This Article develops both a framework for a theory of desistance from crime and an analytical strategy with which to examine desistance. With respect to the former, an identity theory of the desistance from crime that is more cognitive and individualistic than some and more forward-looking than others is sketched out. This framework contributes to and complements existing theoretical arguments by building upon the work of others through integrating several diverse bodies of work that range from social psychology to collective movements in sociology. In this framework, offenders have “working selves” as criminal offenders with a set of preferences and social networks consistent with that self. In addition to the working self, or the self in the present, there is a future, or possible, self that consists both of desires as to what the person wishes or hopes to become (the positive possible self) and anxiety over what they fear they may become (the feared self). Persons are committed to their working self until they determine that the cost of this commitment is greater than the benefits. A perception that one may in fact turn out to become the feared self, a perception assisted by the linking of life failures, or what has been called the “crystallization of discontent,” provides the initial motivation to change the self. This initial motivation brings with it a change in preferences and social networks that stabilize the newly emerging self. This identity theory of desistance can be empirically developed by thinking about it in terms of a structural break in an individual-level time series of offending. This theory...
and the process of desistance itself can be profitably examined by examining such time series of offending over a long time period at the individual level.

I. INTRODUCTION

Traditionally, criminological theorists have presumed that what they needed to explain was initiation into, and persistence in, criminal behavior. The central question, then, was, “Why do people start offending, and why do they continue offending?” Interest in the “career criminal” in the early 1980s changed all this as criminologists became concerned about dimensions of offending other than onset and persistence, such as the duration of offending over time, escalation from less serious to more serious offending, and the eventual termination of or desistance from crime. Once they recognized that desistance from crime might be an important and distinct dimension of the criminal career, criminologists scrambled for possible theoretical explanations that ranged from simple extensions of old theories\(^1\) to new theories specifically designed to explain desistance.\(^2\)


\(^2\) See generally John H. Laub & Robert J. Sampson, Shared Beginnings, Divergent Lives: Delinquent Boys to Age 70 (2003); Shadd Maruna, Making Good: How Ex-Convicts Reform and Build Their Lives (2001); Stephen Farrall, On the Existential Aspects of Desistance from Crime, 28 Symbolic Interaction 367 (2005); Peggy C. Giordano, Stephen A. Cernkovich & Jennifer L. Rudolph, Gender, Crime, and Desistance: Toward a Theory of Cognitive Transformation, 107 Am. J. Soc. 990 (2002) [hereinafter Giordano et al., Gender, Crime, and Desistance]; Peggy C. Giordano, Stephen A. Cernkovich & Ryan D. Schroeder, Emotions and Crime Over the Life Course: A Neo-Median Perspective on Criminal Continuity and Change, 112 Am. J. Soc. 1603 (2007) [hereinafter Giordano et al., Emotions and Crime]. This does not, of course, mean that desistance from crime was neither noticed nor explained prior to the advent of the criminal career debate. Sheldon and Eleanor Glueck, for example, may have been the first to empirically document the general decline in criminal conduct over the life course. See Sheldon & Eleanor Glueck, Of Delinquency and Crime (1974); Sheldon & Eleanor Glueck, Delinquents and Nondelinquents in Perspective (1968); Sheldon & Eleanor Glueck, Unraveling Juvenile Delinquency (1950); Sheldon & Eleanor Glueck, Criminal Careers in Retrospect (1943). While not developing a “theory” as to why desistance occurred, the Gluecks did suggest it was due to a process of gradual maturation. Similarly, David Matza observed that over time most delinquents “mature out” of offending. See David Matza, Delinquency and Drift (1964). Finally, Travis Hirschi used the decline in offending beginning in late adolescence as a vehicle to criticize strain and cultural deviance theories of crime as well as to promote his own social control theory, which he thought could adequately account for desistance. See Travis Hirschi, Causes of Delinquency (1969).
In this Article, we present an identity theory of desistance that builds upon and complements the work of these other theories\(^3\) by integrating a diverse body of literature in social psychology, behavioral economics, and collective movements in sociology. We draw upon a distinction between, on the one hand, one’s current or working identity and, on the other, the kind of person that one wishes to be—and, more importantly, not be—in the future: one’s possible self.\(^4\) Offenders have working identities as persons who, among other things, have and will commit criminal acts. This working identity remains a locus of commitment as long as it is thought to be successful or, more specifically, as long as, on average, it nets more benefits than costs. Gradually, however, the working identity of “criminal offender” becomes less and less satisfying. The process is a measured one and only occurs when perceived failures and dissatisfactions within different domains of life become connected and when current failures become linked with anticipated future failures. These failures include a sense that being an offender is no longer financially beneficial, that it is too dangerous, that the perceived costs of imprisonment loom more likely and greater, and that the costs to one’s social relationships are too dear.

When these life dissatisfactions become linked to one’s criminal identity, they are more likely to be projected into the future, and the person begins to think of his or her “self” as one who would like to change to be something else. This perceived sense of a future or possible self as a non-offender coupled with the fear that without change one faces a bleak and highly undesirable future provides the initial motivation to break from crime. Movement toward the institutions that support and maintain desistance (legitimate employment or association with conventional others, for example) is unlikely to take place until the possible self as non-offender is contemplated and at least initially acted upon. Human agency, we believe, is expressed through this act of intentional self-change.\(^5\) Further,

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\(^3\) See generally Maruna, supra note; Neal Shover, Great Pretenders: Pursuits and Careers of Persistent Thieves (1996); Farrall, supra note; Giordano et al., Gender, Crime, and Desistance, supra note.


this change in identity brings with it a change in one’s preferences (for crime, drugs, “wild” peers) and one’s orientation to the future, such that causal factors have a different impact on the person now than in the past. In understanding desistance as literally a “break with the past,” something changes about the person, such as his or her identity and preferences, so that the causal processes moving behavior are different across the different time periods.

Though similar in some ways to the work of Shadd Maruna, Stephen Farrall, and Peggy Giordano et al., our theory both builds upon and extends their theories in important ways. Giordano et al.’s most recent symbolic interactionist approach heavily stresses the influence of social processes—social interactions, social experiences, socially derived emotions, and social influences—in developing both the motive to change through self-improvement and self-modification and the means to do so. Relationships with conventional others, primarily romantic partners, plays a prominent role in their theory, which they admit “steers us away from a view of cognitive transformations as deriving from individualistic mental processes.” In the theory developed here, intentional self-change is understood to be more cognitive, internal, and individual, at least initially, with new social networks approached and mobilized subsequent to the emergence of the new, conventional identity. While we think that the kinds of conventional social relationships and role-taking described by Giordano et al. are important and necessary parts of the desistance process, we think that these are not accessed until after offenders first decide to change and then actually begin to change their sense of who they are. In addition, we place greater emphasis on the notion of the “feared

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6 See Farrall, supra note; Giordano et al., Gender, Crime, and Desistance, supra note; Maruna, supra note; see also Stephen Farrall & Shadd Maruna, Desistance-Focused Criminal Justice Policy Research, 43 HOW. J. CRIM. JUST. 358 (2004); Shadd Maruna, Desistance from Crime and Explanatory Style: A New Direction in the Psychology of Reform, 20 J. CONTEMP. CRIM. JUST. 184 (2004); Shadd Maruna & Kevin Roy, Amputation or Reconstruction? Notes on the Concept of “Knifing Off” and Desistance from Crime, 23 J. CONTEMP. CRIM. JUST. 104 (2007).

7 Giordano et al., Emotions and Crime, supra note, at 1608-16.

8 Id. at 1607.

9 We are not implying that identity forms without social interaction, for the shift toward a new identity is a social product, as persons “try out” their new role on others. Here we are arguing that whole-scale shifts in social networks and some opportunities for new social roles, such as marriage partner or employee, must be based at least in part on new identities that are both projected by self and at least tentatively validated or accepted by others. We will argue in a later section of this paper, infra Part V, that it is important for the success of the change process that others support the new self or at the very least not actively oppose it.

10 Giordano et al., Gender, Crime, and Desistance, supra note; Giordano et al., Emotions and Crime, supra note.
self”—an image of what the person does not want to become as an initial source of motivation for intentional self-change among those with a “spoiled identity.” As we will discuss in more detail in Part V, our theory is fundamentally different from that of Giordano and her colleagues in 2007,12 and more cognitive and individualistic than the work of Giordano and her colleagues in 2002.13

Our view is more compatible with Farrall’s14 and Maruna’s15 position that “sustained desistance most likely requires a fundamental and intentional shift in a person’s sense of self.” We agree wholeheartedly both that desistance requires a fundamental change in how a person views herself and her world and that it is intentional. Desistance, when it occurs, generally involves a deliberate act of self-change—a “break with the past” that occurs both in a metaphorical and, as we argue in Part IV, in an analytical sense as well.16 There are, however, important differences between our theory and Maruna’s. In Maruna’s view, offenders who “make good” do not craft different, more conventional identities than those they had in the past to provide both the motivation and direction for change.17 Rather, offenders who already have prosocial views of themselves in the present deliberately distort their pasts to make past criminal actions both explicable and consistent with their current favorable views of who they are and what they are “really like.” For Maruna’s offenders, “[D]esisting is framed as just another adventure consistent with their life-long personality, not as a change of heart. Again, this allows the individual to frame his or her desistance as a case of personality continuity rather than change.”18 The “upfront” work that the desisting offenders described in Maruna’s theory do, then, is to change their understanding or interpretation of their criminal pasts, so that it is consistent with their current views of themselves as a “good” person.19 This reinterpretation involves a “willful cognitive distortion” of the past to align it with the present and is the cognitive work described as “making good.”20 Desistance does not seem to require, as it does in our theory, the notion that the offender casts off his old identity in

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12 Giordano et al., Emotions and Crime, supra note .
13 Giordano et al., Gender, Crime and Desistance, supra note .
14 Farrall, supra note , at 368-69.
15 MARUNA, supra note , at 17.
16 See Kiecolt & Maybry, supra note .
17 MARUNA, supra note , at 88-92.
18 Id. at 154.
19 Id.
20 Id. at 9.
favor of a new one.\textsuperscript{21} Moreover, this theory does not require, as ours does, a description of the process that leads to a disenchantment with crime or a criminal identity, the appeal of a new, conventional identity, nor how that new identity must be built up.

Finally, our theory is decidedly different from that of Robert Sampson and John Laub.\textsuperscript{22} Again, we will take up this issue in more detail in Part V, but it is necessary to point out here that Sampson and Laub take deliberate steps to separate themselves from any suggestion that identity change is necessary for desistance to occur and place far less emphasis than we do on the role of human agency in desistance. In their more structural theory of desistance, Sampson and Laub argue that behavioral change comes about as a result of one’s involvement in conventional roles (such as stable worker or good husband), and therefore comes about more often than not without the person either planning or actively participating in it (desistance by default).\textsuperscript{23} In Part V, we will more clearly point out the differences between our theory and Sampson and Laub’s, and make clear our unique contribution to the understanding of desistance.

Our theory of desistance casts the decision to quit crime as just that—a decision by an offender that she has “had enough” of crime and being a criminal and desires a change in what she does and who she is. In our view, desistance comes about as a result of the offender \textit{willfully} changing his identity and both working toward something positive in the future and steering away from something feared. As we will describe it in this Article, this change in identity is slow and gradual. The movement toward accessing social supports (or “hooks”) for change is just as tentative and inconsistent.\textsuperscript{24} Deliberate self-change and desistance are not captured in a moment, nor are they events, but they constitute a process occurring over time. Moreover, since we think that desistance from crime involves

\textsuperscript{21} Although we will be discussing the role of identity and desistance from crime generally, it will be obvious to most that notions of identity and crime are pervasive in the criminal justice system. For example, in determining what kind of punishment and how much to punish, judges certainly consider what kind of person they assume the convicted to be: remorseful and heading in the “right direction” or unrepentant and likely to offend again. To the extent that correctional programs still try to engage in rehabilitation, they attempt to change the identity of the inmate with the expectation that such a change will lead to conformity or desistance upon release. There is in fact a vast literature on the use of rehabilitation to reduce offending by changing offenders’ identities that the interested reader may seek out; however, that topic is beyond the scope of this Article.


\textsuperscript{23} SAMPSON & LAUB, supra note , at 278-79; Sampson & Laub, \textit{supra} note .

\textsuperscript{24} See Giordano et al., \textit{Gender, Crime and Desistance}, \textit{supra} note , at 1033-36.
important changes in a person’s identity, tastes, values, and preferences, we are explicit that desistance is about both a change in the propensity to commit crime and its opportunity.\textsuperscript{25} Finally, while the process of desistance is a gradual one, when the offender’s identity has changed, she has, in a metaphorical sense, “broken with the past” in that things that once mattered now do not (or matter much less), and things that did not matter before now do (or matter a little more).

