

Edgework: A Social Psychological Analysis of Voluntary Risk Taking

Stephen Lyng

The American Journal of Sociology, Vol. 95, No. 4 (Jan., 1990), 851-886.

Stable URL:

<http://links.jstor.org/sici?sici=0002-9602%28199001%2995%3A4%3C851%3AEASPAO%3E2.0.CO%3B2-T>

The American Journal of Sociology is currently published by The University of Chicago Press.

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/about/terms.html>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/journals/ucpress.html>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is an independent not-for-profit organization dedicated to creating and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact jstor-info@umich.edu.



Edgework: A Social Psychological Analysis of Voluntary Risk Taking¹

Stephen Lyng

Virginia Commonwealth University

Voluntary risk taking is an activity that attracts a sizable number of people in American society but has been largely ignored by sociologists. A literature review is presented that points to a number of shortcomings in existing studies, most of which are associated with the psychological reductionism that predominates in this area of study. An effort is made to provide a sociological account of voluntary risk taking by (1) introducing a new classifying concept—edgework—based on numerous themes emerging from primary and secondary data on risk taking and (2) explaining edgework in terms of the newly emerging social psychological perspective produced from the synthesis of the Marxian and Meadian frameworks. The concept of edgework highlights the most sociologically relevant features of voluntary risk taking, while the Marx and Mead synthesis offers a framework for tracing the connections between various aspects of risk-taking behavior and structural characteristics of modern American society at both the micro and macro levels. This approach ties together such factors as political economic variables, at one end of the continuum, and individual sensations and feelings, at the other end.

Among the many paradoxes of the modern age, one that has been the focus of much attention recently from the American media is particularly puzzling. While there seems to be general agreement among members of contemporary American society about the value of reducing threats to individual well-being, there are many who actively seek experiences that

¹ I am deeply indebted to several people who contributed to various stages of this project: I thank Jeff Ferrell, Ken Adams, Gideon Sjöberg, and David Snow for their contributions to the initial formulation of my ideas on this subject; and George and Sharon Gmelch, David Franks, David Bromley, and several anonymous reviewers for *AJS* for their critical comments on various drafts of this paper. Special thanks go to Al Coovert for teaching me the true character of edgework and for helping me to see the variety of its forms. Requests for reprints should be sent to Stephen Lyng, Department of Sociology and Anthropology, Virginia Commonwealth University, Richmond, Virginia 23284.

involve a high potential for personal injury or death.² High-risk sports such as hang gliding, skydiving, scuba diving, rock climbing, and the like have enjoyed unprecedented growth in the past several decades even as political institutions in Western societies have sought to reduce the risks of injury in the workplace and elsewhere. The contradiction in American society between the public agenda to reduce the risk of injury and death and the private agenda to increase such risks deserves the attention of sociologists.

In looking for social scientific literature that bears on this issue, one is naturally drawn to the field of risk analysis. An examination of this body of research reveals much work dealing with the assessment and management of technological and natural hazards but a complete absence of research on voluntary risk-taking behavior. As one authority on risk analysis notes (Heimer 1988), this problem is due, in part, to the dominance of a psychological model of risk taking that views anticipated rewards as the primary motivation for risk-taking behavior (cf. Kahneman, Slovic, and Tversky 1982). This approach, however, cannot be reconciled with one of the principal features of voluntary risk taking—the fact that some people place a higher value on the *experience* of risk taking than they do on achieving the final ends of the risky undertaking. In another line of criticism, James Short (1984) complains that the focus of research in risk analysis has been so narrow as to exclude even the “bottom line” issue of the field, that is, determining what makes risks acceptable. I support his call for a more expansive approach and further suggest that attention be directed to an even more puzzling issue—the problem of what makes risk taking *necessary* for the well-being of some people.

