mass genocides, rioting, gang behavior, and drug use) whereas common street crime as a whole (e.g., robbery, mugging, and theft) is more effectively explained by



strain theory and other theories that examine larger social structures. Persistent violent criminal and antisocial behavior committed by certain individuals may defy all pure sociological explanations, and thus may require the introduction of biological and/or psychological factors.

Through these examples, one can start to see how the theories might be viewed as complementary. In this view, criminologists need to pay greater attention to the direction of causation and the location of independent variation in the different theories (Bernard and Snipes, 1996). In addition, it is important to consider the problem the theory is meant to solve. This relationship is exemplified by the conflict between social learning and control theories. On the one hand, social learning theories suggest that group influences can cause a person to become involved with criminal activity (i.e., hanging out with the “wrong” crowd causes delinquency and crime). On the other hand, control theories claim that criminals seek out others with similar interests and suggest that this is how delinquent peer groups form (i.e., as the stock phrase goes, “birds of a feather flock together”) (Bernard, 2001). These theories are not necessarily incompatible; rather, they focus on different processes involved with criminal behavior. Criminologists must first specify the situations in which the theories are most applicable to usefully integrate theories.

After this brief resurgence during the mid-1980s, interest in theorizing, integration, and theoretical methods subsided. However, several scholars have recently pointed out the need for an increased understanding of this area. For example, Farrington (2003a) states “that a great deal can be learned by comparing several theories with each other” (p. 223), and that further theoretical work in the area

may give clues as to which elements need to be kept and which ones ought to be discarded.

Another important debate that impacted the DLC program focused upon the usefulness of the criminal career paradigm to study crime and criminality. The criminal career paradigm was popularized by the formation of the National Research Council's Panel on Criminal Careers (NRCPC) (Blumstein, Cohen, Roth, and Visher, 1986). However, like the emergence of the risk factor approach, the origins of the criminal career approach can be traced to a much earlier point in the history of criminology. The NRCPC drew some inspiration from Wolfgang, Figlio, and Sellin's (1972) study on delinquency in a birth cohort (Bernard, Snipes, and Gerould, 2010). By examining and analyzing official records, the researchers were able to follow the criminal activity of a group of young males from Philadelphia born in 1945. They found that 6 percent of the juveniles accounted for 50 percent of all contacts with the police suggesting the existence of a small group of chronic and prolific offenders (Wolfgang et al., 1972). Based on the findings of Wolfgang and his colleagues, the NRCPC attempted to develop a more consistent terminology to use when studying criminal careers. Specifically, they examined participation in crime by frequency (or lambda) and prevalence (or the fraction of people in a group who committed crime). They also stressed the importance of measuring the onset and duration of crime as well as desistance from crime (Blumstein, Cohen, Roth, and Visher, 1986).

The debate about criminal careers emerged from disagreements over the age-crime curve. Proponents of the criminal career stance claimed that since some people desist from crime while others continue to offend throughout life, two separate models

were needed to explain the differences in behavior. Bernard and his colleagues (2011) summarize this side of the argument:

Because some offenders always participate whereas others end their careers early, it may be necessary to develop different models for predicting participation and frequency. It may be that one set of factors influences whether someone participates in crime, whereas another set of factors affects the frequency and duration of their criminal acts. (307)

This disagreement eventually led to a particularly contentious debate about the proper type of research required to test the theories. On the one hand, proponents of the criminal career approach argued that traditional cross sectional research only provided knowledge about the correlates of criminal behavior; they believed that longitudinal research is required to understand the causal processes involved in criminality. On the other hand, criminal propensity theorists claimed that some people seem to be more likely to commit crime than others, and that this tendency remains stable throughout life.

Interestingly, at this point the debate begins to intersect with earlier discussions about the importance of risk factors in predicting criminality:

Different sets of “causes” may influence individuals’ decisions to commit crimes, the types of crimes committed, and their decisions to stop committing crimes. Attention to these separate dimensions of the criminal career can thus help to refine theories of criminal behavior, since some theoretical explanations may account for the initiation of deviant acts by teenagers, while very different theories may be more relevant to the termination of serious criminality by adults or fluctuations in rates of offending during an active criminal career. (Blumstein, Cohen, Roth and Visher, 1986, pg. 46)

The intellectual activity chronicled above has contributed to the formation of the orienting strategy used by the DLC research program in many different ways. In the

next section, the specific assumptions and directives of the DLC program that were derived from these debates will be identified and discussed.

### **Out of Many, One: Foundational Elements of DLC Program**

Each of the areas described above have contributed assumptions that form the basis for the orienting strategy of the DLC program; these key assumptions can be found in Table 10 below.

**Table 10: Key Foundational Elements in Developmental-Life Course Orienting Strategy**

- Biological, psychological, and sociological variables must be integrated to explain criminality
- Criminals progress through different stages
- Macro forces interact with meso-level processes and micro-level factors that influence behavior

The task at hand now is to separate the foundational elements (i.e., assumptions and directives that all DLC theories share) that have influenced all the theories in the DLC program from the working strategies that have influenced individual theory growth directly.

The influence of the risk factor approach should be readily apparent in unit theories in the DLC program. Most of the theories attempt to incorporate an assortment of variables derived from existing theories of criminology in biology, psychology, and sociology. The primary concern here is to understand how the variables fit together and which are complementary. The assumption that theories are complementary represents an important foundation in the DLC program.

Another key foundational assumption in the DLC program, the notion that criminals progress through different stages, is derived from the criminal career paradigm. DLC theorists all seem to acknowledge that in order to progress towards a complete explanation of crime and criminality, different theories may be more important at different points in one's life. As will be demonstrated shortly, Moffitt's (1993) unit theory is much more concerned with early life and how individuals began offending as opposed to Sampson and Laub's (1993, 2003) formulation which focuses on adulthood and desistance from crime. Therefore a substantive assumption of the program is an emphasis on the study of the emergence, maintenance, and desistance of antisocial or criminal behavior (Farrington, 2003a).<sup>181</sup>

Developmental criminology is another important influence in the orienting strategy of the DLC program (Loeber and LeBlanc, 1990). Not surprisingly, this approach holds many parallels to both the criminal career paradigm and life course perspective. Developmental criminologists have attempted to expand on and refine some of the concepts supplied by these approaches. First, like proponents of the criminal career paradigm and life course theorists, developmental criminologists examine how one's involvement with crime changes over one's lifetime. However, they use a slightly different terminology derived from developmental psychology (i.e., activation, aggravation, and desistance versus emergence, maintenance, and desistance in the criminal career paradigm). Second, developmental criminologists have also attempted to further elaborate upon terminology introduced by criminal career

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<sup>181</sup> The distinction between antisocial and criminal behavior is made by some, but not all, DLC theorists. Both Moffitt (1993) and Farrington (1992, 2003) are quite clear about the fact that they are more interested in antisocial behavior, Sampson and Laub (1993, 1997, 2005) still refer to criminal behavior.

proponents (e.g., replacing incidence of crime with more precise measurements like individual and cumulative frequency of crime). Finally, they have also sought to define the temporal boundaries of concepts introduced by criminal career proponents and present new concepts that focus on changes offending patterns (Loeber and LeBlanc, 1990).

A final key influence in the DLC program is life course perspective. Genetic and psychological personality factors provide the starting point for the analysis of human behavior in this approach. An important metatheoretical belief within the life course perspective is that the behavior of individuals is also influenced by their social, cultural, and historical environments (Baltes, 1987). Consequently, DLC theories attempt to account for biological, psychological, and sociological variables in criminal behavior. At first glance, this may appear to be the same as the assumption offered by the risk factor approach. However, life course perspective goes further and suggests that wider macro forces can interact with meso-level processes and micro-level factors that influence behavior (e.g., changes in economies can affect standards of living for particular groups of people, which can influence child-rearing practices and this can affect developmental processes of young children). This is similar to saying that while individual differences are important, a complete theory of criminality and crime will explain how more macro-level, structural factors interact with micro-level factors (i.e., individual differences) and social processes to produce criminality and crime.

Extending this argument a bit further, Benson (2002) suggests that there are also a variety of structural and political factors important to understanding behavior that have been ignored or downplayed by criminologists in recent years. For example, many

have argued that there is an increasing maturity gap between parents and their children (see also, Moffitt, 1993). In modern society, it is becoming increasingly difficult for young people to become self-sufficient because well-paying jobs are slowly vanishing; those that are left require higher levels of training and education and tend to be more difficult to get than they were 20 years ago (Benson, 2002). This is the result of broader political and economic decisions and the shift towards globalization in which occupational out-sourcing has become the norm. This increases the length of time one is “free” to engage in criminal behavior (i.e., because of a lack of responsibility) and may change the duration to which one is exposed to delinquent norms and values leading to changes in rates of offending for certain periods over the life course.

A major methodological foundation of the DLC program is the use of longitudinal research as opposed to traditional cross sectional research. This also helps form the basis for the observational set of the program, and represents a significant shift in criminology. Cross-sectional research compares a group of individuals at one point in time and was the norm in criminological for many years. In contemporary criminology, the preference for longitudinal research is becoming more and more pronounced (Lilly, Cullen, and Ball, 2007; Bernard, Snipes, and Gerould, 2010), therefore, a discussion of longitudinal research is in order here.

There are two forms of longitudinal research: cohort studies and panel studies. Cohort studies follow groups of individuals who experience the same event within the same time period; birth is most commonly used as the significant event (Thornberry and Krohn, 2003). Description is the most common goal of cohort studies (Wolfgang, Figlio, and Sellin, 1972). Panel studies are similar to cohort studies but, they contain

more detailed measures of explanatory variables than found in cohort studies. Panel studies are more concerned with attaining a theoretical rather than merely descriptive understanding. The data for longitudinal research designs can come from a variety of sources but official statistics and self-reports are most commonly used (Thornberry and Krohn, 2003).

The preference for longitudinal research in criminology arises primarily out of the criminal career paradigm and the debates around this described in the previous section (Benson, 2001, p. 12). However, developmental and life course criminologists also naturally prefer this type of research, and it has become increasingly important in the field of criminology (Thornberry and Krohn, 2003).<sup>182</sup> Given the inclination towards longitudinal studies, one substantive foundation of the program is to examine within-individual change rather than between-individual differences (Farrington, 1992).

The attempts to fuse the risk factor approach, the criminal career paradigm, developmental psychology, and life course perspective undertaken by theorists in the DLC program can be seen as an example of a research tradition or paradigmatic integration described by Laudan (1977), and later by Ritzer (1981). This is much different than unit theory or propositional integration. The theorists have taken several different approaches and identified parallels among them. Terminology and concepts were refined using ideas from the different traditions, and then usefully combined with one another to provide the foundations for unit theories. This activity triggered several important shifts in the way in which research is conducted in criminology. In

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<sup>182</sup> Longitudinal research became very popular in Criminology when the U.S. Dept. of Justice and the National Institute of Justice begin sponsoring and funding research directed towards identifying 'career criminals'. The goal here was to identify repeat offenders early and incarcerate them for long periods of time.



addition, it provided a method to integrate pre-existing unit theories in criminology and produce new unit theories.

Various aspects of the three main theoretical trajectories of control theory, differential association/social learning theory, strain/anomie theory are clearly represented in the theories of Thornberry (1987, 2001), Farrington (1992, 2003a), Moffitt (1993), Agnew (2005), and Sampson and Laub (1993, 1997, 2005). However, often the theorists have integrated ideas from these different trajectories; sometimes the integration has been in the form of unit theories, sometimes it has been in the form of orienting strategies, sometimes a mixture of both. In addition, they have integrated theories across levels of analysis (i.e., individual differences, process, and structure) and between problem sets (e.g., criminal acts/crime and criminality/criminal behavior). The following sections will attempt to describe the major unit theories in the DLC research program and describe how the various forms of integration taking place in amongst this set of interrelated unit theories.

### **Integration through Elaboration: Thornberry's Interactional Theory**

An important forerunner to the unit theories produced by the DLC program is Thornberry's (1987) interactional theory.<sup>183</sup> Thornberry (1987) began the formulation of his theory by identifying a number of shortcomings of criminological theories produced in the 1970s and 1980s. First, he argued that most theories of the time were uni-directional and tended to ignore bi-directional or reciprocal effects. According to Thornberry (1987), interactions between different variables were ignored or poorly

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<sup>183</sup> The later version of this theory (Thornberry and Krohn, 2001) could be considered to be part of the DLC program since it is more explicitly developmental.

understood. Second, Thornberry (1987) claimed that during this time most theories were non-developmental in that they focused on mid-adolescence, and downplayed the importance of other points in the life course (e.g., early childhood development, young adulthood, and old age). Third, he pointed out that most theories assume uniform causal effects throughout the social structure. To put it differently, little attention was paid to understanding how a person's location in society influences their likelihood of future risk for delinquency. These complaints can be seen as issues with some common assumptions found in most criminological theories (Berger and Zelditch, 1993, 1997).