As a second contribution, we very briefly present an analytical approach to illustrate and eventually test our ideas about desistance that further extends the current literature’s focus on desistance as a process. The original understanding of desistance in the criminal career paradigm focused on desistance as a discrete event where one went from offender to non-offender. Jeffrey Fagan first recognized desistance as a process rather than an event, differentiating the process of desistance, defined as the reduction in the frequency and severity of offending, from the event of quitting crime or no longer committing offenses.\textsuperscript{26} Marc LeBlanc and Marcel Fréchette also referred to desistance as a set of processes that led to the cessation of crime.\textsuperscript{27} Laub and Sampson explicitly separated the process of desistance from the termination of offending, which they view as the outcome of desistance.\textsuperscript{28} Shawn Bushway et al. proposed using growth curve models that describe the change in latent propensity to commit crime over time to identify desisters.\textsuperscript{29} These methods, particularly the group-based trajectory models developed by Daniel Nagin and Kenneth Land, can identify long-term changes in offending propensity over time.\textsuperscript{30} Bushway et al. demonstrated that desisters defined using these methods are dramatically different than desisters defined by more traditional static methods (for example, clinical cutoffs).\textsuperscript{31} The group-based trajectory

\textsuperscript{25} Gottfredson and Hirschi describe this phenomenon as a change in both criminality and crime. MICHAEL R. GOTTFREDSON & TRAVIS HIRSCHI, A GENERAL THEORY OF CRIME (1990).


\textsuperscript{27} MARC LEBLANC & MARCEL FRÉCHETTE, MALE CRIMINAL ACTIVITY FROM CHILDHOOD THROUGH YOUTH: MULTILEVEL AND DEVELOPMENTAL PERSPECTIVES (1989).


Method has now been used repeatedly to describe offending over different parts of the life course. While each set of analyses identifies a subset of people with relatively flat long-term patterns of offending, the more typical pattern is a period of increasing propensity of offending followed by a long-term decline in offending, which usually reaches very low or non-existent levels of offending propensity by the end of the period. Offenders who follow this pattern are referred to by both sets of authors as desisters.

These long-term analyses of crime make two important contributions to the study of desistance. First, they explicitly conceptualize desistance not as the static state of not offending but as the process of movement over time from a high or non-trivial level of offending to one that is not significantly different from zero. Second, they implicitly acknowledge the importance of long-term patterns of offending as involving a time series at the individual level. Analysis of time series data is a separate and rich area of statistics that is more commonly associated with the study of aggregate time trends in criminology. However, there is nothing inherent in individual-level data that precludes the use of time series regression. The fact that there are many individual time series, represented in a panel, adds to the richness of the data, but it does not negate the need to take the basic time series character of the data into account. Moreover, prior theories of desistance and the one developed in this Article implicate individual-level time-series offending data.

In Part IV, using data from the Cambridge Study in Delinquency Development, we will show that the desistance process is inherently a non-stationary time series. Non-stationary means that some basic parameter of the model is not time-stable. This instability has dramatic implications for the study of desistance, since non-stationary series are not amenable to standard regression techniques unless they are first made stationary. The most dramatic way of making a time series stationary is to study first

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33 See, e.g., Blokland et al., supra note , at 932-33; Bushway et al., supra note , at 141-45.

differences, or period-to-period change. But the study of desistance is fundamentally not about period-to-period change unless one is willing to conclude that long-term change in offending is essentially random, a process that time-series statisticians call a random walk.\textsuperscript{35} An alternative is to explain the long-term change using structural breaks. We will argue that identity theory, as we describe it, is essentially a story of structural breaks. Support for our theory can, therefore, be developed by examining a time series of offending at the individual level for structural breaks. The timing and predictability of the structural breaks will help establish the viability of identity theory.\textsuperscript{36}

II. AN IDENTITY THEORY OF DESISTANCE FROM CRIME

A. IDENTITY THEORY: THE WORKING SELF AND THE POSSIBLE SELF

There is a long intellectual tradition in sociology and social psychology that emphasizes the importance of one’s identity.\textsuperscript{37} Identity—a sense of who one is—is important for numerous reasons, the most important of which, at least for our concerns, is that it motivates and provides a direction for behavior.\textsuperscript{38} A person’s actions are seen as expressions of his self-identity—people intentionally behave in ways that are consistent with who they think we are. When interacting with others, therefore, people project an identity of who they are, and a primary vehicle for communicating to others who “one is” is through one’s behavior.\textsuperscript{39}

\textsuperscript{35} RICHARD MCCLEARY & RICHARD A. HAY, JR., APPLIED TIME SERIES ANALYSIS FOR THE SOCIAL SCIENCES (1980).

\textsuperscript{36} We will also argue that support for the theory can also be developed by a more traditional research strategy, such as conducting intensive interviews with samples of committed criminal offenders some of whom are going through, or have gone through, the desistance process. Information obtained from such offenders would include data about the process described in this paper: change in identity, crystallization of discontent, and changes in social and institutional relationships.

\textsuperscript{37} See generally CHARLES H. COOLEY, HUMAN NATURE AND THE SOCIAL ORDER (1902); WILLIAM JAMES, THE PRINCIPLES OF PSYCHOLOGY (1890); GEORGE H. MEAD, MIND, SELF, AND SOCIETY FROM THE STANDPOINT OF A SOCIAL BEHAVIORIST (1934); SHELDON STRYKER, SYMBOLIC INTERACTIONISM: A SOCIAL STRUCTURAL VERSION (1980); Sheldon Stryker, Identity Salience and Role Performance: The Relevance of Symbolic Interaction Theory for Family Research, 4 J. MARRIAGE & FAM. 558 (1968).

\textsuperscript{38} See, e.g., Peter J. Burke, The Self: Measurement Requirements from an Interactionist Perspective, 43 SOC. PSYCHOL. Q. 18 (1980); Peter J. Burke & Donald C. Reitzes, The Link Between Identity and Role Performance, 44 SOC. PSYCHOL. Q. 83 (1981); Nelson N. Foote, Identification as the Basis for a Theory of Motivation, 16 AM. SOC. REV. 14 (1951); Stryker, supra note .

\textsuperscript{39} It is in this sense that Stryker claimed that “[a]ctors within this social structure name themselves as well—it is to these reflexively applied positional designations that the concept
Peter Burke and Donald Reitzes further argue that persons make commitments to their identity. It is the fact that commitments are made to identities that “certain lines of action are valued,” and it is this commitment to an identity that explains why behavior is motivated and generally consistent in different situations.\(^\text{40}\) This, of course, does not mean that identity determines behavior since the self is very reflexive and interpretative. It does, however, mean that the self, which guides action toward some purposeful goal, being both very dynamic and reflective, is capable of change. It is this notion of the self as an active subject intentionally pursuing lines of activity that makes human beings agents.\(^\text{41}\)

Although, at its most basic level, one’s identity can be understood as an attempt to answer the question, “Who am I?”, individuals do not have just one identity. Most people have multiple views about themselves and therefore multiple identities that are organized into a salience hierarchy.\(^\text{42}\) Some identities are, therefore, more important and more prominent than others and, thus, more consistently seen in behavior. This view of the self as having a multifaceted structure implies that there is not something like the self, but a collection or set of selves.\(^\text{43}\) Identities or selves also vary in terms of their temporal orientation. Some selves, like the working self, are oriented toward the present while others, like the possible self, are oriented toward the future.\(^\text{44}\)

The working self is that component of the self that can be accessed at the moment and is based upon the individual’s here-and-now experience.\(^\text{45}\) Anchored in the present from one’s existing pool of experiences and self-knowledge, the working self consists of what the self is in the present. This notion of the working self does not mean that identity is fleeting or inconsistent over time and place even in the present because there can be of self is typically intended to refer—and in so doing they create internalized expectations with respect to their own behavior.” Stryker, supra note, at 559.


\(^\text{41}\) ARCHER, BEING HUMAN, supra note; ARCHER, MAKING OUR WAY, supra note; Alicia D. Cast, Identities and Behavior, in ADVANCES IN IDENTITY THEORY AND RESEARCH 41 (Peter J. Burke et al. eds., 2003); Burke & Reitzes, supra note; Burke & Reitzes, supra note.

\(^\text{42}\) Stryker, supra note; see also Sheldon Stryker & Peter J. Burke, The Past, Present, and Future of an Identity Theory, 63 SOC. PSYCHOL. Q. 284 (2000).


\(^\text{44}\) Markus, supra note; Markus & Wurf, supra note.

\(^\text{45}\) Hazel Markus & Ziva Kunda, Stability and Malleability of the Self-Concept, 51 J. PERSONALITY & SOC. PSYCHOL 858 (1986); Markus & Wurf, supra note.
more central or core aspects of one’s self that are “chronically accessible.”46 One can, for instance, have, as part of his working self, the notion that he is a drug dealer, a father concerned about his child, a drug user, a person with limited education and legitimate job possibilities, an indifferent but demanding lover, one with an expensive taste in liquor, and a loyal crime partner. Not all of these components of self-knowledge will be accessed or relevant at all times, but, relatively speaking, others will be more core components of one’s self, or part of one’s self-schema.47

In addition to a sense of who and what one is at the moment (a self that is fixed on the present), an individual also has a sense of self that is directed toward the future. This future-oriented self can be defined positively as the self one would like to become or negatively as the self one would not want to become or fear that one might become. Hazel Markus and Paula Nurius have defined both dimensions of this future orientation of the self as a possible self.48 The possible selves “are conceptions of the self in future states” and consist of goals and aspirations as well as anxieties and fears that the individual has as to what they could become.49 While our working selves are aware of what skills we do and do not have and what we can and cannot do in the present, our possible selves are directed toward the future and what it is possible for us to be, good or ill. As a conception of the self in a future state, the possible self is not mere fantasy but is connected to current selves and past experiences and is directed at individually specific hopes or goals and fears or uncertainties.

I may, for example, see myself currently (my working self) as an unskilled thief who is addicted to drugs, but may see myself in the future as working in a job (though perhaps for minimum wage), being a better parent and partner, owning a car, and ceasing my life of drug use and crime. I may, however, also fear that I may turn out to be a burned-out addict, riddled with disease, homeless, childless, jobless, and destined to die alone in prison. My possible self is, of course, constrained by the context within which it exists in the sense that my hopes and goals are limited by my social

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47 Hazel Markus, Self-Schemata and Processing Information About the Self, 35 J. PERSONALITY & SOC. PSYCHOL. 63 (1977).
48 Markus & Nurius, Interface, supra note ; Markus & Nurius, Possible Selves, supra note . Along similar lines, Schlenker speaks of a “desired self.” A desired self is “what the person would like to be and thinks he or she can really be.” Barry R. Schlenker, Identity and Self-Identification, in THE SELF AND SOCIAL LIFE 65, 74 (Barry R. Schlenker ed., 1985). A desired self, then, emphasizes a positive identity that a person would like to have and is realistic to have.
49 Markus & Nurius, Interface, supra note , at 157.
environment (given my education and my criminal record, my positive possible self would not likely include being a doctor or the driver of a Jaguar). An individual’s actions must coordinate or balance the individual’s goals, aspirations, and fears with what is possible or feasible within the social environment. Behavior, then, is not driven solely by human agency but is influenced by the social and cultural environments within which action takes place.\(^{50}\)

At least two consequences of possible selves are important for our concerns. One is that when a person imagines a positive possible self achieved or a negative possible self avoided, his feeling about his self is enhanced.\(^{51}\) If I think about the positive possible me who is able to hold down a good factory job and the one who has successfully avoided falling back into crime and drug addiction, my esteem is inevitably enhanced. I may not be these things today—my working self does not include the view that I am a wage-earning factory worker or non-offender—but I envision my future self as containing these possible identities. The self-enhancing consequences of a positive possible self are an important reminder that change is possible because the self is not immutable. The self-enhancing component of a possible self fuels optimism and provides hope that whatever one’s situation is today, the possibility of a better future exists.\(^{52}\) Similarly, a negative possible self may be a stark reminder that however bad things currently are, they can get worse—and the image of what is “worse” is squarely in one’s consciousness. Self-enhancing possible selves, therefore, contribute to positive and optimistic as well as self-defeating and hopeless feelings about the self, but they are not directly relevant for the person’s future behavior.

The second consequence of a possible self is that it provides directed motivation for one’s behavior.\(^{53}\) Possible selves, both positive and negative, not only contain images of what the person would like to be or desperately fears becoming, they can also provide a specific and realistic set of instructions or a “roadmap” directing what one can do to both achieve


\(^{52}\) King, supra note , at 798-99; see also Marti Hope Gonzales et al., The Allure of Bad Plans: Implications of Plan Quality for Progress Toward Possible Selves and Post-Planning Energization, 23 BASIC & APPLIED SOC. PSYCHOL. 87 (2001).

\(^{53}\) Markus & Nurius, Possible Selves, supra note , at 955; Markus & Nurius, Interface, supra note , at 159-60.
the positive future self and avoid the negative possible self. This roadmap or blueprint is referred to as the self-regulating component of the possible self. The self is self-regulating because, among other things, it (1) compares the past and current working-self with the possible self and provides specific directions, strategies, or plans for narrowing any discrepancy between the two for a positive possible self or (2) increases the divergence with a feared self, thereby connecting the present with the future. Motivation is generated and is more likely to be successful, then, when one not only has a goal of self-improvement, but also has specific and realistic means to both reach that goal and to avoid the kind of person one does not want to become. In this sense, one component of the possible self is that of providing a “blueprint” for self-change to lead one toward a positive possible self and away from a feared self. Possible selves, therefore, consist of both desired ends or goals and means or a sense of how the goals can be realized. As Markus and Nurius state,

Possible selves encompass within their scope visions of desired and undesired end states. Very often they also include some idea about the ways to achieve these ends and thereby provide the means-ends patterns for new behaviour. Represented within possible selves are the plans and strategies for approaching or avoiding personally significant possibilities. Thus, it is the possible self that puts the self into action, that outlines the likely course of action. In sociological terms, possible selves are the link between salient identities and role performance.