Although voluntary risk taking has been ignored by students of risk analysis and sociologists generally, a literature on this subject does exist. A diverse group of social and behavioral scientists has attempted in earlier decades to explain the phenomenon. No one, however, has provided a thoroughly sociological explanation—an account that would explain high-risk behavior in terms of a socially constituted self in a historically

² A recent cover story in *Time* magazine (Skow 1983) is indicative of the increased media attention to dangerous sports and daring exploits in the past decade. Another example of the recent interest in voluntary risk taking is its celebration in the popular culture. The catchphrase of the 1980s seems to be the exhortation to “go for it.” The merits of actively seeking high-risk situations appear as a dominant theme in many pop cultural domains as well. In popular music, a high-energy, “take it to the limit” style is dominant. And in television programming and advertising, series characters and the users of advertised products are often engaged in some exciting, high-risk endeavor. Finally, the movie industry has also played a significant role in giving expression to this theme; witness the success in recent years of the *Indiana Jones* and similar movies.

specific social environment. The aim of this paper is to provide such an account.

EXISTING MODELS OF HIGH-RISK BEHAVIOR

An examination of the existing literature on risk-taking and thrill-seeking behavior reveals two major analytical frameworks. For the sake of convenience, I will refer to these two approaches as the “personality predisposition” model and the “intrinsic motivation” model. The former approach, which emerged out of the earliest efforts to explain voluntary risk taking, is rooted in the presupposition that the propensity to engage in risky activities defines two polar personality types: those who value and actively seek high-risk experiences versus those who fear and shy away from such experiences. The principal thrust of this early literature is to introduce unique classifying terms for the two modal types: the “narcissistic” versus the “anaclitic” (Freud 1925), the “extrovert” versus the “introvert” (Jung 1924), the “schizoid” versus the “cycloid” (Kretschmer 1936), the “counterphobic” versus the “phobic” (Fenichel 1939), and the “philobatic” versus the “ocnophilic” (Balint 1959). More recent contributors to this approach tend to designate only one of the personality types involved—the type that values risk taking. The terms “stress-seekers” (Klausner 1968), “sensation-seekers” (Zucherman et al. 1964), and “eudaemonists” (Bernard 1968) have been used to refer to this latter type. The main shortcoming of this work is its failure to provide a causal explanation of voluntary risk taking. It is assumed that risk takers are predisposed toward this kind of behavior, but no account of the ontogenetic basis of such a personality predisposition is provided.³

In contrast, the intrinsic motivation approach does offer a causal account of high-risk behavior. Scholars working within this tradition identify a wide range of physiological, psychological, and neurological factors that give rise to this kind of behavior. Stress seeking is viewed as a way to fulfill a need for arousal (Klausner 1968, p. 139) or for stimulation (Farberow 1980, p. 21), as a way to develop capacities for competent control over environmental objects (Klausner 1968, p. 156), as a form of tension-reduction behavior with addictive qualities related to the buildup of intoxicating stress hormones (Delk 1980, p. 400), and as “indirect self-destructive behavior” that functions as a defense mechanism against depression and despair (Achte 1980; Filstead 1980; Litman 1980).

What is missing in this literature, however, is an explanation of risk-taking behavior that focuses on the relationship between relevant psycho-

³ The only study within this tradition perhaps exempt from this criticism is Michael Balint’s (1959) analysis of the “philobatic/ocnophilic” continuum.

logical factors and the broader social historical context in which risk taking occurs. A few studies incorporate social variables into the analysis but always maintain a strict separation between the psychological and social realms. A case in point is Klausner's (1968) seminal study. After concluding that stress seeking is motivated by a "need for arousal," he shifts to an entirely different level of analysis to deal with the issues of the functional significance, social control, and legitimation of stress seeking. Similarly, Jesse Bernard (1968) analyzes class, age, sex, and cultural differences in stress seeking but excludes from her study any discussion of psychological variables.

It appears, then, that the study of high-risk behavior suffers from a theoretical problem that plagues much of social scientific study as a whole. At issue here is the seemingly irreconcilable nature of studies that focus on the psychological or interactional dimensions of a phenomenon and of those that examine the influence of macro-level social structural factors, a problem that has recently become the subject of much discussion in sociology (Alexander et al. 1987; Coleman 1985; Knorr-Cetina and Cicourel 1981; Giddens 1984). As we will see, a body of literature has emerged recently that not only offers some hope for rectifying the micro-macro problem but also provides some valuable theoretical insights for understanding risk taking.