Interactional theory makes several important assumptions about the nature of criminality and crime. First, social interaction is central to the theory; behavior is assumed to be consistently influenced and changed via social interaction with various groups (e.g., family, peers, and acquaintances). Like social control theories, interactional theory has the earmarks of a Durkheimian stance and emphasizes social control. The belief is that a lack of effective social control allows wider variation in behavior one of which is criminal or delinquent behavior. Finally, to become involved in delinquency and crime, control must be lifted and the individual must be in an interactional setting in which delinquency is learned, performed, and reinforced.

The three primary bonding mechanisms in Thornberry's (1987) theory are derived from Hirschi's (1969) variables of attachment, commitment, and belief. Thornberry (1987) also examines motivation and incorporates several concepts from learning theory to explain how youth with weak social bonds become involved with criminal behavior. However, these learning concepts are incorporated within the context of

control theory. For example, attachment to delinquent peers is considered to be an important motivator for crime. Delinquent associations and values, concepts central to social learning and differential association theory, also have clear parallels to the involvement and belief concepts in Hirschi's (1969) theory. If one associates with delinquent peers, one is "involved" with them in a sense. If one is exposed to delinquent values, their "belief" in delinquent values may increase. Finally, while weak social bonds may give rise to delinquent peer associations, delinquent peer associations may also help break down bonds to parents and other family members. Thornberry (1987) refers to these interactions as "reciprocal effects".

As implied previously, Thornberry's (1987) theory also contains a developmental and structural extension. The developmental aspect of the theory specifies how the model applies to different life stages (e.g., middle and late adolescence). The structural aspect indicates how social location (i.e., age, gender, class, and race) may affect the risks and likelihood of criminal behavior. As will be demonstrated later, these notions serve as vehicles for integration; they allow the theorist to combine ideas from different research programs and levels of explanation.

Thornberry and Krohn (2001) have proposed an elaboration of this theory; a reformulation that contains two important changes. First, life course perspective is more central in the later version of this theory. There is a new focus on continuity and change in criminal careers. Second, the theory attempts to specify different types of offenders. Precocious offenders display antisocial behavior in early childhood (i.e., the first six years of life). This behavior is thought to arise from a combination of family interactions and temperamental traits (e.g., aggressiveness and low frustration

tolerance). Early onset offenders begin to partake in delinquent behavior from the ages of 6-13. According to Thornberry and Krohn (2001), this pattern develops as a result of family issues and social structural disadvantages (e.g., social disorganization). Late onset offending is the most common and typically starts during adolescence or after age 13. This type of offending is influenced by the presence of delinquent peers and involves common types of crime committed during one's youth (e.g., petty crimes, drug use, and status offenses).

Thornberry (1987) clearly states that he does not view his unit theory as an example of propositional integration. However, the true nature of this theoretical activity is unclear. Bernard and Snipes (1996) explain:

...Thornberry avoids describing his theory as an "integrated" theory and prefers to call his approach "theoretical elaboration". If true theoretical integration keeps each original theory entirely intact in the merger, then Thornberry's is not an integrated theory. However, if adopting the key concepts from more than one theory and reordering the causal specifications can still constitute integrated theory, then his theory fits into this category. (316)

The confusion between integration and elaboration is not surprising. Wagner (1984) mentions that "integration presents a construction task that is very similar to elaboration," (pg. 70). According to Wagner's (1984) model of theory growth, this would be more appropriately thought of as an integration of two variant theories; specifically, Hirschi's (1969) theory of social bonding and social learning theory (Burgess and Akers, 1966; Akers, 1998) (Wagner, 1984). Thornberry is using a developmental approach as a vehicle for combining these two theories by specifying the points in life at which each is relevant.

Several key assumptions have also changed during the process of formulating this theory; these changes alter the nature of the orienting strategy being used (Berger and Zelditch, 1993, 1997). Eventually, Thornberry's (1987) suggestions were embraced by other DLC theorists, and used as a basis for further theorizing. Therefore, the changes in orienting strategy may have been more important than the unit theory that was produced by them. This type of activity has parallels to the integration of orienting strategies or research traditions described by Laudan (1977), and later by Ritzer (1981). Thornberry (1987) has added new assumptions and directives into the control theory orienting strategy and these changed the nature of the unit theory he (and others) have produced.

The Rochester Youth Development Study is guided, in part by Thornberry's (1987) interactional theory and has been used to revise and expand the theory. This study was started in 1986 by the Office of Juvenile Justice and Delinquency Prevention's Program of Research on the Causes and Correlates of Delinquency. Initially, the focus of the study was adolescent delinquency and drug use; however, over the years it expanded to examine prosocial and antisocial development across the life course. The sample consists of 1,000 students in the 7<sup>th</sup> and 8<sup>th</sup> grades and their primary caretakers. Males and those living in high arrest areas were oversampled because they were assumed to be at a greater risk for offending. Multiple measures of the same variables were taken over time; variables measured included rates of delinquency, parent-child relations, school factors, peer relationships, family sociodemographic characteristics, parental stressors, area characteristics, and individual characteristics. Data for the measures were obtained through a combination

of interviews, official statistics, school and social service records, and census data (Thornberry, Lizotte, Krohn, Smith, and Porter, 2003).

Thornberry (1987, 2001) does an admirable job of integrating elements of control and social learning theories to produce new unit theory that addresses several levels of explanation (Bernard and Snipes, 1996). In addition, he also made significant changes to the orienting strategy by introducing or changing various metatheoretical elements. However, the theory fails to adequately account for individual differences that arise from biological and psychological factors.<sup>184</sup> The next unit theory, Moffitt's (1993) developmental taxonomy, is a more blatant attempt to produce a cross-level integration that takes individual differences into account.

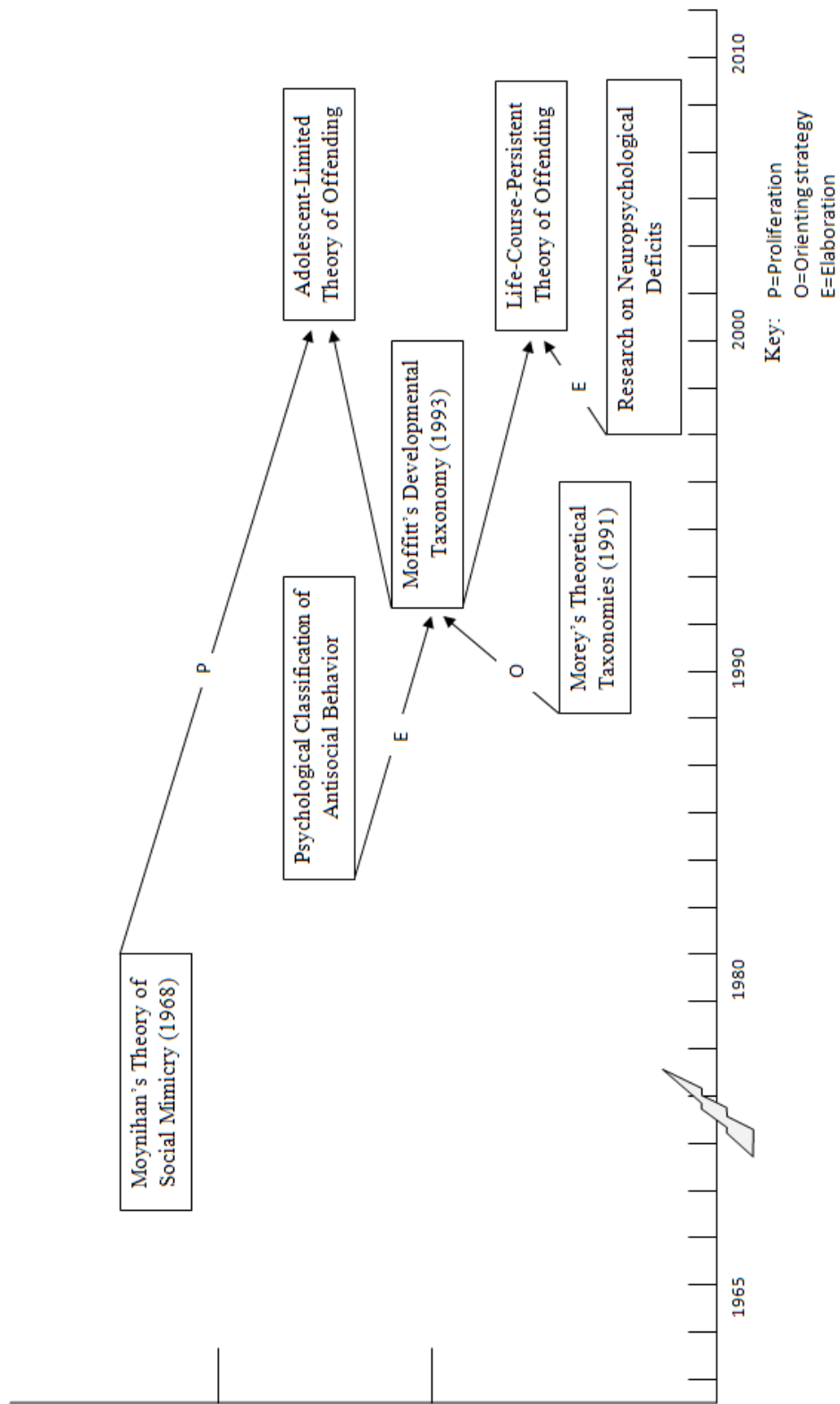
### **Hell Raisers and Their Protégés: Moffitt's Developmental Taxonomy**

Moffitt's (1993) developmental taxonomy is actually composed of two theories focused on explaining antisocial behavior (see Figure 35 on page 337). Initially, these theories can be seen as a direct elaboration of the psychiatric classification of antisocial behavior (Wagner, 1984). This method of theory generation was suggested by Morey (1991) and constitutes an important aspect of Moffitt's methodological working strategy, and is unique to her theory (Berger and Zelditch, 1993). More specifically, Morey suggests that taxonomic constructs from the *Diagnostic and Statistical Manual of Mental Disorders* ought to be embedded in some kind of

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<sup>184</sup> Bernard and Snipes (1996: 336) imply that Hirschi's (1969) theory of bonding has both structural and individual differences aspects, so there is attention paid to both levels but findings from psychology and biology are not included.

Figure 35: Moffitt's Developmental Taxonomy



theory.<sup>185</sup> This will provide a context in which the construct can be falsified and modified and will also allow research about the constructs to be more easily undertaken (Morey, 1991).<sup>186</sup>

According to Moffitt (1993), there are two types of antisocial behavior that manifest in individuals: life-course-persistent and adolescent-limited. Life-course-persistent individuals are thought to display neuropsychological deficits early in life that include verbal (e.g., problems with expressive speech, lack of listening and problem solving skills) and executive function problems (e.g., learning problems leading to impulsivity and comportmental learning disability) (Moffitt, 1993, p. 103). These neuropsychological deficits cause problems when interacting with parents early in life, and this leads to social conflicts with later in life with peers, teachers, and other figures of authority. This is compounded in some cases since these neuropsychological deficits may be partly hereditary. In other words, the child may be interacting early in life with a parent who has the same deficits, so socialization and attachment may be stunted (Moffitt, 1993, p104-106; see also Bowlby, 1969). This pattern of problematic and destructive interactions eventually creates a situation that Moffitt (1993: 108-110) describes as “cumulative continuity” in which the consequences of poor interactions perpetuate a child’s, and later an adult’s, tendency for antisocial behavior.<sup>187</sup> This idea has some parallels with the labeling perspective;

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<sup>185</sup>Thus, criminal behavior is equated with antisocial personality disorder (a mental disorder). At one point, Moffitt (1993) discusses the resemblance of life course persistent behavior to psychopathology (p. 112-113).

<sup>186</sup> There seem to be some parallels to psychopathy here. Some argue that psychopathy is a theory when, in reality, it is an instrument used to classify offenders. This does not mean there is no underlying theoretical basis to psychopathy.

<sup>187</sup>Moffitt (1993) suggests that something called “contemporary continuity” arises when the constellation of problematic traits (e.g. impulsivity, low cognitive functioning) continues causing problems into adulthood.



specifically, Lemert's (1951) theory of secondary deviation. Thus, emerges the first important proposition in Moffitt's (1993) developmental taxonomy: the more interpersonal conflicts one has, the greater the chance of antisocial and criminal behavior throughout the life course. She claims life-course-persistent individuals seem to get locked into a trajectory that begins in early childhood and have great difficulty escaping from it.