The difference between the self-enhancing and self-regulating components of the possible self is that the latter provides directed or focused motivation with respect to specific and realistic behavioral strategies for goal attainment, while the former does not. Peggy Giordano, Stephen Cernkovich, and Jennifer Rudolph provide an example from the desistance literature. One of their subjects, Nicole, was a homeless crack addict with several children and a bleak past but a specific and realistic sense of her future self:

I see me gettin’ a house and a job, by the time this year is out I’ve set goals to have a job and be off of welfare. My plan is to get into a house when school starts in September to start going to school to be a nurses’ assistant.

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55 Oyserman et al., supra note .

56 Id.

57 Markus & Nurius, supra note , at 159.

58 Giordano et al., *Gender, Crime and Desistance*, supra note .

59 Id. at 1026.
Nicole has a very specific plan to be off of welfare and have a home for her children when they start school, and, in aspiring to be a nurse’s aide rather than a nurse, her plan is realistic. This realistic blueprint of how to avoid being what one fears and how to change one’s self to be more like the positive possible self may be an important component of the optimism or self-efficacy that offenders who eventually desist seem to possess.\textsuperscript{60} It also highlights the importance of the blueprint or specific road map to the possible self. Many, if not most, offenders may “talk the talk” about wanting to reform and be a different kind of person (a positive possible self), but only some will have a specific and realistic strategy to make this happen.

A feared possible self can also be a powerful motivator for change and an outcome that one can intentionally try to avoid. In fact, for reasons that will become clear later in this Article, movement out of a deviant or “spoiled identity” is more likely, at least initially, to be based on a sense of what one does not want to become rather than a sense of what one wants to become. Norman Denzin has argued that a powerful motivator for an individual who desists from drinking occurs when “she comes to define herself in terms of who she no longer wants to be.”\textsuperscript{61} Patrick Biernacki has observed similar trends with respect to former opiate addicts:

When illicit addicts begin to question their lives and resolve to stop using opiates, their change in perspective often is negative in the sense that they see the continued use of opiates, and their involvement with other addicts and the world of addiction, only as undesirable, or worse, as actually or potentially detrimental to their wellbeing. The change in perspective does not necessarily entail a positive view that could provide an alternative to their present situation. \textit{At this point, addicts may know what they do not want to do, but they are less certain about what they do want.}\textsuperscript{62}

Denzin’s characterization of the alcoholic and Biernacki’s description of the drug addict seem equally true for offenders exiting the role of criminal. At the point that they begin to think about “going straight,” offenders may have only an inchoate sense of what kind of conventional life they want but a very vivid and profound image of what kind of future they now realize they do not want.\textsuperscript{63} This notion of starkly fearing how one’s life may turn out as a motivation for quitting crime can be seen in a number

\begin{footnotes}
\footnote{\textsuperscript{61} \textit{Norman K. Denzin, The Recovering Alcoholic} 158 (1987).}
\footnote{\textsuperscript{62} \textit{Patrick Biernacki, Pathways from Heroin Addiction: Recovery Without Treatment} 72 (Sheryl Ruzek & Irving Kenneth Zola eds., 1986) (emphasis added).}
\footnote{\textsuperscript{63} \textit{Id.}}
\end{footnotes}
of ethnographic accounts. Deborah Baskin and Ira Sommers provide the following account of a female, drug-involved offender:

You get tired of bein’ tired, you know. I got tired of hustlin’, you know. I got tired of livin’ the way I was livin’, you know. Due to your body, your body, mentally emotionally, you know. Everybody’s tryin’ to get over. Everybody will stab you in your back. Nobody gives a fuck about the next person. And I used to have people talkin’ to me, “You know, you’re not a bad lookin’ girl. You know, why you don’t get yourself together?”

The role of a feared self can be seen in the words of a recovering heroin addict and street criminal in Biernacki’s study who recounted the fear of becoming a prostitute as a factor in quitting drugs: “I was real scared, real frightened, real terrified . . . of what would happen to me. I felt like I was at a point where either I had to clean up or become a dealer or prostitute . . . .”

Another one of Baskin and Sommers’ desisting female offenders reveals another important dimension of the feared self—that offenders realize that they have isolated themselves from their conventional pasts:

The fact that my family didn’t trust me anymore, and the way that my daughter was looking at me, and, uh, my mother wouldn’t let me in her house anymore, and I was sleepin’ on the trains. And I was sleepin’ on the beaches in the summertime. And I was really frightened. I was real scared of the fact that I had to sleep on the train. And, uh, I had to wash up in the Port Authority. I was alone and no one was helping me anymore. I used to have my family when things got real rough. I always thought I would eventually have my daughter. But I was all of sudden, all alone.

This notion of personal isolation from their connection to any pro-social life is a recurrent theme in ex-offenders’ descriptions of their lives. This woman’s story reveals how embedded in their criminal lives offenders can become and how, because of this criminal embeddedness, it is difficult to gain access to legitimate opportunities, such as jobs or conventional social networks, without at least some indication on their part that they have started to turn their lives around or are not who they used to be.
Our suggestion that the “feared self,” the negative possible self, may be a particularly powerful motivator for those leaving crime is consistent with the clinical literature concerning alcoholics and drug addicts, suggesting that:

“[N]egative” or “avoidant” motives such as fear of arrest, physical deterioration, family breakup or job loss characterize initial reasons for not drinking which are later eclipsed by more positive or “approach” motives such as a sense of purpose in life, a commitment to financial or occupational success, focus on closeness and intimacy in relationships, or the development of creative or altruistic goals.69

The feared self is likely to be one such “avoidant motive” that initiates self-change only to be supplemented over time with a more positive possible self—the conventional self one wants to become.70

Those desiring to break from crime, then, are likely motivated at first by a strong aversion to the negative possible self, the feared self that they do not want to become. Aversion to the feared self alone cannot sustain the break with crime, but it does supply the initial motivation, which, over time, is supplemented by more positive reasons. In fact, although notions of the feared self may dominate at first, success at self-change seems in the long-run to require a balance between positive and negative possible selves—a combination of both what one wants to become and moves toward and what one fears that one will become and moves away from.71 In the words of one adolescent at high risk of delinquency, Daphna Oyserman and Hazel Markus provide an example of both a self-regulating possible self and a balance between what one wants to be and what one fears they might be in possible selves:

I expect to be doing better in school, to be almost independent—ready to move out and to have a part-time job. I hope to study more, have a good paying part-time job,

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70 This theme was also developed in MARUNA, supra note , at 27.

71 Hoyle & Sherrill, supra note , at 1677-78; Daphna Oyserman & Hazel Rose Markus, Possible Selves and Delinquency, 59 J. PERSONALITY & SOC. PSYCHOL. 112, 113 (1990).
and be independent of my parents. I’m afraid I might not stay in school, I won’t get a summer job, and I’ll be homeless.\footnote{Oyserman & Markus, supra note , at 117.}

A possible self balanced between what is hoped for and what is feared is thought to be more effective in reaching one’s ultimate goal because the consequent motivation is additive, combining both an approach and an avoidance mechanism. Oyserman and Markus have argued that a positive or hoped-for possible self may be insufficient by itself to keep those desiring self-improvement from staying on course. This is particularly true in the face of difficulties and setbacks when persons are moving from a compelling or appealing current self (a delinquent) to one that is not intuitively as compelling (a good student and part-time, low-wage worker).\footnote{Id. at 114.} Just as the motivation to move away from a self that is feared is both enhanced and directed by the motivation to move toward the hoped-for self, the motivation to move toward a desired self is strengthened by the image of the feared-about self that is incompatible with it.

The other reason we think aversion to the feared self provides the initial motivation to begin the break with crime is that, as we will argue in some detail below, the events that lead up to the decision to leave crime are primarily negative; in fact, a gradual accumulation and connection of diverse negative events tends to occur. That is, we think that offenders do not initially think about leaving crime because they suddenly see the advantages of a conventional life, but rather because they begin to see, in more vivid detail than ever, the costs and disadvantages of their lives of crime. It is this growing awareness of the accumulating costs of crime and that such costs are linked both to one’s self and one’s future, that provides offenders with the clarity they need to begin thinking about leaving crime and the motivation to engage in intentional self-change. We would hasten to add, however, that both the awareness of the accumulating costs of crime and the realization that one must change who and what one is in order to avoid this future is very gradual, and likely not the sudden “epiphany” that Denzin describes in his discussion of those trying to desist from drinking.\footnote{NORMAN K. DENZIN, INTERPRETIVE INTERACTIONISM 74-75 (Leonard Bickman & Debra Rog eds., 1989).} This notion of an evolving awareness of the costs of crime and the attendant awareness that such costs are projected into the future supports our view that desistance is a process and not a moment or an event.\footnote{In this regard, we agree with Bottoms et al.’s assessment of desistance: “Damascene conversions may happen for a few, but we suspect that, for many people, the progression is faltering, hesitant and oscillating.” Anthony Bottoms et al., \textit{Towards Desistance: Theoretical Underpinnings for an Empirical Study}, 43 \textit{How J. Crim. Just.} 368, 383 (2004).}
As we have discussed, the link between the working self and the possible self is that one maintains a commitment to the working self unless and until that identity and the commitment that is attached to it are undermined or are perceived to be unsatisfying or unsuccessful. In other words, commitment to a working self continues so long as it is perceived to be a source of satisfaction or reward. Burke and Reitzes have noted that there are two bases of identity commitment: (1) a cognitive basis that refers to the “overall reward-cost balance of maintaining the identity”; and (2) a socio-emotional basis that refers to the emotional ties created with others based upon the identity.\textsuperscript{76} In the first instance one can be committed to an identity as a criminal offender because that identity nets one money, drugs, or other desirable things with less cost than an alternative, conventional identity.\textsuperscript{77} In the second instance, one is committed to an identity because of the satisfying relationships forged as a result of interacting with others on the basis of that identity.\textsuperscript{78}

Though stable, identities clearly can and do change. We are arguing that a working identity as a criminal offender can change into a more conventional identity when the person thinks of a conventional identity as a positive possible self and an identity of a burned out ex-con with no friends or possessions as a negative possible self. Contemplation of a possible self that does not include criminal offending in turn occurs when the working identity of criminal is perceived to be problematic or disappointing. An identity of one’s self as a criminal is likely to be a “core” component of one’s working identity and, as such, is frequently activated or easily accessed and is less malleable than less important components. Just as a criminal identity emerges slowly and tentatively in response to perceived successes, so does a break from that identity. As one begins to find less success and satisfaction with the criminal identity, one is likely to conjure up negative possible selves: long terms in prison with young, violence-prone fellow inmates; the possibility of a violent death; or small payoffs from criminal enterprises. These negative possible selves and the eventual activation of positive selves—a working person, a good spouse, a giving father, a law abider—can provide both the motivation and direction for change. Before one is willing to give up his working identity as a lawbreaker, one must begin to perceive this identity as unsatisfying, thus weakening one’s commitment to it. Although this is an issue that should be investigated by empirical research, we tend to doubt that this weakening of one’s commitment to a criminal identity comes about quickly. Nor do we

\textsuperscript{76} Burke & Reitzes, \textit{supra} note, at 244.
\textsuperscript{77} Id.
\textsuperscript{78} Id.
think it comes about in response to one or two failures. Rather, it is likely that one’s commitment to an existing identity comes about only gradually and subsequent to the linking of many failures and the attribution of those linked failures to one’s identity and life as a criminal.

B. LINKING FAILURE: THE CRYSTALIZATION OF DISCONTENT

What would motivate a past and current criminal offender to begin to think of an identity and life without crime? It seems likely that current offenders would only begin to think of a possible self that is conventional and crime-free when they realize that the costs of crime and a criminal identity are beginning to become too great and that being conventional might provide either greater satisfaction or at least a lower price. This view is faithful both to our view that criminal behavior and its abandonment are rational behaviors and our belief that, though constrained by sometimes severe structural factors, criminal offenders act with agency.

On its face, it might seem that one’s commitment to a criminal identity would be easy to surrender. What we know about criminal offending is that it comes with great risk and little financial or personal gain. Crime is above all else physically dangerous: after breaking into a house one can find oneself confronted by an armed homeowner; drug dealers are shot and robbed by both customers and competitors; drug buyers frequently receive adulterated goods; and assailants can at times be overmatched by stronger (or more numerous or better armed) victims. Property crimes generally do not net much in the way of money, and certainly not the kind of money with which one can easily support oneself or a family. Robberies generally result in a paltry amount of cash, burglars do not get anywhere near top dollar when they fence their stolen goods, carjackers who try to sell their cars do not get “blue book” value, and drug sales for most participants involve little more than petty cash. In addition, crime is “seasonal work.”

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80 Gottfredson & Hirschi, supra note , at 18-21.

