

A Generic Control Theory of the Criminal Phenomenon: The Structural and Dynamic Statements of an Integrative Multilayered Control Theory

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Introduction

Over the last forty years, criminology has not witnessed any major theoretical innovations. Numerous theories were available: social disorganization, strain, control, cultural deviance, differential association, social learning, labelling, deterrence, and so on. In addition, these theories were elaborations of ideas of nineteenth-century theorists such as Quetelet, Durkheim, Marx, and Tarde. Over the last four decades, we have witnessed enormous theoretical activities that take the form of theoretical elaboration, integration or modelling. This situation is particularly true of Hirschi's bonding theory; a theory formulated in 1969.

Bonding theory is an elaboration of the more general control perspective. Control theories have been presented by such theorists as Thrasher (1927), Freud (1963), Reiss (1951), Nye (1958), and Reckless (1961), to name a few. While these theorists outlined different constructs, they

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accepted the same basic assumptions concerning human nature (see Empey 1978 and Kornhauser 1978, discussions). Over the last few decades, bonding theory has become, and remains, the most prominent, empirically based criminological theory for the explanation of juvenile delinquency. During that same period, criminology was also entering a new era of theoretical questioning in which the theoretical perspective was viewed as more important than the content or structure of the theory. Social control, radical, structural, social learning, cultural deviance, labelling, deterrence, rational choice, and so on are theoretical perspectives that discuss guidelines for understanding the criminal phenomenon. In that context of competing of perspectives, empirically oriented criminologists pursued two research directions: testing bonding theory and confronting that theory with existing theories.

In the first direction, empirical studies of control theory were numerous; Kempf (1993) reports more than seventy investigations. However, studies that made an exact replication of bonding theory with the variables employed by Hirschi were few. In addition, a situation of near anarchy in the operationalization of key concepts characterized the verification of bonding theory. This anarchy meant that researchers referred to the constructs of the theory, but without a clear consensus on the measures to operationalize them. In the second direction, there were numerous attempts to integrate bonding theory with other theories, particularly differential association or social learning theory, but mainly at the level of empirical model building. This approach gave rise to controversy about the usefulness of theoretical integration, as shown in *Theoretical Methods in Criminology* (Meier 1985) and at the Albany Conference on Theoretical Integration (Messner et al. 1989). Because there was much more interest in empirical modelling, the content of the theory was not a major focus of attention. As a consequence, bonding theory remained stagnant for nearly twenty years. Neither the internal consistency nor the structure of the theory was the object of major challenges from empirical data. We had to wait until 1990 for a major elaboration of the foundations of bonding theory and an extension of its constructs by Gottfredson and Hirschi.

During that period, neither bonding theory nor other criminological theories addressed straightforwardly the question of the explanation of continuity and change in offending over time or the question of changes in bonding during the life course. Only labelling theory, particularly Lemert's (1951) theory of primary and secondary deviance, and learning

theory, particularly Sutherland's differential association theory (Sutherland and Cressey 1960) and Akers' (1973) comprehensive social learning theory, are clearly developmental. Other theories did not explore the developmental implications of their discursive statements. Only very recently have criminologists begun to include a developmental perspective in their theory (see the special issue on theory published in *Criminology*, 25,4; and Loeber and Le Blanc 1990).

In this paper, we want to follow two of the possible roads to theory development, integration and elaboration. We will start by distinguishing different types of theoretical activities, particularly integration, elaboration, and modelling. Afterwards, we will define levels of explanation of the criminal phenomenon: crime, criminal and criminality. Starting from these layers of the criminal phenomenon, we elaborate an integrative multilayered control theory. This paper proposes a static and a dynamic formulation of our generic theory. We define the components of the theory and their organization in a particular structure. We also state the theory from a process point of view.

Preliminaries

Theoretical Elaboration, Integration, and Modelling

In criminology during the 1960s, the term "integration" designated an integration of different theoretical perspectives or the simultaneous consideration of data from multiple disciplines, especially sociology and psychology. This definition of integration was shared by scholars in North America and Europe, for example Mannheim (1965), Wolfgang and Ferracuti (1967), and Szabo et al. (1968), among others. Two decades later, however, the term integration no longer referred to an interdisciplinary integration. Johnson (1979) and Elliott et al. (1985) reduced its scope to an integration of sociological theories and the Albany Conference on Theoretical Integration (Messner et al. 1989) confirmed that tendency. Because of this unfortunate change in the meaning of the term theoretical integration, it is now necessary to distinguish clearly among types of theoretical activity. Criminologists perform three major types of theoretical activities: elaboration, integration and modelling.

Elaboration is the development or expansion of an existing theory. As compared to an initial theory, elaborated theory has the following characteristics according to Wagner and Berger (1985): it has a similar struc-

ture; it applies to a similar phenomenon; it is more comprehensive, more rigorous, more precise; and it is empirically more adequate. Hirschi's bonding theory possesses all these characteristics in relation to Durkheim's initial statement of the importance of the bond to society (1895, 1934). However, elaboration is an unusual activity in contemporary criminology. DeFleur and Quinney (1966) used set theory to formalize and extend Sutherland's differential association theory. Empey and Lubeck (1971) relied on formal rules to develop their axiomatic theory of lower-class delinquency, an elaboration of strain theory. Concerning bonding theory, there is only one comprehensive attempt at elaboration through formalization, Le Blanc and Caplan's (1993) formal statement using Gibbs' method (1985). There are also some discursive elaborations of bonding theory (for example, Catalano and Hawkins 1986; Le Blanc and Caplan 1993; Thornberry, 1987). Theoretical elaboration can also take the form of a multilayered theory as defined by Lenski (1988). In this case, the theorist derives special theories from a general theoretical statement. We have proposed this type of elaboration for bonding theory under the denomination of middle-range family control (Le Blanc 1992), school control (Le Blanc et al. 1992, 1993) and constraints theories (Le Blanc 1995).

Integration, the second type of theoretical activity, is the formulation of a theory that incorporates separate notions into a new whole. Theoretical integration implies for Wagner and Berger (1985) a new structure for the theory and additional predictions. For Thornberry (1989: 52), theoretical integration is "the act of combining two or more sets of logically interrelated propositions into a larger set of interrelated propositions, in order to provide a more comprehensive explanation of a particular phenomenon." In criminology, and particularly in the area of bonding theory, we can distinguish three different kinds of theoretical integration: unification, combination and incorporation.

Unification concerns the levels of explanation of the phenomenon considered. In this case, a common conceptual framework applies to the micro and macro levels of explanation, for example crime and criminality. Pearson and Weiner (1985) propose a social learning theory unification, while Gottfredson and Hirschi (1990) develop a control one.

Combination involves the amalgamation of different orienting theoretical strategies such as social control, social learning, labelling, or other theories within a particular branch of a discipline such as sociological

criminology. There are numerous such combination of social control theory with other unit theories, most often social learning or differential association theory (Conger 1976; Matsueda 1988; Catalano and Hawkins 1986; Reid 1989) and the most comprehensive attempt along these lines is by Elliott et al. (1985, 1989) using social control, social learning and strain theories.

Incorporation uses notions from different branches of a discipline to formulate a new theory; for example, notions from biological, sociological or psychological criminology are amalgamated. Constructs of control theory have been affiliated with biological constructs by Arnold and Brungardt (1983), Denno (1985) and Udry (1988) and with psychological constructs by Le Blanc et al. (1988) and Gottfredson and Hirschi (1990).

Modelling, the third type of theoretical activity, has become the prevalent theoretical activity in criminology during the last few decades. According to Hanneman (1988), it is the development of a system of propositions about a set of data that is a statistical description of an explanation of a phenomenon. There are many empirical models of social control theory. Most of the verifications of Hirschi's theory reviewed by Kempf (1993) are of this nature, as are many of the elaborations and integrations previously cited. Each model distinguishes itself by the constructs involved, by their measurement, by the type of sample used, or by all three of these characteristics. No model is the object of a replication on a different set of data. The mere existence of these numerous models corresponds to the situations of theory proliferation, theory competition and theory variation describe by Wagner and Berger (1985).

In this paper, we perform two types of theoretical activity—integration and elaboration—and leave for another paper the question of empirical modelling. The generic control theory that we propose is integrative in the classical sense; it uses constructs originating from different disciplines. In that sense it is an integrative incorporation. It is also an integrative unification because it applies to the three levels of definition and explanation of the criminal phenomenon—criminality, criminal and crime. This approach to the elaboration of control theory is based on the following rationale. First, there is currently no precise formulation of control theory for some of the levels of the criminal phenomenon. And second, there is currently no developmental formulation of control theory.

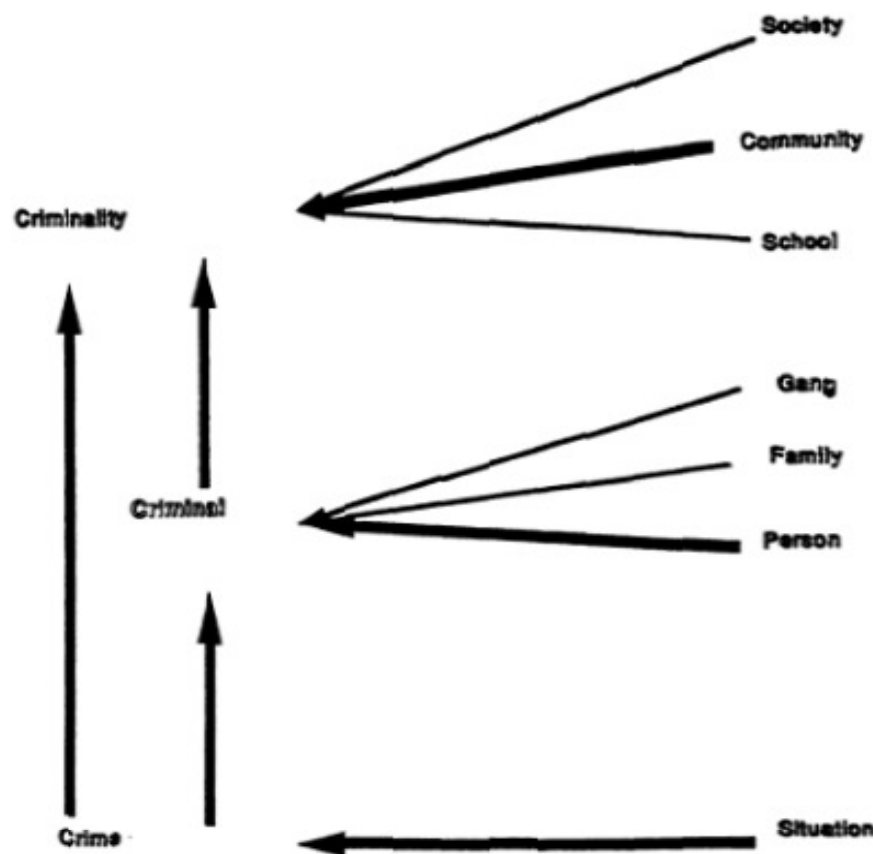
The Criminal Phenomenon, Levels of Definition, and Explanation¹

The objective of this section is to specify the levels of the delinquency phenomenon that a multilayered integrative criminological theory must be able to address. The French criminologist Jean Pinatel (1963), in a masterful effort to define the bases of criminology, was the first to propose that criminologists should distinguish among three levels of the criminal phenomenon, namely criminality, criminal and crime. Each level has its own perspectives, its own rationales and its own methods (see Le Blanc and Fréchette 1989, for an elaborated discussion). Figure 6.1 sketches these levels of definition and explanation of the criminal phenomenon.

Pinatel defines criminality as the sum of infractions committed at a given time and place. It occurs on a societal scale and is influenced by demographic, economic or political factors. Criminality is not an individual criminal propensity as defined by Gottfredson and Hirschi (1990). Their definition of criminality introduced more confusion than clarity in criminology. Based on Pinatel's definition, the dependent variable is the rate of criminality for a particular geographical and social unit and for a specific period. The independent variables are indicators of the state of a society (differential social organization in Sutherland's terms, Sutherland and Cressey 1960), characteristics of a community (social disorganization in the Chicago school terms, Shaw and McKay 1969), dimensions of effective community control (Bursik and Grasmick 1993), or indicators of the functioning of an institution (school organization characteristics for example, Gottfredson and Gottfredson 1985).

The second level, the criminal, refers to the transgressor and includes a study of the transgressor's personal characteristics, as well as of the factors that influence the formation and evolution of his personality. This level of the criminal phenomenon corresponds to the expression of individual offending, as suggested by Blumstein et al. (1986). The dependent variable is any descriptive index of the criminal career, such as participation, frequency, onset, or duration, or any developmental measures, such as activation, aggravation or desistance (Le Blanc and Fréchette 1989). The independent variables are personal characteristics of an individual, such as the biological capacity and the personality, or social indicators such as the relationship with the environment, the bond to society in Hirschi's terms (1969), social class, and so on.

FIGURE 6.1
Levels of Definition and Explanation of the Criminal Phenomenon



The third level of interpretation, is the crime itself. The criminal event has a beginning, a development and an end, and the task of criminology is to ascertain the factors or mechanisms that cause its appearance. At that level the dependent variable is any characteristics of specific offences. The independent variables are characteristics of the situation, such as routine activities (Cohen and Felson 1979) or other variables of the rational choice model of Cusson (1983) or Clarke and Cornish (1985).

American criminologists recently rediscovered this basic criminological rule, that there are various levels of definition matched with various levels of explanation (Hirschi 1979, 1989; Short 1985, 1989). However, the emphasis of criminological research has been mainly on two levels,

criminality and criminal, just as Sutherland had suggested much earlier (Sutherland and Cressey 1960). This basic rule is far from being followed in the discourse of criminologists (see Le Blanc and Fréchette 1989, for examples). However, a number of more recent authors, for example Arnold and Brungardt (1983), Pearson and Weiner (1985), Short (1989), Cullen (1985), and Gottfredson and Hirschi (1990), take into account the need to specify the level of definition when elaborating their theoretical propositions for the explanation of the criminal phenomenon. In this paper, the terms crime, criminal and criminality are used inclusively, referring to the criminal phenomenon at whatever age, including children and adolescent offending as well as adult criminal activity.

Accepting that there are three levels of the criminal phenomenon implies that there are corresponding levels of explanation that are distinct and matched to them. Psychologists generally distinguish three levels—the milieu, the person, and the situation—and tend to use the more complex ecological classification of Bronfenbrenner (1979). For their part, sociologists tend to refer to society, community and institutions. As shown in figure 6.1, these levels of explanation match the levels of the criminal phenomenon. In consequence, each level of explanation is principally pertinent to a particular level of definition. In addition, to respect the logic of the ecological fallacy and the fallacy of reductionism, explanatory variables of one level do not explain the dependent variable of another level. Societal variables may affect the person and his milieu, however only person variables can influence directly individual offending and person variables cannot affect the rate of criminality directly. The same logic applies to the levels of crime and criminal. Figure 6.1 also implies that the levels of definition and explanation may have some relationships with each other. Crimes are constituent parts of the criminal and criminality, while criminality includes individual offending. Explanatory variables are constantly interacting and, it is also implicit from a dynamic point of view, that levels of definition and explanation reciprocally influence each other over time. Time is then conceived as a spiral as illustrated in figure 6.10. At a specific time, the characteristics of a person and of his community, associated with previous behavior, will partially determine subsequent behavior that, in turn, will modify the characteristics of the person and of his community. From the levels of definitions and explanation of the criminal phenomenon presented in figure 6.1, there can be at least seven layers in the explanatory theory. In this paper, we

will limit discussion to three strata: the community, the person, and the act. These explanatory layers call for a multilayered theory. Each level of definition and explanation is autonomous. However, a particular level includes other levels. Each level has its own set of explanatory factors, notwithstanding the fact that crime is part of individual offending and criminality and that individual offending is part of criminality.