Adolescence-limited antisocial behavior is precipitated by factors that are quite different from life-course-persistent antisocial behavior. The motivation for adolescent-limited offenders is thought to result from something similar to the strain described by Merton (1939), and later elaborated upon by Agnew (1992). However, it is couched at the biological rather than the social-structural level. Specifically, Moffitt (1993) suggests that most adolescents reach biological maturity before reaching social maturity; consequently, they suffer a "role vacuum" in which they are not children yet not quite adults (p. 116). Restrictions on behavior also inherently limit the types of activities they can take part in like pleasurable activities (e.g., sex and drinking alcohol) and their level of independence. At this point, the biological theory of social mimicry is imported to help explain how most adolescents obtain these desires (Moynihan, 1969). The suggestion is that adolescents will observe which peers are securing sought-after resources (i.e., pleasure and independence) and will determine how they are obtaining them. Once this determination is made, the adolescent in question will begin to mimic the peers who are receiving the resources; this usually involves behaving in an antisocial manner (e.g., drinking underage, having sex out of

wedlock, doing drugs, and risky behavior).<sup>188</sup> Some of the reinforcement gained from these activities is negative, meaning that even if there are tangible negative consequences, the status gained among peers and the feeling of independence will override the actual punishment from authority figures (Moffitt, 1993). This may sound similar to social learning theories (e.g., Akers, 1998); however, a key difference is that the observer need not have any kind of attachment or bond with the model (i.e., priority, frequency, intensity, duration are not of importance).

Like the notion of cumulative continuity, Moffitt's (1993) use of social mimicry has parallels with social learning and differential association theory. The importance of peer interaction and social reinforcement are readily apparent in both formulations. This may indicate that it may be possible to produce a sort of cross-disciplinary integration here.

Moffitt's (1993) developmental taxonomy can be seen as a form of theory integration. According to Hirschi (1979), side-by-side integration occurs when a theorist selects or develops specific theories to explain different crimes. Some have also called these types of integrations "typologies" (Gibbons, 1985). In her theory, Moffitt (1993) manages to unite a number of different ideas from neuropsychological research and key theoretical trajectories in criminology including strain and learning theory. In addition, incorporates ideas that have many parallels with theories from sociological criminology (i.e., strain, differential association/social learning, and labeling). So, a theory that started as an elaboration of a psychiatric classification

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<sup>188</sup>It is important to note that adolescent limited antisocial behavior is considered completely normal by Moffitt (1993) despite the use of a psychiatric illness categorization as a vehicle for elaboration.

turned into an integrated unit theory that combines ideas from sociological and biological explanations of criminality.

In Wagner's (1984) terms, Moffitt (1993) is integrating proliferations since she is synthesizing findings across disciplines. The description of neuropsychological factors and cumulative continuity that seem to lead to persistent antisocial behavior represents an integration of individual difference and structure/process theories, whereas the description of the strain and social mimicry experienced by adolescent-limited offenders can be seen as an integration of structure/process theories intended to explain "normal" delinquent behavior that commonly occurs during adolescence (Bernard and Snipes, 1996).

Like Thornberry, Moffitt has used data from a large-scale study to test and support her theory. The Dunedin study started in 1972 and is a longitudinal investigation of both health and behaviour (Moffitt, Caspi, Harrington, and Milne, 2002). The sample consists of a cohort of 1,037 children from a mix of social classes on New Zealand's South Island. The researchers took 79 measures "selected to represent five domains of adult outcome implicated by the theory" (182). The domains included were criminal offending (property crimes, rule violations, drug crimes and violence); personality, psychopathology (substance abuse and mental disorders), personal life (relationships with women and children) and economic life (education, occupation, income, unemployment and work problems). These domains were measured through personal interviews and official records or questionnaires completed by informants who were acquainted with the study members (Moffitt, Caspi, Harrington, and Milne, 2002).

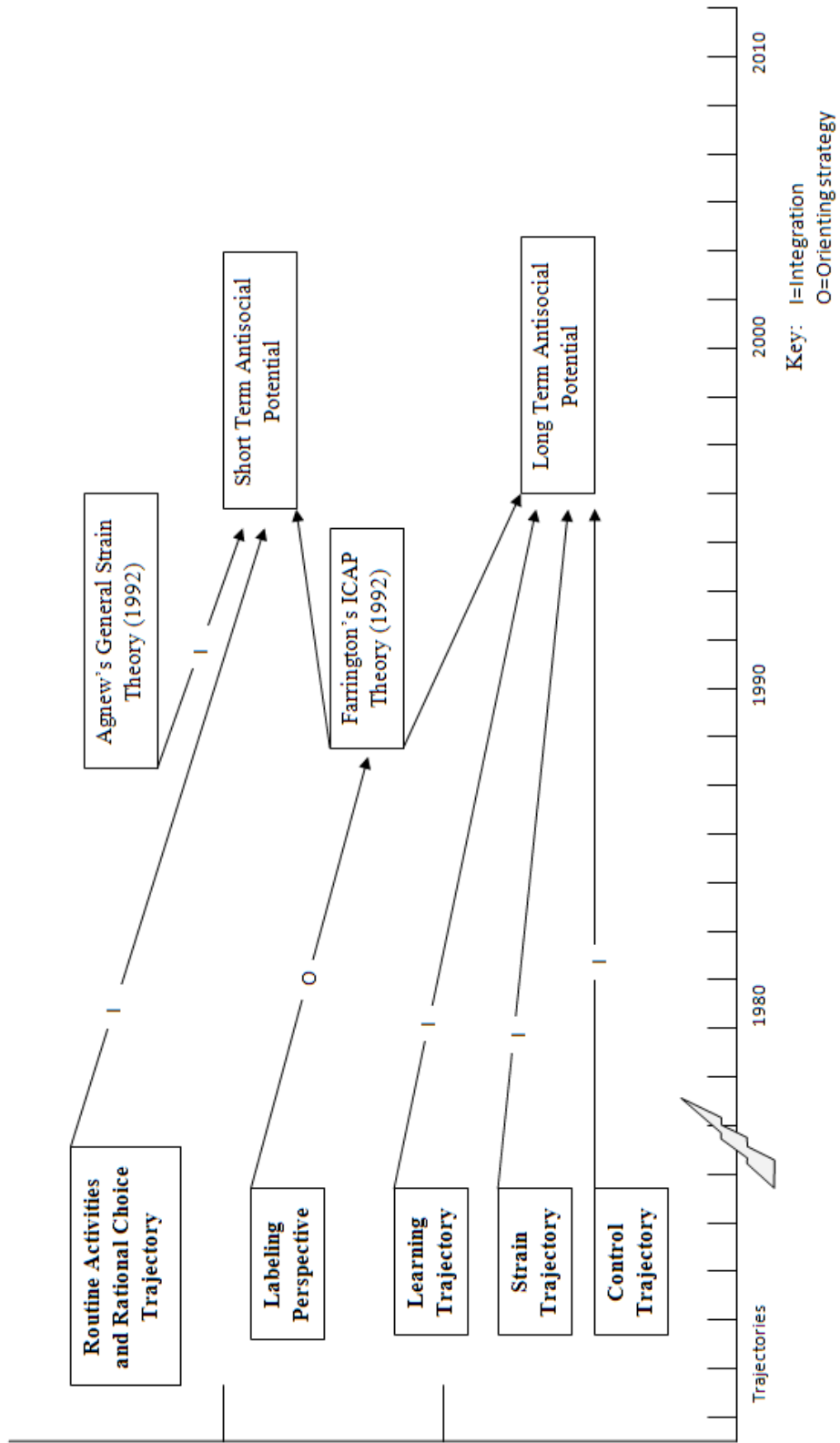
Moffitt and her colleagues (2002) have used the data from the Dunedin Study to test her developmental theory and were able to elaborate upon her original theory, the developmental taxonomy, by further specifying characteristics of “abstainers”. In addition, they were able to refine a category of “recoveries” proposed in earlier research. Recoveries are those who exhibited serious behavioural problems and antisocial behavior early in life but then seemed to reform during adolescence and young adulthood.

Another developmental theory drawing upon a large-scale study for empirical has been proposed by Farrington (1992). This will be the focus of the next section of this chapter.

### **Integrating Across Problem Sets: Farrington’s ICAP Theory**

Farrington’s (1992, 2003a) Integrated Cognitive-Antisocial Potential Theory (ICAP) is another theory that draws heavily upon the biology and developmental psychology to explain criminal behavior (see Figure 36 on page 343). However, there are several important differences between Moffitt’s (1993) developmental taxonomy and ICAP theory despite the fact that they share several key assumptions. Most prominent among these is the belief that early childhood characteristics is the key to predicting criminal behavior later in life and that antisocial behavior can be equated with criminal offenses. The first major difference is that Farrington (1992, 2003a) explicitly states the scope of his theory; his theory is meant to explain criminal

**Figure 36:** Farrington's Integrated Cognitive Antisocial Potential (ICAP) Theory



behavior amongst lower class males.<sup>189</sup> Second, ICAP theory draws upon a risk factor strategy to identify its variables of interest:

For many years I did not attempt to formulate a wide-ranging DLC theory of offending. In line with Bernard and Snipes (1996), I focused on identifying independently predictive risk factors, testing specific hypothesis (e.g., the effects of unemployment on offending: Farrington et al. 1986) and investigating causal mechanisms linking risk factors and offending (e.g., why criminal parents tended to have delinquent sons: West and Farrington, 1977, chapter 6). However, I was criticized for being “atheoretical”, for focusing on empirical variables rather than underlying theoretical constructs. (Farrington, 2003a, p 230)

This short passage seems to illustrate how Farrington has used the risk factor prevention paradigm to inform his own methodological working strategy that he used to formulate ICAP theory (Berger and Zelditch, 1993, 1997).

Motivation for antisocial behavior is not assumed (distinguishing this formulation from a pure control theory) and factors that draw one into criminal activity can come in a variety of forms (e.g., biological, family/peer influences, strain, and situational factors). In addition, Farrington (1992, 2003a) attempts to explain both criminal behavior and the criminal act by offering different sets of factors to explain each problem area. According to Berger and Zelditch (1993), substantive working strategies serve to “conceptualize the nature of actors, action and society in order to direct the theorist to solvable problems,” (p. 37). This distinction between action and actors is important in criminology and this signifies a crucial difference in the working strategy of ICAP theory.

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<sup>189</sup>This should not present any difficulties as far as a theory by theory comparison is concerned as the other two theories are intended to explain crime in general, so their explanatory domains are overlapping. This being the case, there will be some competition among them as they are attempting to explain some of the same phenomena (Berger and Zelditch, 1993).

Farrington's (2003a) model distinguishes between long and short-term levels of antisocial potential (AP).<sup>190</sup> Long-term influences are thought to represent between-individual differences in criminal behavior and are normally found through cross-sectional research (Farrington, 1992). These long-term factors include ideas from the three prominent theoretical trajectories in criminology (i.e., control, strain, and social learning) and also some empirical findings of biological and psychological research. Specifically, this portion of ICAP theory integrates Gottfredson and Hirschi's (1990) notion of low self-control, Bowlby's (1969) work on early childhood attachment problems and their effect on behavior, social learning and strain theories (Farrington, 1992).

Robinson (2004) has suggested that the use of a risk factor/prevention method of theorizing does not lead to true theory integration since all aspects of the constituent theories are not truly represented. This is debatable<sup>191</sup>; however, Farrington's ICAP theory still displays aspects of integration even if Robinson's (2004) suggestion is accurate. Integration also occurs as a result of Farrington's (2003a) introduction of short-term influences of antisocial potential. Short-term influences are more direct and situational. Examples of these influences include the presence of opportunities and cost-benefit analyses conducted by offenders. Interestingly, many of these factors are drawn out of the routine activities (Cohen and Felson, 1980) and rational choice approaches to crime (Cornish and Clarke, 1983).

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<sup>190</sup> In Farrington's original formulation (1992) he differentiated between antisocial tendency (or long term influences) and offending behavior (or short term influences).

<sup>191</sup> Again, this finding is not surprising. Both Wagner and Berger (1985) and Berger and Zelditch (1993) suggest that certain elements of within constituent theories will invariably be lost after the integration is complete. This does not necessarily make the integration unsuccessful.

Essentially, ICAP theory unites ideas from the control, strain, and learning trajectories (all variants in criminology) by offering new concepts and theoretical language in the form of the long and short-term influences on antisocial potential. In addition, these new concepts allow the theory to incorporate aspects of routine activities (Cohen and Felson, 1980) and rational choice theories (Cornish and Clarke, 1983). Finally, it is posited that these situational factors and personal characteristics interact with one another when a person behaves in an antisocial manner (Farrington, 1992, p. 275).

Farrington (1992) is integrating several variant theories (i.e., control, strain, and learning) with other theories that have a different problem focus (i.e., rational choice and routine activities) while considering the importance biological and psychological factors on offending behavior (Wagner, 1984). This allows for integration between problem sets (i.e., criminal behavior and criminal acts) and across levels of analysis (individual differences and structure/process theories) (Bernard and Snipes, 1996). Therefore, this theory could be seen as simultaneously integrating both variant and proliferant theories (Wagner, 1984).