Rarely is there steady employment with a paycheck that one can count on, and the benefits are non-existent—no paid vacation time, no medical coverage, and the retirement plan is not particularly attractive. Finally, there are the high social costs of crime as well. Maintaining relationships with family, partners, and children is extremely difficult if one is trying to make it as a criminal, even if those relations themselves are on the dark side. Family members are likely to be both an offender’s victims as well as victimizers, partners may stray (or be believed to) during periods of incarceration, and children may turn against the offender and turn him in.82 It would seem, therefore, that maintaining commitment to a criminal identity would be very difficult and relinquishing it very easy, since by many measures it appears to be a very Hobbesian life—an existence that is “solitary, poor, nasty, brutish, and short.”83

A commitment to a criminal identity and criminal life becomes more understandable, however, when viewed in the context of the stock of conventional alternatives available to many criminal offenders.84 While a criminal identity may not come with great financial payoff, for someone with little education, few marketable job skills, and an arrest record it cannot be much less attractive than minimum wage, the prospect of repeated layoffs, long working hours, minimal benefits, and sometimes dangerous and physically demanding working conditions. Further, criminal offenders’ prospects for adequate jobs become even bleaker with drug addiction, arrest, conviction, and incarceration. While clearly not financially lucrative, and often dangerous and lonely, a criminal identity and life comes with its own incentives—excitement and thrills, unencumbered relationships, and a sense of power or dominance—and may, therefore, be seen as an attractive alternative to a conventional life.85 In addition, just as there is an element of idealism in legitimate professions that provides motivation to persevere in the course of one’s inevitable occupational ordeals and trials, there is likely an element of idealism among those selecting a life of crime.86 Those involved in theft, for example,

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82 Nancy Wolff, Jing Shi & Jane A. Siegel, Patterns of Victimization Among Male and Female Inmates: Evidence of an Enduring Legacy, in 24 VIOLENCE & VICTIMS 469, 469-84 (2009).
83 THOMAS HOBBES, LEVIATHAN 100 (Touchstone 1997) (1651).
84 BERNSTEIN & HOUSTON, supra note ; SULLIVAN, supra note ; SUDHIR VENKATESH, GANG LEADER FOR A DAY (2008); SUDHIR VENKATESH, OFF THE BOOKS: THE UNDERGROUND ECONOMY OF THE URBAN POOR (2006); Levitt & Venkatesh, supra note .
frequently have high hopes for the “big score,” a life of thrills,\textsuperscript{87} or at least a life that moves between crime and “life as party.”\textsuperscript{88} While such “professional” idealism is important while one is learning a vocation and in providing motivation in difficult times, the ideals are unlikely to be realized, and one will be repeatedly confronted with the reality of frustration and failure. The reality of the criminal life is that it is destructive for healthy social relationships, its economic benefits are meager, and dangers are ever present. While useful at times, idealism allows for “burnout” and the desire for change in one’s “profession” and professional identity.\textsuperscript{89}

Whatever the advantages a conventional, non-criminal possible self in the future does offer, in order for someone with a current or working identity as a criminal offender to begin to consider it, the attachment to the current identity must be weakened. We believe that the weakening of a criminal identity comes about gradually and as a result of a growing sense of dissatisfaction with crime.\textsuperscript{90} This dissatisfaction with crime is more likely to lead to a conventional possible self when failures or dissatisfactions across many aspects of one’s life are \textit{linked together} and attributed to the criminal identity itself. It is not just that one has experienced failures but that diverse kinds of failures in one’s life become interconnected as part of a coherent whole. This coherence leads the person to feel a more general kind of life dissatisfaction, the kind of life dissatisfaction that can lead to identity change, or what K. Jill Kiecolt has rightly termed “intentional self-change.”\textsuperscript{91}

Roy Baumeister has referred to the linking of previously isolated dissatisfactions and senses of failure in life as the “crystallization of

\begin{itemize}
  \item \textsuperscript{87} KATZ, supra note , at 65-66, 299-300.
  \item \textsuperscript{88} SHOVER, supra note , at 93-109.
  \item \textsuperscript{89} DWORKIN, supra note , at 21-34.
  \item \textsuperscript{90} This is consistent with Neal Shover and Carol Thompson, who found that the probability of desistance increases when offenders’ expectations for achieving rewards through criminal activity declines. Neal Shover & Carol Y. Thompson, \textit{Age, Differential Expectations, and Crime Desistance}, 30 CRIMINOLOGY 89 (1992). Similarly, Sommers et al. speak about “socially disjunctive experiences” as catalysts for decisions to quit offending. Ira Sommers, Deborah R. Baskin & Jeffrey Fagan, \textit{Getting out of the Life: Crime Desistance by Female Street Offenders}, 15 DEVIANT BEHAV. 125 (1994). Lee Robins noted that for the offenders she studied “the most frequent explanation offered for desistance was that “I just wasn’t up to that kind of hassle anymore.” Lee N. Robins, Explaining When Arrests End for Serious Juvenile Offenders: Comments on the Sampson and Laub Study, 602 ANNALS AM. ACAD. POL. & SOC. SCI. 61 (2005).
\end{itemize}
discontent.92 This crystallization of discontent, part of a subjective process of self-interpretation or self-knowledge, is understood as the forming of associative links among a multitude of unpleasant, unsatisfactory, and otherwise negative features of one’s current life situation. Prior to a crystallization of discontent, a person may have many complaints and misgivings about some role, relationship, or involvement, but these remain separate from each other. The crystallization brings them together into a coherent body of complaints and misgivings. . . . The subjective impact can be enormous, because a large mass of negative features may be enough to undermine a person’s commitment to a role, relationship, or involvement, whereas when there are many individual and seemingly unrelated complaints that arise one at a time, no one of them is sufficient to undermine that commitment.93

While no one single complaint or dissatisfaction may be enough to motivate someone to question his life, the linking together of numerous previously isolated complaints may be sufficiently strong to undermine a person’s commitment to a role or identity.

When understood as single unrelated events, failures, complaints, or misgivings can more easily be dismissed as simply isolated difficulties to be expected and ignored as part of ordinary life. As long as the significance of isolated failures can be ignored, and be seen as separate and isolated, they are not likely to entice the person to make major life considerations or re-evaluations and do not lead to a weakening of commitment to an identity. Once linked, however, these failures become part of a pattern that might not easily be fixed, be ignored, or disappear, requiring a reevaluation or reassessment of one’s current situation.

The crystallization of discontent prompts a reassessment of the relationship or commitment. Isolated problems, frustrations, and bad days can be ignored as low-level setbacks that do not reflect negatively on one’s overall level of satisfaction and commitment. But a large pattern of problems and frustrations brings one up to a broader level of meaning and raises the issue of whether the positives outweigh the negatives. The person’s calculation of whether the involvement is worthwhile can no longer ignore the large body of problems.94

Once problems and dissatisfactions have been connected into a larger whole, and one realizes that these problems will not go away and can no longer be ignored, one’s commitment to an existing life and existing identity is more easily called into question.

93 Baumeister, supra note , at 281-82.
94 BAUMEISTER, supra note , at 306.
Biernacki describes the events leading up to an opiate addict’s decision to finally give up drugs as based upon an accumulation of minor discontents that get linked:

The generally chaotic state of the addict condition often results in addicts’ thinking about altering their lives and stopping their use of opiates. . . . For some addicts, the personal experiences that stimulate the resolve seem to be rather trivial events—for example, purchasing poor-quality heroin (“bunk”) and not being able to get high. Yet, to the addict these events may not be trivial at all; added to the other problems the addict must deal with, they are perceived as being “the last straw.”

Similarly, with respect to more general kinds of role and identity changes, Helen Ebaugh speaks of the importance of a “gradual build-up of feelings [that] . . . were the culmination of a long process of doubting and evaluating alternatives.” She also noted that even when there appeared to be a specific triggering event in someone’s life that led him to exit a role and identity, the event itself frequently was trivial but took on added importance because it “symbolized the culmination of feelings and role ambivalence.”

The triggering event in the life of a criminal offender—arrest, incarceration, being surprised and shot at during a burglary—may initiate a reconsideration of one’s commitment to a criminal identity not because of what it stands for alone, but because it may focus one’s feelings on a more general discontent and life dissatisfaction. The kind of general dissatisfaction with one’s life of crime that a crystallization of discontent can bring is illustrated in the following words of a former burglar:

The impetus to think seriously about [desistance] . . . seemed to come in many cases from a gradual disenchantment with the criminal life in its totality: the inability to trust people; the frequent harassment by the police; the effects on wives and children when the offender is in prison . . .

Commitments to criminal identities are maintained in part because of the ability to keep one’s failures isolated and unconnected while keeping one’s successes interrelated and as typical outcomes. That is, I am able to keep my criminal identity intact, in spite of the low financial reward, physical risk, and turmoil with social relationships because I am successful in both exaggerating the benefits and minimizing the costs. One way the benefits can be maximized is by seeing them as inextricably connected to who I am and as connected and tied to my identity; costs can be minimized by viewing them as exceptional or unrelated to each other or not connected to my identity. One’s commitment to an identity becomes reevaluated when

95 BIERNACKI, supra note , at 54.
97 Id. at 125-28.
98 MIKE MAGUIRE & TREVOR BENNETT, BURGLARY IN A DWELLING 89 (1982).
this changes—when one begins to see successes as isolated while seeing failures as part of a whole—and discontent becomes crystallized. In order for this questioning of commitment to identity to occur, there does not have to be an increase in either the frequency or magnitude of one’s failures or dissatisfactions. Rather, what changes is how the sources of content and discontent in one’s life are perceived and evaluated. Dissatisfaction with a few unpleasant outcomes becomes dissatisfaction with one’s life and with who one is.

It is this new understanding of who one wants to be that leads to the effort to intentionally change; or, as Neal Shover put it, “This new perspective symbolizes a watershed in [offenders’] lives. They decide that their earlier identity and behavior are of limited value for constructing the future.”99 The importance of the crystallization of discontent is that after it occurs, the dissatisfactions that one has experienced now have implications for the future. Events that seemed atypical and isolated are now seen as interrelated and therefore both less easily dismissed and likely to continue to occur in the future. The projection of continued life dissatisfaction into the future leads the person to begin to seek changes. Unlike Maruna, who argues that offenders do not change their identities as part of the process of desisting from crime but simply reinterpret their past as somehow both consistent with and as a necessary prelude to the prosocial person that they think they are,100 our view is that there is a distinct change in how offenders think about “who they are.” Because of the crystallization of discontent and the accumulation of dissatisfactions, this change in identity is likely motivated at first by “avoidant motives” of not becoming the feared self. An offender moves tentatively (and perhaps inconsistently) toward being a more conforming person, and that movement is assisted and made possible by two other changes that are subsequent to a change in identity: changes in preferences and changes in social networks.101 Changes in preferences and social networks that are brought about by changes in identity lead offenders to consider and weigh things differently than they did in the past.

C. SUPPORTS FOR SELF-CHANGE: PREFERENCES AND SOCIAL SUPPORTS

The process of thinking beyond a motivation to change one’s self toward actually making that happen occurs when there is a change in preferences. A preference can be thought of as a taste or penchant for

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99 Shover, supra note , at 132.
100 Maruna, supra note , at 85-108.
101 See generally Giordano et al., Gender, Crime, and Desistance, supra note ; Giordano et al., Emotions and Crime, supra note .
something. An example of a preference would be what Giordano et al. refer to when they speak of the “changes in the meaning and desirability of deviant/criminal behavior itself” that bring about desistance. For example, one of their respondents, Donna, says that she used to think that life was a big party and that taking drugs was fun and exciting. In doing so she is expressing a preference for drug using and “hard partying.” When another respondent reported that he once liked hanging around two friends who were “wild . . . and cool,” he was expressing a preference. Since preferences provide a source of and direction for motivation, they are inextricably linked with a person’s self-identity. One way I can express who and what I am is in terms of my tastes. One with preferences or tastes like those described above seems to be consistent with an identity as a rule breaker, non-conformist, fun-lover, risk seeker, and one who seeks the company of other non-conformists and fun-lovers.