Lenski (1988, p. 168) defines a multilayered theory as "one in which a broadly inclusive general theory establishes a covering principle from which a series of more limited special theories can be derived." Lenski applies that definition to various subsets of societies. We propose to apply it to the levels of definition and explanation of the criminal phenomenon. A broadly inclusive general theory is what Wagner and Berger (1985) call an orienting strategy; it discusses guidelines for understanding crime, what notions to include and how to relate them to each other. In criminology, there are many such orienting strategies: social control, radical, structural, social learning, cultural deviance, labelling, deterrence, rational choice, and so on. These limited theories are unit theories, as defined by Wagner and Berger (1985). They present and evaluate a plausible body of theoretical statements offered to explain a particular layer of the criminal phenomenon. In this article, we develop both a general control theory and a set of limited theories about crime, criminal and criminality; this set of theories constitutes a multilayered control theory of the criminal phenomenon.

The Integrative Multilayered Control Theory, the Structural Statement²

In this section, we present the structure of the generic control theory. We define the constructs and relationships among them. We start with a comprehensive statement of the integrative multilayered control theory. We then state the theory for the three levels the criminal phenomenon.

A Generic Control Theory

Control theory dates back to the nineteenth-century idea that the family is the cause of delinquency (Empey 1978). This idea is also linked to Quetelet's (1835: 95) statement that "This fatal propensity appears to be developed in proportion to the intensity of the physical power and pas-

sions of man.... The intellectual and moral development...subsequently weaken the propensity to crime...." Hirschi (1969) limits the notion of control to Durkheim's definition of the bond to society as expressed in Durkheim's "Le suicide" (1897). Kornhauser (1978) sets the origin of a more elaborated version of control theory with Thrasher (1927), and with Shaw and McKay (1969), while Empey (1978) emphasizes Freud's psychodynamic formulation. Nevertheless, much of the recent literature forgets formulations that preceded Hirschi's statement. Precursors and followers of Hirschi would probably agree with Empey's statement that the core of control theories is (1978: 207): "...their emphasis upon the idea that delinquent and conformist behavior is a function of the ability of the child to control his antisocial impulses. They start from the assumption that children require training if they are to behave socially. Delinquent behavior will result either if a child lacks the ability for effective training or because he has been trained badly." This statement fits particularly well Durkheim's definition of control in his 1934 book *L'éducation morale* and the last version of control theory that introduces the notion of low self-control (Gottfredson and Hirschi 1990). As currently formulated, control theory only applies to the second level of the criminal phenomenon, the criminal. We propose to elaborate this theory for the other two levels, crime and criminality.

Our general control theory of the criminal phenomenon states that, *in a favorable environment and setting, control mechanisms operate efficiently and change in harmony with social expectations, and as a consequence, conformity results and maintains itself over time.* Conversely, in an unfavorable context, control mechanisms are insufficient and inappropriate and the criminal phenomenon emerges and persists.

We use the term control according to its third literal definition in Webster's dictionary (245, 3b): "one that controls" or "a mechanism used to regulate and guide the operation of a system." The term control then refers to the definition of the central notion that Gibbs proposes for sociology (1989: 23): "...control is overt behavior by humans in belief that (1) the behavior increases the probability of some subsequent condition and (2) the increase or decrease is desirable." For Gibbs, the commission or the omission of an act is overt behavior. Overt behavior manifests itself in several forms: inanimate things,³ human and nonhuman organisms, self-controls and external controls—proximal, sequential, or social. Gibbs argues that this notion of control is central for

sociology and for all the behavioral and social sciences. Gibbs' definition of control is compatible with its literal definition: the exercise of restraining and directing influences. This definition has two main advantages. First, this definition keeps us away from the strictly individual level formulation of the definition of control by Durkheim and others, that is the bond to society and internal and external constraints used during the socialization process. Second, its level of abstraction facilitates the formulation of our control theory at the three levels of definition of the criminal phenomenon. Individuals, communities and events can produce behaviors—acts, circumstances or conditions—that are purposive and desirable. Bonds and constraints, as defined in the Durkheimian tradition, are only one type of such overt behaviors.

Gibbs' notion of control is also central to psychology. For example, Lytton (1990) uses the umbrella of control system theory to review the literature on child development and Horowitz (1987) proposes a structural/behavioral control model of development. This notion of control is also dominant in criminology. For bonding theorists, attachment and supervision are forms of such regulating mechanisms. We could also argue that an arrest, the perceived certainty of a sanction or opportunities are forms of restraining influences for subsequent offending; they are constructs proposed by labelling, deterrence and strain theorists. Favorable and unfavorable definitions for differential association theorists and reinforcements for learning theorists are also controls because they are directing influences on criminal behavior.

Our generic theory identifies four categories of control mechanism: bonding, unfolding, modelling and constraining. Two types of context modulate these mechanisms, the environment and the setting. Each category of control mechanism and each type of context⁴ represent numerous factors that have a potential impact on one particular level of the criminal phenomenon. The definitions of the control mechanisms are the following.

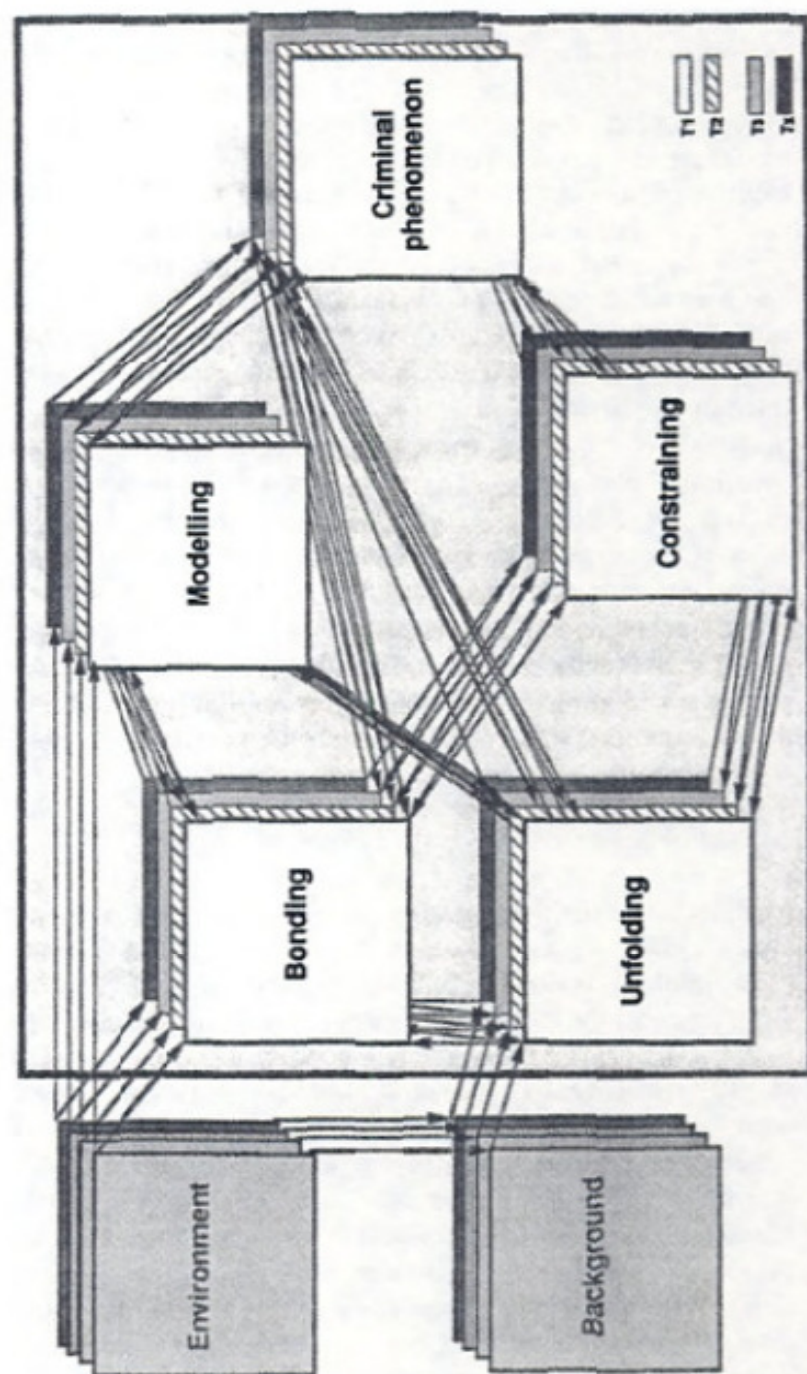
Bonding refers to the various ways by which individuals are held together in a community or interpersonally. Unfolding is the natural growth and development toward a desirable state, the growth of a community, or the development of the person according to values and expectations. Modelling is the existence of patterns that can shape conformity, opportunities that are available in a community and to individuals. Constraining refers to the regulation of conformity through various direct and

indirect restraints; these restraints are limits defined by a community or imposed by the social network of the person. These mechanisms simultaneously and causally interact to produce conformity. They also have their own life or ontogeneity. This theory is systemic in the sense that it defines a structure, a sequence between the components, as well as directional relationships between the components including reciprocal or feedback effects. Figures 2 illustrate this generic theory with unidirectional and bidirectional arrows. It is also a dynamic theory because over time there is continuity and change within the mechanisms as well as because of their mutual influences. Figure 6.2 illustrates change by the superimposed boxes.

The structure of the theory, the relative position of the mechanisms in figure 6.2, indicates the direct and indirect impacts of the various mechanisms of control relative to the criminal phenomenon. The relative position of the mechanisms of control depends on the principle of prerequisites and on the distinction between continuity and change. The theory states that there are exogenous or contextual factors that do not have a direct impact on the criminal phenomenon; they are the environment and the background. The mechanisms of control mediate their impact. Two of these mechanisms of control, bonding and unfolding, are prerequisites or remote sets of factors, their impact is indirect on the criminal phenomenon. They are the foundations of the control mechanisms.

Without bonds, models cannot be significant and constraints cannot operate. As a consequence, an unbounded community or individual cannot be sensitive to direct controls or influenced by the available models. In addition, since the unfolding mechanism refers to a desirable state, this definition of what ought to be necessarily precedes the influence of available models and constraints, what is available as direct controls. Figure 6.2 also states that the bonding and the unfolding mechanisms modulate the criminal phenomenon through the mechanisms of modelling and constraining. These mechanisms are proximal causes of the criminal phenomenon. Models and constraints are more specific to the space-time dimension and tend to change frequently. They are not the more permanent dimensions of control such as bonding and unfolding. Figure 6.2 also states that the bonding and the unfolding mechanisms are in a situation of reciprocal causation at any given time. The modelling and the constraining mechanisms are in the same situation, a causal order cannot be established theoretically or empirically at a specific time.

FIGURE 6.2
Control Theory of the Criminal Phenomenon



In sum, the bonding and unfolding mechanisms are both the foundation of and the continuity component of control; the modelling and constraining mechanisms are catalysts of conformity and are the changeable dimensions of control. Even in that context, we postulate that the four mechanisms of control are in a synergistic relation. They interact to produce an overall level of control of the criminal phenomenon. This synergy is particularly the result of the reciprocal relation between the bonding and the unfolding mechanisms and the reciprocal relation between the modelling and the constraining mechanisms.

We intend to demonstrate that this structure of the theory applies to the three levels of the criminal phenomenon. In a multilayered theory, the components have to be present at all the levels of definition and explanation of the criminal phenomenon. There is isomorphy in the mechanism of control at the layers of the crime, criminal and criminality. In this paper, we want to show that there are isomorphic constructs in the criminological literature for the various levels of definition and explanation. Let us formulate the integrative control theory at the level of individual offending. We start at this level because it is the layer for which control theory is most complex. The level of the criminal is also in-between the micro level, the crime, and the macro level, the criminality. Then we will present a sketch of the theory at the other levels of the criminal phenomenon.

A Control Theory of Individual Offending⁵

Reiss' (1951) statement of control theory proposed a distinction between social and personal control. Hirschi's formulation of control theory (1969) did not include psychological variables, but this deficiency is overcome with the introduction of the notion of self-control by Gottfredson and Hirschi (1990). Our initial elaboration of control theory involved such a construct (Le Blanc and Biron 1980), while our most recent version incorporates the six components enumerated earlier, namely social ties, entry into the adolescent role, psychological functioning, social constraints, social status and gender (Le Blanc et al. 1988; Le Blanc and Caplan 1993). Figure 6.3 describes the integrative personal control theory. *At the individual level, conformity to conventional standards of behavior occurs and persists, on one hand, if an appropriate level of allocentrism exists and the bond to society is firm and, on an other hand, if constraints are appropriate and models of pro-social behavior*

are available. This personal and social regulation of conformity is conditioned by the biological capacities of the person and his position in the social structure. Alternatively, offending emerges and continues when egocentrism persists, when the social bond is tenuous, when constraints are insufficient and deviant models are abundant. These causes of offending will be more potent when the individual has some biological deficiencies and when he comes from the lower social class. We can now define the components of this theory represented in figure 6.3.

Social Status

The position of the individual in the social structure is the first contextual condition that affects the development of the bond to society and exposure to prosocial influences. Hagan (1988) is the most prominent recent North-American proponent of this position and Walgrave (1992) uses the term social vulnerability to refer to that contextual set of factors. Criminology has constantly documented that, if the person lives in a deteriorated community and if his socioeconomic status is low, his probability of becoming criminal and of having a criminal career is much higher (Blumstein et al. 1986). The impact of belonging to certain ethnic or racial groups is similar. It is also well known that in these milieus there exist various subcultures of deviance that support deviant patterns of behavior and more occasions are present for offending in these communities (see, for example, Cloward and Ohlin 1960). Such social conditions are indirect causes of offending, as shown in figure 6.3. This relationship appears in studies about the impact of the family, school systems, and their combination (see for example, Laub and Sampson 1988; Sampson and Laub 1993; Le Blanc 1992; Le Blanc et al. 1992) on self-reported and official delinquency (Le Blanc 1994).

Biological Capacities

Arnold and Brungardt (1983) were the first to introduce the construct of biological capacity in a control theory of offending. Studies document that biological deficiencies, such as the nature of the functioning of the central nervous system, testosterone, and so on (Hodgins 1985; Moffitt 1990; Knoblich and King 1992; Blackburn 1993) and a difficult temperament (Wilson and Herrnstein 1985) are conditions that limit the pos-

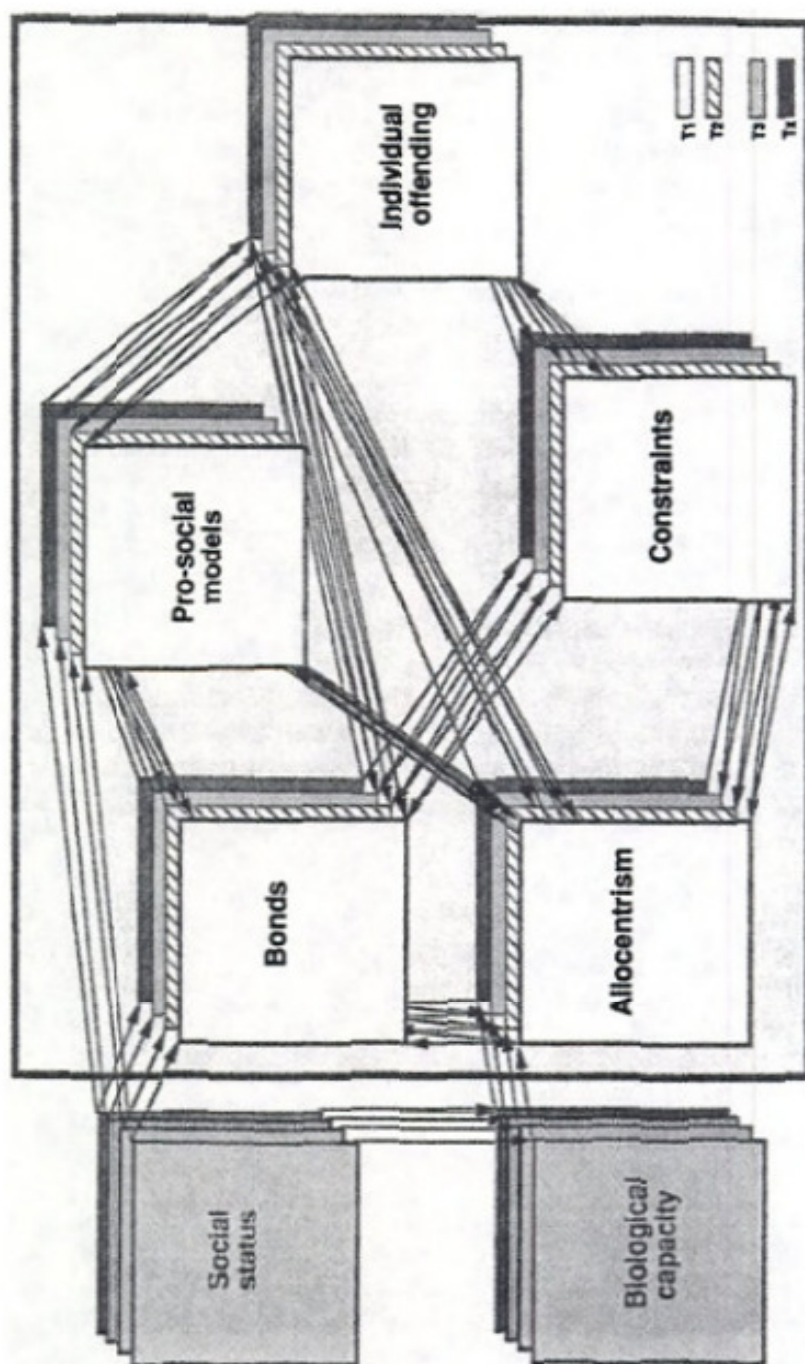
sibilities for the development of personality. Sampson and Laub (1993) define this last set of factors as child effects and they show that they are distal explanations of adult offending. In our personal control theory, such deficiencies will affect the development of allocentrism in the person and, in particular, should affect the cognitive development of the individual (IQ and moral development). The egocentric and cognitively primitive individual will be more likely to be criminal and to persist in offending. Such factors are indirect causes of conformity and offending as shown in figure 6.3.