Farrington has derived a great deal of empirical support for his ICAP theory from The Cambridge Study, which was started in 1961 by the psychiatrist Donald J. West. In 1983, Farrington assumed directorship of the study and it has continued until today (Farrington, 2003b). Not surprisingly, this is a longitudinal survey of the development of antisocial and criminal behavior in 411 South London working class boys born in the early 1950s. The findings of the study lend support to the criminal career perspective. In addition, Farrington (2003b) was also able to identify some key risk



factors involved in offending and suggests that in many cases criminal offending is “part of a larger syndrome of antisocial behavior that tends to persist over time” (pg. 155). Finally, researchers were also able to investigate the importance of life events in one’s criminal trajectory. Variables for Farrington’s (1992) ICAP theory were derived from early findings of the Cambridge Study. Subsequent findings from the study have also provided support for the theory.

### **Chaos and Criminality: Sampson and Laub’s Age-Graded Theory**

Sampson and Laub’s (1993) age-graded theory of informal social control differs from other theories in the DLC program in two important respects (see Figure 37 on page 348). First, unlike the other theories, Sampson and Laub made no attempts, initially, to integrate unit theories or concepts from the other two major criminological theory trajectories (i.e., strain or learning) Instead, Sampson and Laub’s (1993) formulation can be seen as an extension of Hirschi’s (1969) theory of social bonding.

Second, Sampson and Laub (1993) assume a more stringent life course stance than the other theories, and this carries with it a number of assumptions and directives that the previous theories do not have (see, Elder, 1985 and Baltes, 1987). The previous two theories place much more emphasis on physiological arousal and early childhood characteristics.<sup>192</sup> Further, both Moffitt’s (1993) developmental taxonomy and Farrington’s (1992) ICAP theory assume that habitual criminals can be identified early in life and will remain on their antisocial trajectories for the rest of their lives.<sup>193</sup>

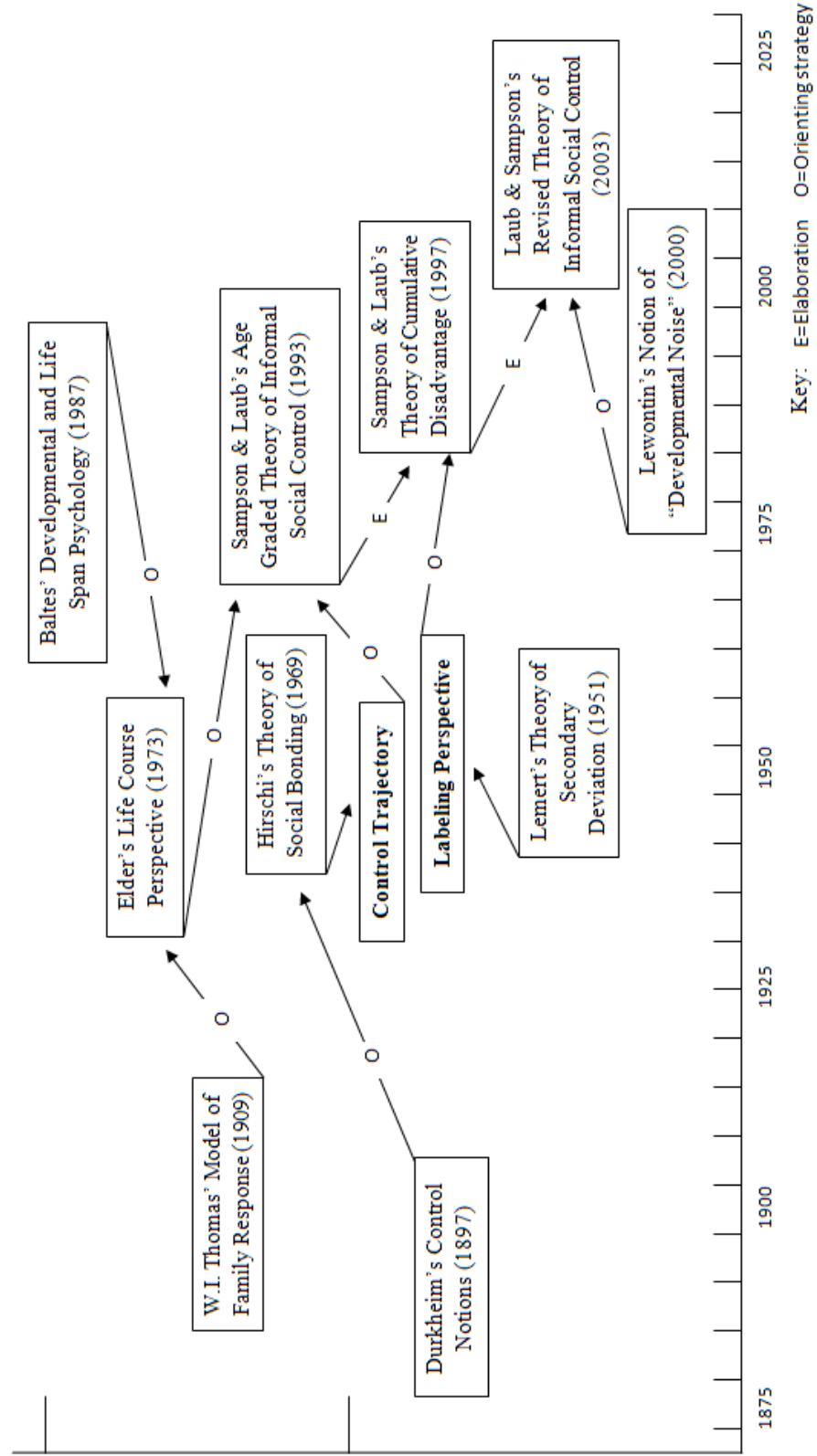
While there is a great deal of support for this contention, some criminological research

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<sup>192</sup> So, for Moffitt’s (1993) developmental taxonomy the emphasis is on neuropsychological deficits and for Farrington’s (1992) ICAP theory the focus is on impulsivity (similar to Gottfredson and Hirschi’s self-control construct).

<sup>193</sup> The influence of both the criminal career and risk factor/ prevention paradigms is readily apparent here.

**Figure 37:** Sampson and Laub's Age Graded Theory of Informal Social Control



indicates that this relationship is not quite so cut and dried. Specifically, the oft-cited “Robin’s Paradox” (Robins, 1978) research suggests that while most antisocial adults were antisocial children, most antisocial children do not become antisocial adults. To address this problem, Sampson and Laub (1993) use an orienting strategy informed primarily by Elder’s (1985) life course perspective.<sup>194</sup> This tradition places an emphasis on the entire life span suggesting that every stage of life is of importance (Sampson and Laub, 2005). Consequently, Sampson and Laub (1993) draw attention to an individual’s location in the age structure of society and how lives are linked to one another. This represents another important difference in the working strategy of Sampson and Laub’s theory when compared with the previous two models (Berger and Zelditch, 1993).

In addition to using a life course perspective to inform their orienting strategy, Sampson and Laub (1993) incorporated several life course concepts into their theory. First, individuals are thought to be on a number of different trajectories in life; in this respect, the term trajectory refers to long-term patterns of behavior. For example, there may be work, relationship, and parenthood trajectories. All of these trajectories are different, but sometimes they overlap with one another (Sampson and Laub, 1993). Transitions are embedded within the trajectories and are marked by important life events (e.g., getting married, getting a new or better job, having and/or raising a child). These life events often demand people to re-evaluate their lives, and this may cause turning points in one’s life (Sampson and Laub, 1993). Naturally, these concepts

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<sup>194</sup> Elder’s life course perspective also draws upon several strands of metatheory including developmental life span psychology (Baltes, 1987) and intergenerational age structure models (Kertzer and Keith, 1984). Again, this type of metatheoretical integration seems to go unnoticed in the field of criminology and philosophy of science literature.

readily lend themselves to the framework of control theory, especially Hirschi's (1969) social bonding theory. Specifically, the underlying cause of the turning point is increased informal social control and a stronger bond to society (Sampson and Laub, 1993).

Sampson and Laub have elaborated upon their age-graded theory several times over the years, and not surprisingly, the working strategy of their theory has reflected some of these changes (Berger and Zelditch, 1993). In their theory of cumulative disadvantage, Sampson and Laub (1997) argue that labeling theory was perhaps one of the earliest developmental theories, and they import some ideas from labeling perspective into the framework of their theory. Drawing on Lemert's (1951) principle of secondary deviation and Becker's (1963) notion of master status, Sampson and Laub (1997) suggest that social control efforts on the part of the criminal justice system may serve to perpetuate criminal offending in some important ways. For example, if an offender is labeled by the criminal justice system, their social status effectively changes and their opportunities for employment are cut off or reduced as are chances to establish interpersonal relationships (Sampson and Laub, 1997). The situation created here, at best, frees the offender to commit more crime; at worst, it encourages criminal behavior because the offender has little to lose and no stakes-in-society (Laub, Sampson, and Sweeten, 2007). The negative effects of the criminal justice system have been demonstrated in both Sampson and Laub's (1997) research on crime and also several other studies (see Austin and Irwin, 2001 for a summary).

Sampson and Laub (1997) go on to suggest that these findings prove that the stability of criminal behavioral is not rooted in one's biological or psychological

make-up, rather it is at least, in part, maintained by social responses to behavior. The introduction of these labeling principles affects both the working strategy of the theory and the internal structure of the theory itself. Becker's (1969) notion of "master status" seems to be similar to an assumption, since it would be nearly impossible to objectively test and measure. However, Lemert's (1951) principle of secondary deviation is a unit theory and can be seen as an elaboration of Mead's more general principles of symbolic interaction (Wagner, 1984: 49). Thus, the inclusion of Lemert's (1951) theory is similar to unit theory integration.

In later formulations of their theory, Laub and Sampson (2003) also introduce concepts from routine activities theory (Cohen and Felson, 1979) to explain how everyday routines can shape criminal behavior. Like Farrington (1992), Sampson and Laub (1993) seem to be integrating variant theories from within criminology (e.g., control and labeling) while integrating proliferant theories from different problem sets (i.e., routine activities theory with variants that explain criminality or criminal behavior) (Wagner, 1984). Sampson and Laub (1993, 1997) appear to be integrating different types of structure/process theories originally intended to address different problem sets (i.e., criminal behavior and criminal acts) (Bernard and Snipes, 1996).

Individual differences play less of a role here than in Moffitt's (1993) or Farrington's (1992) theories. In fact, Sampson and Laub (2005) caution against approaches that attempt to predict future criminal behavior on the basis of early childhood characteristics. Instead they endorse an approach that focuses on interactions between social structure, human agency, and processes involved in criminality:

The challenge is that random processes and human agency are ever-present realities, making prediction once again problematic. It further follows that long-term patterns of offending among high-risk populations cannot be divined by individual differences (for example, low, verbal IQ), childhood characteristics (for example, early onset of misbehavior), or even adolescent characteristics (for example, juvenile offending)...To more process-oriented, non-reductionist, and generalized accounts of within-individual change, the field of life course criminology might therefore profitably turn. (Sampson and Laub, 2005: 179-180, italics added)

The authors seem to be implying here that criminology should focus on uncovering mechanisms and processes involved with criminal behavior and how these interact with structural factors. In the language of Bernard and Snipes (1996), criminologists should focus on structure/process theories. Individual differences should not be ignored, but we should not rely upon them to predict behavior especially without reference to processes and structural factors.

In early formulations of the theory, Sampson and Laub (1993, 1997) incorporated a number of concepts from life course perspective. However, human agency, an idea central to Elder's (1985) life course perspective, was not emphasized (Laub and Sampson, 2003). Based on conclusions drawn from the analysis of the Glueck data, Laub and Sampson (2003) concluded that human agency was very important to explaining criminal behavior over the life span, especially the reasons offered by people who desist from crime. Matza (1969), in a similar vein, suggested that it is important to see criminal behavior as neither completely determined nor arising exclusively from free will. Instead, Matza (1969) advocates "soft determinism" or the

idea that that there is a middle ground between Classical School free will and positivist notion of determinism.<sup>195</sup>

As stated previously, an overemphasis on early childhood characteristics and other individual differences in determining criminal behavior later in life will inevitably yield inaccurate predictions. Laub and Sampson (2003) carry this further and assert that the precise prediction of criminal behavior is not possible. Following the biologist Richard Lewontin, they claim that all forms of human behavior are a result of an interaction between genetic predispositions and environment coupled with random and unpredictable processes called “developmental noise” (Laub and Sampson, 2003: 285-286). These findings seem to call into question the widespread of risk prediction devices that have come to dominate criminal justice system practice and policy (see, Feeley and Simon, 1992 for a discussion of this phenomenon).