Since preferences are linked to personal identities, an important change attendant to a change in identity is a change in one’s preferences. Though initially guided by the feared self or “avoidant motives,” offenders who feel that “they just can’t take the hassle” slowly begin to construct a new view of who they would like to be. This change in identity is in part reflected to the self and others as a change in preferences—offenders wishing to quit crime develop tastes for non-criminal actions and the newly perceived “comforts” of a non-criminal life. One of Shover’s desisting thieves stated just such a change in preference:

103 Giordano et al., Gender, Crime, and Desistance, supra note, at 992.
104 Giordano et al., Emotions and Crime, supra note, at 1625.
105 Id.
106 Peggy C. Giordano et al., Changes in Friendship Relations Over the Life Course: Implications for Desistance from Crime, 41 CRIMINOLOGY 293, 308 (2003).
107 See George A. Akerlof & Rachel E. Kranton, Economics and Identity, 115 Q. J. ECON. 715 (2000); Shane Frederick, Time Preference and Personal Identity, in TIME AND DECISION: ECONOMIC AND PSYCHOLOGICAL PERSPECTIVES ON INTERTEMPORAL CHOICE 89 (George Loewenstein, Daniel Read & Roy F. Baumeister eds., 2003); George Loewenstein & Erik Angner, Predicting and Indulging Changing Preferences, in TIME AND DECISION, supra, at 351.
108 Akerlof and Kranton provide as an example the giving of charitable contributions. Akerlof & Kranton, supra note. Most people do not give to these charitable organizations, which, with the highest marginal rate of return, would maximize the economic impact of the gift. Rather, most give to organizations that reflect their identity—“green” organizations, peace organizations, organizations for A.I.D.S. patients, the homeless, the Republican Party, or their alma mater. Id.
109 Amodeo et al., supra note, at 709.
I’ve got to a point where things that were important to me twelve, fifteen years ago aren’t important now. I used to have a lot of ambitions, like everybody else has—different business ventures, stuff like that. But today, why, with what I have to buck up against, why, I could be just as happy and just as satisfied with a job that I’m getting by on, where I knew I wasn’t going to run into trouble or anything.110

Similarly, one of Monica Barry’s young Scottish offenders who desisted from crime stated, with respect to the nice clothes and money she had received from her criminal activities, “I can do without things like that just now.”111 With a change in preferences, a minimum wage job, or one that allows one to “just get by,” might seem more acceptable than it used to.112

An important component of a change in preference brought on by an identity change, therefore, is the modification of views about the things that are valuable, such as a marginal job or a stable relationship or family, and the things that are costly, such as more prison time. A second important change in preference that is related to desistance is a change in time orientation. While cognitive psychologists, behavioral economists, and criminologists have documented the fact that, as people age, they begin to think more about long-term consequences,113 we argue here that part of one’s personal identity consists of how well one thinks one makes decisions, considers the costs and benefits of alternative courses of action, and shows patience; or, stated in the negative, how much one thinks of oneself as “hot-headed” or impulsive.114 Research has shown that children who exercised more patience and self-control in preschool were described in late adolescence by their parents as more cognitively competent, and, as adults, these children reported that they both seriously considered long-term

110 SHOVER, supra note , at 134.
112 Id.
113 See SHOVER, supra note ; David M. Bishai, Does Time Preference Change with Age?, 17 J. POPULATION ECON. 583 (2004); Maurice Cusson & Pierre Pinsonneault, The Decision to Give up Crime, in THE REASONING CRIMINAL 72 (Derek B. Cornish & Ronald V. Clarke eds., 1986); Leonard Green, Astrid F. Fry & Joel Myerson, Discounting of Delayed Rewards: A Life-Span Comparison, 5 PSYCHOL. SCI. 33 (1994); Daniel Read & N. L. Read, Time Discounting Over the Life Span, 94 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 22 (2004); Neal Shover, The Later Stages of Ordinary Property Offender Careers, 31 SOC. PROBS. 208 (1983).
114 See Frederick, supra note ; Loewenstein & Angner, supra note ; George Loewenstein et al., Introduction to TIME AND DECISION, supra note , at 1. Descriptive of this is the conclusion by Loewenstein, Read, and Baumeister that “[t]he ability to wait is not only correlated with brain activity, but also with age and dispositional person variables . . . . Independent of maturation level, stable individual differences also exist in the ability to access cool-system strategies in dealing with the frustration of the delay situation.” Id. at 5 (emphasis added).
goals and deliberately planned for them.\textsuperscript{115} Appraisals directed from parents to their children about their competence and self-control are then incorporated into the child’s self-identity as a patient person who can resist immediate temptations.\textsuperscript{116} We imply here that certain types of people (offenders, addicts, alcoholics, shopaholics) have self-control problems, are aware of these self-control problems as part of their self-identity, and, in becoming a different kind of person, can deliberately change the degree to which they exercise patience and the quality of their decision making.\textsuperscript{117}

One of the most critical changes in preference for the desisting offender with a fledgling prosocial identity is in the kinds of friends she has and the social networks in which she wishes to immerse herself. Kiecolt has argued that intentional self-change is unlikely to be successful without what she calls “structural supports” for change.\textsuperscript{118} These supports “provide individuals with means and opportunities for effecting self-change” and include self-help groups and professional changers, such as psychiatrists and social workers.\textsuperscript{119} As a separate condition for successful self-change, Kiecolt includes the assistance of social supports such as friends, family members, and spouses or partners.\textsuperscript{120} For the desisting offender with a prosocial identity, structural supports or hooks for change consist of a network of others more conventional than oneself.\textsuperscript{121} In fact, it is unlikely that one can successfully desist from crime unless there is a successful network realignment with more prosocial others.\textsuperscript{122} But how does this network realignment take place?

First of all, we believe that a social realignment is not generally exogenous\textsuperscript{123} but that one deliberately and intentionally affiliates with more prosocial others as part of the change in identity. That is, a change in identity to a more prosocial person brings with it a preference for the kind of people more likely to foster and support that new identity. This process of network alignment (and the process of desistance itself) may be more or less difficult to achieve. Dana Haynie has found that most people have “mixed” peer networks—social networks comprised of both prosocial and...
offending others.\footnote{124} To the extent that an offender’s social network is mixed, the process of realignment is easier; it may mean simply shifting one’s affiliations away from the antisocial members of the network and toward the prosocial members and their conforming normative orientation (giving credence to the so-called fact of desistance by geography or moving away from the “bad guys”). The process of social network realignment (and desisting from crime) may be much more difficult for those who are so embedded in a criminal context that they have few or no prosocial others from whom to draw support in breaking away from crime and may instead have antisocial others who encourage them to stay on the path of crime.\footnote{125} Recall the female offender in the Baskin and Sommers’ study discussed earlier who, after years of a life of drug use and crime, found herself so embedded in crime that she felt completely isolated from the conventional people in her life (“I was alone and no one was helping me anymore.”).\footnote{126}

The importance of a change in one’s social network was revealed in the research of both Mark Warr\footnote{127} and the team of Peggy Giordano, Stephen Cernkovich, and Donna Holland.\footnote{128} Warr reported that desistance from offending is co-integrated with a decline in the importance of time spent with peers to a greater involvement with one’s spouse or partner.\footnote{129} Similarly, Giordano et al. found that those who were embedded in all-offender peer networks were most likely to be involved in and continue in crime, while those in mixed peer networks were more likely to desist.\footnote{130} Their narrative research also highlighted the fact that a social realignment was likely induced by a change in preferences.\footnote{131} Offenders who had new prosocial identities and wanted to quit crime no longer had a preference for friends who used drugs, did crime, or lived a “fast and crazy” life.\footnote{132} An

\begin{footnotes}
\item[125] See Hagan, Social Embeddedness, supra note , at 465-75.
\item[126] BASKIN & SOMMERS, supra note , at 130.
\item[127] See Mark Warr, Companions in Crime (2002); Mark Warr, Life-Course Transitions and Desistance from Crime, 36 CRIMINOLOGY 183 (1998).
\item[128] See Giordano et al., Changes in Friendship Relations, supra note .
\item[129] WARR, supra note , at 103-04; Warr, supra note , at 188-96.
\item[130] Giordano et al., Changes in Friendship Relations, supra note , at 312-16.
\item[131] Id. at 316-17.
\item[132] One of the offenders studied by Giordano et al., Debbie, commented: “I wanted to settle down and stay out of trouble and they [her old friends] are still doing those things . . . . I think they are still doing a lot of things that they still did back then. I don’t want to do any of that. Drinking, drugs, I just know where it got me . . . .” Id. at 304. A male offender stated: “Nobody told me, well Andy . . . or influenced me to break into this, this building . . . . But it was just wanting to fit in. Just with some of the . . . especially like Chester and Shawn . . . cause they were more, more wild . . . .” Id. at 308 (emphasis omitted).
\end{footnotes}
even more comprehensive understanding of this process can be found in another line of research: the sociology of collective movements.

In his work on the sequences through which persons join and become committed to high-risk social movements, like the 1964 Freedom Summer Project in Mississippi, Doug McAdam argues that persons wanted and deliberately sought to participate in Freedom Summer because the activities and goals of the project reflected their personal identities. Those who thought of themselves as social activists, liberals, reformers, civil rights protectors, or good Christians were initially attracted to the Freedom Summer Project and sought to volunteer. In this sense, seeking to join Freedom Summer was a deliberate act motivated by the fact that the activities of the Project resonated with the personal identities of the volunteers. An important factor that distinguished those who actually participated in Freedom Summer and those who sought to but later backed out was that the actual participants were better integrated into civil rights organizations generally, had close friends who were also involved in the project, and did not have close others, such as parents, to oppose their joining. Actual joiners were better integrated into social networks that included others who were involved in the project and other civil rights organizations. These networks could support and sustain their identities as civil rights workers, activists, or liberals, and allowed them to be relatively more isolated from others who opposed both their work for the Project and their identity. Both their personal identities as civil rights activists and being embedded in supportive social networks (while relatively isolated

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133 The Mississippi Freedom Summer Project was initiated by the Student Non-Violent Coordinating Committee in 1964. The idea of the project was to recruit volunteers (most of them white, well-off college students at elite universities) to work for three months in Mississippi education and voter registration efforts. Workers for the projects lived in communal houses or in the homes of local black families for the three months they were in the state. The project was high-risk, because Mississippi was a tinderbox of racial tension at the time and volunteers could expect opposition from local law enforcement and no assistance or protection from federal authorities. The project was less than a half month old when three workers—James Chaney, Andrew Goodman, and Michael Schwerner—were kidnapped by local whites, beaten to death, and buried in an earthen dam. One other Freedom Summer Project volunteer lost his life and countless others experienced beatings, arrests, and jailing.

134 See generally DOUG MCADAM, FREEDOM SUMMER (1988); Debra Friedman & Doug McAdam, Collective Identity and Activism: Networks, Choices and the Life of a Social Movement, in FRONTIERS IN SOCIAL MOVEMENT THEORY 156 (Aldon D. Morris & Carol McClurg Mueller eds., 1992); Doug McAdam, Recruitment to High-Risk Activism: The Case of Freedom Summer, 92 AM. J. SOC. 64 (1986); Doug McAdam & Ronnelle Paulsen, Specifying the Relationship Between Social Ties and Activism, 99 AM. J. SOC. 640 (1993).

135 McAdam & Paulsen, supra note , at 642-45, 654-58.

136 Id. at 659.
from oppositional social networks) separated the actual participants in Freedom Summer from initially interested non-participants.137

Another important point McAdam makes about those who join high-risk collective movements is that the process is not sudden, but gradual and made up of a series of successful minor steps.138 The fact that identity transformation, preference shifts, and a change in social network affiliation is a slow, gradual process is critical. The importance of this process for the Freedom Summer Project was seen in the fact that before participating in this high-risk effort, virtually all of those who volunteered had been previously involved in less intense civil rights activities; some 90% of the applicants had participated in write-in campaigns, signed petitions, or engaged in protest demonstrations.139 McAdam emphasizes that no one immediately jumped into the Freedom Summer Project; rather, involvement came about slowly, with incremental changes in identity followed by tentative behavior that expressed that identity.140 He argues that the process of identity transformation involves tentative forays into new roles that pave the way for more thoroughgoing identity changes. Playing at being an ‘activist’ is a prerequisite to becoming one . . . . Moreover, each succeeding foray into safe forms of activism increases the recruit’s network integration, ideological affinity with the movement, and commitment to an activist identity, as well as his receptivity to more costly forms of participation. It is this type of gradual recruitment process that is likely to foster high-risk/cost activism.141

The relationship to the process of criminal desistance is clear. Offenders seeking to break from crime, a different type of “high-risk” activism, slowly begin to “play at” a new identity and make initial and safe forays into a more prosocial life.142 They develop new, non-criminal preferences and slowly begin to realign their social networks to include more conventional people. These more conventional people are important sources of social capital who provide support for their new identities, a normative climate that supports prosocial conduct and information about jobs, treatment programs, housing, and the availability of financial assistance.143 Those wishing to quit crime are more likely to be successful at desistance if they are embedded in social networks that not only support

137 Id. at 653.
138 McAdam, supra note , at 41.
139 Id. at 51.
140 Id.
141 McAdam, Recruitment, supra note , at 69-70.
142 See Warr, supra note ; Warr, supra note .
their new identities and tastes but also isolate them from those who would oppose them quitting crime or induce them to continue in their criminal ways.

This would suggest that success in desisting from crime is more likely when offenders who have made the decision to leave crime and become prosocial have at least mixed pro- and antisocial social networks (it is very doubtful that non-trivial criminal offenders would have exclusively prosocial networks). The first movements toward desistance would be to strengthen their relationships with prosocial others and distance themselves (emotionally and physically) from those who would oppose their new identity. In addition, these movements are likely to be very tentative and mundane at first, as the process of becoming a committed prosocial person is neither easy nor guaranteed. The more that offenders are embedded in criminal contexts (the more the mix of their social network favors the antisocial over the prosocial), the greater the obstacle of isolation from support for their fledging conventional identities will be. These offenders will face more opposition to their new identity and will be less likely to encounter other prosocial opportunities, like job prospects.

We think that the change in preferences that comes with a change in self-identity explains why failures occur and why successes, when they occur, are gradual. While dissatisfaction with crime brought about by a crystallization of discontent can lead an offender to want to change his identity and preferences, he may misjudge the satisfactions that he will enjoy with the new preferences. That is, I can imagine myself with different preferences in the future (a more conventional life, a job “I’m just getting by on,” a steady partner to whom I return after work every day, or being around the kids) but may easily misjudge in the present that these, in fact, are the preferences that I want or that will make me happy in the future. If I fail to predict my future preferences accurately, I will become dissatisfied, and I will likely face a setback in my attempt at deliberate self-change. In sum, desistance from crime is not easy; in fact, it is exceedingly difficult, and many who embark on the path of self-change fail and do so repeatedly. Change does occur, however, and when it does, we think it frequently occurs when offenders are motivated by the self they want to become as well as what they fear they will become if they do not change. Offenders who desist, then, successfully break themselves from their past.