Bond to Society

Following Hirschi (1969), the numerous replications of his theory (Kempf 1993), and its formalization (Le Blanc and Caplan 1993), we can state that an individual's bond to society manifests itself towards several institutions constituting the different spheres of the person's world. Three institutions receive particular emphasis for the adolescent: family, school, and peers. For adults, these institutions are marriage, work and peers. The person relates to these institutions through two avenues: attachment to persons and commitment to institutions. The development of the bond to society may be more difficult when the person lives in adverse socioeconomic conditions and when she is highly egocentric and less able cognitively.

The most important element of the bond to conventional society is the individual's attachment to persons. The importance of this element lies in the number of persons in society that can lead to an individual's attachment. There are at least three categories of such figures: parents or spouse, peers, and persons in positions of impersonal authority. Attachment to persons is part of the framework of the social norm that states what ought to be. The theory assumes that if a person is sensitive to the opinions of others, then he feels an obligation to abide by their norms. Consequently, the internalization of norms depends on the individual's attachment to persons and attachment to persons favors the acceptance of societal constraints such as parental discipline, school or work sanctions. Attachment to conventional persons acts as a major deterrent to the commission of criminal acts. The stronger this tie, the more likely the person will consider them when and if he envisages committing a crime. This attachment to persons also counters the impact of criminal influ-

FIGURE 6.3
Control Theory at the Level of the Criminal



ences: a weak or broken attachment to persons increases the susceptibility to deviant and criminal influences. The theory defines the process through which attachment to persons reduces the commission of crimes and criminal influences. That is, the person's level of attachment to conventional individuals determines his level of attachment to peers and to persons in positions of impersonal authority. The cumulative impact of these attachments protects the person against criminal influences and discourages occasional and persistent offending.

The second element of the bond is commitment to institutions such as school, religion, work, or success. Commitment refers to an attitude of acceptance of an institution, an affective investment in education, work, religion, and so on. If such commitments are strong, deviant behavior is costly. Therefore, when a person faces the temptation to commit a crime, he must evaluate the costs of his behavior relative to the investments he has made. The assumption underlying the idea of commitment to institutions is that the attitudinal investment of most persons seriously affects the decision to commit criminal acts. Commitment is a constraint on offending and a protection against criminal influences since they would jeopardize the person's possibility of realizing the fruits of his investment. This suggests that the person is committed to conformity not only by his present investments but also by what he hopes to achieve.

Allocentrism

A comprehensive and integrative perspective for the explanation of offending cannot rule out individual differences. The criminological literature documents the importance of individual differences in the emergence and development of individual offending (Feldman 1978; Kornhauser 1978; Wilson and Herrnstein 1985; Fréchette et al. 1987; Blackburn 1993). While there are a large variety of psychological theories, only one has a common set of postulates with social control theories. As shown by Empey (1978), it is the psychodynamic perspective. Freud developed the postulates that children are originally antisocial and that socialization occurs through successive stages. We could easily argue that Piaget's (1967) theory of intellectual development and Kohlberg's (1976) theory of moral development are part of the control family. Bonding theorists are now considering psychological dimensions more explicitly. Gottfredson and Hirschi (1990), for example, propose the construct of low self-control as an inte-

gral part of control theory. In our view, this construct is a very limited selection of the possible psychological traits that are associated with individual offending. It refers to vulnerability to the temptation of the moment; individuals with low self-control are impulsive, insensible, physical, risk-taking, short-sighted, and nonverbal.

Allocentrism is the movement away from the natural egocentrism of the individual. It manifests itself by a genuine consideration of what surrounds a person; it is the disposition to think about others and to behave in relation to them. This egocentrism-allocentrism axis of the development of humans (see Lerner 1986) serves to synthesize the personality dimensions associated with offending. We propose this construct to represent psychological control as a complement to Hirschi's social control theory (Le Blanc and Biron 1980; Le Blanc et al. 1988). This is in accordance with the classic conception of the explanation of offending that stresses the importance of psychological variables (Wolfgang and Ferracuti 1967, among others).

A review of the literature in this domain convinced us that two major lines of complementary thought need to be part of our integrative psychological control theory (Fréchette and Le Blanc 1987). The first stems from developmental theories and lead us to consider the level of psychic development, which means the level of progression from a primitive toward a rich psychic life manifested by a certain level of allocentrism. Allocentrism manifest itself in terms of movement from self-centered to "decentered" states on social, affective, moral, relational, and cognitive dimensions. The decentered person is no longer limited in outlook to his own activities and needs. The second line of research made it possible to identify a great number of personality traits that correlate with delinquent conduct. We synthesized them under the notion of the egocentric personality, a deficient psychological functioning because it focuses excessively on the self. The egocentric personality has five distinguishing traits: hyposociality (inability to cope with the demands and constraints of social life), negativity (hostile attitude toward others), insecurity (malaise and strong feelings of discomfort), primitiveness (rudimentary manner of functioning; giving strict priority to personal needs), and cognitive deficiencies (a lag in intellectual and moral development). This cohesive structure constitutes the framework for the psychic support of individual offending. Personal isolation emerges as the main characteristic of serious delinquency; in other words, the most determining negative

influence is withdrawal from intimate human contact. A multidimensional structure directly supports that isolation. This structure involves hyposociality, which seems to be the most powerful element, and negativity; insecurity, primitiveness, and cognitive deficiencies strengthen these influences.

Figure 6.3 indicates that the normal development of allocentrism favors the establishment of a solid bond to society, receptivity to social constraints, and preference for prosocial influences, and, finally, conformity to conventional standards of behavior. However, the levels of allocentrism and cognitive development are dependent on individual biological capacity. Allocentrism improves over time and then counters the continuation of individual offending.

Constraints

Following Durkheim's (1895, 1934) classic distinction between norms, defined as rules of law and moral values, and discipline, characterized as monitoring and punishment, we propose that there are two major sources of restraint when an individual envisages a crime, internal and external constraints (see the full elaboration of the constraint component in Le Blanc 1995).

External constraints are of two categories, formal and informal. Labelling theorists fully elaborate the formal external constraint perspective (see Shoemaker 1990), while bonding theorists develop the informal social reaction point of view (see Le Blanc and Caplan 1993). Labelling theory states that the imposition of the official label of criminal, following criminal activity, favors the development of a criminal self-image and the emergence of new and more serious forms of criminal activities. Bonding theorists recognize that both very low and very high levels of parental control are least effective in bringing about conformity. They also argue that both strict and punitive or lax and erratic discipline increase the level of conduct problems. Direct parental control variables (supervision and discipline) are related to offending during adolescence even when attachment to parents and family context (family structure, marital relations, parental deviance, and so on) are controlled statistically (Le Blanc 1992). In the school domain, contrary to the family domain, external constraint, as compared to bonding, is the best explanation of adolescent and adult offending (Le Blanc 1994).

Bonding theorists elaborate the notion of internal constraint under the concept of beliefs (Hirschi 1969) and under the concept of perceived certainty and severity of sanctions, a notion borrowed from deterrence theorists (see Paternoster 1987). The first notion refers to the person's belief in conventional standards of behavior, that is, the extent to which he believes he should obey the rules of society. The person's beliefs act as a moral obstacle to the commission of crimes. The less a person believes he should obey the rules of society, the greater is the probability that he will commit crimes. However, there is ample variation in the attitude of respect toward the rules of society; many persons feel no moral obligation to conform. Four types of belief are potentially important: the acceptance of the normative system, the use of neutralization techniques, the legitimacy of rules imposed by parents, and by controlling institutions (Le Blanc and Caplan 1993). Perceptual deterrence theory postulates an inverse relationship between the perceived certainty and severity of sanctions and offending. Empirical tests of this hypothesis are numerous but the results are still inconclusive (Le Blanc 1995).

As represented in figure 6.3, individual receptivity to social constraints depends on the quality of the person's bond to society, the level of development of his allocentrism and on the presence of strong prosocial influences. These constraints are one of the last protections against individual offending. When constraints are age-inappropriate, erratic or absent, they are direct and proximal causes of individual offending as shown in our previous studies (Le Blanc et al. 1988; Le Blanc 1992, 1993, 1995; Le Blanc et al. 1992, 1993).

Prosocial Influences

Tarde (1924) introduced a modelling explanation of delinquency, which was later developed by Sutherland (Sutherland and Cressey 1960). Modelling is an important cause of adolescent delinquency according to numerous studies (see Elliott et al. 1985, 1989; Thornberry et al. 1994). A central assumption of classical control theories is that companionship with delinquents is an incidental by-product of the quality of the bond to society. This assertion suggests that the relationship between delinquent companions and offending is spurious. However, after testing this hypothesis with his data and reviewing numerous other studies, Hirschi (1969) revised his bonding model to state that delinquent companions

have a direct or causal impact on the commission of crimes. Furthermore, after formalizing Hirschi's theory we proposed that a weak or broken bond to society leads to the acquisition of delinquent friends and directly affects the level of offending (Le Blanc and Caplan 1993). In the latest revision of bonding theory, Gottfredson and Hirschi (1990) suggest that low self-control leads to street life and to the membership in a deviant group. These factors, in turn, lead to a more frequent offending.

The delinquent friend represents, in part, the person's exposure to criminal influences. A person, however, is exposed to criminal influences through a variety of other sources: deviant subcultures that are present in his community, television and video viewing, parental deviance and criminality, routine activities, spouse's deviance, and so on. Figure 6.3 states that the person's receptivity to criminal influences depends on the quality of his bond to society, the development of his allocentrism and the tightness of the constraints imposed by himself or others. Thus the receptivity to criminal influences is a direct and proximal cause of individual offending as shown by numerous criminological studies (see particularly Elliott et al. 1985, 1989; Thornberry et al. 1991, 1994; Sampson and Laub 1993).

The Structure of the Personal Control Theory

The structure of the theory, as indicated by the relative position of the mechanisms in figure 6.3, depends on the principle of developmental prerequisites and on the distinction between continuity and change as in the structure of the generic control theory.

As shown by Zazzo's (1979) magisterial synthesis, animals and humans have two primary needs, self-conservation and integration into their species. Animals and humans inherit these two needs. First, the primary need for self-conservation has a biological origin and is the source of personal traits. As a result, the biological context of our theory contains a set of distal factors for explaining conformity. They, however, give birth to the unfolding mechanisms, named allocentrism, that are closer explanations of conformity. This mechanism implies that from his temperament the person develops his character and personality in interaction with his environment. World views define the goals of this development in a social and cultural context—the setting in our theory—and biological capacities limit the attainment of these expectations. Second, the primary need of integra-

tion to its species leads to bonding, which grounds the individual in a social and cultural milieu. This sociocultural context of the bond is a remote set of factors for conformity while the quality of the bond has a more direct impact on conformity. In our general theory, the bonding and the unfolding mechanisms are in a situation of synergy. This situation is similar at the level of the criminal (figure 6.3). In causal modelling terms, bonds and allocentrism are in a situation of reciprocal causation; no one-way causal sequence is justifiable between these components of the theory. They are developmental prerequisites of conformity. They are also continuous primary needs during the life course.

This is not the case for the modelling and constraining mechanisms. During the life course, models and constraints change with the evolution of society. Models—attitudinal and behavioral demands of society for children, adolescents and adults—are constantly changing over time and with age. During the life course, constraints are also transformed; for example external controls have priority early in the life course while internal controls gain dominance later in the life course (see for example Durkheim 1934; Nye 1958). As a consequence, figure 6.3 states that prosocial models and constraints are results of the bonding and allocentrism mechanisms; they are proximal causal factors of conformity. They operate in synergy, as the bonding and unfolding mechanisms do. In figure 6.3, reciprocal arrows represent synergy.

Figure 6.3 also implies causal and retroactive effects. Arrows from one superimposed box of a mechanism to the next one of another mechanism (in fact from one time to a later time) represent a causal impact. By definition, a causal effect follows the sequence proposed by the structure of the theory. In contrast, a retroactive effect runs in the opposite direction of the sequence defined by the structure of the theory. An example of a retroactive effect is the impact of the modelling mechanism at one time on the bonding mechanism at the subsequent time, and so on for all other mechanisms. An other example of such retroactive effects is the impact of previous individual offending on the subsequent state of bonding, unfolding, modelling, and constraining. Figure 6.3 also implies that individual offending will sequentially display the same type of effect on the modelling and constraining mechanisms and on the bonding and allocentrism mechanisms.