Related to the micro-macro issue is a second difficulty with the existing studies of high-risk behavior. The psychologically reductionist emphasis on deep-seated "motive forces" rests on the assumption that risk taking is impelled by factors that are constant across time and space. Moreover, the operationalization of "intrinsic motives" is problematic since the attitudes and behaviors that could be used as indicators of the forces in question are the very attitudes and behaviors that require explanation.

In light of these concerns, I propose that an alternative social psychological theoretical framework be used to account for participation in high-risk behavior, one that conceptualizes the proximate causes of high-risk behavior in terms of general social psychological variables rather than idiosyncratic motives or personality characteristics. But to achieve this goal, we must first deal with a more fundamental conceptual issue. Despite the plethora of concepts about risk taking, those who would seek to apply a sociological perspective to this type of behavior confront a problem—the fact that none of the many existing concepts for classifying this kind of behavior can be easily integrated into the corpus of sociological theory. The study of personality types, intrinsic motive forces, and stress is clearly more central to the discipline of psychology than it is to sociology. Consequently, it would help to reclassify risk taking in a way that directs attention to some sociologically relevant features.

In the section that follows, I attempt to deal with this by introducing

the concept of “edgework” as a classifying category for voluntary risk taking. As I will show, this concept allows us to view high-risk behavior as involving, most fundamentally, the problem of negotiating the boundary between chaos and order. Since order versus disorder is a central issue for most general sociological theories, conceptualizing high-risk behavior as edgework places this type of behavior squarely in the center of theoretical discourse in sociology.

After presenting both primary and secondary data on risk taking and organizing these data in terms of the concept of edgework, I next propose an alternative framework to account for participation in edgework. This account focuses on two forms of social determination—factors internal to the individual and the external social environment of edgeworkers. In this section, I refer primarily to a newly emerging body of literature that explores the fruitfulness of a synthesis between the sociologies of Karl Marx and George H. Mead.

THE CONCEPT OF EDGEWORK

The idea of edgework is the product of several diverse influences. The term itself is borrowed from the journalist Hunter S. Thompson, who has used it to describe a variety of anarchic human experiences, the most infamous being his experimentation with drugs. Thompson’s journalistic accounts of many different types of edgework give powerful expression to the essential character of this experience. Indeed, negotiating the boundary between life and death, consciousness and unconsciousness, and sanity and insanity is a central theme in Thompson’s work (1971, 1979).

The first effort to analyze edgework within a social scientific framework was undertaken by Lyng and Snow (1986) in an earlier study. This project involved a five-year ethnographic study of a group of sky divers. As a “jump pilot” for a local skydiving center, I was able to gain access to the complex subculture of skydiving. Field research was conducted on the skydiving subculture with a combination of techniques including participant observation, semistructured interviews, and document analysis.

My status as jump pilot permitted me to collect participant-observational data on the world of skydiving. Because the jump pilot is responsible for transporting sky divers to jump altitude, he or she is able to observe all aspects of the core activity of the group. Also, the jump pilot’s special function in jumping activities gives him or her “insider” status, even though he or she may not be a sky diver. Thus, after the first year of study, I became sufficiently well integrated into the group to be included in most informal gatherings of sky divers outside of weekend jumping activities. Although it is always difficult to get sky divers to describe their feelings about the sport (see below), the more reflective mood that some-

times prevailed during these social gatherings yielded valuable data on the skydiving experience.