### **A Synthesis of Orienting Strategies**

In criminology, there are several examples of integration that have occurred through the introduction of elements (i.e., assumptions and directives) from outside orienting strategies.<sup>196</sup> In most cases, these adjustments have fundamentally altered the nature of the unit theories being produced by the theoretical research program or led to the creation of an entirely new research program. Like Thornberry’s (1987) interactional theory, Laub and Sampson’s (2003) revised age-graded theory of

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<sup>195</sup> A scholarly chain influence may be at work here. Matza was an important mentor to Hirschi, who, as previously mentioned, was a teacher to both Sampson and Laub.

<sup>196</sup> One could cite several examples of this activity that have occurred in criminology. For instance, both Cohen (1955) and Cloward and Ohlin (1960) produced theories by combining insights from Merton’s (1937) and Sutherland’s (1949) orienting strategies. Incidentally, both Merton and Sutherland also produced theories by formulating new orienting strategies of their own which later led to their unit theories.

informal social control demonstrates an integration of orienting strategy elements as well as several significant shifts in the orienting strategy. Some of these changes include the incorporation of a life course framework in the study of criminality, their fundamental shift to an assumption of human agency and, finally, their revised notion of development (Laub and Sampson, 2003).

The first important change in the orienting of the revised age-graded theory of informal social control (Laub and Sampson, 2003) is the type of metatheoretical integration described by Laudan (1977) and Ritzer (1981). Laub and Sampson's (2003) theory illustrates this type of activity because of its connections to Hirschi's (1969) theory of social bonding. Hirschi's (1969) theory, in turn, carries with it a number of elements from a control-based orienting strategy. These assumptions emerge from Hobbesian, Freudian and Durkheimian conceptions of human nature which all suggest that humans are naturally self-interested and antisocial, and require proper socialization and training in order to assimilate into society. Laub and Sampson (2003) chose to incorporate some of these control assumptions within a life course framework (Elder, 1985). This synthesis fundamentally changes the nature of both strategies and creates what could be considered a new orienting strategy to be used in the study of criminality. According to Berger and Zelditch (1993, 1997), this activity will cause a shift in the methodological directives of the working strategy or the 'how-to' of theory building. Specifically, this changes the preference of data from cross-sectional research to longitudinal research. This general shift also applies to the whole family of DLC theories (e.g. Farrington, 1992; Moffitt, 1993; LeBlanc, 1998). All of these theories share certain methodological elements in the foundations of their



orienting strategies; however, they differ greatly in their substantive elements. So, these methodological shifts also change the underlying structure of the unit theory. This includes the introduction of new concepts such as transitions and trajectories in Laub and Sampson's (2003) theory which alter the predictions and explanations offered by the theory.

The next shift deals with the assumption concerning human nature. In short, Laub and Sampson's (2003: 280-282) assumption of human agency represents a direct challenge to the foundational assumption of determinism found in most theories of criminality (e.g., Merton, 1937; Sutherland, 1949; Wilson, 1985; Moffitt, 1993; Akers, 1998). According to Berger and Zelditch (1993, 1997), this would equate to a proposed change to the substantive foundations of theories of criminality as a whole. As of now, the shift can be understood as a change in the directives of Laub and Sampson's (2003) substantive working strategy. This change is also reflected in the methodological working strategy; specifically, Laub and Sampson (2003) claim that qualitative research (not quantitative research) is *required* to gain further understanding about individual will, the processes of within-individual change, and how these may impact theorizing. This also constitutes a challenge to the existing methodological foundations of criminological theory as quantitative research (i.e., statistical and numerical data) has traditionally been preferred over qualitative data (i.e., interviews, ethnographies, life history narratives).<sup>197</sup>

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<sup>197</sup> Some might question the accuracy of this observation; however, we must remember that Laub and Sampson's (2003) ground-breaking revision of their own theory was, in part, a response to criticism leveled suggesting that their theory lacked qualitative insight. This has been true of most leading theories of criminality over the years because they are grounded in natural scientific methods and make deterministic assumptions about human behavior (Bottoms, 2008). While quantitative support is important, a full understanding of human agency requires the use of qualitative methods.

There are other, more unorthodox changes taking place in Laub and Sampson's (2003) most recent formulation of their theory. An example of this is their introduction of Lewontin's concept of "developmental noise" into their substantive working strategy. This element calls into question the ability of science to predict human behavior altogether. In addition, it also offers a significant change to how criminologists conceptualize development itself. As Lewontin (2000) states: "...the organism is determined by *neither genes nor environment* nor even by an *interaction between them*, but bears a significant mark of *random processes*" (as cited in Laub and Sampson, 2003: 286, italics added). In other words, long-term criminal behavior cannot be explained or predicted by individual differences or childhood/adolescent characteristics (Laub and Sampson, 2003).

None of this means that criminological theory is incapable of explaining crime and criminality. However, it does indicate that some of the underlying assumptions that inform our theories must be questioned and revised, or possibly discarded. Until criminological theorists attain an improved understanding of individual will and the role it plays in affecting decisions to commit or desist from crime, our theories will not be equipped to explain or predict criminal behavior.

All of this activity clearly represents a synthesis of several different elements drawn from outside perspectives (notably, Hirschi's control, Elder's life course perspective, and Lewontin's developmental noise) that have become incorporated within the orienting strategy of Laub and Sampson's (2003) age-graded theory of informal social control. In the following passage, Bottoms (2008) uses terminology that holds parallels with Wagner's (1984) distinction between unit theories and orienting strategies:

...what Sampson and Laub are engaged in here is creating an initial 'theoretical scaffold' (the 'life course perspective' with its accompanying core theoretical concepts), which is intended to have a 'relatively durable form since it adapts reflexively rather than automatically in relation to empirical data' although it should be 'capable of accommodating new information and interpretations by reconfiguring itself' (Layder, 1998, p. 150). In practice, what has happened since 1993 is that Sampson and Laub's use of the framework of Elder's 'life course perspective' remained fully durable, but within this framework the content of their initial substantive theorization has – as we shall see- undergone some significant modifications...the initial formulation of this theory linked life course perspective to one other theoretical tradition, namely a developed and modified version of Hirschi's (1969) control theory. (pg. 108, italics in original)

It seems clear at this point, that when theorists integrate unit theories with different orienting strategies and from different problem sets, they must also integrate different aspects of the relevant orienting strategies.

### **One Theory to Rule Them All, One Theory to Bind Them? Agnew's General Theory**

Robert Agnew (1992, 1997, and 2001) is perhaps most well-known for his general strain theory (GST). However, he has recently formulated a general theory of offending by situating his original GST within a larger model (Agnew, 2005). As will be demonstrated shortly, the most recent incarnation of this theory also assumes a developmental stance, and thus, fits within the DLC research program. In his general theory of crime and delinquency, Agnew (2005) integrates aspects of many theories in the field of criminology. He combines ideas from the control, strain, and learning trajectories as well as elements from rational choice and routine activities theory.

The problem focus of this theory is both criminality and criminal events. Similar to most contemporary theories of criminality and crime, the emphasis in this theory is on between-individual differences and processes that lead to crime. However, Agnew

(2005) argues that the theory is also capable of explaining within-individual changes in patterns of offending. Thus, his theory also incorporates a developmental perspective. In addition, he suggests that the theory can also be used to explain group differences in criminal behavior such as male criminality vis-à-vis female criminality).<sup>198</sup> According to Agnew (2005), the scope of the theory is, “behaviors that are generally condemned and that carry a significant risk of sanction,” (pg. 12).

The structure of this theory is interesting as Agnew (2005) introduces some new theoretical constructs to organize important concepts and variables from the theories he is integrating. First, he argues that crime occurs when constraints against crime (e.g., external control, stakes-in-conformity, and internal control) are low and motivations to commit crime (e.g., reinforcement for crime, exposure to criminal models, and beliefs favorable to crime) are high. Obviously, constraints refer to work done by control theorists: external control is derived primarily from bonding theory (Hirschi, 1969); stakes-in-conformity is very similar to Sampson and Laub’s (1993) concept of ‘social capital’; and, internal control is based on one’s level of self-control (Gottfredson and Hirschi, 1990).

The motivation for crime comes in two varieties, pushes and pulls. The notions of “pushes” and “pulls” are borrowed from Reckless (1961). Factors that pull or entice an individual to commit crime arise from social learning theory (Akers, 1998) and include reinforcements for crime, exposure to criminal models and learning beliefs favorable to committing crime. Factors that push an individual to crime are drawn out of Agnew’s (1992, 2001) general strain theory and include being prevented from

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<sup>198</sup> However, variations in crime rates between different societies (e.g. United States vs. Canada) are ignored.

achieving important goals, removing positive stimuli, and presenting noxious stimuli. Both constraints and motivations can vary based on situational context. There are other short-term influences on these factors derived from routine activities and rational choice theory (e.g., easy opportunities, the presence of authority figures, and provocations). This is very similar to the method of integrating across problem sets used by Farrington (1992) in his ICAP theory. Finally, Agnew (2005) incorporates labeling notions by suggesting that prior criminal behavior can affect subsequent criminal behavior.

Many variables are suggested as possible constraints and motivators to criminal behavior. Some of these include: impulsivity/low self-control; negative interactions and bonding experiences; poor school or work performance; and association with delinquent peers. These variables are organized within various life domains including self, family, school, peers, and employment. In addition to organizing these variables, the domains allow one to see how variables may interact with one another (e.g., an impulsive nature may lead to negative parental interactions and bonding and/or poor school performance). Finally, Agnew (2005) also states that biological and environmental factors (e.g., neurotransmitter or hormonal imbalances or low socioeconomic status) may influence the life domains.

According to Bernard and Snipes' (1996) categorization scheme, Agnew's (2005) theory represents integration across the levels of analysis since he is taking individual differences, processes and structural factors into account. Like some of the other developmental-life course theories, Agnew's (2005) theory is both an example of the integration of variant theories (since he is combining theories with differing orienting

strategies) and the integration of proliferant theories (since he is combining theories from different problem sets) (Wagner, 1984).

While it does represent a creative contribution to the field of criminology, Agnew's (2005) theory does have some problems, in the sense that it seems as though he may be trying to integrate too many different variables within his theory. This criticism stems from the tendency of contemporary criminologists to cling to a risk factor approach. Moffitt and Caspi (2006) have also noted that this is a problem:

Influential reviewers have concluded that the study of antisocial behavior has been stuck in the "risk-factor stage" (Farrington, 1988, 2003; Hinshaw, 2002; Rutter, 2003a, 2003b) because so few studies have used designs that are able to document causality (Rutter et al., 2001). (pg. 109)

This passage also touches upon another criticism of Agnew's (2005) model. He fails to identify specific causal mechanisms that lead to criminal behavior.<sup>199</sup> Several influential commentators have recently suggested that this is the next step in criminological theorizing (Bunge, 2004, 2006; Sampson and Wikstrom, 2006; Wikstrom, 2008).

### **Complementary and Competing Modes of Growth**

The application of Wagner's model (1984) of theory growth and Bernard and Snipes's (1996) ideas to the DLC research program demonstrates several progressive modes of theory growth in the field of criminology. In addition, this examination of criminological theory seems to have clarified how growth patterns change as a program matures and how certain modes of growth influence one another. In particular, the process of integration and the many forms it takes were readily apparent

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<sup>199</sup> However, some of his new organizing concepts (e.g. constraints, motivations, and domains) may be useful in identifying causal mechanisms.

when analyzing the DLC research program. The application of the model also clearly illustrates the importance of the guiding philosophy (or orienting strategy) in generating theories and changing patterns of growth in a theoretical research program. Each of these findings will be discussed in turn below.

The DLC research program has been characterized by a great deal of competition (Wagner and Berger, 1985). Moffitt's (1993) developmental taxonomy, Farrington's (1992) ICAP theory, and Sampson and Laub's age-graded theory are competing with each other over explanatory domain. Not surprisingly, frequent elaboration has taken place as this program has developed over the years. Wagner and Berger (1985) suggest that this is to be expected and is likely a response to competition in the program as theories are constantly trying to gain explanatory ground on one another. The high levels of competition have also caused a great deal of theory proliferation, especially from disciplines outside the realm of sociology. Again, this sort of activity is not surprising; theorists import theories (or theoretical elements) to help generate a new theory or bolster the explanatory power of the model.

The DLC program has also been characterized by a great deal of integration. The foundational elements of the program have been assembled from several different orienting strategies: the criminal career paradigm, the risk factor/prevention paradigm, developmental psychology, and the life course perspective (Farrington, 2003a). The theories themselves also draw upon the three major trajectories of criminological theory (control, strain, and learning) as well as ideas outside the study of crime and deviance (e.g., notions from a developmental biology perspective and social mimicry). This incorporation of theories from outside the field seems

appropriate as Wagner and Berger (1985) suggest that competitive programs are often characterized by highly-developed and complex theories. Further, developmental-life course theorists seem to have integrated theories across levels of analysis. By focusing on within-individual change, they are able to combine individual difference and structure/process theories. Finally, they have also combined theories originally meant to explain different criminological problems (e.g., routine activities with control and social learning theories).