We began the elaboration of our multilayered control theory at the level of the individual. We stated that the personal and social regulation

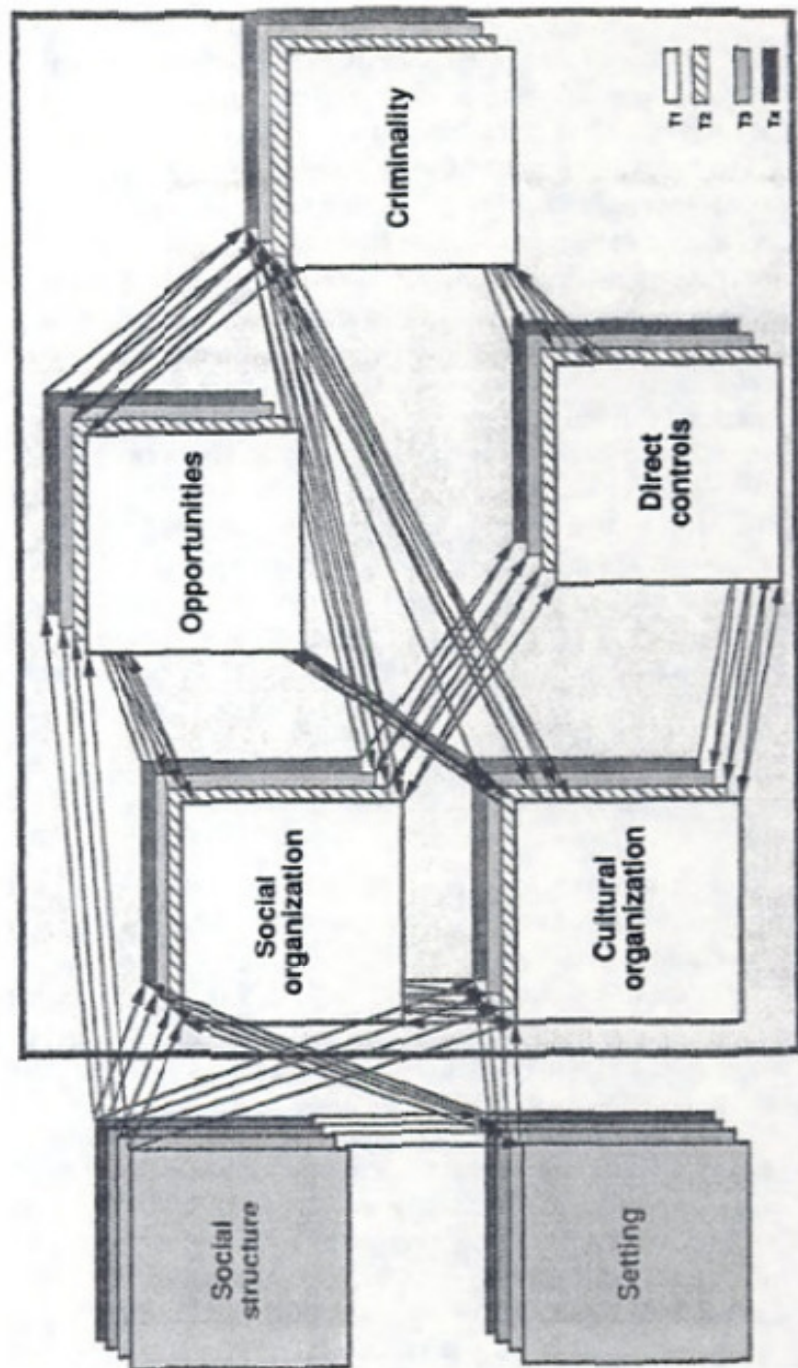
of conformity is conditional to the biological capacities of the person and his position in the social structure. This regulation of conformity is the result of the interaction of proximal mechanisms, such as constraints and prosocial models of behavior, and distal mechanisms, such as the development of allocentrism and bonds to society. Synergy results from the interactions between these set of factors. In the next section, we move to the level of criminality, another layer of the criminal phenomenon. We elaborate our community control theory with the logic used for our personal control theory.

A Control Theory of Criminality

Kornhauser (1978) argues convincingly that the social disorganization perspective is basically a control theory, even if it is primarily about community disorganization. She indicates that this theoretical perspective has an overwhelming emphasis on community context even if it does sometimes specify the influence of coordinate individual level variables. She demonstrates that social disorganization theory includes the major components of a control theory: the strength of social bonds as the foundation of control, the importance of direct controls, the weakness of culture, and defective socialization to cultural values. Her model is based on three constructs: exogenous variables (economic status, mobility, heterogeneity), cultural disorganization, and social disorganization. She specifies the relationships between the exogenous variables and the structural and cultural community organization without stating clearly the connection between these two forms of community organization. Our version of community control elaborates on this base. Figure 6.4 represents our control theory at the level of explanation of the community.

The dependent variable is the rate of criminality in a particular community at a specific moment and its evolution over time. This rate refers either to an overall rate or to rates of specific types of criminal acts. The independent variables, as in the individual level of control theory, comprise six constructs: social structure, setting, social organization, cultural organization, opportunities, and direct controls. These constructs represent respectively the environment and the setting contexts, the bonding, the modelling, the unfolding and the constraining mechanisms of the generic control theory. Thrasher (1927) and Shaw and McKay (1969) proposed some of these constructs and Kornhauser (1978) and Sampson

FIGURE 6.4
Control Theory at the Level of the Criminality



(1991) elaborate upon them. Bursik and Grasmick (1993) stress the intervening aspect of community social organization constructs between the social structure and criminality.

Our community control theory assumes that *a high rate of conformity to conventional standards of behavior persists in a community when the social organization is sound and the cultural organization robust, when direct controls are efficient, and when there are sufficient legitimate opportunities. This regulation of conformity is conditional on the quality of the setting and on the position of the community in the more general social structure.* Alternatively, a high rate of criminality will exist when social and cultural disorganization are persistent, when direct controls are inappropriate and when deviant subcultures and opportunities are present. These causes of a high rate of criminality in a community will be more efficient in a physically deteriorated setting and when the social status of the community is low. The rate of conformity will vary over time and between communities according to changes in the position of the community in the social structure and the quality of the setting and to variations in the levels of social and cultural organization, direct controls and opportunities. We begin by outlining the content of each of these communities constructs before we discuss the structure of the theory.

Social Structure

The definition of the social structure appears under different terms in different theories: exogenous variables for Kornhauser (1978), the population dimension for Figueira-McDonough (1991) and urbanization for Wikström (1990). Bursik and Grasmick (1993) define this dimension as the socioeconomic composition of the community, the residential stability of the residents and the racial and ethnic heterogeneity of the neighbourhood. This construct parallels the concept of social structure in the individual level theory. Since the seminal studies of Shaw and McKay (1969) numerous studies have documented that rates of criminality are higher in communities that display lower social status and higher poverty and that these communities are heavily populated by immigrants (see Kornhauser 1978; Wikström 1990; and Bursik and Grasmick 1993, reviews).

Figure 4 states that a disadvantaged social context favors social and cultural disorganization, the presence of illegitimate opportunities, and

inappropriate direct controls (see also Wikström, 1990, for a formulation of these statements based on a more extensive literature review). Sampson (1993) shows the indirect impact of the social structure on the rate of criminality through the social organization dimension. A change in the position of the community in the social structure may also affect formal and informal social controls and the rate of criminality in that community (Bursik and Grasmick 1993).

Setting

The setting is the isomorphic construct to biological capacity at the level of the individual. It is defined traditionally in criminology by density and crowding (Figueira-McDonough 1991) and by the physical deterioration of the inner city (Kornhauser 1978). It could now also involve such characteristics as the level of pollution by substances (such as lead and so on), traffic, noise, and so on. The impact of the setting on criminality has long been documented (Shaw and McKay 1969; Kornhauser 1978, and others). We can state that the characteristics of the setting of a community provide a context that favors or disfavors community control over criminality. Figure 6.4 states that a physically deteriorated and a very low or a very high density setting encourages social and cultural disorganization. Such a setting also favors the use to direct controls (Figueira-McDonough 1991). A change in the setting, gentrification for example, could only indirectly modify the rate of criminality over time through community control.

Social Organization

Social disorganization traditionally refers to the weakness of informal networks; it is the loss of community control over members and the erosion of informal networks (see Sampson 1988, 1991). Sampson (1992) highlights three major dimensions of community social organization: the ability of a community to supervise and control teenage peer groups, the quality of local friendship and acquaintanceship networks, and the rate of local participation in formal and voluntary organizations. Said in an other way, social disorganization is the inability of organizations, groups and individual members of a community to solve their common problems collectively (Shoemaker 1990). Bursik and Grasmick (1993), for their

part, refer to the quality of primary relational networks (intimate informal primary groups: family, friends, neighbors) and the strength of secondary relational networks (broader local interpersonal networks and the interlocking of local institutions). All these authors are clearly referring to a bonding mechanism between members of a community, that is, ties between the members of a community that are some sort of community attachment and commitment. These are similar mechanisms compared to the individual bonding mechanism that we defined at the previous level of explanation of the criminal phenomenon.

Figure 6.4, based on the reviews by Kornhauser (1978) and Bursik and Grasmick (1993), stresses that the social structure of the community (socioeconomic composition, residential stability and ethnic heterogeneity) affects the level of social disorganization. It also indicates, in accordance with lower-class theories (Cohen 1955; Cloward and Ohlin 1960), that when social disorganization is high various deviant subcultures exist in the community. Social disorganization will increase cultural disorganization (Kornhauser 1978), reduce formal controls (see Figueira-McDonough 1991) and increase the opportunities for crime (Wikström 1990). Variations in social organization over time should also modify the rate of criminality.

Cultural Organization

The distinction between structure and culture has long been established in sociology, particularly by Parsons. Following that direction, various notions are present in the criminological literature that refer to cultural organization. There is Sutherland's constructs of economic and political individualism (Sutherland and Cressey 1960), Sellin's (1938) notion of culture conflict, Merton's (1957) anomic construct, and Angel's (1947) social integration notion (cultural, normative, communicative). The term cultural disorganization, proposed by Kornhauser (1978), seems particularly appropriate to represent these notions and the unfolding mechanism. The definition of this mechanism stresses the growth and development of a community toward a desirable state. Cultural disorganization, for Kornhauser, refers to the attenuation of societal cultural values as controls. The desirable state for any society is the presence of robust and influential cultural values.

According to Kornhauser (1978), the physical deterioration of slum areas, their low economic status, their cultural heterogeneity, and the

mobility of the residents are responsible for the presence of both the diversity and the obsolescence of subcultures in the community. These factors also account for the instability and narrow scope of community culture and the irrelevance of societal culture. This situation impedes communication and obstructs the quest for common values and as a result there is an attenuation of subcultural, communal and societal cultural values in these communities. The cultural organization-disorganization continuum at the level of the community has a common feature with the egocentrism-alloentrism continuum at the level of the individual. The continuum defines a desirable state for the development of a community or an individual.

Figure 6.4, following existing empirical evidence, proposes that social and cultural disorganization will increase in deteriorated settings and in heterogeneous, mobile and low social status communities. It also postulates that these two disorganization constructs are related reciprocally to each other. This position is probably the most conservative one, notwithstanding the fact that Kornhauser (1978) limits herself to a nonrecursive model and states that cultural disorganization causes social disorganization. Since there is no clear empirical evidence nor solid theoretical reasons to support this limited position, we will postulate reciprocal causality or synergy. Social and cultural disorganization will support the emergence of various subcultures (Kornhauser 1978; Bursik and Grasmick 1993) and they will encourage the development of formal social control (Figueira-McDonough 1991, reports that there is an inverse relationship between social disorganization and direct controls). Over time, modifications in cultural disorganization should indirectly imply changes in the rate of criminality.

Opportunities

In a deteriorated setting and a low socioeconomic status community, various deviant models and numerous illegitimate opportunities will be available to adolescents. Such a relationship has been masterly described by Cloward and Ohlin (1960). Bursik and Grasmick (1993) use the construct of neighborhood opportunities and argue that neighborhood processes affect routine activities and gang behavior and, in turn, the community level of criminality.

Our notion of opportunities is more comprehensive. It includes the subcultures, their representative gangs, and corresponding illegal mar-

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kets (stolen goods businesses, drugs, prostitution, and so on). However, it also involves black markets, such as undeclared work, and deficiencies in resources for conventional activities, such as work, playgrounds, sports organizations, art classes, and so on. Our notion of opportunities also refers to the large availability of suitable targets for crimes because of the deficiencies in social and cultural organization and formal and informal direct controls. All these categories of community opportunities offer deviant models to persons living in such a community. The existence of these illegitimate opportunities and the scarcity of legitimate opportunities will encourage the use of repressive direct controls and they will sustain a high rate of criminality as illustrated in figure 6.4. Changes in the level of such opportunities over time should correspond to equivalent changes in the rate of criminality.

Direct Controls

Kornhauser (1978, p.74) defines direct controls as "...purposive efforts to ensure conformity or limit deviance...." Hunter (1985: 233) proposes three levels of such control. The private level refers to relationships among friends; friends accomplish such control through the withdrawal of sentiment, social support and mutual esteem. The parochial level of direct control points to the broader set of local interpersonal networks of neighbors, and interlocking of local institutions, such as voluntary organizations, stores, schools, churches. The public level involves the ability of the community to secure public goods and services (health services, social services, policing, and so on) that various outside agencies allocate to the community.

Bursik and Grasmick (1993) document with their literature review that the level of direct control directly affects the criminality rate. In turn, the level of direct private, parochial and public controls depends on the level of social disorganization. In the same vein, Figueira-McDonough (1991) concludes from her review of the literature that social disorganization will be a central cause of criminality because of the intervention of direct controls or the transfer of many control functions from primary groups to formal organizations. In such a case, law enforcement agencies will be more present and repressive, and there will also be a proliferation of agencies and programs in the domains of school, personal counselling, professional training, health services, and so on. Figure 6.4

states that direct controls are a proximal cause of the rate of criminality and the presence of various subcultures and illegitimate opportunities reinforces the community's propensity to crime.

The Structure of the Community Control Theory

We argue that an integrative community control theory contains six constructs: social structure, setting, social organization, cultural organization, opportunities and direct controls. In addition, based on past theoretical statements and empirical studies, we proposed many interdependencies between these constructs. However, we did not justify the particular sequence of constructs represented in figure 6.4. Let us see if the principle of prerequisite and the distinction between continuity and change apply to community control as they do for personal control.

There is a total consensus among the specialists of community control that the social structure of the community (socioeconomic status, heterogeneity and mobility) and its setting (particularly if it is physically degraded) are exogenous factors to community processes. These sets of variables directly influence the social and cultural organization of the community, the nature of available opportunities, and the nature of direct controls. In consequence, these authors conclude that the social structure and the setting of a community do not have a direct impact on the rate of criminality.

The following assumption can be made concerning the relative position of the constructs of social and cultural organization of the community, opportunities and direct controls. Communities, like humans, have two primary needs, self-conservation and integration to the larger society. First, the primary need of self-conservation has its origin in the setting of the community and its social structure and it is the main source of community organization. As a result, the setting and social structural contexts of our theory are distal sets of factors for conformity. They, however, encourage the bonding (social organization) and the unfolding (cultural organization) mechanisms that are closer explanations of conformity but not direct explanations. These mechanisms imply that, from a particular setting and a specific position in the social structure, the community develops its social and cultural organization. Second, the primary need for the integration of the community into the larger society leads also to community organization. In our general control theory, the

bonding and the unfolding mechanisms are in a situation of synergy and no ordering is justifiable between these components of the theory. They are growth prerequisites of conformity. There is also a consensus among authors that the available opportunities and the nature of direct controls are consequences of the social and cultural organization of the community.

The two primary needs of communities, self-conservation and integration, are always present during history. This is not the case for the modelling (opportunities) and constraining (direct controls) mechanisms. Over time, the models change and the constraints alter with the evolution of the community and the larger society. Models—attitudinal and behavioral exemplars—are constantly changing in history through fashions and growth. For example, gangs of today are different from gangs of previous decades (see Spergel 1990). During history, constraints have been transformed from repressive to humanitarian (Van Dijk 1989, documents these changes). As a result, figure 6.4 states that the modelling and the constraining mechanisms are influenced by the bonding and unfolding mechanisms, they are proximal causal factors of conformity. The structure of the theory proposed by figure 6.4 is another application of the principle of growth prerequisite and of the distinction between continuity and change. Figure 6.4 also indicates that this theory is dynamic and interactional. Development is represented by superimposed boxes in this figure. Reciprocal and directional arrows represent interactions.