Thus, as jump pilot, I was able to observe the most intimate details of the group's activities. These observations were recorded in the form of field notes written up at the end of most weekends at the drop zone (an area approved by the FAA for parachute drops) and after many sky-diver social events. The accuracy of participant-observational data was also checked in intensive semistructured interviews with strategic respondents. In these interviews, which totaled scores of hours, respondents were asked to describe the experience of dealing with the various risks associated with the sport. Finally, to ensure the representativeness of the observational and interview data, I perused literature that circulated within the national skydiving network. Technical manuals (see, e.g., Works 1975) and related publications, as well as many issues of *Parachutist* magazine, were examined for information that would help identify the social psychological factors that lead people to participate in a high-risk sport like skydiving. All the findings emerging from interviews and document analysis were double-checked with additional firsthand observations I made in my dual role as jump pilot and novice sky diver.⁴

As noted in the earlier study, some of the features that define the edgework concept were delineated by a specific "vocabulary of motive" employed by the sky divers. Although this was just one of three separate motivational perspectives used at different times by the group, I eventually came to regard the edgework perspective as theoretically useful for understanding risk taking in general. This view emerged from my examination of various accounts of high-risk activities, ranging from other thrill sports (downhill skiing, car racing, etc.) to wartime combat situations and business entrepreneurship. These accounts are astonishingly similar to the descriptions provided by the respondents in my study. Indeed, the common patterns seem to point to a nomothetic potential for the concept of edgework.

Because of my personal access to a body of rich primary data on the sport of skydiving, I have chosen to focus on this sport as the principal substantive illustration of the edgework concept. But I also make use of illustrative material from sources dealing with other types of high-risk activities in order to demonstrate the wider application of the concept.⁵

⁴ The author completed a parachute training course and made a number of jumps during the period of study.

⁵ A representative sampling of the secondary sources used in this part of the study include the following: aircraft test piloting (Wolfe 1979; Thompson 1979), mountain climbing (Mitchell 1983), combat soldiering (Marshall 1968), prostitution (James 1980), drug use (Thompson 1971, 1979), gambling (Kusyszyn 1980), scuba diving

Emerging from these data are empirical patterns that can be organized into three separate categories: (1) the kinds of activities that qualify as edgework, (2) the specific individual characteristics and capacities that are relevant to the edgework experience, and (3) the subjective sensations associated with participation in edgework. Discussing edgework in terms of the first dimension demonstrates the broad scope of the concept while directing attention to the features common to all forms of edgework. Focusing on the second dimension helps to identify the individual-level factors that reflect most clearly the macrostructural determinants of the edgework pattern. And, finally, the third dimension is concerned with empirical patterns belonging to perhaps the most "private" level of individual experience. The consistency of these private experiences across various forms of edgework lends support to the claimed validity of the edgework concept.

Edgework Activities

Activities that can be subsumed under the edgework concept have one central feature in common: they all involve a clearly observable threat to one's physical or mental well-being or one's sense of an ordered existence. The archetypical edgework experience is one in which the individual's failure to meet the challenge at hand will result in death or, at the very least, debilitating injury. This type of edgework is best illustrated by such dangerous sports as skydiving, hang gliding, rock climbing, motorcycle racing/car racing, and downhill ski racing or by such dangerous occupations as fire fighting, test piloting, combat soldiering, movie stunt work, and police work. The threat of death or injury is ever-present in such activities, although participants often claim that only those "who don't know what they're doing" are at risk.

While such death-defying activities are the quintessential form of edgework, the concept has much wider application. The "edge," or boundary line, confronted by the edgeworker can be defined in many different ways: life versus death, consciousness versus unconsciousness, sanity versus insanity, an ordered sense of self and environment versus a disordered self and environment. This more general definition of the edge is consistent with Hunter Thompson's conceptualization of certain kinds of drug use as edgework. Alcohol users who engage in binge drinking negotiate the line between consciousness and unconsciousness, while the

(Blau 1980), rock climbing (Fawcett 1987), ice climbing (Lowe 1987), auto racing (Wilkinson 1973), motorcycle racing (*Cycle* 1985–88), endurance sports (Gross 1986), downhill skiing (Loudis et al. 1986), and criminal behavior (Toch 1980).

use of hallucinogenic drugs may push one over the line separating an ordered from a disordered sense of self and environment. Thompson establishes an explicit link between the latter form of edgework and the life-and-death variety in the following interview statement:

PLAYBOY: Do you believe religious things about drugs?