III. RESEARCH ON IDENTITY AND DESISTANCE

Our conjecture about how a change in identity is related to a decline in criminal behavior is for now just that—a conjecture. We hope that the

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144 Loewenstein & Angner, supra note, at 352-53.
theoretical work discussed herein will motivate some empirical research into the causal mechanisms we have outlined, linking identity with changes in preferences, social networks, and ultimately desistance from crime. Research in this area should proceed along two tracks. The first track should involve research on how to measure identity shifts and connect those shifts both backward to the crystallization of discontent that initially motivated the identity change and forward to attempts to change social networks, preferences, and other connections to fit a more conventional life. Recent work by Thomas LeBel et al. demonstrates that it is possible to measure subjective mental states that appear to both directly and indirectly affect the process of desistance. More generally, we fully agree with Laub and Sampson that “[w]e need to find a way to measure individual motivation, free will, and ultimately the decision to initiate and embrace the process of change.” As shown in the work of LeBel et al. and Greg Pogarsky, it may be possible to exploit existing datasets that measure the subjective framework of the individual subjects. It might also be possible to exploit the dramatic growth in prison-based treatment that focuses on cognitive restructuring and the development of new patterns of thinking and decision making. Many of these treatment programs are accompanied by risk assessment instruments that assess “dynamic” features, which include subjective cognitive states. Explicitly qualitative studies that rely on both prospective and retrospective assessment of an individual’s identity will also be important.

Related to this, we also think that efforts should be made to assess features of an individual’s preferences, which we believe are a function of one’s identity. The most obvious example of such a preference is one’s time preference or discount rate. Behavioral economists and cognitive psychologists have created an impressive literature on the nature of time

145 Thomas P. LeBel et al., The “Chicken and Egg” of Subjective and Social Factors in Desistance from Crime, 5 EUR. J. CRIMINOLOGY 131 (2008).
146 Laub & Sampson, supra note , at 51.
147 See LeBel et al., supra note , at 135-37; Greg Pogarsky, Deterrence and Individual Differences Among Convicted Offenders, 23 J. QUANTITATIVE CRIMINOLOGY 64-66 (2007).
149 In this spirit, Paternoster is initiating a research project to examine the long-term changes in identity, social networks, and “life conditions” of a sample of ex-offender addicts released from a state prison in the early 1990s. The research will employ detailed interviews with these former (and some current) inmates in an attempt to document both the objective conditions of their lives after prison and their subjective understanding of those conditions, including any changes in identity.
150 Frederick, supra note .
discount factors and how they vary within a population.\footnote{151 For an exhaustive review, see Shane Frederick, George Loewenstein, & Ted O’Donoghue, Time Discounting and Time Preference: A Critical Review, 40 J. ECON. LITERATURE 351 (2002).} With the exception of some work in the deterrence literature,\footnote{152 See, e.g., Daniel S. Nagin & Greg Pogarsky, Integrating Celerity, Impulsivity and Extralegal Sanction Threats into a Model of General Deterrence: Theory and Evidence, 39 CRIMINOLOGY 865 (2001).} there has been little application of these ideas in criminology despite the inherent linkage to the central concept of impulsivity.\footnote{153 See Daniel S. Nagin, Moving Choice to Center Stage in Criminological Research and Theory: The American Society of Criminology 2006 Sutherland Address, 45 CRIMINOLOGY 259 (2007).} Links to this literature provide criminologists with a precisely specified concept for which clear measurement strategies have been developed. Criminologists also have a potential contribution to make in this area by describing the way in which time preferences change with age and how this is connected eventually to desistance. Only limited work has been done thus far,\footnote{154 See, e.g., Read & Read, supra note .} but empirical evidence about the shift in time preferences for a population of desisting criminals would provide strong evidence about the role of identity shifts in explaining desistance.

A second and less conventional research track should focus on studying the process of desistance as a time series. Time-series analysis is focused on identifying and explaining the process that generates the series,\footnote{155 David McDowall et al., No. 07-021, Interrupted Time Series Analysis (1980).} an analytical framework that fits well with explaining desistance. Time series analyses should start with tests for stationarity; if individuals are found to follow a non-stationary time series, focus should be on explaining that non-stationarity. As we will argue below, identity theory can be conceptualized as a time series with a structural break. Therefore, support for identity theory can be developed by demonstrating the existence of structural breaks in an individual time series of criminal offending. Although somewhat foreign to the study of individuals, criminology as a field is comfortable with this basic analytic strategy within the context of the aggregate study of crime rates, where much work has focused on the character of these time series.\footnote{156 See, e.g., David McDowall & Colin Loftin, Are U.S. Crime Rates Historically Contingent?, 42 J. RES. CRIME & DELINO. 359 (2005); Robert M. O’Brien, Theory, Operationalization, Identification and the Interpretation of Different Differences in Time Series Models, 17 J. QUANTITATIVE CRIMINOLOGY 359 (2001); William Spelman, Specifying the Relationship Between Crime and Prisons, 24 J. QUANTITATIVE CRIMINOLOGY 149 (2008).} In the next Part, we will discuss this idea in a little more detail, but space constraints limit how much it can be developed here.
IV. AN ANALYTICAL FRAMEWORK FOR DESISTANCE: THE OFFENDING CAREER AS A TIME SERIES

The starting point of time series regression revolves around thinking about the stochastic process that is generating the data. In its most basic form, any time series can be described (not explained) by the following autoregressive time series:157

\[ Y_t = \alpha + \rho Y_{t-1} + e_t \]  

(1.1)

where \( e_t \) is a time series of uncorrelated shocks. A key assumption of time series analysis is that the process is weakly stationary, which simply means that the first and second moments of the parameters of the model—in this case, \( \alpha, \rho \) and \( \text{var}(e) \)—are stable throughout the time period. Our main, and most important, assertion is that this kind of process, with time constant parameters, cannot create the long term path of desistance as described by Sampson and Laub158 or Arjan Blokland et al.159 The kind of path described by equation 1.1 will move to its equilibrium level and then stay flat with short term variation around the equilibrium line. Laub and Sampson are right: state dependence and individual heterogeneity as captured in the lagged \( Y \) term in equation 1.1 cannot explain desistance.160 We restate this important observation in time series language: we think desistance is inherently a non-stationary process.

Practitioners of time series analysis recognize that the first step in any time series analysis involves a test for stationarity.161 This is logical. If the parameters are inconstant and we use regression models, which assume time-constant parameters, then the estimates will be biased. A researcher can make a non-stationary time series stationary by taking differences or detrending. The researcher then focuses on explaining the resulting stationary time series. In this case, however, we are not interested in the stationary part of the time series. Rather, we are interested in first characterizing and then explaining the non-stationary part of the time series, the long-term path or trajectory over time.162

We are not aware of any previous attempt to test for stationarity in longitudinal individual data in criminology, so we will illustrate our point

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157 The following is the simplest possible dynamic model. It can be generalized by including more lags. However, the basic concepts apply.
158 Sampson & Laub, supra note , at 36-60.
159 Blokland et al., supra note .
160 LAUB & SAMPSON, supra note .
161 MCCLEARY & HAY, supra note .
with some preliminary time series analyses of the Cambridge Study in Delinquency Development (CSDD) data. The CSDD is a prospective longitudinal survey of 411 South London males. Data collection began when the boys were eight years old, and conviction data were obtained for these boys from age ten to age fifty. Time series techniques designed to deal with discrete dependent variables are in their infancy, which means that most time series analyses are done with ordinary least squares models. But in this paper, we have asserted that desistance is a process by which the latent propensity to commit crime changes over time. As such, we want to study the continuous latent propensity and not the realization of this latent propensity. Therefore, we first used non-parametric smoothers on the forty-year CSDD time series conviction data to create a continuous trajectory of estimated p’s, where p = Prob(conviction) for a given year. Although most previous work with this dataset has focused on frequency, or lambda, in this application for the study of desistance we focus on prevalence. This approach simply creates an estimate of the probability of convictions for each year of age and, in this sense, is analogous to what growth curve models do for the population.

Although we estimated continuous trajectories of the latent probability of conviction for all 411 subjects, in what follows we will focus only on 24 individuals, displayed in Figure 1, who follow what we believe most people would agree are desistance trajectories. Each of these individuals have initially high levels of offending propensity that descend to zero levels of propensity for at least ten years by age fifty. The average number of convictions for these twenty-four people is eight, with some having as few as four and one (the highest) having eighteen. Some of the trajectories are the traditional upside down U-shape, while others are double-peaked. The trajectories are considerably noisier than what one gets in group trajectory

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163 FARRINGTON ET AL., supra note. We thank David Farrington for his generosity in letting us use these data.
164 Id.
165 Id.
166 The difference is that we created the trajectory for each individual, and we did not fit a polynomial function form; instead we used a smoothing function in STATA that, sequentially, did median smoothers of four, two, five, and three spans (number of observations around a given Y) followed by a Hanning linear smoother, and did each sequence twice. The results reported below do not appear to be overly sensitive to the type of smoother we used (we get largely similar results when we did a simple three-period moving average to smooth the time series). We are however open to discussions about the best way to proceed. In this paper we are simply trying to briefly present a concrete example of a time series analysis with individual-level data.
analysis, reflecting the focus here on one individual path without smoothing from the overall group.167

For these twenty-four individual time series, we conducted a standard Dickey-Fuller unit root test for each and every time series. This test starts from the null hypothesis that the series is non-stationary.168 Using a 5% level of significance, we were not able to reject the null hypothesis of a non-stationary time series in any of the cases. To repeat, in all of the cases in which we estimated a trajectory for the probability of conviction that was different from a constant at zero, we accepted the null hypothesis that the time series was non-stationary. We also used the Kwiatkowski-Phillips-Schmidt-Shin (KPSS) test for stationarity (with zero lags). Unlike the Dickey-Fuller test, which assumes non-stationarity, the KPSS test assumes stationarity. This test was developed because of concerns about the low power of the Dickey-Fuller test that makes it difficult to reject the null hypothesis of non-stationarity.169 We were able to reject the null hypothesis of stationarity (with no trends) for twenty-three of the twenty-four time series (we could not reject for person # 403) using the KPSS test. These results confirm for the first time our basic assertion that desistance trajectories are inherently non-stationary. To be clear, this does not mean that these twenty-three time series lend credence to our identity theory but simply open the possibility that they may be characterized as having a structural break, which would be consistent with the theory.

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167 Osgood, supra note .

168 We did not use the augmented Dickey-Fuller test, which uses lags to control for serial correlated errors. The problem here is that lags force the researcher to discard observations at the beginning of the time series. A lag of four means that we will discard the observations from ages ten to thirteen. The tests for optimal lags routinely found optimal lags of eight or nine, which means that the results were “best” when we start at seventeen or eighteen—after the hump of adolescence. This makes little sense in this context, given our interest in explaining the full desistance trajectory. However, it is also clear to us that individual time series of individual offending propensity will be serially correlated. As an alternative, we also used the Phillips Perron test, using Newey-West standard errors to correct for serial correlation (which does not use the lagged differences), and found the same answer. We failed to reject the null hypothesis of a unit root in all cases.

169 Denis Kwiatkowski et al., Testing the Null Hypothesis of Stationarity Against the Alternative of a Unit Root, 54 J. ECONOMETRICS 159 (1992).
Persons 94, 103, and 114

Persons 137, 145, and 158
Persons 181, 187, and 204

0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1

Age

Persons 225, 230, and 241

0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1

Age
Persons 298, 347, and 357

Probability of Conviction vs. Age

Persons 367, 383, and 403

Probability of Conviction vs. Age
The next step is to identify or try to explain the non-stationarity. The simplest form of non-stationary time series is a random walk, a well-known form that has been found to occur in many contexts, including the stock market price of a company, the financial status of a gambler, and both aggregate unemployment and crime levels in the United States. Random walks have a unit root, which means that the parameter $\rho = 1$ or to be more specific:

$$Y_t = \alpha + Y_{t-1} + e_t$$  \hspace{1cm} (1.2)

According to equation 1.2, change from period x to x+1 is equal to some constant plus a random shock. The series has an infinite memory, since any shock is permanently incorporated into the time series. Random walks do not, therefore, return to any mean. The same formula can generate flat, increasing, decreasing, or U-shaped curves, depending entirely on the time series of uncorrelated shocks $e_t$.