A Control Theory of Crime

An event control theory has common grounds with a personal control theory and a community control theory. Hirschi (1986), for his part, argues convincingly that there is no fundamental opposition between rational choice and control perspectives. He states that they share the same image of man as a self-seeking individual. In addition, even if the corresponding models emphasize different criminal phenomenon, the criminal event and the criminal, they are complementary for that reason. Bursik and Grasmick (1993), for their part, state that the routine activities and the social disorganization approaches complement each other. They argue that community dynamics relate naturally to the offender/target/capable guardian convergence so important for routine activities theory. In addition, with the help of the theoretical and empirical literature, they

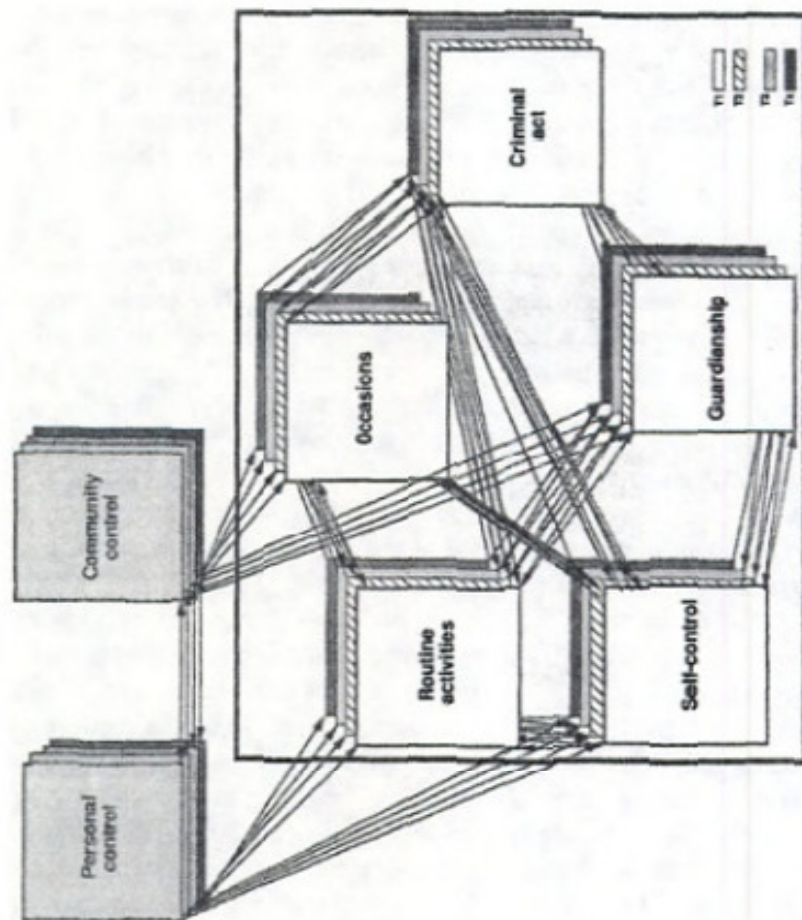
show that there is a complex series of interdependencies between the components of community control and routine activities, on one part, and the convergence of a target and an offender, on the other.

In sum, a criminal event is a function of the community in which it takes place and of the individual who commits it. In these circumstances, it is natural to move to the micro level of definition and explanation of the criminal phenomenon with a control perspective. The discursive statement of our integrative event control theory is the following. Offense control theory assumes that *conformity to conventional standards of behavior in a specific situation occurs when routine activities are conventional, when self-control is high, when there is no occasion for the perpetration of a criminal act, and when guardianship is reliable. This regulation of conformity is conditional on the quality of community and personal controls.* Alternatively, a crime is likely when the person's self-control is low, when his routine activities are unconventional, when there are numerous occasions to commit crimes and when possible targets are unprotected. These causes of the perpetration of an offense will be more potent when the person has a high propensity for crime (low personal control) and lives in a disorganized community (low community control). Over time, the variations in the quality of the offense control mechanism change the probability of the commission of a crime. Figure 6.5 represents this theoretical statement.

The dependent variable is a particular criminal event. This event has various characteristics (the nature of the crime; the mechanics of the perpetration of the act: planning, use of instruments, accomplices, and so on; the psychological reaction before, during and after the event). Le Blanc and Fréchette (1989) define these components of a criminal event and study changes in them during the life span. The explanatory constructs of community control, personal control, self-control, routine activities, occasions and guardianship are isomorphic with the constructs of the other two levels of the criminal phenomenon. Personal and community controls represent the structural factors or the exogenous variables. Routines' activities delineate the bonding mechanism, the self-control component manifests the unfolding mechanism, the occasions construct defines the modelling mechanism, and the guardianship dimension represents the constraining mechanism.

As represented in figure 6.5, we propose that a person's routine activities will primarily be away from the household when the person's bond to

FIGURE 6.5
Control Theory at the Level of the Crime



society is tenuous and his self-control will be low when he is highly ego-centric. Figure 6.5 also states that when community control is low there are numerous occasions to commit crimes and less guardianship. We also postulate that when routine activities tend to take the potential offender away from home there will be more occasions to commit crimes and that when self control is low the occasion will appear more interesting and the guardianship will be underestimated. Crime more likely occur when all these factors are active. Our integrative offense control theory relies greatly on Felson's (1986) discussion of the relationships between criminal choices, routine activities, indirect control, ecology, and social control theories. Figure 6.5 also represents the interdependencies between the constructs from a dynamic point of view—the superimposed boxes, and in an interactional perspective—the directional and bidirectional arrows.

Community Control

Community control involves four processes, social organization, cultural organization, legitimate opportunities and increased formal control. The social structure and the setting of a particular community modulate these processes. Figure 6.6 states that the quality of community control influences indirectly the perpetration of specific crimes through the proliferation of occasions and unstable guardianship. Poor community control will increase the probability of the perpetration of a criminal act.

Felson's (1986) discursive statement of the links between routine activities and other theoretical perspectives recognizes the importance of community control for the proliferation of opportunities for predatory crimes. He states (123) that "a tight community...offers little opportunity for common exploitative crime." For their part, Bursik and Grasmick (1993), reviewing the literature, argue that changes in the social structure of the community, in the household composition for example, will increase available targets and diminish guardianship. As a consequence, we propose that the level of community control will determine the availability of occasions to commit crimes and will diminish the number of persons, physical protection devises, or specific situations that can act as capable guardians.

Personal Control

There are bridges between personal and event control. Clarke and Cornish's (1995) criminal involvement model includes many classic con-

control theory constructs. For example, they include, in the background factor box, upbringing, cognitive style, and so on; in the previous experience box, they retain moral attitudes, contact with law enforcement agencies, and so on; and, in the perceived solution box, they refer to involvement in legitimate and illegitimate activities. These constructs refer to some types of indirect and direct controls. Felson (1986) also explicitly cites bonds to society, an aspect of our construct of personal control, in his elaborated model of the criminal event. He calls the bond the handle-unhandle potential offender. As a consequence, rational choice and routine activities theorists recognize that the level of personal control is an important exogenous variable when the perpetration of a crime is possible and considered.

Figure 6.5 states that the level of personal control indirectly affects the convergence of the available target and the inclined offender. This indirect impact can occur through routine activities for Felson (1986) or the reaction to chance events and the readiness of the potential perpetrator for Clarke and Cornish (1985).

Routine Activities

The construct of routine activities refers to habitually enacted public activities. This construct focuses particularly on individual life-style (Hindelang et al. 1978) or the daily activity patterns that disperse the person away from his family (Felson and Gottfredson 1984) and household situation (Cohen and Felson 1979). According to routine activity theory, these activities will bring the person in contact with numerous targets or occasions for the commission of a crime, and, particularly, contact with improperly guarded targets. The construct of involvement in conventional activities, borrowed from Hirschi's theory (1969), is complementary to this construct of routine activities. It incorporates public and private, institutional and noninstitutional activities. The involvement process states that the greater the involvement of the person in conventional activities, the less time he has to engage in deviant acts and the less chance of exposure to the temptation of crime. When defining offending as an activity, the emphasis is on the nature of the conventional activity as oppose to the quantity of conventional activities. With this position, five types of activities are presumably important. These institutional and non-institutional activities revolve around the family (or the spouse and

children), peers, leisure, school or work, and loitering. These types of activities are important since, according to Hirschi's results (ours also Fréchette et Le Blanc 1987) school-related activities inhibit criminal activities, whereas the adolescent's loitering, participation in work and in leisure activities positively correlate with offending (which may not be the case for adults). The other two types of involvement, activities with parents (or later on with a spouse) and peers (particularly if they are conventional) are a protection against the commission of criminal acts.

Figure 6.5 introduces a construct of routine activities that covers this entire range of activities. The model states that the dominance of public and noninstitutional routine activities will increase the number of occasions to commit crime and the number of contacts with unguarded targets. In turn, unconventional routine activities are supported by deficient personal and community controls. Conversely, private and institutional routine activities will decrease the number of occasions to commit a crime and the number of contacts with unguarded possible targets. Changes in routine activities over time could modify the probability of the commission of a criminal act and also could result in a transfer from one type of criminal offense to another type of offense.

Self-Control

Gottfredson and Hirschi (1990: 87) define self-control as "the idea that people differ in the extent to which they are vulnerable to the temptation of the moment." They characterize people with low self-control as "...impulsive, insensible, physical, risk-taking, short-sighted, and non-verbal" (90). For their part, Clarke and Cornish (1985) introduce similar notions with what they call previous experiences and learnings (direct and vicarious experience of crime, foresight and planning, and so on), reactions to chance events (easy opportunities, need for cash, drugs, and so on) and readiness to commit a crime. The egocentric person is also describe as an impulsive individual (Fréchette and Le Blanc 1987). For us, Gottfredson and Hirschi's (1990) construct of low self-control should be part of the event control theory rather than the personal control theory. We made this choice because the notion of egocentric personality, defined earlier on, is much more comprehensive than the above definition of self-control. As in our conception, Eysenck's (1977) definition of personality includes impulsivity as a subtrait of a larger dimension, extroversion.

Figure 6.5 indicates that low self-control will persist when the person's bonds to society are tenuous, when he is egocentric, when prosocial influences are weak and when constraints feeble. The person will then be more likely to prefer routine activities that offer excitement and thrill, which will, in turn, increase the number of occasions for the perpetration of a criminal act. Individuals with low self-control will also be more likely to evaluate guardianship as inefficient. As a result, the probability of the occurrence of a criminal event will be higher.

Occasions

The Chicago school teaches criminologists that in crime-prone communities there are numerous occasions for the commission of criminal acts. Cohen and Felson's (1979) routine activity theory uses the construct of suitable targets to represent the possibilities to commit a crime. According to Clarke and Cornish (1985), the individual makes a rational choice about the suitability of the target; he evaluates the degree of effort involved, the amount and immediacy of the reward, the likelihood and severity of punishment, and the moral costs. We expect that the more a target seems suitable, the higher the probability of the commission of the offense, particularly if the person's self-control is low and his activities public and noninstitutional. Figure 6.5 also states that the presence of numerous suitable targets in a community is a proximal cause of the commission of a crime.

Guardianship

In Cohen and Felson's (1979) routine activity theory, three elements are necessary for the commission of a criminal act: a likely criminal, a suitable target, and the absence of a capable guardian against crime. A capable guardian can be a person, a physical protection device, or a specific situation. The risk of victimization literature is eloquent on the relationship between guardianship and the perpetration of crimes (see Bursik and Grasmick 1993, review 73–80). Figure 6.5 indicates that the absence of guardianship is a proximal cause of a crime and that a situation is likely to be perceived as such when the person has low self-control, when his routine activities are predominantly unconventional, and when there are suitable targets.

The Structure of the Event Control Theory

We argue that an integrative event control theory needs six constructs: community control, personal control, routine activities, self-control, occasions and guardianship. We also propose many connections between these constructs. However, the theoretical statements and the empirical studies at this level are rare and they are not always explicit about these interdependencies. As a consequence, our event control theory rests on shakier grounds than the community control and the personal control parts of our control theory. However, the principles of context and prerequisites and the distinction between continuity and change can help us speculate on the structure of the integrative event control theory as we did at the other two layers of our control theory.

The most pertinent hypothesis is that the level of community and personal controls are contextual factors to the criminal event. Personal control directly affects the choice of routine activities and the level of self-control. Community control directly determines the availability of occasions for the commission of a crime and the quality of guardianship. However, these contextual variables do not have a direct impact on the commission of a crime. Community control and personal control are contextual prerequisites of a criminal event. As a result, at this level of explanation, the contextual factors originate from two levels of explanation of the criminal phenomenon—community control from the level of criminality and personal control from the level of the criminal. This is a major difference from what we proposed earlier. Then, the contextual factors were of the same level of explanation. At the level of the criminal event there is then a convergence of all the factors, community, personal and event, to determine the probability of a specific crime.

Concerning the position of the constructs of routine activities and self-control and the constructs of occasions and guardianship, we can make the following assumption. First, the decision to commit a crime is made if the person is available and ready. The primary condition of availability has its origin in routine activities and relates to the primary need of self-conservation or the adaptation of the individual to the sustenance activities of a community. Second, the level of self-control also represents a primary condition of readiness and relates to the primary need of integration or involvement in a specific situation. In our general control theory, the bonding and the unfolding mechanisms are in a situation of recipro-

cal causation, no orderings exist between these components of the theory. Their influence is synergistic and they are prerequisites to conformity. As a consequence, appropriate routine activities and high self-control will diminish the convergence between the offender, suitable targets and unguarded premises.

The two primary conditions of a criminal event, which are more stable individual propensities, are the availability of the individual for crime through appropriate routine activities and the readiness of the person through low self-control. This is not the case for the modelling (occasions) and constraining (guardianship) mechanisms. During periods of the day or the week, occasions and the guardianship change. As a consequence, figure 6.6 states that the bonding and the unfolding mechanisms are catalysts for the modelling and the constraining mechanisms, which are viewed as proximal causes of conformity. The structure of the theory proposed by figure 6.5 is another application of the principle of prerequisite and of the distinction between continuity and change. Figure 6.5 also indicates that this theory is, synergistic, dynamic and interactional. Reciprocal relations represent synergy in this figure. Superposed boxes show dynamics. In addition, retroactive and directional arrows represent interactions.

The Three-Layered Control Theory, a Generic Perspective

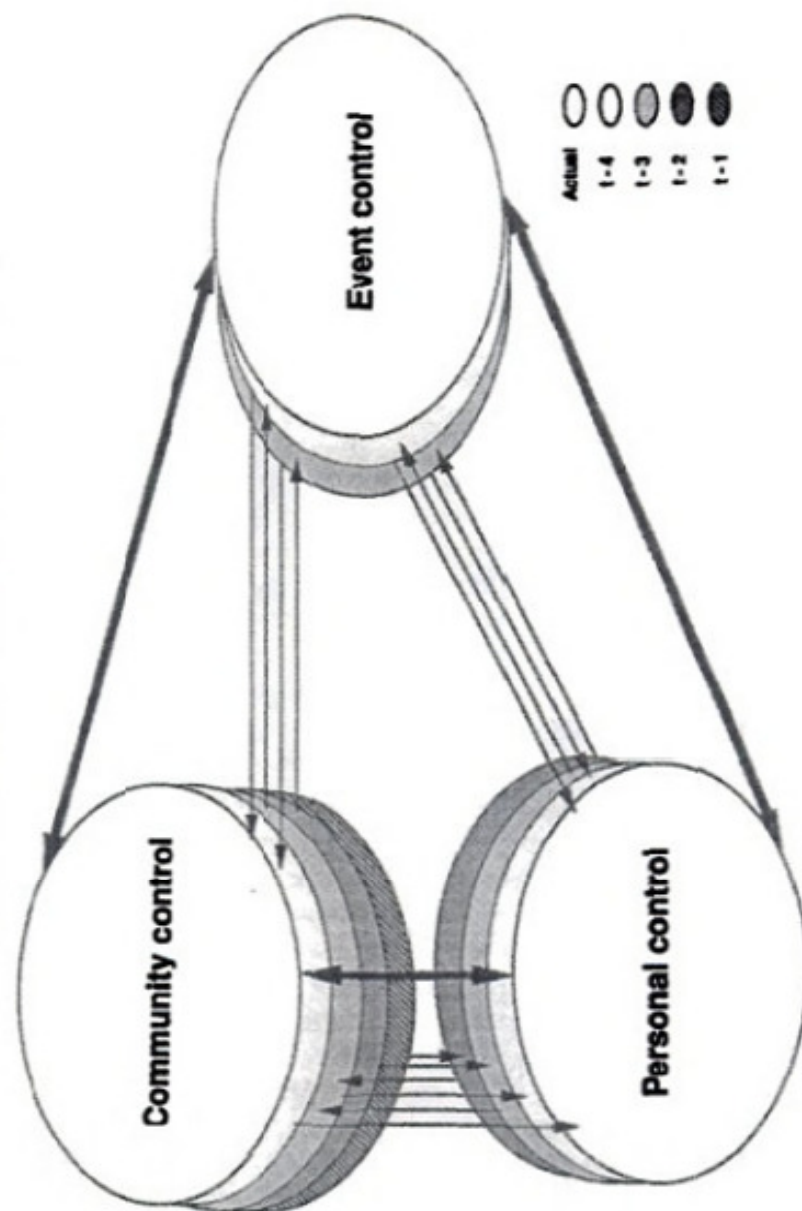
The central notion of our theory is control. We define control as the exercise of restraining and directing influences over the criminal phenomenon. We propose that in appropriate contexts control will be tighter and in harmony with expectations, and, as a consequence, conformity will result. The restraining and directing influences are the result of four mechanisms: bonding, unfolding, modelling and constraining. The simultaneous consideration of these four mechanisms and of their contexts constitute a theoretical elaboration and combination, as define earlier in this paper. Our theoretical statement is an expansion of existing theories and a mixture of various control constructs. Our theory is an amalgamation of psychological and sociological control theory, of its bonding and constraint components. The proposed system of control of the criminal phenomenon is an open system because it exchanges energy with other systems. The mechanisms of control involve synergy because they combine their action to regulate the criminal phenomenon. This complex

open system of control of the criminal phenomenon is subject to the laws of thermodynamics about the conservation of energy (a system neither creates nor destroys energy during any process) and equilibrium (during an irreversible process, entropy always increases).