While there are definite examples of the integration of theories or elements of theories (Farrington, 1992; Moffitt, 1993; Sampson and Laub, 1993) there also seems to be another type of integration occurring at the metatheoretical level in which elements from orienting strategies are integrated with one another. This type of activity is not necessarily new in the field of criminology (for other examples see Cloward and Ohlin 1960, A. Cohen 1955, and Burgess and Akers 1966). However, the nature of this sort of integration has rarely been dealt with in either criminology or the philosophy of science literature despite its obvious importance. Both Feyerabend (1975) and Wagner (1984) suggest something similar when discussing proliferation:

The consistency condition which demands that new hypotheses agree with accepted theories is unreasonable because it preserves older theory, and not the better theory. Hypotheses contradicting well-confirmed theories give us evidence that cannot be obtained in any other way. Proliferation of theories is beneficial for science, while uniformity impairs its critical power (Feyerabend, 1975, pg. 24)

Proliferation is perhaps the most interesting kind of theory development. Certainly, it is one of the most creative and thought-provoking. It opens entirely new ideas for a theorist to pursue; in effect, it provides a new path for elaboration of the theory. There has been very little discussion of proliferation in theory construction or the philosophy of science. This is unfortunate, since it is clearly a very important kind of growth. (Wagner, 1984, pg. 70)



The connection to be made here is that in many cases, proliferation (A. Cohen, 1955; Cloward and Ohlin, 1960; Burgess and Akers, 1966; Thornberry, 1987; Moffitt, 1992; Sampson and Laub, 1993; 1997) has either preceded or occurred in conjunction with the activity called theory integration or synthesis. In cases where it precedes integration, the proliferation often takes place on the orienting strategy level and changes the nature of the theories being produced in the program. Further, when ideas are incorporated from theories not traditionally used to explain crime and deviance or when theories are imported from outside disciplines, there are often changes in the working strategy, and this, in turn, necessitates a change in the methods used to study the phenomenon. As demonstrated previously, Laudan (1977) also mentioned that the integration of philosophical research traditions (or orienting strategies) is a phenomenon that occasionally occurs in the history of the sciences. An obvious example in the DLC program would be the shift in interest about between-individual differences to within-individual change. This change demanded that criminologists began to use longitudinal rather than cross-sectional research. This type of activity should be of interest to criminologists since it can cause massive changes in the field of criminology, not just criminological theory, as it affects the way research is conducted.<sup>200</sup>

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<sup>200</sup> It could be argued that most large-scale changes in the field of criminology occur in response to these shifts. Other examples include the formation of the routine activities (Cohen and Felson, 1980), rational choice perspectives (Cornish and Clarke, 1983) on crime, and the research program of environmental criminology (Brantingham and Brantingham, 1984). These developments shifted the emphasis on problem focus from criminal behavior to the criminal event (a working strategy directive).

## **Never too Early, Never Too Late: Practical Ramifications of the DLC program**

The unit theories in the DLC program make a variety of policy and practice suggestions that can be categorized into three main categories: early intervention; selective incapacitation/risk prediction; and increases job training/employment opportunities. Further, specific unit theories differ somewhat in the degree to which they support the use of these different practical approaches to reducing crime. To a certain extent, their degree of support is connected to the scope of the theory. For example, theories that examine individual differences (Farrington, 1992 and Moffitt, 1993) tend to support early interventions and selective incapacitation for chronic and serious offenders. Theories that focus more on social structure seem to endorse increasing job training and employment opportunities and interventions later in life and question the ability of criminologists to predict criminality based upon early childhood characteristics (Sampson and Laub, 1993, 2003; Thornberry and Krohn, 2001; Agnew, 2005). Others have argued for an integrated approach to interventions (Losel, 2007).

Early intervention approaches include a variety of attempts to target cognitive-behavioral issues in childhood as well as early biological risk factors. Tremblay, Vitaro, Bertrand, LeBlanc, Bueachesne, Bioleau, and David (1992) have evaluated the effects of a parental training program on children's rates of antisocial and delinquent behavior. The program consisted of a literacy component for parents coupled with parental training (i.e., appropriate reinforcement for good behavior and non-abusive punishment to discourage behavior). This particular intervention style seems to

address some of the processes that lead to criminal behavior, so the connection to process theories in criminology (especially control and learning theories) should be readily apparent. Other approaches seem to hold more in common with theories that focus on individual differences. For example, Olds, Henderson, Cole, Eckenrode, Kitzman, Luckey, Pettitt, Sidora, Morris, and Powers (1998) examined the impact of pre-natal and early childhood nurse home visits on long-term delinquency and antisocial behavior. The goal here was to prevent the onset of some of the early childhood risk factors (e.g., cognitive impairments) that are known to put people at risk for criminal behavior later in life. Both of these interventions were shown to be moderately effective in preventing crime over the life course (Piquero and Mazerolle, 2001).

Individual differences theories also tend to be linked to selective incapacitation and risk approaches. For example, Moffitt's (1993) theory suggests two types of offenders: adolescent-limited and life-course persistent. Life-course persistent offenders present the greatest problems to deal with and the theory would stress dealing with cognitive impairments early in life. According to the theory, these problems are readily apparent early in life, and children who display risk factors should be targeted. If these problems are left unaddressed, life-course persistent individuals may become locked into a criminal trajectory and it may be necessary to incapacitate them to protect society. However, it is important to keep in mind that the prediction of future criminality is fraught with problems primarily because of the emphasis on individual differences without reference to structural factors, processes and situated human choice (Laub and Sampson, 2003; Sampson and Laub, 2005).

Theories that emphasize social structure (Thornberry, 1987; Laub and Sampson, 2004; Agnew 2005) suggest that interventions both early and later in life might also be useful. For example, programs targeted at younger adults, such as Job Corps and the Quantum Opportunity Program, have both been shown to be effective in reducing criminal behavior (Currie, 1998 as cited in Benson, 2002). Laub and Sampson (2004) take this a step further and argue that offering job training to older offenders might also be worthwhile when trying to promote desistance. However, job training is meaningless if there are no jobs available. Therefore, these theories also suggest that efforts need to be made to provide good stable employment opportunities to former offenders if they are to desist.

It is important to bear in mind that these are not all necessarily direct practical ramifications of the DLC theories. Instead, the logic of the approaches seems to hold parallels or resonates with the logic of theories. This helps illustrate the dialectical nature of theory and practice.

### **Pushing the Boundaries of Criminological Theory**

In criminology, it seems obvious that there is no consensus as to what should be considered a theory or what constitutes integration. Not surprisingly, this means that there is no dominant theoretical approach in criminology; rather the field is characterized by a number of competing orienting strategies and theoretical research programs. However, certain facts seem to be acknowledged by a most criminologists. First, a simple assumption of determinism based on natural scientific methods will not lead to a full understanding of criminality. This point has been made by criminologists for several decades and has been resurfacing recently (for example,

Matza, 1964; Taylor, Walton, and Young, 1976; Laub and Sampson, 2003; Bottoms, 2008). Second, most criminologists suggest that directives and assumptions tend to be vital in understanding theory in criminology (Young, 1981; Meier, 1985; Messner et al, 1989; Einstadter and Henry, 2006). For example, Laub and Sampson (2003) have challenged some of the most tightly held assumptions in criminology (e.g., the distinction between free will and determinism and the predictability of human behavior) and contemporary criminological theories will have to address these challenges if they are to be considered progressive. Clearly, changes in orienting strategy elements can greatly alter the nature of theoretical research programs, the unit theories and related research they produce as well as their practical implications. Finally, an improved understanding of directives and assumptions in criminology can help to explain integrative activity and may help to inform integrative attempts in criminology.

It is clear that another major area of agreement would be on the importance of proliferation and the role it plays in both theory integration and orienting strategy synthesis. For instance, Moffitt's (1993) developmental taxonomy integrates theories from biological and neuropsychological research; this equates to an integration of proliferant theories (Wagner, 1984). In addition, there are clearly parallels to sociological theories of criminal behavior and there seems to be an opportunity here to integrate these two lines of thought.

The synthesis of orienting strategies also seems responsible for a great deal of theory integration in criminology since it tends to be interdisciplinary and integrative as well. For instance, Laub and Sampson's (2003) fusion of the control orienting

strategy from criminology with the life course perspective is similar to proliferation that leads to integration (elements are used from a perspective outside the original theory's explanatory domain). Specifically, the life course perspective suggests new concepts to use in a different explanatory domain (i.e., crime and desistance). Laub and Sampson's (2003) formulation is definitely a control theory; however, there is clearly integration occurring here between orienting strategies and this affects the nature of the unit theory they propose.

Clearly, this sort of activity is beneficial to theory growth in criminology and this should come as no surprise. Scientific progress demands the infusion of fresh ideas in order to challenge the dominant mode of theorizing. Feyerabend (1976) has also identified this type of activity as important to theory growth:

Not only is the description of every single fact dependent on some theory (which may, of course, be very different from the theory to be tested), but there also exists facts which cannot be unearthed except with the help of alternatives to the theory to be tested, and which become unavailable as soon as such alternatives are excluded. This suggests that the methodological unit to which we must refer when discussing questions of test and empirical content is constituted by a whole set of partly overlapping, factually adequate but mutually inconsistent theories (pg. 27, italics in original)

As pointed out earlier, the fusion of orienting strategies or research traditions often results in integration across levels or between problem sets. This is because outside directives usually encourage the theorist to search for new explanations, often beyond the theory's parent discipline, that can help bolster the explanatory power of the theory.

## **CONCLUSION: THE PHILOSOPHY OF SCIENCE AND ITS RELEVANCE TO CRIMINOLOGY**

Throughout this dissertation a model derived from the philosophy of science literature has been applied to theory growth in the field of criminology. This type of analysis is useful for many reasons and a number of interesting findings have emerged during the course of this research. Future research in this area could also proceed in several different directions. This concluding chapter combines a review of key themes covered in earlier chapters with some final thoughts on the relevance of this model to theorizing in criminology. In addition, directions for future research in this area will be offered. Finally, efforts will be made to clarify how this analysis represents an important contribution to the field of criminology.

Wagner's (1984) model of theory growth, and particularly the distinction between orienting strategies and unit theories, helps make sense of theory development in criminology. It is important to be aware of the difference between one's own philosophical approach to the subject matter (i.e., one's perspective or orienting strategy) and testable, falsifiable statements about the nature of crime and criminal behaviour (i.e., unit theories) for knowledge to grow. Criminology has long been plagued by irresolvable arguments about the differences in assumptions and directives that inform one's theorizing. As the expression goes, these debates have produced far more heat than light, and this has not contributed to the development of the field (Bernard and Snipes, 1996). Distinguishing between orienting strategies and unit theories makes it possible to see the

early development of theories. Assumptions and directives about the nature of the subject matter precede unit theories, and should be carefully examined and analyzed.

There are a number of different findings that have surfaced through this analysis. First, it seems clear that in criminology, perspectives or orienting strategies do grow and develop and this often leads to new theoretical research programs which produce new unit theories. Second, relationships between unit theories suggested by Wagner (1984) are useful for understanding the history of criminological theory, and criminology itself. Third, to encourage fruitful theory growth and avoid purely ideological debates, it is vital that criminologists have a clear understanding of the scope, problem focus, and level of explanation of various theories in criminology. Finally, there are numerous social and interactive aspects of theorizing that have received very little discussion in the field of criminology. To truly understand the history of criminology, one must be familiar with these dynamics.

### **Development of Orienting Strategies**

To appreciate how orienting strategies change over time, work by Laudan (1977), Ritzer (1981), and Berger and Zelditch (1993, 1997) was used to supplement Wagner's (1984) original model of theory growth. These analysts argue that orienting strategies<sup>201</sup> can grow and develop, and that this type of activity sometimes produces new theories or research programs. Interestingly, this type of change is often ignored in criminology or at the very least is not discussed and analyzed in a uniform manner. Significantly, this type of change and growth can be seen in both the natural and the social sciences. In the

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<sup>201</sup> The terminology used here is all similar. As noted in earlier chapters, research tradition, paradigm, metatheory, perspective, and orienting strategy all refer to a similar idea: the notion of a guiding philosophy behind one's theory.



natural sciences, for example, orienting strategy growth is readily apparent if we examine the history of evolutionary theory summarized in Chapter Six. One can see new orienting strategies and research programs emerging with the advent of evolutionary theory, then with the modern synthesis of evolutionary theory and Mendelian Genetics, and finally, with the rise of Wilson's (1975) new synthesis. This activity can also be seen in social sciences such as psychology. Key orienting strategies in psychology include Freudian psychodynamics, behaviourism, and cognitive psychology (Hall and Lindzey, 1970; Zimbardo, 1980, Bartol and Bartol, 2011). In addition, it seems that at least one new orienting strategy, moral development, has emerged and given rise to a vibrant program of research. It is important to bear in mind that these different orienting strategies and their research programs do not replace each other. Instead, they function alongside each other and sometimes merge together (Lakatos, 1970; Laudan, 1977).