This description of a random walk is consistent with the Laub and Sampson characterization of life course theories of desistance as the result of a series of “random events,” “desistance by default,” or “macro-level shocks largely beyond the pale of individual choice (for example, war, depression, natural disasters, revolutions, plant closings, or industrial restructuring).” Random walks are inherently unpredictable, and, as described by Laub and Sampson, this lack of predictability is the key factor which distinguishes life course trajectories from predetermined developmental trajectories. In a world of random walks, we can no longer predict long-term change, and the idea of explaining long-term change becomes conceptually meaningless. In that context, we need to focus our attention on explaining change in any given period, which is driven by these relatively exogenous life events. This conclusion is consistent with empirical practice: if a time series is a true random walk, the only feasible strategy is to explain period-to-period change. It is simply not possible to explain any long-term pattern, because that long-term pattern is driven by random shocks. Although we are not sure that any of the current desistance theories in criminology fully qualify as random walk theories,

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170 For an accessible presentation of random walks, see McCleary & Hay, supra note . For a more detailed but still intuitive presentation, see William Feller, 2 AN INTRODUCTION TO PROBABILITY THEORY AND ITS APPLICATIONS (1971). For examples of random walks in crime time series, see David F. Greenberg, Time Series Analysis of Crime Rates, 17 J. QUANTITATIVE CRIMINOLOGY 291 (2001); David McDowall, Tests of Nonlinear Dynamics in U.S. Homicide Time Series, and Their Implications, 40 CRIMINOLOGY 711 (2002); Spellman, supra note .

171 LAUB & SAMPSON, supra note , at 34.

172 Id.

173 Osgood, supra note .
we are comfortable asserting that in the extreme, life course processes (as
described by Glen Elder) would follow a random walk.174

Not all non-stationary processes are random walks, however. An
alternative non-stationary time series is a series with a structural break. In
other words, the time series appears non-stationary, but it is actually
stationary with a structural break. Once the structural break is accounted
for, the time series is stationary. Although there are multiple forms of
structural breaks, one version implies that there are two sets of parameters
across time periods.175

\[
Y_t = \begin{cases} 
\alpha_a + \rho_a Y_{t-1} + e_{at} & \text{if } t < T \\
\alpha_b + \rho_b Y_{t-1} + e_{bt} & \text{if } t \geq T 
\end{cases}
\] (1.3)

The above equation represents an exogenous structural break. David
McDowall and Colin Loftin present a discussion of an endogenous
structural break, where the different formulas apply for different levels of Y
rather than for different time periods.176 In that case, the break is
endogenous because it depends on the time series itself.177

Criminological theorists have not formally discussed structural breaks
in the context of individual time series, but we see elements of structural
breaks in some desistance theories. For example, the notion of age-graded
causal factors is consistent with the idea that the values of coefficients on
some time-varying variables vary over time. For example, if employment is
inversely related to offending during adulthood but not during adolescence,
we have structural coefficients that vary with time, which could generate
time-varying \( \alpha \) or \( \rho \) in equation 1.3.178 Christopher Uggen’s work,
following this model, describes a structural break in an individual time
series where employment had an effect on recidivism for those over the age
of twenty-six but not on younger offenders.179

A more general way of thinking about structural breaks is to consider
that a relatively time-stable component of an individual, such as self-
control, changes over time. This is only relevant if life events and the
social context interact with self-control to affect behavior. In Terence

174 Glen H. Elder, Jr., *The Life Course as Developmental Theory*, 69 CHILD DEV. 1
175 MCCLEARY & HAY, supra note .
176 McDowall & Loftin, supra note .
177 Id. at 362-63.
178 Christopher Uggen, *Work as a Turning Point in the Life Course of Criminals: A
179 Id.
Thornberry’s interactional model, for example, the exact nature of state dependence depends in meaningful ways on the individual’s relatively stable characteristics. Those individuals who are heavily embedded in crime are less “dynamic,” in that they are less responsive to changes in their environment and therefore are also less state-dependent. Daniel Nagin and Raymond Paternoster built on this idea in their own version of an interactional theory when they posited that the impact of sanctions on an individual depend in meaningful ways on the individual’s level of self-control. Although not developed further by Nagin and Paternoster, subsequent empirical work by Bradley Wright and his colleagues has found evidence of an interaction between life events and stable individual characteristics, such as self-control. If this basic preference function shifts over time in meaningful ways, as suggested by Carter Hay and Walter Forrest, we can have a situation in which the same inputs and opportunities lead to different behaviors and state-dependent processes can start to push people in a different direction. This situation, where a person experiences different causal processes depending on changes in his or her underlying preferences, extends interactional theories, such as theories of personal identity, to accommodate a structural break and strengthens the ability of these types of theories to explain long-term changes in offending propensity.

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182 See Bradley R. E. Wright et al., Does the Perceived Risk of Punishment Deter Criminaly-Prone Individuals? Rational Choice, Self-Control, and Crime, 41 J. RES. CRIME & DELINO. 180 (2004); Bradley R. Entner Wright et al., The Effects of Social Ties on Crime Vary by Criminal Propensity: A Life-Course Model of Interdependence, 39 CRIMINOLOGY 321 (2001); see also Carter Hay & Walter Forrest, Self-Control Theory and the Concept of Opportunity: Making the Case for a More Systematic Union, 46 CRIMINOLOGY 1039 (2008); Graham C. Ousey, & Pamela Wilcox, Interactions Between Antisocial Propensity and Life-Course Varying Correlates of Delinquent Behavior: Differences by Method of Estimation and Implications for Theory, 45 CRIMINOLOGY 313 (2007); Pogarsky, supra note . Wright et al. finds, in contrast to Nagin and Paternoster’s prediction, that those with the most self-control are the least responsive to structural events. Another study, described in Elaine Eggleston Doherty, Self-Control, Social Bonds, and Desistance: A Test of Life-Course Interdependence, 44 CRIMINOLOGY 807 (2006), found no evidence of an interaction between social bonds and social control. The latter result could be explained by Doherty’s use of a sample of serious juvenile delinquents rather than a more heterogeneous general population sample.
183 Hay & Forrest, supra note .
This recognition brings identity theory to the forefront of theoretical discussions about exactly how desistance from crime takes place. The importance of identity theories from this perspective is that they provide an explanation for how fundamental individual characteristics, such as self-control, can change. Changes in identity can trigger fundamental shifts in how people value the future (time discounting), or value their social relationships. Simply saying that preferences change is easy; explaining the mechanism by which they change is both important and difficult. As described above, identity theorists like Giordano and her colleagues offer social psychological theories of desistance that revolve around exogenous structural breaks in the process that generate crime. While building on their work, we outlined a slightly different explanation focused on the idea of the possible self. This idea corresponds most closely to the idea of an endogenous break because it implies that the break occurs when a person reaches a certain level of propensity and decides that she wants to change. However, unlike a typical non-linear model, the process does not revert back to the original process when the level changes, but rather continues.

Testing for an identity theory using time series methods would need to begin by examining whether the data can be described as a time series with a structural break perhaps using the Quandt-Andrews test statistics for structural breaks. The Quandt-Andrews test would allow us to test for a structural break, and identify the most likely break point. The Quandt-Andrews test is based on a Chow test, which estimates a regression model on two subsamples and then uses an F-test to determine if the coefficients are different in the two models. The Quandt-Andrews test expands Chow by eliminating the need to know the correct break point. The approach involves conducting the test in all possible subsets, in effect searching for the “best possible” break point. Because this test involves a number of statistical tests, the standard chi-square distribution will lead to biased inferences. Donald Andrews developed the appropriate sampling distribution for the test, which is why the test is known as the Quandt-

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184 MARUNA, supra note; Farrall, supra note; Farrall & Maruna, supra note; Giordano et al., Gender, Crime, and Desistance, supra note; Maruna, supra note; Maruna & Roy, supra note.


Andrews' test. While such a test is beyond the scope of this paper, it could be implemented on the Cambridge data described in this section.

Analytically, we are interested in both the existence and timing of structural breaks in individual-level time series. Our identity theory is only plausible if there is empirical evidence in favor of structural breaks. And, assuming that there are structural breaks, the distribution of age at which the breaks occur would be an important fact that desistance theories would need to explain. For our identity theory, we would need to predict the timing of the structural break across individuals using our focus on the possible self. We would predict the arrival of the structural break to occur around times when an accumulation of negative life events leads to a realization and a structured attempt to create a change in the way an individual interacts with her world. It is unclear whether the data would support a detailed analysis of the nature of the structural break, but this type of analysis could distinguish between different versions of identity theory.

V. PARTING COMPANY WITH OTHERS

Before us, Laub and Sampson and Giordano, Cernkovich, and Rudolph have presented detailed and well known theories of criminal desistance. Although a comprehensive discussion of their work is beyond the scope of this paper, given their prominence in discussions of desistance within the field it is necessary to indicate briefly where our theory parts company from theirs so that one can more clearly see what our work adds to the debate.

With respect to the work of Laub and Sampson, the most direct statement we can make is that, in our theory, social identity and human agency play a far more important role in explaining desistance from crime. While it comes with some hazard to speak of criminal desistance
explanations as being either “structuration” theories (which account for desistance in terms of the social structures within which individuals live, such as jobs, marriages, or peer groups) or “human development” theories (which account for desistance in terms of human agency and choice), it is clear that different desistance theories place greater weight or emphasis on one or the other component. Our reading of their work is that Sampson and Laub take a distinctly structural position regarding why offenders cease committing crimes. Their view is that structural events such as good jobs, good marriages, reform school experiences, and military service reduce crime by limiting the opportunities to commit crime largely without the actor himself ever being aware of the fact that he is being changed. The image of the criminal actor they embody in their theory is one who does not intentionally create his own life or choose his own desistance and instead is one who responds or simply reacts to events that he finds himself in, but having had no or little part in creating. Although Laub and Sampson do include a consideration of human agency in their theory, it is clear that human agency plays a backseat to structural influences. There are two reasons we think this is true.

First, they give great prominence in their theory to something called “desistance by default,” which occurs when former offenders stop committing crimes not because they deliberately decide to “go straight” and intentionally change things in their lives, but simply because they find themselves in different circumstances and, as a result, stop committing crime. While it is no doubt true that this kind of accidental desistance may occasionally occur, as the passage below makes clear, Laub and Sampson make it not merely a possibility, but apparently something that occurs more often than not:

Our stance on the desistance process contrasts with emerging theories of desistance that emphasize cognitive transformations or identity shifts as necessary for desistance to occur . . . . We believe that most offenders desist in response to structural turning points that serve as the catalyst for long-term behavioral change. The image of “desistance by default” best fits the desistance process we found in our data. Desistance for our subjects was not necessarily a conscious or deliberate process, but rather the consequence of what Howard Becker calls side bets . . . . Many men made a commitment to go straight without even realizing it . . . . Our main point is that many of the desisters did not seek to make good—they simply desisted with little if any cognitive reflection on the matter.

192 LAUB & SAMPSON, supra note , at 145-49.
193 Id. at 278-79.
194 Id. (emphasis added).
For Laub and Sampson, the process of desistance that “best fits the data” is one in which former offenders do not deliberately seek to change themselves or their lives. There is very little of what we have described in our social identity theory as intentional self-change. Rather, in Laub and Sampson’s theory of desistance, offenders are changed by events that they have neither deliberately created nor apparently have control over.\(^{195}\) They react and respond but do not act or create. To us, this seems to give very little, if any, room for the operation of human agency. The difference between the image of the desisting criminal offender in their theory and ours and between their structural explanation of personal change and our identity explanation is perhaps nowhere made more evident than in a quote from Howard Becker that Laub and Sampson approvingly provide:

> A structural explanation of personal change has important implications for attempts to deliberately mold human behavior. In particular, it suggests that we need not try to develop deep and lasting interests, be they values or personality traits, in order to produce the behavior we want. It is enough to create situations which will coerce people into behaving as we want them to and then to create the conditions under which other rewards will become linked to continuing this behavior.\(^{196}\)

To Sampson and Laub, desistance is brought about when external events coerce former offenders into changing their behavior if not against their will then certainly against their knowledge and their active participation.\(^{197}\) In our view, the criminal offender at some point comes to the realization that an identity as a criminal offender is more costly than the possible self of a non-offender. The possible self of a non-offender provides a current offender with a specific and realistic route, roadmap, or strategy to take in order to realize that self, and steps that can be deliberately taken to change one’s life in a way consistent with that self. It is precisely this effort at intentional self change that we have described in this Article as evidence of human agency, and it is a fundamental

\(^{195}\) Id. at 148-49, 278-79.

\(^{196}\) Id. at 149 (emphasis added) (quoting Howard S. Becker, *Personal Change in Adult Life*, 27 Sociometry 40, 52-53 (1964)).

\(^{197}\) We must admit that Laub and Sampson have not been completely consistent on this point. Elsewhere in their book and other writings, they seem to imply that human agency does play an important role in their theory: “For a number of our formerly delinquent men, personal agency looms large in the processes of persistence and desistance from crime.” *Laub & Sampson*, supra note, at 280. Perhaps the “number” is a small number compared with those who desisted without ever realizing it? Ultimately we are convinced that a theory of desistance cannot give an “important role” or “prominence” to both human agency and desistance by default. In addition, their view that structural factors can coerce humans to behave in appropriate ways is inconsistent with any identity theory of desistance such as ours, or even one based on the kinds of cognitive transformations described by Giordano et al., *Gender, Crime, and Desistance*, supra note.
component in the process of criminal desistance. For us, actors deliberately create change; they are not coerced into it by external structural events.