We then specified our control theory for three layers of the criminal phenomenon, criminality, criminal, and crime. Our community control theory assumes that a high rate of conformity to conventional standards of behavior exists when social organization is sufficient, when cultural organization is influential, when direct controls are efficient, and when there are adequate legitimate opportunities. This regulation of conformity is conditional on the quality of the setting and on the position of the community in the social structure. Our personal control theory reasons that a person's conformity to conventional standards of behavior is present when allocentrism grows, when the bond to society is solid, when the constraints are adequate, and when pro-social influences are strong. This personal and social governance of conformity is conditional on the biological capacity of the person and on his or her position in the social structure. Finally, our offense control theory proposes that criminal acts are unlikely when routine activities are conventional, when self-control is high, when there is no occasion for the commission of crimes, and when guardianship is reliable. This regulation of conformity is conditional on the quality of community control and the level of personal control.

Figure 6.6 represents the interdependencies among these three layers of our control theory. This theory is interactional because it includes the two categories of interactions that Thornberry (1987) defines as necessary for such a theoretical statement. Reciprocal effects, the first condition of this perspective, are the large arrows. They show that for a specific moment in time community control has a global impact on personal and event control, that personal control has an impact on community control and event control, and that event control has an impact on community control and personal control. Figure 6.6 also shows that events are part of criminality and offending, while the criminal career is an integral part of criminality. Causal effects, the second characteristic of an interactional theory, is stressed by the impact of community control at time 1 on personal control at time 2 and by the impact of personal control at time 2 on community control at time 3, and by all the arrows between personal, event and community controls that go from one period of time to another one. Our theory is also

FIGURE 6.6
Interdependencies between the Specific Layers of Control Theory



systemic because figure 6.6 implies that there are synergistic and retroactive relations. Synergy is represented by bidirectional arrows between community and personal controls when event control is the focus of explanation. Retroactive effects are included because event control at a specific point in time affects community and personal control at the next point in time.

Figure 6.6 also indicates that these interactions take place in two contexts. First, there are contextual prerequisites to some categories of control. We propose that a certain level of community control always exists before a particular level of personal control develops. Communities have a history, while persons have a life course during a specific historical period. Conversely, a certain level of personal control always exists before the perpetration of a crime becomes possible. Persons are states, while events are situations. In figure 6.6, this context of interaction is represented by the absence of an oval at time 1 for personal control, while time 1 community control influences time 2 personal control. Conversely, there is no time 2 oval for the event control while time 2 personal control influences time 3 event control.

Second, the context in which these interactions grow is sensitive to dependent on initial conditions; this is the butterfly effect of chaos theory (Gleick 1987). This principle states that complex systems are unstable and that small differences in input can produce overwhelming differences in output. Nagin and Farrington's (1992a, b) papers on the impact of the age of onset and prior delinquency on subsequent offending supports the position that, at least in part, initial offending determines subsequent criminal activity (see also Sampson and Laub 1993). In figure 6.6, the superimposed ovals picture this phenomenon. These sets of ovals state, for example, that an initial level of personal control will, in large part, determine the subsequent level of personal control. In our models of family control (Le Blanc 1992), school control (Le Blanc et al. 1992) and constraints (Le Blanc 1995), the correlations of all the control variables with themselves at a subsequent point in time are stronger than the reciprocal (a correlation with another variable measured at the same point in time) or causal (a correlation with other variables measured at a later point in time) correlations. This is also the case in Thornberry et al.'s (1991, 1994) and Patterson et al.'s (1992) analyses.

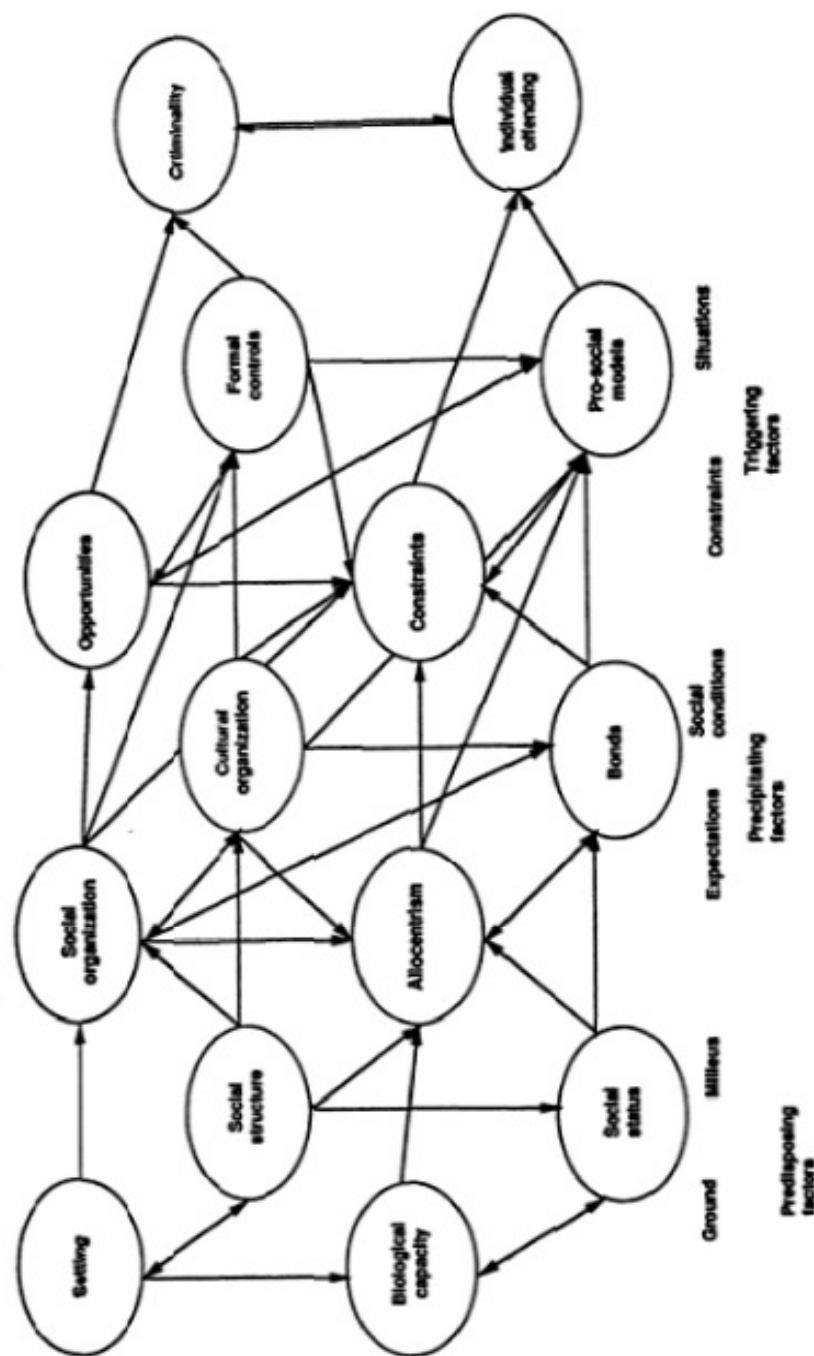
Figures 6.7, 6.8 and 6.9 move us farther in the direction of theoretical unification. They specify some of the relationships among the three strata

of the criminal phenomenon. We use three figures to report these relationships because a single figure would be too complex and difficult to read. In each figure, there are six categories of factors that are represented at each level of definition of the criminal phenomenon: grounds (setting, biological capacity), milieus (social position of the community, social status of the individual or his family), expectations (cultural organization, allocentrism, self-control), social conditions (social organization, social bonds, routine activities), restraints (direct controls, internal and external constraints, guardianship), and situations (legitimate opportunities, pro-social influences, occasions). These factors are arranged according to their proximity to the dependent variables. In order, they are predisposing factors (grounds and milieus), precipitating factors (expectations and social conditions), and triggering factors (restraints and situations).

Figure 6.7 reports interdependencies between community and personal control. Figure 6.8 presents relationships between the constructs of personal and event control. Finally, figure 6.9 shows the impact of community control on event control. In these figures, we represent only reciprocal effects (bidirectional relation between two variables at the same point in time) and recursive (unidirectional relations between two variables measured at the same point in time). State dependence (a correlation between the same variable at two points in time), causal (a relationship between a variable measured at one point in time and a different variable measured at another point in time) and retroactive (the impact of the dependent variable at time 1 on independent variables at time 2) effects are not presented in these figures to facilitate the understanding of our multilayered control theory. However, it should be assumed that they exist, as stated earlier.

Very few theoretical statements and even fewer empirical studies have discussed interdependencies between community control and personal control constructs. Kornhauser (1978: 69) synthesizes Shaw and McKay's theory in a graph where social disorganization implies weak controls and, on the basis of these weak controls, youths become delinquent with or without the influence of organized crime and delinquent companions. Kornhauser then elaborates the Shaw-McKay theory, stating that cultural disorganization implies a loss of direct external control by the family and the resulting defective socialization produces weaker direct internal

FIGURE 6.7
Interdependencies between Community Control and Personal Control



attachment and commitment of the child, as well as the instrumental bond to institutions, will be attenuated and, as a consequence, direct control will suffer at school and in the family. Empirical studies, such as Krohn (1986), Simcha-Fagan and Schwartz (1986), Gottfredson et al. (1991) and Lizotte et al. (1993), conclude that the direct impact of community variables on individual offending is marginal. However, there is a clear indication that social disorganization variables have an indirect impact on offending. For example, Sampson (1993) shows that community-level differences in social cohesion and indirect controls do have significant effects on individual-level variations in offending, deviant attitude and association with delinquent peers through family management techniques.

Consequently, figure 6.7 proposes the following theoretical statements of interdependencies between community level and individual level constructs. The nature of the community setting (density, space, quality of air, and so on) affects the biological capacity of individuals. The social structure of the community limits the range of both individual and family social and ethnic status in a particular community. The community level of cultural organization restricts expectations for the development of the individual in terms of the social bond and allocentrism, while the level of social organization narrows the possibilities of individual development, bonding and unfolding mechanisms. The available pro-social influences for individuals are dependent on the range of legitimate and illegitimate opportunities and on the level of social organization in the community. Finally, cultural expectations and opportunities mould internal constraints while external constraints depend on the quality of the social organization and the nature of direct controls in the community. In sum, community level constructs are contextual factors of individual level constructs.

There are very few theoretical statements and empirical studies of the relationships between community and offense constructs. Reviewing this scant literature, Bursik and Grasmick (1993) suggest that the convergence of a suitable target, a motivated offender and the absence of a guardian is a function of the model of routine activities that, in turn, depends on the social structure of the community. Wikström (1990) observes that urbanization implies weaker social control, greater opportunities for crime, more motivated offenders and more criminal events. Figure 6.8 presents the postulated relationships between the community

FIGURE 6.8
Interdependencies between Community Control and Event Control

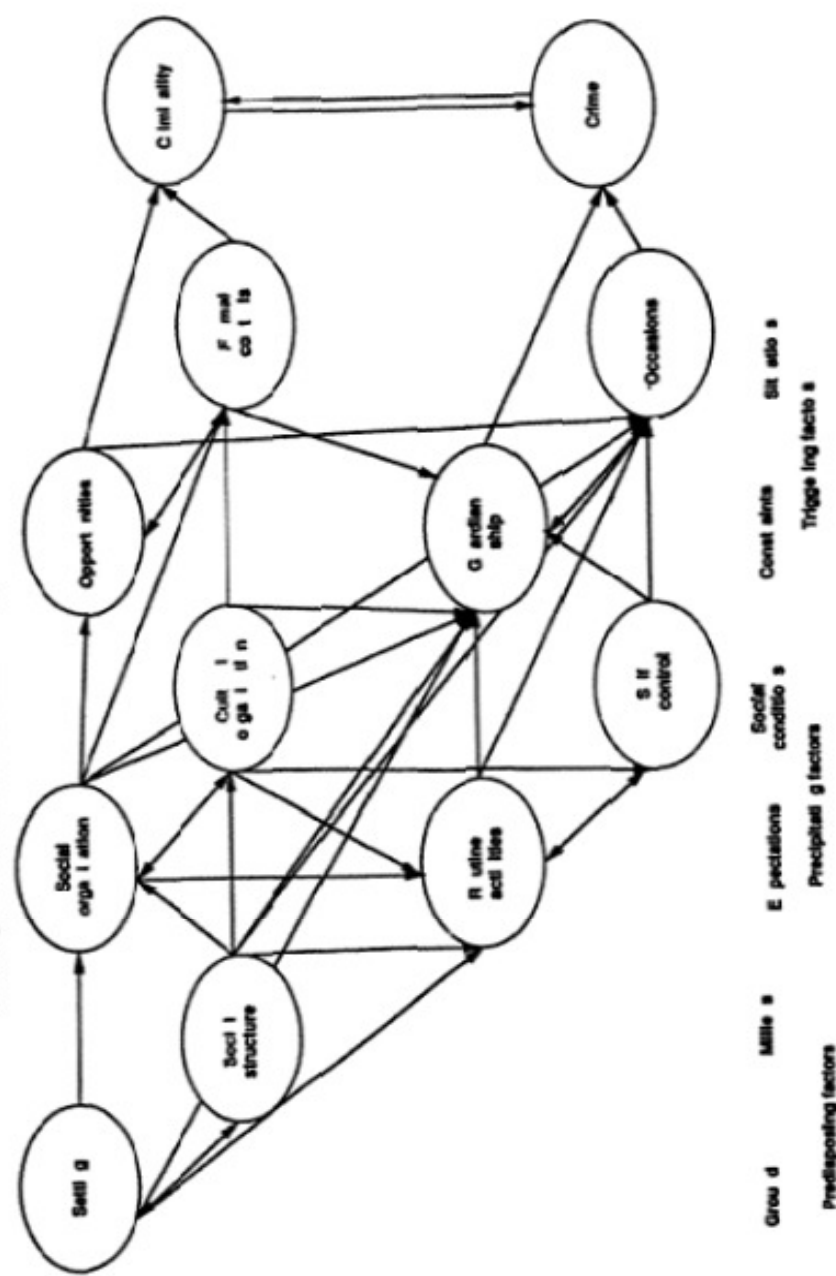
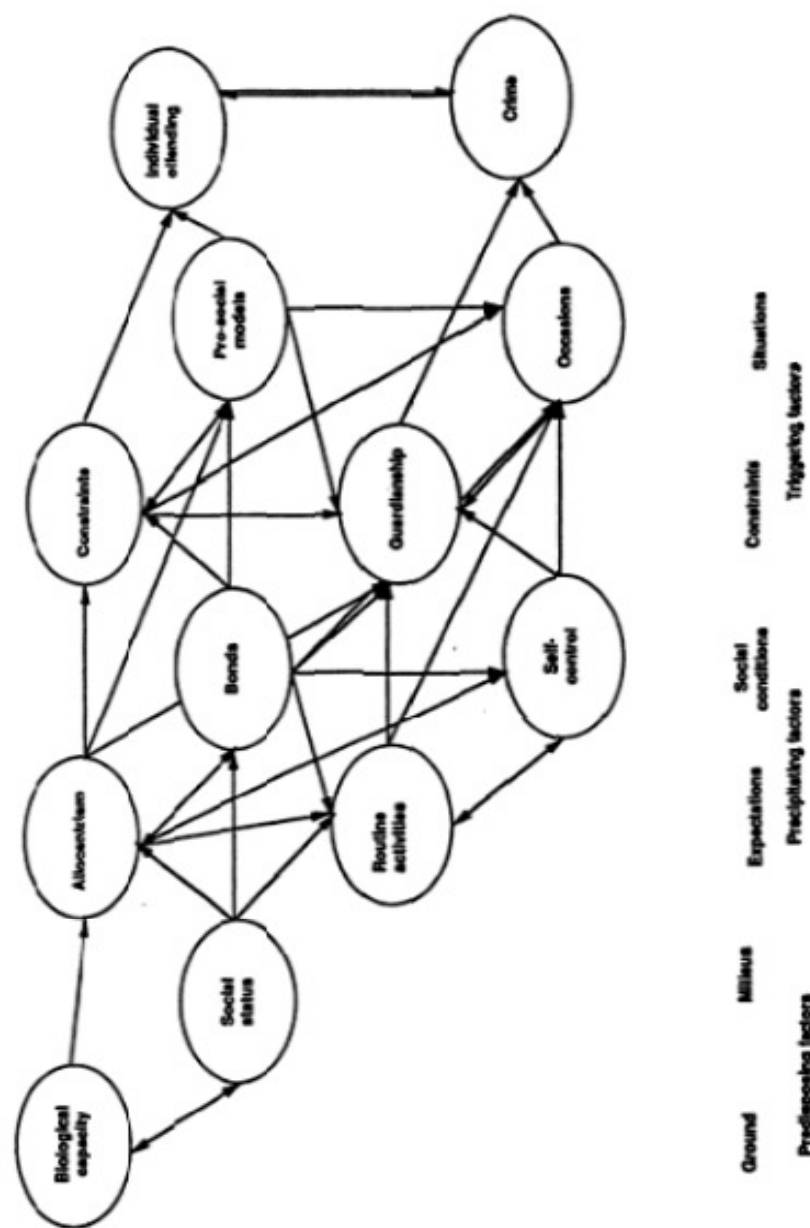