THOMPSON: No I never have. That's my main argument with the drug culture. I've never believed in that guru trip; you know, God, nirvana, that kind of oppressive, hipper-than-thou bullshit. I like to just gobble the stuff right out in the street and see what happens, take my chances, just stomp on my own accelerator. It's like getting on a racing bike and all of a sudden you're doing 120 miles per hour into a curve that has sand all over it and you think "Holy Jesus, here we go," and you lay it over till the pegs hit the street and metal starts to spark. If you're good enough, you can pull it out, but sometimes you end up in the emergency room with some bastard in a white suit sewing your scalp back on.

PLAYBOY: Is that what you call "edgework"?

THOMPSON: Well, that's one aspect of it, I guess—in that you have to be good when you take nasty risks, or you'll lose it, and then you're in serious trouble. [*Playboy* 1974, p. 78]

Another form of edgework sometimes associated with excessive drug use involves negotiating the boundary between sanity and insanity. This boundary line can be reached through other means as well—for example, when some "workaholics" seek to push themselves to the very limits of sanity.

In abstract terms, edgework is best understood as an approach to the boundary between order and disorder, form and formlessness. As we will see shortly, edgeworkers typically seek to define the limits of performance for a particular object or form. One category of edgework involves efforts to discover the performance limits of certain types of technology, as when test pilots take their airplanes "to the outside of the envelope" (i.e., pushing it to its aerodynamic limits) or when race-car drivers push their cars to their mechanical limits. Another category consists of testing the limits of body or mind, as illustrated by marathon runners attempting to discover their physical limits or artists endeavoring to realize their creative potential through intense work schedules. In many cases, edgeworkers explore the performance limits of both themselves and a material form; with the increasingly sophisticated nature of modern technology, individuals must sometimes push themselves to the outer limits of human performance in order to reach the performance limits of the technology under their control.

Edgework Skills

Another common feature of the activities I have classified as edgework is that they all involve the use of specific individual capacities. One such

capacity has already been identified: the exercise of the particular skills required to discover the performance limits of a piece of technology or other form. Indeed, edgeworkers regard the opportunity for the development and use of skills as the most valuable aspect of the experience. Sky divers are typically very preoccupied with their own and others' skills in the art of flying one's body in free-fall, and the status hierarchy in the group tends to center on this characteristic. Edgework in drug use can also involve skilled performance, as revealed in Hunter Thompson's statement that "you have to be good when you take nasty risks, or you'll lose it, and then you're in serious trouble."

Of course, the emphasis on skilled performance is not, in and of itself, unique to high-risk activities. People who devote leisure time to such activities as home improvement and fishing do so in part because these activities allow for the development and use of various skills. But edgeworkers claim to possess a special ability, one that transcends activity-specific skills such as those needed for driving a car, riding a motorcycle, and flying an airplane or one's body in free-fall. This unique skill, which applies to all types of edgework, is the ability to maintain control over a situation that verges on complete chaos, a situation most people would regard as entirely uncontrollable. The more specific aptitudes required for this type of competence involve the ability to avoid being paralyzed by fear and the capacity to focus one's attention and actions on what is most crucial for survival. Thus, most edgeworkers regard this general skill as essentially cognitive in nature, and they often refer to it as a special form of "mental toughness." This view is especially prominent among those who participate in more athletic forms of edgework (endurance running, etc.).

In surveying various forms of edgework, I found that many participants regard this special "survival capacity" as an *innate* ability. They find support for this belief in the instinct-like character of edgework action—the fact that people respond automatically without thinking. A related and somewhat ironic presupposition about the capacity is revealed in Tom Wolfe's (1979) ethnography of the test-pilot subculture. Wolfe describes an interesting tautology that pilots employ for determining who possesses "the right stuff," that is, the basic survival instinct under discussion here. Because they believe that having this capacity will insure against accidents, a fatal crash by one of their comrades is taken as direct evidence that he or she never possessed "the right stuff" in the first place. I have observed a similar attitude on the part of sky divers. When people are killed or injured in skydiving accidents, it does not suggest to them that some risks in the sport are beyond anyone's ability to manage; it merely indicates that not everyone involved in skydiving possesses the innate survival capacity.