Second, this belief that offenders can be coerced to behave in ways that we (but not necessarily they) want them to is consistent with the process through which Laub and Sampson argue that structural factors work. Following Michael Gottfredson and Travis Hirschi, we can think of structural events like marriage and securing a good job as leading to desistance because they reduce the propensity to commit crime (criminality) or its opportunity (crime).\textsuperscript{198} To us, a change in one's identity, the assumption of a possible self that is non-offending and conventional, results in a change in criminal propensity. One who has undergone an identity change is, therefore, a different kind of person. When asked why things like good marriages and stable jobs reduce crime, Laub and Sampson argue that they work not principally because they reduce criminality or the individual’s propensity to commit crime, but because they reduce the opportunity to commit a crime.\textsuperscript{199} In discussing what they refer to as their “revised” aged-graded informal social control theory, they state that institutions like marriage, employment, and the military influence desistance from crime for one of four reasons: (1) they “knife off” the past from the present; (2) they provide greater supervision and monitoring of the person and provide new sources of social control and “growth”; (3) they change and structure routine activities; and (4) they provide for identity transformation.\textsuperscript{200} It seems quite clear that the first three mechanisms facilitate desistance by reducing the opportunity for crime, while only the last provides for a change in propensity.

Further, although they state that they believe that a good marriage changes both the opportunity and propensity for crime,\textsuperscript{201} they also seem to have abandoned the metaphor of a good marriage as a “turning point.”\textsuperscript{202}

\textsuperscript{198} \textsc{Gottfredson \& Hirschi}, supra note , at 85-120.
\textsuperscript{199} \textsc{Laub \& Sampson}, supra note ; \textsc{Sampson \& Laub, General Age-Graded Theory}, supra note ; \textsc{Sampson \& Laub, Life-Course View}, supra note ; \textsc{Sampson \& Laub, When Prediction Fails}, supra note ; \textsc{Sampson et al.}, supra note .
\textsuperscript{200} \textsc{Laub \& Sampson}, supra note , at 148-49, 278-79; \textsc{Sampson et al.}, supra note , at 324.
\textsuperscript{201} \textsc{Sampson \& Laub, When Prediction Fails}, supra note , at 74.
\textsuperscript{202} See \textsc{Sampson \& Laub, Life-Course View}, supra note ; \textsc{Robert J. Sampson et al., Does Marriage Reduce Crime? A Counter-Factual Approach to Within-Individual Causal Effects, 44 Criminology 465 (2006)}. With respect to the former, Sampson and Laub argue, “[W]e believe that marriage has an effect on both propensity and events or opportunities to offend.” \textsc{Sampson \& Laub, Life-Course View}, supra note , at 74. While they are clear with respect to how marriage changes opportunity, they are not with respect to how it changes propensity, except that it does not change a person’s identity. With respect to the latter, they have written that
Marriage does not seem to produce a long-term change in behavior (that is, it does not fundamentally change the person by affecting their propensity to crime), but inhibits crime only while someone is “in the state of marriage.” The “marriage effect” disappears when one is out of this state. In other words, marriage changes crime but not criminality. We think we have outlined a theory of desistance that is clear in the implication that while certainly opportunities for some kinds of crime diminish over time, other opportunities abound and that the explanatory weight for any theory of desistance must rest upon explaining how criminal propensity may change over time.

Giordano, Cernkovich, and Rudolph have constructed a theory of criminal desistance that relies heavily on symbolic interactionism and the “cognitive transformations” that former offenders must undergo before ceasing crime. As such, it is less structural than Sampson and Laub’s. Giordano, Cernkovich, and Rudolph’s central idea is that structural changes in the lives of offenders, such as changes in marital partners and jobs, are insufficient to explain desistance from crime. What must first occur, they argue, is a “cognitive shift” or transformation in the minds of the offenders which takes place as they begin to make initial movements toward a
different, more conventional, way of life.\textsuperscript{208} These cognitive transformations, which may include a change in identity and felt preferences for crime, enable the actor to actively pursue behaviors that lead to greater conventionality.\textsuperscript{209} Cognitive transformations (or lack thereof) also explain why change can occur in the absence of structural supports for change, and why some who have prosocial structural supports for change fail to take advantage of them.\textsuperscript{210} There are four basic types of cognitive transformations in Giordano, Cernkovich, and Rudolph’s scheme: (1) the actor becomes more open to change; (2) the actor sees greater opportunities or “hooks” for change in their social environment; (3) the actor envisions a “replacement self,” a new identity that is perceived to be incompatible with criminality; or (4) the actor views criminal behavior in an entirely different light.\textsuperscript{211} They clearly argue that their theory is “not fundamentally incompatible with” a more structural approach, such as Sampson and Laub’s, which emphasizes the changing potential of marriages and jobs, but simply is a conceptual explanation of the “up front” cognitive work that takes place before structural factors come into play.\textsuperscript{212}

This cognitive transformation theory of criminal desistance shares some important common ground with our own. First, they, like us, place great emphasis on the role of the actor as human agent in creating change in his life rather than merely reacting to structural events.\textsuperscript{213} We view identity change via a conventional possible self as the critical “up front” work offenders need to undergo before change in behavior can occur. Our notion of identity change and the replacement self is clearly part of what Giordano et al. mean by a cognitive transformation via the “replacement self.” While structural changes are critically important in maintaining identity change in both theories, the most important causal factor is the actor herself. We would agree with their observation that “our emphasis on cognitions and human agency necessarily draws attention to the individual.”\textsuperscript{214} In our theory and theirs, then, the individual is required to undergo some fundamental change of self (who one is, how one thinks, and how one behaves), and it is this change of identity (our theory) or cognitive transformation (their theory) which leads the person to change his life by, for example, finding a job, marrying a conventional person, or finding conventional peers.

\textsuperscript{208} \textit{Id.} at 1002-03.
\textsuperscript{209} \textit{Id.} at 1055.
\textsuperscript{210} \textit{Id.} at 1000-04.
\textsuperscript{211} \textit{Id.} at 1000-03.
\textsuperscript{212} \textit{Id.} at 991-92.
\textsuperscript{213} \textit{Id.} at 992-93.
\textsuperscript{214} \textit{Id.} at 1003.
Second, cessation from crime is more likely if the identity change or cognitive transformation is not simply a self-enhancing, “I want to be a better person” kind of change, but one that comes with a specific and realistic strategy for change. In Giordano et al.’s discussion of prison and treatment as a hook for change, they alluded to the fact that treatment programs can assist in the transformation process to the extent that they provide a specific “cognitive blueprint” as to exactly how one goes about changing oneself.215 This is very similar to the role of the self-regulating component of the possible self in our theory. Both the replacement self and the cognitive blueprint it can provide are instrumental in making change take place.

Although compatible with Giordano et al.’s theory of cognitive transformation at many points, there is at least one fundamental difference between our theory and theirs: the generality of our theories. We have argued that a change in identity from a criminal offender to a non-offender is a process that everyone who successfully desists from crime must undergo. Unless there is a change in identity, an understanding of a possible self as a non-offender, then the kinds of structural supports for change (a conventional job and a new social network) are unlikely to be created, and ultimately desistance from crime will not occur. Giordano et al. have argued that the cognitive transformations they talk about are only applicable in a limited range.216 Their position is that cognitive transformations only play an important role in criminal desistance in the mid-range of structural opportunities for change.217 When the offender lives in a social environment of extreme disadvantage or an environment of relatively great advantage, the cognitive transformations they describe do not matter.218 Cognitive transformations are unlikely to be enough for change to occur under conditions of great deprivation and are not necessary when there are abundant structural advantages.219 We respectfully disagree. Though the number of places at which there may be failure increases in an environment of deprivation, identity change is still necessary. Whether social supports for a change in one’s behavior from criminal to non-offender are meager or abundant, they will not likely be perceived nor taken advantage of unless the foundation of social identity change we have described has first occurred.

Finally, although there are important points of convergence between our views and those of Giordano et al., she and her colleagues have taken a

215 Id. at 1033-34.
216 Id. at 1026-27.
217 Id.
218 Id.
219 Id.
different direction in their more recent work. In a 2007 paper, Giordano et al. presented a theory of desistance which seems to move clearly away from the cognitive and individualist position taken in the earlier theory toward one which places great weight on social processes, particularly the social origins of emotional states and the way a revisiting of emotional issues can lead to desisting from crime.

VI. CONCLUSION

In this paper we have outlined a theory of criminal desistance that is anchored in notions of identity and human agency. Our theory builds both upon the important work of others before us that have directly addressed the issue of desistance from crime and on an integration of such diverse fields as social and cognitive psychology, behavioral economics, and the sociology of collective movements. We have used this prior work to construct an identity theory of desistance that complements existing work, but also raises challenges and plots new areas of theoretical development and research.

One of the theoretical areas in need of further development is how conventional opportunities arrive for those wishing to leave crime. While most theories of desistance agree that conventional institutions such as marriages, jobs, and non-criminal social networks are important, there is much less agreement as to how offenders come upon such opportunities. One of the most intellectually dominant theories in the field of desistance, Laub and Sampson’s age-graded theory of informal social control, essentially hypothesizes that the arrival of key events in the process of leading someone away from crime are exogenous. Our view is decidedly influenced more by the conceptual framework of Giordano et al., who have suggested that “turning points” like conventional jobs and marriages do not arrive at random but require much initial “up front” work on the part of the offender who wants to quit. In fact, the theoretical argument outlined here is a theory of what such “up front” work entails, and how it leads to conventional opportunities. Rather than focusing on the importance of “turning points,” then, we move attention backward to a consideration of things like the “crystallization of discontent” which provides the motivation for a change in one’s identity.

220 Id.
221 Giordano et al., Emotions and Crime, supra note .
222 E.g., MARUNA, supra note ; SHOVER, supra note ; WARR, supra note ; Farrall, supra note ; Giordano et al., When Prediction Fails, supra note .
223 LAUB & SAMPSON, supra note .
224 Giordano et al., Gender, Crime, and Desistance, supra note .
225 See BAUMEISTER, supra note and accompanying text.
Another area of important conceptual and theoretical development is the role of human agency in desistance from crime. Laub and Sampson have suggested that a non-trivial proportion of desistance comes about almost without the effort of the person, so-called desistance by default, or comes about almost against their will.\textsuperscript{226} The theory of identity change outlined here does not imply that conventional institutions change people but that desistance from crime is an intentional act of self-change which is only later strengthened by structural realignments. Desistance comes about when persons are dissatisfied with their working self as a criminal offender and the preferences that are aligned with that identity and actively do something about it. In our theory, once the decision to change one’s self is made, persons intentionally seek out conventional institutions like legitimate jobs, stable marriages, and more conventional social networks. Agency plays a fundamental role in our identity theory, and we here note that criminologists need to begin to directly address the conceptual questions about human agency such as exactly what agency is, what its dimensions are, and how human agency can be operationalized.

Finally, we want to raise some analytical challenges for desistance work. We have argued that our theory of desistance from crime can be empirically tested by research along two tracks. One track is conventional survey research based upon intensive interviews with ex-offenders. From them we can gather information about working and possible selves, any noticeable changes in identity, preferences, and social networks, and whether such changes were preceded by a linking of perceived failures or what we have called here the crystallization of discontent. With conventional methodological tools like the life event calendar, researchers can begin to link the subjective and objective experiences of ex-offenders and piece together the importance of both types in the desistance process.

We have also, however, suggested that much could be learned about desistance by examining individual-level time series offending data. Criminologists are quite comfortable thinking about time series with aggregate data but desistance can be captured with an individual time series data.

\textsuperscript{226} Laub and Sampson argued that “we believe that most offenders desist in response to structurally induced turning points that serve as the catalyst for sustaining long-term behavioral change.” LAUB & SAMPSON, supra note , at 149. In the very next sentence, they approvingly quote Howard Becker that

\begin{quote}
[a] structural explanation of personal change has implications for attempts to deliberately mold human behavior. In particular, it suggests that we need not try to develop deep and lasting interests, be they values or personality traits, in order to produce the behavior we want. It is enough to create situations which will \textit{coerce} people into behaving as we want them to and then to create the conditions under which other rewards will become linked to continuing this behavior.
\end{quote}

\textit{Id.} (emphasis added) (quoting Becker, supra note , at 53).
of offending over a long period of time. Specifically, using offending data that cover some forty years from individuals in the Cambridge Study in Delinquency Development, we have illustrated that some important insights can be gained about desistance from such individual time series. For example, a non-stationary time series that can be described as a random walk would be compatible with Laub and Sampson’s characterization of the desistance process as largely the result of a series of random events or exogenous shocks. A non-stationary time series characterized by a structural break where different causal factors have different impacts on offending before and after the structural break would be friendly with our identity theory of desistance. In fact, one way to think of the identity theory described in this paper is as a theory of structural breaks. It argues that identity changes initiate other changes such as shifts in preferences and social realignments that reorder the importance of or weight attributed to causal factors before and after the structural break. An examination of individual level time series data (such as that illustrated above) therefore can shed light on different theoretical models of how desistance comes about.

As can be surmised, theorizing and research about desistance from crime is one of the most exciting, vibrant, and dynamic areas in criminology today. It is doubtful that a paper such as this could have been written without a great deal of superb previous work which provided the stimulus and the foundation for our own efforts today. Within this intellectual context, we simply wish to both complement this previous work and hopefully challenge criminologists to address some of the issues about criminal desistance we have raised. While great strides have been made in understanding why persons quit crime, there is still much that we do not know.

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227 Id.
228 We sincerely thank one of the anonymous reviewers for reminding us of this very important fact.