FIGURE 6.9
Interdependencies between Personal Control and Event Control

control and offense control constructs. The pattern of routine activities of an individual is the product of the characteristics of the setting, the social structure and the social and cultural organization of the community where the person lives. Cultural expectations and informal controls influence his particular level of self-control. Occasions for the perpetration of crimes increase with the deterioration of the setting, weak social organization, diverse illegitimate opportunities, and in low status communities. Finally, guardianship diminishes when informal control is poor and direct control omnipresent.

There are some theoretical statements and empirical studies about the connections between the community and the personal layers. However, there is virtually nothing in the literature concerning interdependencies between the individual and the event layers. Clarke and Cornish (1985) and Felson (1986) discuss the impact of some individual variables on the decision to commit a crime. Felson proposes that the bond to society is important in that decision. Potential offenders with low social bonds tend to overestimate the suitability of a target and underestimate the capacity of the guardian. Clarke and Cornish offer a complex sequential involvement theory to explain this. Background factors associated with previous experiences, learning and needs influence the way in which the individual evaluates and perceives possible solutions. In turn, the decision to perpetrate a crime depends on the individual's reaction to chance events and his readiness to commit an offense. Figure 6.9 elaborates our generic control theory on these grounds.

The choice of routine activities depends on the quality of the bond to society. Individuals with weaker bonds will favor public and noninstitutional activities. The level of self-control decreases for people who remain egocentric on the egocentric-allocentric continuum. Guardianship is more likely evaluated as deficient if the individual is egocentric and unbounded to society. The temptation of the occasion will increase with the weaknesses of the bond and of the constraints, and with the exposure to antisocial influences.

The Generic Control Theory, a Dynamic Statement

Until now, this discursive statement of our generic control theory has defined the constructs and the structure of their interdependencies. It is now time to propose a developmental statement of our multilay-

ered control theory. We will start by an evaluation of the consideration given by existing criminological theories to continuity and change. We will then define our contextual and developmental perspective. Subsequently, we will distinguish between the course of development and developmental processes.

Are There Developmental Theories in Criminology?

Most criminological theories are not developmental in nature. They do not discuss the dynamics of continuity and change of the criminal phenomenon over time. In addition, when they internally carry a developmental perspective, criminologists rarely interpret them in that way. Labelling and learning theories are exceptions but their tests are rarely longitudinal.

Labelling theory, and particularly Lemert's (1951) theory of primary and secondary deviance, is a dynamic theory. Briefly, Lemert's theory states that when an individual is labelled deviant because of some antisocial behavior, that label is a major cause for behaviors that emerge as part of a deviancy amplification process. Differential association theory (Sutherland and Cressey 1960) can also be interpreted in a developmental manner because its central thesis is that criminal behavior is learned over time. Akers' (1973) social learning theory also falls in that category. However, these authors refer to learning that happens during a short time span rather than the whole life course.

Strain and cultural deviance theories imply a temporal process of involvement in offending. For example, Cohen's (1955) theory stated that the contrast between working-class socialization and middle-class values of success leads first to failure in school, then to low self-esteem, then to school dropout and association with delinquent peers, then to a reaction formation and, finally, to a delinquent status.

Control theory, as stated by Hirschi (1969), would probably not be interpreted in a developmental manner by its author. However, attachment, commitment, and so on, are clearly bonds that are formed progressively through interaction with others and society, rather than being considered *de novo* psychosocial states during adolescence. The most recent formulation of control theory by Gottfredson and Hirschi (1990) also negates a developmental perspective. These authors basic position is that there is a stable criminal propensity, low self-control, that explain a life course of offending.

Recent integrated models, such as Elliott et al.'s (1985, 1989) have done little to enhance our knowledge of the ordering of causal factors, aside from confirming that past delinquency is the most powerful predictor of future delinquency. One problem with many of these models is the short span of time considered, generally a few years between measures (Elliott et al. 1985, 1989; Le Blanc et al. 1988; Thornberry et al. 1991, 1992; and others). Integrated theories (see Messner et al. 1989) have not adopted a developmental perspective because they failed to emphasize processes over time or temporal ordering and changes in causal factors with age. Some new criminological models, however, are clearly sequential because they do propose a specific time ordering of causal factors for a longer time span (Farrington 1986; Le Blanc and Fréchette 1989; Hawkins et al. 1986; Kaplan 1984; Thornberry 1987; West 1982).

Still, the ordering of factors often merely refers to certain classes of factors as operating at specific age periods while other factors are active at another age, rather than being based on distinct developmental processes. For example, Thornberry (1987) proposed an interactional theory that links dynamic constructs to the person's position in the social structure. He argues that controls, learning, and delinquency are reciprocally related over the person's life cycle, and that they may be conceptualized developmentally with different variable contents and structures at different age periods and phases of life. For instance, commitment may be conceptualized as commitment to school during adolescence and commitment to work during young adulthood.

We can conclude from this brief summary that theorists in criminology generally do not explore all the developmental implications nor exploit all the potential dynamic strengths of their theories. Only very recently have they formulated theories that include a developmental perspective. We believe that the time is ripe to further these endeavors through our generic control theory. To do so, we will use the frameworks provided by theoretical developmental psychology and chaos theory.

A Contextual and Developmental Perspective

According to Lerner (1986), the mechanistic, organismic and contextual theoretical perspectives about development could be described in the following way. The mechanistic position stresses that the laws of natural science apply to other disciplines, that the reduction of a phenomena to

its fundamental units is necessary, that the same laws apply to all levels of study, that the focus should be on quantitative changes and that these changes are additive. In comparison, the organismic perspective emphasizes that the organism must be studied as a whole, that at each level of phenomenal organization there is an emergence of new phenomena, that phenomena grow such that later forms of organization cannot be reduced to earlier ones, and that changes are qualitative, discontinuous, multiplicative, and interactive. The main proposition of the contextual theoretical perspective is that every phenomenon is historic. Constant changes at all levels of analysis characterize life and embeddedness of each level with all others is a particularity of human phenomena. This position is particularly relevant to our definition of the criminal phenomenon and the layers of our control theory.

Crime is embedded in criminality and individual offending, and criminals are constituent parts of the crime rate. Event control is part of personal and community control, and personal control is a component of community control. Figure 6.10 represents embeddedness by arrows going from event control to personal control and so on and shows change by the spirals. In the contextual perspective, development is also probabilistic. This means that the influence of the changing context on the trajectory of development is partly uncertain and that development must be defined in terms of "...organism-context reciprocal, or dynamic-interactional relations" (Lerner 1986: 69). However, the organization and the internal coherence of the organism limit the probabilities of different trajectories. These principles are also those of the chaos theoretical perspective in science (Glieck 1987; Briggs and Peat 1989). This scientific perspective talks about structured randomness, complex systems, nonlinear dynamics, and inner rhythms.

In sociology, Fararo (1989) develops that line of thinking under the notion of dynamic social systems and formalizes his theory in terms of the mathematics of nonlinear dynamics. In our formulation of control theory, a crime is probable in the context of a specific level of personal control and community control. Individual offending will continue in the context of a specific community.

According to the contextual perspective on development, we can state that the level of community control, of personal control, and of event control is specific to a particular time and space. According to chaos theory (see Briggs and Peat 1989), we can state that changes at one layer

of control will affect changes at the other layers of control; there is a coevolution of the changes at the various layers of control. Spirals in figure 6.10 represent this phenomenon of coevolution. Changes in event control will modify the level of personal control and community control and vice versa. Arrows from one spiral to the others in figures 6.6 and 6.10 represent those interdependencies. In addition, we can state that the level of community control depends upon and influences societal control, that the level of personal control determines and results from the level of community control, and so on. Studies that we cited in the previous section document these statements.

Whatever the level of explanation of the criminal phenomenon, we propose that the fundamental developmental trajectory reflects the orthogenic principle state by Werner (1957: 126). "...whenever development occurs it proceeds from a state of relative globality and lack of differentiation to a state of increasing differentiation, articulation, and hierarchic integration." Psychologists will easily accept that proposition (see Lerner's review 1986) and sociologists will also recognize the pertinence of that statement for societal change (Boudon 1984; Caplow 1988) and community change (see the studies of Bursik 1986, for Chicago and Schuerman and Kobrin 1986, for Los Angeles). However, criminologists still dispute the application of that principle to the development of individual criminal activity (Le Blanc 1993b). Users of transition matrices argue for the randomness of offenses, while developmentalists claim that there are developmental stages of offending.

The evolution toward more complexity is governed by two principles: sensitivity to the initial condition and probabilistic epigenesis. Criminologists have demonstrated that past criminal activity explains subsequent offending. The results of Elliott et al. (1985, 1989), Nagin and Farrington (1992a, b), Patterson et al. (1992), Jessor et al. (1991), Sampson and Laub (1993), and others are eloquent about this phenomenon of amplification. Chaos theorists refer to the consequences of sensitivity to the initial condition as the "Butterfly effect" (Glieck 1987). Offending is not the only variable affected by that principle; a significant proportion of the explained variance of explanatory variables—attachment to parents, commitment to education, association with delinquent peers, and others—is accounted for by the past level of those same variables (for a few examples see Le Blanc et al. 1992; Le Blanc 1992, 1993a; Thornberry et al. 1991, 1992). Superimposed boxes in figures

6.3 to 6.6 represent this developmental mechanism. As a consequence, each subsystem is partly self-organizing and self-perpetuating. This is the case for the bonding, unfolding, modelling and constraining systems and their subsystems. Concerning the principle of probabilistic epigenesis, our results about individual offending (Le Blanc and Fréchette 1989) and Patterson's data (1992) about problem behavior clearly show that there are some normative stages but that the outcome of individual behavioral development is only probable, never certain. Some individuals will pass through all stages, some will not; some individuals will start at the initial stage and some will not. Developmental sequences are hierarchic rather than embryonic.

Finally, development is interactional as proposed by some criminologists (see Thornberry 1987, Le Blanc et al. 1988) and contextual developmentalists (see Lerner 1986). As represented in figures 6.3 to 6.6 and 6.10, the development of event, personal and community control implies interactions. Interactions take various forms: reciprocal interdependencies among constructs at a specific time; causal relationships between constructs over time, such that constructs that will become alternatively independent and dependent variables; state dependencies for each construct; and, retroactively, the impact of the criminal phenomenon on the four control mechanisms. These retroactive effects have two possible consequences, amplification or regulation of the criminal phenomenon.

The Course of Development

After reviewing the principles that govern the dynamics of control of the criminal phenomenon, either event, personal or community, it is necessary to specify the nature of the course of development. In our developmental criminology paradigmatic paper (Loeber and Le Blanc 1990) and in our analysis of individual offending (Le Blanc and Fréchette 1989), we relied on Wohlwill's (1973) developmental analysis of child behavior and applied some of his ideas to the study of the development of individual offending. We argue, in this section, that we can apply the methods used for the study of within-individual change to the study of the course of event and community control. The course of control can take the form of either quantitative and qualitative change, a distinction fundamental for developmentalists and specialists of social change.

Quantitative changes are usually termed trends at the community level of analysis and growth curves at the individual level of analysis. For example, quantitative changes refer to variations in the percentage of immigrants, of single-parent families, and so on, for communities, to changes in height, attachment, neuroticism, and so on for individuals, and, to variations in the value of goods stolen, in physical harm, and so on, at the level of the event.

Loeber and Le Blanc (1990) propose that these quantitative changes should be assessed in at least three ways and they supply, for each type of quantitative change, numerous examples in the domain of individual offending. First, quantitative changes are the degree of change on the scale that measures any construct of our control theory. Second, quantitative changes correspond to the direction of change, is there progression or regression. Finally, quantitative changes also refer to the rate of change, or the velocity, i.e., the relationship between the degree of change and time. We could measure the degree, direction and velocity of change in the structure of the community, for example variation in the racial heterogeneity of the community, in its social organization, for example changes in participation in voluntary organization, in its direct control, for example the number of police patrols, and so on for the other constructs of the community control theory. We could assess the degree, direction and velocity of change in attachment, egocentrism, number of delinquent friends, and so on for the other constructs of the personal control theory. We could describe the degree, direction and velocity of change in guardianship, the availability of targets, and so on for the others constructs of the event control theory.

Qualitative changes are a more complex problem. They refer to something new, something that is different from what went before, something that is more complex according to the orthogenetic principle. These changes in nature are habitually subdivided in a developmental sequence that comprises a certain number of stages. When sociologists talk about industrial, postindustrial, developing, and postmodern societies, they refer implicitly to such stages. When social ecologists talk about a community moving from a middle-class status to a working-class status, from a racial minority status to a racial majority status, from a homogeneous underclass status to a gentry status, and so on, they define implicitly stages of development. When psychologists talk about sensorimotor or preoperational intelligence, about oral, anal or phallic functioning, con-

ventional or postconventional reasoning, and so on, they refer explicitly to stages. In each of these examples, sociologists and psychologists call attention to a universal developmental sequence divided into a limited number of stages. We assume that a normative developmental sequence exists for the community, individual and event constructs of our generic control theory.

Concerning individuals, there are numerous theories and empirical studies that show that developmental stages exist and that they are related to age. For example, there are psychosexual (Freud 1905), cognitive (Piaget 1967), moral (Kohlberg 1976), psychosocial (Erickson 1972), peer relations (Oden 1988), external control (Durkheim 1934), and play (Berk 1989) developmental sequences to name a few domains and the principal theorists. In addition, according to Loeber and Le Blanc review's (1990), there is growing evidence that there are stages of development of such problem behaviors as drug use and criminal activity. We think that if we were to apply this line of thinking and research to community change and event change we would probably identify developmental sequences as well.

At the level of analysis of events, there is probably a sequence in planning and organization of crimes, for example between a forged check to a sophisticated credit card fraud, from an unplanned breaking and entry to a professional one, from events of bully behavior during childhood to gang fights during adolescence and wife battering later on. At the community level, there are probably successive periods when the socioeconomic status and ethnic heterogeneity of a neighborhood changes. For example, with respect to the process of gentrification neighborhoods could change from being homogeneous with respect to lower socioeconomic status and minority group composition, to being quite heterogeneous with a mixture of statuses and ethnicities, to being homogeneous with respect to higher socioeconomic status and majority group composition as the process of gentrification is completed.