Such beliefs are associated with an elitist orientation among some edgeworkers who maintain that these innate edgeworking capacities are possessed by only a select few and who often feel a powerful solidarity with one another based on their perceived elite status. In some cases, this solidarity transcends the boundaries of interpersonal networks so that even people who practice very different forms of edgework regard one another as members of the same select group. A logical consequence of this belief is the notion that a demonstrable capacity for "crowding the edge" in one domain is evidence of one's ability to handle other forms of edgework. In accordance with this belief, individuals accomplished in one type of edgework often try their hands at other types as well.⁶

Edgework Sensations

Although different types of edgework do not produce precisely the same sensations, the primary and secondary data assembled for this study reveal a number of common themes. First, participants in virtually all types of edgework claim that the experience produces a sense of "self-realization," "self-actualization," or "self-determination." In the pure form of edgework, individuals experience themselves as instinctively acting entities, which leaves them with a purified and magnified sense of self. As one sky diver noted about his experience with a parachute malfunction, "I wasn't thinking at all—I just did what I had to do. It was the right thing to do too. And after it was over, I felt really alive and pure." In edgework, the ego is called forth in a dramatic way.

This sensation is also accompanied by a specific sequence of emotions. In those forms of edgework involving a threat of death or injury, the individual typically feels a significant degree of fear during the initial, anticipatory phases of the experience. This finding, which persists across many varieties of edgework, should dispel the popular stereotype of risk takers as fearless individuals. Even sky divers with thousands of jumps report being very nervous and fearful in the 15 or 20 minutes before reaching jump altitude (a finding corroborated by Klausner 1968). But as one moves to the final phases of the experience, fear gives way to a sense of exhilaration and omnipotence. Having survived the challenge, one feels capable of dealing with any threatening situation. This no doubt contributes to the elitest orientation of some edgework groups.

The edgework experience can also involve alterations in perception and

⁶ This pattern was especially prevalent among the group of sky divers observed in this study. Members of the group made explicit conceptual connections between skydiving and other high-risk activities such as high-speed motorcycle riding, hang gliding, drug use, etc. (see Lyng and Snow 1986).

consciousness. Participants in many different types of edgework report that, at the height of the experience (as they approach the edge), their perceptual field becomes highly focused: background factors recede from view, and their perception narrows to only those factors that immediately determine success or failure in negotiating the edge. In this state of mind, edgeworkers not only are oblivious to extraneous environmental factors, but they also lose their ability to gauge the passage of time in the usual fashion. Time may pass either much faster or slower than usual: sky divers experience 45 seconds of free-fall as an eternity, while rock climbers sense many hours on the cliffs as “just a few minutes.”

Focused perception also correlates with a sense of cognitive control over the essential “objects” in the environment or a feeling of identity with these objects. Edgeworkers sometimes speak of a feeling of “oneness” with the object or environment. For example, motorcycle racers and test pilots describe a feeling of “being one with their machines,” a state in which they feel capable of exercising mental control over the machines. Sky divers are particularly instructive on this point. In describing how to fly one’s body in free-fall, jumpers emphasize the need to “think” one’s way through space: “If you try to physically force your body into the correct configuration, you won’t be able to go where you want. You have to ‘think’ your way from point *A* to point *B*. It’s impossible to do this though unless you’ve reached a state of being completely comfortable with the air.”⁷

Another prominent theme is the sense of the edgework experience as a kind of “hyperreality.” Despite the out-of-the ordinary character of edgework, participants often describe the experience as being much more real than the circumstances of day-to-day existence. This view is expressed in a sky diver’s description of the various stages of a jump: “While we’re riding in the airplane on the way to jump altitude, I always feel scared and a little amazed that I’m fixing to do this bizarre thing—jump out of an airplane! But as soon as I exit the plane, it’s like stepping into another dimension. Suddenly everything seems very real and very correct. Free-fall is much more real than everyday existence.”