After establishing that philosophical shifts do occur in science, the question of how these changes take place comes to the forefront. Large-scale shifts in knowledge in the social and natural sciences appear to occur through challenges to the dominant mode of theorizing. At first glance, this may not seem like a significant finding. However, science encourages a uniformity of theory and method embodied in Kuhn's (1962) conception of "normal science". When one considers this scientific ideal of uniformity, the finding that progress can occur through conflict becomes somewhat surprising. Feyerabend's (1976) notion of "anything goes" was readily apparent throughout this analysis and is useful for an understanding of most of the key shifts in criminological theories. For instance, the origins of sociological criminology involved challenging the early, established approach to understanding criminality, which was based on

evolutionary theory, psychopathology, and individual differences. Further, most contemporary criminological theories were heavily criticized after they were first proposed (e.g., see the history of routine activities theory in Chapter Four or biosocial criminology in Chapter Six). This pattern is clear if one examines the history of psychological theorizing discussed in Chapter Five (see also Hall and Lindzey, 1970).

In criminology, orienting strategies develop in a fashion similar to that suggested by Berger and Zelditch (1993, 1997). Criminology has produced a number of new orienting strategies since breaking away from the influence of sociology. In many cases, these new criminological orienting strategies are the result of theorists combining assumptions and directives from a number of existing research traditions in the manner described by Laudan (1977). For example, ideas from the Classical School, economics, and social ecology were combined to produce the orienting strategy shared by the theories in the postclassical research program and that focuses on criminal acts rather than criminality. The orienting strategy of the biosocial research program integrates findings from the neurosciences, behavioral genetics, and evolutionary theory to help better understand criminality. The orienting strategy used by the developmental-life course program fuses ideas from the strain, social learning, and control trajectories from sociological criminology with key findings from biology and developmental psychology. This fusion allows key variables to be temporally ordered based on their relevance to different life stages, and reveals the complexity of explaining criminality over the life course. Clearly, criminology has separated from its sociological roots, however, it has not lost them.

## **Relationships between Theories**

The application of the interrelationships between theories proposed by Wagner (1984) helps to organize and clarify the often confusing field of criminological theory and can sometimes reveal relationships between theories that were not at first apparent. For example, Rushton's (1985a, 1985b) work on differential K theory has been quite controversial because it contends that variations between racial groups contribute to serious differences in intellectual ability, reproductive habits, and criminal involvement. However, many scholars consider his work to be seriously flawed methodologically. For instance, some scholars have questioned whether or not Rushton's (1985) application of r and K strategies to human populations is appropriate. In addition, there are suspicions about his selection of data and the use of questionable sources to support his central argument (Zuckerman and Brody, 1988). Others have asserted that hierarchies of racial superiority tend to change with social and historical context (Liebermann, 2001). Finally, criminologists have pointed out that these genetic connections to crime based upon race are mere correlations and contain a number of internal contraindications (Gabor and Roberts, 1990; Roberts and Gabor, 1990).

Interestingly, Ellis' (1987) r/K theory of criminal behavior is derived directly from Rushton's (1985a) differential K theory, but these connections are not mentioned in most discussions of the theory that appear in prominent criminological theory textbooks (Fishbein, 2001; Anderson 2007, Lilly Cullen and Ball, 2007). To one familiar with the problems in Rushton's (1985a, 1985b) research, this trend is somewhat disturbing. This is not meant to imply that the aforementioned textbooks are poorly written or researched. Instead, this discussion should be interpreted as a call for a more rigorous analysis of existing criminological theories, their relationships to other theories, and their underlying

assumptions. This is vital for an understanding of the history of criminology, the ideas it has produced, and how these ideas have influenced the criminal justice system. Again, several prominent criminologists have pointed out that this sort of understanding is sorely needed in the field of criminology (Garland, 1985; Laub, 2004; Bottoms, 2008; Rafter, 2008).

The theoretical relations identified by Wagner (1984) help to clarify the nature of integration, and offer advice about how to proceed with such a task. The integration of competing variant theories seems to be the most problematic and the most controversial. For example, Elliott and his colleagues created a theory integrating strain, control, and social learning theory. According to Wagner (1984) this is likely because the orienting strategies were all different, and therefore some elements were combined while others were abandoned (Wagner, 1984). However, an important metatheoretical shift occurred after this theory emerged. Specifically, the notion that there was one clear pathway to criminality was abandoned in favour of a more complex approach to the etiology of criminality. This notion of the existence of multiple pathways to delinquency laid the groundwork for the rise of the developmental-life course orienting strategy and the unit theories it would produce.

Integration across levels of explanation, or “cross-level” integration, has confounded criminological theorists for many years (Messner, Krohn, and Liska, 1989; Laub, 2006). With the application of the model proposed here, it becomes obvious that cross-level integration usually involves the integration of proliferant theories (Wagner, 1984). For Bernard and Snipes (1996), this would be the equivalent of integrating structure, process, and individual difference theories. Integration across levels combines theories that are

complementary and leads to a type of branching growth (Wagner, 1984; Wagner and Berger, 1985). In criminology, early examples of this type of integration can be found in the postclassical research program and the environmental criminology branch, as well as the developmental-life course research program. Unfortunately, these efforts have not been fully developed, possibly because criminology lacks a coherent model for understanding this sort of growth. Cross-level integration always seems to be preceded by metatheoretical activity involving the integration of existing research traditions or orienting strategies (Laudan, 1977).

Proliferation is perhaps the most important theoretical relation when trying to understand the development of criminological theory. Early in the history of criminology, elaboration was perhaps the most important because the field of criminology was still developing, and most of its unit theories were sociological or social-psychological. At this point, the field exhibited a linear form of growth. Competition was also somewhat important early on, since many theories were being tested against each other with the hope of developing one, general theory of crime and criminality. Unfortunately, these efforts may have been premature and interest in competitive theory testing has waned since the late 1980s (Bernard, Snipes, and Gerould, 2010). However, many criminologists now acknowledge that criminology is an interdisciplinary pursuit meaning that criminality and crime require a variety of different explanations from a number of scholarly disciplines (Robinson and Beaver, 2008). This being the case, it is difficult to argue that criminology is not influenced regularly by findings from outside disciplines. In some cases, theories are imported and directly applied to crime or criminality. For example, Darwin's (1859) theory of natural selection

was not originally intended to explain crime or criminality. However, biosocial theorists have applied it to these phenomena, and, in doing so, started a new research program.

In other cases, proliferation starts with the importation of ideas which are not necessarily theories from other disciplines. These ideas help to form the building blocks for new orienting strategies. The new orienting strategies eventually give rise to more specific explanations or unit theories; this is how new theoretical research programs are formed. For example, the developmental-life course program took shape after ideas from developmental psychology were applied to crime and criminality. More specifically, theorists began to acknowledge that patterns of offending change over time and that people become involved with crime in many different ways. To help solve these new problems, theorists began to use the concepts of a “life course trajectory” and “within-individual change” to help explain crime and criminality.

### **Level of Explanation, Problem Focus and Scope**

As has been implied in the previous chapters, understanding the level of explanation, scope, and problem focus of the different theories is of vital importance. Earlier theoretical research programs (e.g., sociological and radical criminology) seemed far more concerned with understanding the structural aspects and processes involved with criminal behavior, however, little attention was paid to individual differences (Bernard and Snipes, 1996). In addition, the problem focus was clearly on criminality or criminal behavior as opposed to the dynamics of criminal acts and crimes. Some of this changed with the rise of the neoclassical and postclassical research programs, which focused more on the punishment and deterrence of criminal acts than on understanding the formation of

criminality. These changes continued with the rise of the biosocial research program and the emergence of the developmental-life course program in criminology.

The postclassical research program has produced theories that have attempted to address all of the levels of explanation: individual differences, processes and structural aspects of crime (Bernard and Snipes, 1996). Cohen and Felson's (1979) routine activities theory is clearly a macro-level, structural theory that explains how changes in society may affect opportunities to commit crime. Cornish and Clarke's (1986) routine activities theory addresses the situational dynamics of crimes and how they occur; it is not concerned with the societal level factors that produce crime. Gottfredson and Hirschi's (1990) general theory of crime is essentially a theory of individual differences based on routine activities and rational choice theory. It should be clear that theories in this program can be seen as complementary in the sense that they share a common orienting strategy but focus upon different aspects of the criminal event (Hirschi, 1989).

The biosocial research program presents a similar case. It has offered three sets of interrelated theories posited at different levels of explanation. Theories in this area focus exclusively on how the interaction of biological factors and one's physical environment contribute to criminality. Neuroscientific theories deal with the "extreme" micro end of the continuum and emphasize the role of the brain, neurotransmitters, enzymes, and hormones in behavior (Raine, 1993). Evolutionary theories of criminality use Darwin's (1859, 1871) theories of natural and sexual selection, and their more recent elaborations, to explain why people commit crime. Behavioral genetic theories examine how genetic predispositions interact with one's environment to produce behavior and represent a "middle ground" between the neuroscientific and evolutionary theories of criminality

(Ellis and Hoffman, 1990; Fishbein, 2001; Walsh, 2009). As in the postclassical research program, theories in the biosocial research program can be seen as complementary. However, this group of theories is geared towards explaining criminality rather than crime and criminal events.

The developmental-life course program presents a particularly complex case, in part, because it is so new, and the core ideas in the program are still being refined. At this point in its development, there seems to be a great deal of competition amongst the unit theories in the program (Farrington, 2006; Sampson and Laub, 2006). However, this may all be part of refining core ideas in this area. In reality, each theory emphasizes a different disciplinary influence, so they may eventually come to be complementary. For example, Moffitt's (1993) developmental taxonomy is rooted in biological, genetic, and psychological explanations but still acknowledges the importance of social psychological and sociologically factors in the development of criminality. Sampson and Laub's (1993, 2004) age-graded theory of informal social control is clearly a sociological explanation of criminality as it is derived from Hirschi's (1969) theory of informal social control; however, they still admit that biological and psychological factors are important. Farrington's (1992) developmental theory is very much based on psychological explanations but variables from biology and sociology are included in the model. In addition, ICAP theory addresses two problem foci simultaneously as it attempts to account for both criminality and criminal events. It is evident that the focus of this program is on integrating key findings about criminality and crime from a number of disciplines.



The level of explanation and problem focus of a theory helps to determine its scope, or the variety of crimes and behaviors the theory can explain. The analysis of modern research programs undertaken here indicates that in most contemporary theories of criminal behaviour (i.e., theories in the postclassical, biosocial, and developmental-life course research programs) the scope is limited to street and violent crime with an emphasis on chronic offenders. Interestingly, group forms of antisocial and criminal behavior - swarming attacks, riots, massacres, genocides - receive little attention in mainstream theoretical criminology. These omissions are of particular importance because these events are quite common and tend to confuse society and members of the criminal justice system alike.

### **Theory Groups and Scholarly Chains**

Scholarly chains<sup>202</sup> or groups of scholars who frequently interact and share the same or a similar orienting strategy also seem to be present in most research programs and are important for an understanding of how elaboration occurs and how some aspects of orienting strategy integration take place. There are numerous examples of student-mentor interactions and scholarly chains in the various research programs. For example, Turk, Quinney, and Chambliss, three important pioneers in the area of radical criminology, all knew each other and interacted with each other (see Lilly, Cullen, and Ball, 2007). C.R. Jeffery was influenced by both Sutherland and Skinner, and eventually proposed a theory based on operant conditioning and differential association theory

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<sup>202</sup> Mullins (1973, 1980) calls these “theory groups” and Collins (1998) calls these “interaction ritual chains”. They are referring to essentially the same idea.

(Jeffery, 1965). Robinson (1999) refers to the importance of Skinner, in particular, in the following passage:

Given that Jeffery attended Indiana University where B.F. Skinner was chair of the Psychology Department, and that Jeffery spent some time at Arizona State University, known as “Fort Skinner of the West”, it is to be expected that Jeffery’s work was influenced by Skinner. (pg. 434)

Jeffery also had connections with Jacobs and Newman both of whom helped to inspire his ideas about Crime Prevention through Environmental Design (CPTED) (Jeffery, 1971). The Brantinghams had connections to both Jeffery and Felson<sup>203</sup>, and eventually ideas from differential association theory, CPTED, and routine activities theory became integrated within the branch of environmental criminology (Brantingham and Brantingham, 1978, 1981, 1984, 1991, 1993, and 1999).