Contrary to the position of many developmental stage theorists, a developmental sequence does not imply an embryonic course. Every individual or community does not go through all the stages. Research data show that the course is usually hierarchic, however. People start at different stages and move through a different number of stages. It is particularly the case for individual offending as showed by Le Blanc and Fréchette (1989). We postulate that it is also the case for every construct

of the multilayered control theory defined either for its community, personal and event layers. The consequence of the hierarchic course is the possibility of numerous trajectories.

Loeber and Le Blanc (1990) also propose that this hierarchic course on a universal developmental sequence can be specified according to what Wohlwill (1973) calls conservation, synchrony and paths. They review the literature and show that these notions apply to individual offending. The conservation notion assesses individuals' retention of certain offense types while moving to a new stage in offending (retention) or the addition of new offense types to the already existing crime mix (innovation). The notion of synchrony examines the probability that individuals will make the transition on various dimensions of personal control (attachment, allocentrism, constraints, and so on) from one stage to an adjacent stage within a given period. Finally, paths are particular trajectories on a developmental sequence that individuals follow over a time. These formulations of conservation, synchrony and paths refer to personal control.

Concerning community control, they can be stated in the following way. Conservation assesses the retention of certain forms of community control—social organization, cultural organization, available opportunities or direct controls—while moving to another stage of community control or retention of a certain form of criminality while moving to another form. Synchrony refers to the probability that a community will simultaneously make the transition to new stages of complexity on its social organization, cultural organization, available opportunities, direct control, and criminality. Finally, paths are particular trajectories for various communities on the normative developmental sequence.

Qualitative changes imply a developmental sequence of stages. In turn, the consequence of the existence of these stages is the presence of critical periods at the intersections of these stages, periods when the system of control is in a state of disequilibrium. Figure 6.10 shows these transitions by the intersections of the spirals. Classical developmentalists call these periods transitions (see Lerner's review, 1986); some criminologists refer to them as turning points (Sampson and Laub 1993), while others use the notions of drift (Matza 1957) or strain (Cohen 1955); behaviorists define these transitions as learning that represents a change in the behavioral repertoire of an organism (see Lerner 1986); while chaos theorists name them bifurcations (Glieck 1987; Briggs and Peat 1989). For all these au-

thors, turbulence and chaos characterize these critical periods. The course of development, because of the difficulty or ease of the transitions, can manifest sleeper effects (Kagan and Moss 1962), abrupt changes (Flavell 1971) and ceiling effect (Le Blanc and Fréchette 1989).

The Developmental Processes

The developmental course of the criminal phenomenon involves both quantitative and qualitative changes. Along the qualitative course, there are some facilitating mechanisms such as activation, escalation and decline. These processes characterize the course of criminality and individual offending. The distribution of individual offending according to age is a clear indication of the existence of a cycle of offending. Our empirical study (Le Blanc and Fréchette 1989) and our review (Loeber and Le Blanc 1990) show that criminal activity emerges and is activated through an acceleration of the frequency of offending, a diversification of the types of offenses committed, and a stability of offending across time. In addition, individual offending becomes increasingly severe for persistent offenders, they move from minor offenses, to average and to major property offenses, then to serious personal offenses. Finally, there is a gradual desistance through a deceleration of the frequency of offenses, a de-escalation and a diminution of the variety of offenses committed. Le Blanc and Fréchette (1989) state these processes in mathematical terms.

We also believe that it is possible to show that the nature of criminality in a specific community changes under the impact of the same processes. For example, activation manifests itself through the emergence of adolescent gangs and the arrival of a criminal population in a particular community. Aggravation occurs during a period when adult criminal organization become more structured, and compete for the distribution of illicit services (prostitution, drugs, and so on). Finally, decline manifests itself when juvenile gangs are no longer fashionable, when illicit services move to other areas, and when criminal organizations age. As a result, the developmental processes of activation, escalation and decline could apply to the levels of the criminal phenomenon and the control mechanisms.

Community, personal and event control are also the object of quantitative and qualitative change. Along the qualitative course, there are pro-

cesses that facilitate transitions from one stage to another and from one state to another one. These processes are maturation, adaptation, socialization or learning. The first process, maturation, refers to the natural growth and differentiation that characterize every system over time. Chaos theorists (see Glieck 1987) would suggest that the internal clock of communities and individuals is geared toward more control. Jessor et al. (1991), Sampson and Laub (1993) and Le Blanc and Fréchette (1993e) show that with time personal control increases. Concerning communities, there are no study that document such internal clock. However, an impressionistic analysis of a large city over a long period of time indicates that some communities die, that is, they are completely replaced by commercial and industrial activities; other communities move through different levels of conventional and unconventional control, that is, they are conventional for a period, then become disorganized under subcultural control, and then return to conventional levels of control. This process can require decades to unfold for individual communities.

The second process, adaptation, refers to the way an organism adapts through the integration of new external elements or through structural change to fit with the environment. Control is also the result of successive adaptations. For example, a community integrates a new group of immigrants or adapts to changes in land use and individuals adapt to a new wife, a new job, the birth of a child, and so on.

The third process, socialization or learning is, according to Lerner, "a relatively permanent change in behavioral potentiality that occurs as a result of reinforced practice" (1986: 411). The impact of this learning process on offending refers to differential association (Sutherland and Cressey 1960) and social learning (Akers 1973) for criminologists. A community can also enlarge its repertoire through a prevention program that increases guardianship for example. Reinforcements operate as attractors in chaos theory (Glieck 1987; Briggs and Peat 1989). Attractors are magnetic points that structure a phenomenon.

Through these processes, development can appear either chaotic or ordered. Chaotic development would imply anarchy or an unruly system, a system in which different factors that operationalize control would independently and irregularly produce the criminal phenomenon. Ordered development would be deterministic; it would involve a hierarchic system with a specific set of rules, that are both necessary and sufficient causes to explain the phenomenon. Our presentation of the dynamics of

control—its quantitative and qualitative course and its processes—implies an “heterarchic” system to use the term proposed by Schwartz and Ogilvy (1979). A system of control characterized by mutual constraints and influences and by various orderings. Such a system is governed by several rules, not only by one rule.

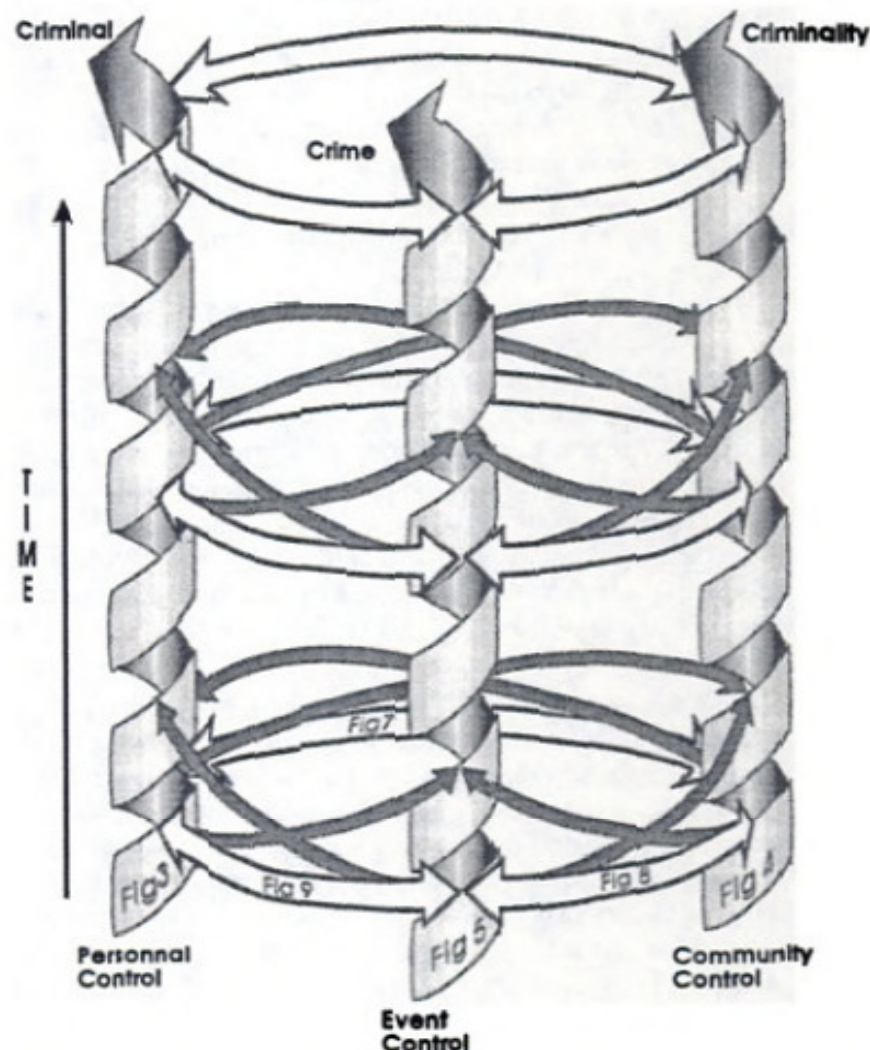
A Representation of the Dynamics of Control

Figure 6.10 represents the dynamics of control of the criminal phenomenon. This figure integrates the mechanisms of the course of development and the developmental processes to the structure of the generic control theory of the criminal phenomenon. The dynamics of control are of two categories. First, figure 6.10 represents continuity and change over time; in that case, the figure must be read from the bottom to the top of the page. Second, figure 6.10 also shows the interactions between the layers of control; in that case, the figure must be read horizontally.

The vertical reading of figure 6.10 implies that we think in terms of continuity and change. The arrow on the left side of the figure indicates time and time refers to minutes and hours in the event control spiral, to days, weeks, months, and years in the personal control spiral, and to years and decades in the community control spiral. Each spiral represents a layer of the criminal phenomenon and, as a consequence, a type of control. The personal control-individual offending spiral is specified in figure 6.3 and formulated in section 2.2. The community control-criminality spiral is defined in figure 6.4 and discussed in section 2.3. The event control-crime spiral is depicted in figure 6.5 and presented in section 2.4. These spirals are metaphors that represent the mechanisms we proposed to specify the course of development of the criminal phenomenon. Orthogenesis is shown by the time dimension that is associated with the spirals. The beginning of the spirals represents the initial condition, while the rest of the spirals introduces the sensitivity to the initial condition. The independent spirals are there to indicate that event control, personal control, and community control are self-organizing phenomena. Coevolution is indicated by the placement of the spirals on three dimensions. Finally, along each spiral there are probabilistic quantitative and qualitative changes.

The horizontal reading of figure 6.10 implies that we think in terms of interdependencies between the layers of control of the criminal phenom-

FIGURE 6.10
A Generic Control Theory of the Criminal Phenomenon,
A Dynamic Statement



non. These interdependencies are of two categories: synergistic and interactional. In our discursive statement of our theory, synergy implied embeddedness and reciprocal relations between the layers of control. In figure 6.10, embeddedness is represented by the fact that the crime spiral is placed between the criminal and the criminality spirals. This position

indicates that an offense is a constituent part of individual offending and of the rate of criminality and that individual offending is part of criminality. The reciprocal relations between the layers of control were specified in section 2.5. In Figure 6.10 these interactions are shown by the large arrows, each arrow indicates the figure that elaborates these interdependencies, specifically figures 6.7, 6.8 and 6.9. Synergy is represented in figure 6.10 by three plateaus of large arrows. Synergy also exists at all points along the time dimension and, as a consequence, the generic control of the criminal phenomenon looks like a torus attractor such as those proposed by chaos theorists to represent continuity and change (see Briggs and Peat 1989).

Figure 6.10 also represents the interactional perspective of our control theory. The discursive statement of our generic control theory identifies various types of relations: reciprocal, causal, state dependent, and retroactive. Large arrows indicate reciprocal relations, while thin arrows show causal relations and retroactives. These thin arrows emerge from intersections in the spirals to indicate critical periods in the course of the criminal phenomenon. The use of spirals implies state dependency. A discursive statement of the relations showed in figure 6.10 would be the following. Insufficient community control and tenuous personal control will diminish the level of event control of a person and a crime is more likely to be committed. Conversely, the commission of a crime will alter the actual level of personal control for that person and modify the actual level of control in his community. Notwithstanding these relationships that exist between layers of control, there is also some independence within layers such that there are changes relative to the initial condition. In addition, a change in a person's level of event control, will alter his subsequent level of personal control and the subsequent level of control in his community. A change in community control will also affect the subsequent level of personal and event control for the person. Finally, a change in the level of a person's personal control will affect the subsequent level of event control for that person and the following level of control in his community. Notwithstanding these changes, the level of the criminal phenomenon also modifies the subsequent level of control. In figure 6.10, these reciprocal, causal relations, state dependencies and retroactive effects are represented for two specific moments. In fact, these interactions exist all along the time dimension.

Conclusion

Our control theory of the criminal phenomenon is a theoretical elaboration. The theory covers three levels of definition and explanation of the criminal phenomenon and it specifies the relationships among the explanatory constructs of these levels. The three layers of the control theory rest upon four assumptions about human nature and social order. The first assumption is that humans are unsocialized at birth and during the life course socialization is never perfect. These conditions favor the emergence and maintenance of a criminal propensity in the individual. The second assumption is that a social order always implies some consensus on values and informal and formal mechanisms of interactions. However, social order is always transient. The third assumption is that communities and individual are self-serving and have mutual influences on each other. The fourth assumption is that the event, the individual and the community influence each other as much as they are influenced by forces internal to each of these dimensions.

Our control theory is also integrative. It combines constructs from various disciplines and from many theories. The scope of this integration is wide. This integration is also conceptual according to the definition proposed by Liska et al. (1989). We construct our theory assuming that different words and terms are different for different theorists but that their theoretical meanings and operational definitions are similar. For example, our construct of exposure to pro-social influences incorporates the construct of delinquent companions of other theories.

Another characteristic of our theory is its isomorphy. The similarity of structure, from one level of the criminal phenomenon to the others, increases the clarity of our theory. We propose six constructs: two categories of exogenous factors and four mechanisms: bonding, unfolding, modelling and constraining to be used throughout the theory. This characteristic of our theory corresponds to the view of nature proposed by chaos theory. Gleick's (1987) review documents the fractal nature of the universe, while Butz (1992) argues that the self is also fractal. Because of this structure, our multilayered control theory is parsimonious but not simplistic.

Finally, our control theory is developmental. We define a contextual perspective that allows for developmental principles like orthogeny, sensitivity to the original state and epigenetic probability. The course of

change has as quantitative dimensions but is mainly qualitative and non-linear. There are also specific processes to regulate these qualitative changes.

As presented here, this formulation of our multilayered control theory has several deficiencies. One deficiency concerns its generic and discursive status. The statement of our control theory is not yet specific enough and additional work is needed to facilitate an operational formulation of the theory. A theory is also never complete before a formal test identifies its logical inconsistencies. A formalization of the individual level control theory exists (Le Blanc and Caplan 1993), but the same operations should take place for community and event control and our generic control theory as a whole. Only then, will it be possible to discuss its testability and start empirical tests. However, numerous test of specific elements of our control theory do exist in the criminological literature.

Notes

1. This section is, in part, an abstract of pages 9 to 12 in Le Blanc and Fréchette (1989).
2. This section of the paper is a thorough revision of the theoretical section of a chapter (Le Blanc 1993a) and of our presentation at the 51st Meeting of the American Society of Criminology in Phoenix.
3. "Attempted inanimate control is overt behavior by a human.... An inanimate thing may be a solid object, an observable substance, or an unobservable substance...." Gibbs (1989: 43).
4. The terminology introduced in criminology by Hagan (1994) can also be applied to the notions in our theory: The contexts are physical and human capital; bonding and unfolding mechanisms are social and cultural capital.
5. This section of the paper is a summary of previous papers: Le Blanc and Biron 1980; Le Blanc 1983; Le Blanc et al. 1988; Le Blanc et al. 1990.

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