One last sensation that arises in edgework may appear to undermine my approach. Although the preceding discussion is based on a body of rich descriptive data reported by edgeworkers themselves, many edgework enthusiasts regard the experience as ineffable. They maintain that language simply cannot capture the essence of edgework and therefore see it as a waste of time to attempt to describe the experience. Indeed, some

⁷ This view has also received formal expression in a well-known skydiving handbook (Works 1975), whose author (p. 5) states that “relative work” is “done largely with one’s imagination.”

believe that talking about edgework should be avoided because it contaminates one's subjective appreciation of the experience. Fortunately, not all edgeworkers hold this view, as indicated by the growing body of primary data on this subject.⁸

The characteristics and sensations I have described obviously vary in intensity from one form of edgework to another. For instance, fear and the sensations associated with it are obviously more pronounced in the life-and-death circumstances of skydiving than they are in the consciousness-versus-unconsciousness edgework of excessive alcohol use. However, edgeworkers tend to search for more purified forms of edgework. Some achieve this goal by *artificially* increasing the risks, as when sky divers jump under the influence of drugs or when mountain climbers make an ascent without oxygen tanks. These patterns suggest another general principle of edgework—the commitment to get as close as possible to the edge without going over it.

Finally, it is important to discuss concepts relevant to voluntary risk taking that bear some resemblance to the notion of edgework. In an early essay on this subject, Erving Goffman conceptualizes risk-taking behavior as "action," which he defines as behavior that is consequential for the individual, that has problematic outcomes, and that is undertaken for its own sake (1967, p. 185). Goffman's empirical illustrations of the concept of action include many of the same activities I have classified as edgework: high-risk occupations and leisure activities, combat experience, drug use, and the like. The difference between edgework and action, however, can be found in the broader scope of Goffman's conceptualization, especially his inclusion of such activities as gambling and thrill seeking in his illustrative material. The data I have examined indicate that these latter activities are not properly classified as edgework.

Edgeworkers are not typically interested in thrill seeking or gambling because they dislike placing themselves in threatening situations involving circumstances they cannot control. Since amusement-park rides or similar activities involve placing one's fate in the hands of a ride operator of unknown competence, these activities are usually avoided. As indicated above, edgeworkers have high regard for their own abilities to deal with danger but low regard for the abilities of those outside edgework circles. Moreover, they feel equally uncomfortable when their well-being

⁸ It should be noted that the data collected in my study of the skydiving group were not easily acquired. In the early stages of the study, I was constantly frustrated in my attempt to get sky divers to talk about the jump experience. The typical response to my probing questions was, "If you want to know what it's like, then do it!" It was only after the respondents became convinced that I shared their commitment to edgework that they were willing to try to articulate their feelings about the experience.

is left to the whims of “fate.” Edgeworkers do not place much value on a pure gamble, no matter what the odds may be. What they seek is the chance to exercise skill in negotiating a challenge rather than turn their fate over to the roll of the dice.⁹

A second concept that has much in common with the edgework idea is Mihaly Csikszentmihalyi’s (1985, p. 491) notion of “flow,” which refers to a state of focused attention or deep concentration on a limited set of stimuli, accompanied by a distorted sense of time, a feeling of personal transcendence, and merging of the individual with the objects at hand. But while these characteristics bear an obvious resemblance to the edgework sensations discussed above, flow differs from edgework in some important ways. For instance, the structural parameters of the two experiences are fundamentally different: “Every conscious experience lies on a continuum ranging from boring sameness at one end to enjoyable diversity at the center and, finally, to anxiety-producing chaos at the further end. It is in the enjoyable middle regions of experience that one’s attention is fully effective. This optimal state of involvement with experience, or flow, is in contrast with the extremes of boredom and anxiety, which can be seen as states of alienated attention” (Csikszentmihalyi and Rochberg-Halton 1981, p. 185).