These scholarly chains are also found frequently outside criminology, and usually play a role in how a theory proliferates and is applied in other areas. For example, Aichhorn was a student of Freud, and embraced the psychoanalytic perspective. He applied this perspective to the study of criminal behaviour, specifically, juvenile delinquency (Aichhorn, 1925). Freidlander (1947) another psychoanalytic criminologist, was mentored by both Freud and Aichhorn. In the area of moral development, Kohlberg was a “close follower” of Piaget and would later use Piaget’s (1932) theory of cognitive development as the basis for his own theory about moral development (Kohlberg, 1958). Gibbs was a close colleague of Kohlberg’s and developed a revised version of Kohlberg’s (1958) theory to counter criticisms of early formulations of moral development (Gibbs, 1979).

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<sup>203</sup> Jeffery was an important mentor to Paul Brantingham. Marcus Felson and the Brantinghams have been friends for many years and have had a great impact on each others’ ideas.

More examples can be found in the biosocial and developmental-life course programs as well. Gray, who was a student of Eysenck, produced an elaboration of the latter's theory (Gray, 1970, 1975). Robinson's (2004) integrated systems theory incorporates a systems theory perspective which was originally introduced by Jeffery (1990) who was also a mentor to Robinson, and one of the pioneers in the second wave of biological criminology that emerged during the 1970s. Other contemporary biosocial criminologists also frequently work and publish together (Ellis and Walsh, 2003; Walsh and Beaver, 2009; Beaver and Walsh, 2010) and developmental-life course theorists frequently critique and discuss each other's theories (Farrington, 2003; Laub and Sampson, 2004). Further, some of these scholars have connections to earlier prominent criminological theorists. For example, Sampson and Laub were students of Hirschi, and their (1993) age-graded theory of informal social control is an elaboration of Hirschi's (1969) theory of social bonding. Before proposing his ICAP theory, Farrington published frequently with Alfred Blumstein who was an early proponent of the "criminal career paradigm", and this approach contributed greatly to the orienting strategy underlying the developmental-life course program.

The relationships described above greatly resemble Mullins's (1973, 1980) concept of theory groups and Collins's (1998) notion of interaction ritual chains. Both of these scholars argue for the importance of the social aspects of knowledge growth in biology, sociology and philosophy. It seems as though these factors deserve consideration in criminology as well given the number of connections between important theorists in a variety of different areas.

## **Future Directions**

A number of potential options for further research have emerged throughout this analysis. First, more attention ought to be devoted to the analysis of criminological theories as theories, rather than as explanations. Criminologists need to make a concerted effort to understand how their own field is developing and changing. With the emergence of new theories and research programs, attempts should be made to trace the history of the research programs, and there should be more rigorous discussion of the underlying assumptions and interrelations of the theories within the program. Other criminologists have made this point frequently (Garland, 1985, 1990; Farrington, 2003; Laub, 2004; Bottoms, 2008) but research remains undeveloped and poorly-defined in the area of theoretical analysis; that is, the analysis of theories as theories. Another reason why theoretical analysis is needed in criminology is related to the high level of competitiveness of ideas in the field. As argued previously, when comparing and evaluating different theories, critics should be aware of the level of explanation and problem focus of the theories. For many years, unfair and misleading comparisons of theories have been the norm in criminology and this has not contributed to the development of criminology as a whole (Meier, 1985; Bernard and Snipes, 1996).

Second, there are theories not reviewed in this dissertation that are ripe for analysis. The focus of this dissertation has been on theories of crime and criminality. Consequently, theories of neighbourhood crime and crime rate changes<sup>204</sup> were not addressed. Some examples of these theories include Bursik and Grottsick's (1993) extension of social disorganization theory, and Sampson and his colleagues' (1997, 1999) theory of collective

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<sup>204</sup> Technically, the routine activities perspective does explain some crime rate change; however, as Felson (2008) himself notes, many focus on his "chemistry for crime" components (i.e., motivated offender, absence of a capable guardian, and the presence of a suitable target).

efficacy. These efforts could be seen as attempts to develop Chicago School social disorganization theory (Lilly, Cullen, and Ball; Miller, Schreck, and Tewksbury, 2011). Sherman's (1993) defiance theory, Rose and Clear's (1998) coerced mobility theory, and Tonry's (2004) theory of crime rate cycles all represent modern incarnations of labelling theory. These groups of theories seem to exhibit many of the properties of a research program and the concept could more than likely be applied to them as well.

As alluded to previously, the social aspects of theorizing also deserve further consideration. Theories obviously develop, in part, through human relationships. Students often elaborate upon their mentor's theories, and are often responsible for applying these formulations to new and different phenomena. Further, theorists within the same research program also often develop relationships and interact frequently with one another thereby influencing each others' ideas. These dynamics exist not only in criminology, but in many different fields and disciplines outside of criminology including physics and biology (Kuhn, 1962; Mullins, 1973). Some of these relationships have been identified throughout this dissertation, however, more undoubtedly exist. A more thorough examination of the social aspects of theorizing and the effect that ritual interaction chains and theory groups have on theory development could be intriguing and important (Mullins, 1973, 1980; Collins, 1998).

Finally, in criminology much more attention should be devoted to the dynamics of criminological theory and criminal justice system practices. It would be folly to attempt a detailed discussion of how criminological theory influences practice within the criminal justice system in the final pages of this dissertation. However, one can conclude from this examination that the analysis of theory can prove useful for understanding how theory and

practice are related to one another. Many other theoreticians have discussed the influences of theory on practice and policy (Foucault 1977; Cohen, 1985; Garland, 1985, 1990, 2001) but none have done this in the context of theoretical research programs and how they might relate to criminal justice system policy and practice. Such an analysis would involve an attempt to understand not only the effects that criminological theories have had on criminal justice system practices but also the effects that criminal justice system practices have had on criminological theorizing.

The inclusion of research programs in the analytical arsenal provides several advantages. First, it allows an analyst to more clearly explain how certain disciplines are influential in the criminal justice system, and see how different theories can influence different areas of that system. Second, it provides a model that can explain specific changes in theories over time and this could be compared to corresponding shifts in the criminal justice system. This would lead to a deeper understanding of the underlying foundations (e.g., assumptions, problem foci, and methodological directives) of the theories and how they are translated into practice. Several prominent theorists have noted that our understanding of the roots and history of criminological theory are lacking (Meier 1985, Bottoms, 2008), and others have suggested that this may be affecting how theory is translated into practice (Garland, 1985; Laub, 2004). It seems as though it might also be important to track the foundational shifts in theories over time to gain a clearer understanding of them.

Evidence-based policy is a particularly promising area where one could apply theoretical analyses of practices and policies. The notion of evidence-based policy is rooted in the idea that scientific research can tell us which practices “work” and which

ones “don’t work” (i.e., meaning they are inefficient and/or ineffective). This should include an explanation of why and how the practices work or do not work as well. Unfortunately, criminologists and criminal justice system practitioners often fail to consider the causal processes that underlie practices. Much of this is related to an overemphasis on risk factors in the field of criminology and the practice of criminal justice (Wikstrom, 2008). Indeed, the risk factor approach has been quite influential in informing policies in the criminal justice system. In the following passage, Moffitt and Caspi (2006) identify some problems with using the risk factor approach to inform practice:

The causal status of most risk factors is unknown; we know what statistically predicts psychopathology outcomes, but not how or why (Kraemer et al, 1997; Kraemer, 2003). There are consequences to the field’s failure to push beyond the risk-factor stage to achieve an understanding of causal processes. Valuable resources have been wasted because intervention programs have proceeded on the basis of risk factors without sufficient research to understand causal processes. (pg. 109)

Because of this undue interest in the risk factor approach, criminal justice system policy and practice has become overly focused on individual differences, risk assessment, and control (Feeley and Simon, 1992; Garland, 2001). Policy analysts ought to consider the underlying theoretical rationale for different practices. Using theoretical analysis in this way would assist in making criminological theory more relevant to the world of practice; this seems to be a potentially fruitful area of research.

The connections that criminology has to the criminal justice system (e.g., funding and personnel) have clearly influenced the nature of the theories produced by criminological theorists. Modern criminological theories have clearly evolved and improved from where there were 50 years ago, however, social factors are no longer considered important in explaining and understanding crime from a policy point of view. This lack of influence is

not that surprising; nurturant strategies suggested by many sociological theories are not politically attractive because they require decades to have an impact (Vila, 1994; Robinson and Beaver, 2008). As a consequence, biological and psychological approaches have become increasingly popular, and this has contributed to the rise of risk assessment in criminal justice system practice and the dominance of the risk factor approach in criminological theorizing (Feeley and Simon, 1992; Moffitt and Caspi, 2006; Wikstrom, 2008).

### **The Relevance of the Philosophy of Science to Criminological Theory**

Wagner (1984) argues that when theorizing is left to the “elder statesmen”, an academic field will become quite conservative. Old ideas and theories will not be challenged, and scientists become stuck in the process of what Kuhn (1962) called “normal science”. There is nothing wrong with this as long as “normal science” is a stage and does not define the field of study for too long a period of time. Unfortunately, as suggested by some leading criminologists (Moffitt and Caspi, 2006; Wikstrom, 2008) criminology has, in fact, become stuck in the risk factor stage.

In his 2003 Presidential Address to the American Society of Criminology, John Laub made the following statement:

When I entered the field as a graduate student in the 1970s, criminology was an exciting field because people were passionate about ideas. Today “career concerns” are center-stage in the field - for example, publication counts, citation counts, the amount of external funding generated, departmental rankings and so forth are the new measures of intellectual impact and scholarship. In sharp contrast, I want to recapture the spirit, the excitement, and the boldness of criminology in the 1970s by bringing ideas back into the forefront. (3)



In the preceding passage, Laub identifies an important factor that may impede the establishment of theoretical analysis in criminology: a lack of motivating factors to engage in such activity. Laub (2004) concludes his address by saying: “Ideas matter and they matter a great deal. Ideas are the core of what we do...” (pg. 20). Ideas per se are no longer considered important in criminology; young criminologists are more preoccupied with the quantifiable “career concerns” described in the passage above. The focus on career concerns has hampered the ability of criminologists to make bold conjectures and push the field forward (Popper, 1959). Further, the notion that “anything goes” which has served to push the boundaries in not only criminology and the social sciences but also in all areas of scientific inquiry, has been muted (Feyerabend, 1976). This has created an atmosphere in which older, more established theories are not challenged and this serves to slow the growth of knowledge, to continue a sort of stalemate among various research theories.

The preceding discussion helps to illustrate another reason why this dissertation is a contribution to the field of criminology. By and large, thesis and dissertation topics tend to be small-scale studies undertaken to demonstrate familiarity with a particular area of specialization in the field of criminology. This description is much in line with Kuhn’s (1962) notion of “normal science”, and there is nothing inherently wrong with this type of scholarly activity. However, broader, historical analyses of the field of criminology have become increasingly rare (Laub, 2004). It is important to note that, at one time, general analyses of the field of criminology were quite common (Cole, 1975; Downes, 1978; Young, 1981; Monk, 1988). More historical analyses are sorely needed in order to assess recent progress in the field, and to ensure that knowledge and theories are growing

at an optimal pace. Again, some commentators have recently suggested that theory growth is not proceeding as efficiently as it could be (Moffitt and Caspi, 2006; Wikstrom, 2008)

This dissertation also contributes to and builds upon the existing theory-building literature in criminology (Hirschi, 1979; Meier, 1985; Messner et al., 1989) by incorporating ideas originating in the philosophy of science literature. More specifically, Wagner's (1984) of theory growth in sociology, and Laudan's (1977) notion of research tradition (or orienting strategy) integration, and Bernard and Snipes's (1996) seminal work on theory integration were synthesized to produce a model of theory growth for contemporary criminology. This model distinguishes between broader philosophical orientations or orienting strategies and specific explanations of phenomena or unit theories, and by clarifying relationships between existing theories and their underlying assumptions (Wagner, 1984). These distinctions and relationships are important to clearly understanding the level of explanation, scope and problem focus of modern criminological theories (Bernard and Snipes, 1996). In addition, changes in the orienting strategies that guide theory-building were found to be important for understanding large-scale shifts in thought in the field of criminology (Laudan, 1977; Berger and Zelditch, 1993, 1997). Finally, social aspects of theory-building are also identified including the importance of interactions between scholars (e.g., mentor-student relationships, interaction ritual chains, and theory groups) (Mullins 1970, 1983; Collins, 1998).

As has been demonstrated throughout this dissertation, in order to grow and evolve, a field of scientific study needs bold individuals who are willing to challenge the established orthodoxy (Popper, 1959; Feyerabend, 1976). To challenge established ideas,

and build theories that are capable of challenging them, criminologists need to clearly understand theories and how to construct them. The analysis of theories as theories and their underlying foundations is one way of increasing our understanding of theory building and the development of criminology as a whole.

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