As we have seen, experiences belonging to the “enjoyable middle regions” cannot be classified as edgework since, by definition, edgework involves the extreme state referred to by these authors as “anxiety-producing chaos.” The different structural correlates of the two types of experience account for some differences in sensation as well. While the flow state produces a loss of self-consciousness (Csikszentmihalyi 1985, p. 491), edgework stimulates a heightened sense of self and a feeling of omnipotence, sensations described above as self-determination or self-actualization.

An examination of the similarities and differences between edgework and these other concepts suggests that they may each refer to different dimensions of the same general phenomenon. It appears that edgework activities represent a distinct subset of those activities that Goffman has classified as action. At both levels, people seem to experience elements of the flow phenomenon, a set of sensations that can characterize a broader range of activities, including some forms of play and certain types of work. Although it is beyond the scope of the present study to sort out the precise connections among these related concepts, this is an important matter for future research in this area.

⁹ Wolfe also finds this attitude prevalent among test pilots (1979, pp. 18–19).

A SOCIAL PSYCHOLOGICAL THEORY OF EDGEWORK

By directing attention to aspects of high-risk pursuits that have been overlooked in the past, the concept of edgework allows us to consider some of the important theoretical implications of the practice of risk seeking in modern American society. Conceiving of high-risk activities as edgework shifts the focus away from fear, arousal, and preoccupation with death and toward the spontaneous, anarchic, impulsive character of the experience. The data examined in this study suggest that these latter characteristics are the central features of voluntary risk taking.

An intriguing pattern emerges when we begin exploring the connections between edgework and the socioeconomic context in which it takes place. As a form of experiential anarchy, edgework seems to be the direct antithesis of role behavior in the institutional domain. While spontaneity and impulse predominate in edgework, constraint and normative control are central to role enactment. The differences between these two realms of experience seem to designate an important polarity in modern social life, one that has recently received the attention of sociologists.

In an essay dealing with the process of identity construction, Ralph Turner (1976) describes a polarity similar to the one under discussion here. He argues that the experiential locus of identity can vary between two polar extremes—an “institution” versus an “impulse” anchorage. A wide range of actions and feelings can be incorporated into an objective definition of self, but some recognize their “real” selves only in acts of volition, behavior that conforms to high social standards, or the pursuit of institutional goals. In contrast, others see their real selves revealed only in moments of uninhibited behavior, emotional outbursts, or spontaneous expression. While Turner allows that the average person probably possesses elements of both the institutional and impulsive anchorages, he suggests that there may be differences in the location of the self across the rural-urban continuum, class structure, and national cultures, and he offers the hypothesis that “over the past decades substantial shifts have occurred away from an institution and toward an impulse emphasis” (1976, p. 997).

While the experience of self is just one facet of edgework, Turner’s study helps to elucidate the central theoretical problem at issue here. Viewed within a social structural context, edgework seems to represent one end of a polarity resembling Turner’s institutional-impulsive distinction. This polarity, which is more general than Turner’s distinction and may subsume it, involves the opposition between “spontaneity” and “constraint.”

Although the spontaneity-constraint polarity has not been a central concern of existing sociological theories, a perspective has recently

emerged that focuses on this polarity as one of the primary dynamics of social life. This framework, which is the product of efforts to synthesize the theoretical models of Karl Marx and George Herbert Mead (Lichtman 1970; Blake 1976; Goff 1980; Batuik and Sacks 1981; Joas 1981; Schwalbe 1986), suggests that the opposition between spontaneity and constraint is at the heart of many important problems that confront members of modern postindustrial society. An exploration of the spontaneity-constraint dialectic holds the key to understanding why people pursue edgework.

The Marx-Mead model also has some other advantages as a framework for analyzing edgework. First, as a theory that incorporates both micro- and macro-level analysis, the Marx-Mead synthesis allows us to address a major shortcoming of previous studies—their failure to link causally the social and psychological dimensions of high-risk behavior. An emphasis on the character and ontogeny of spontaneity in human conduct at both the micro and macro levels is essential if we are to make sense of the anarchic elements of edgework. Second, applying the Marx-Mead framework to edgework would represent the first effort to provide a *critical* analysis of voluntary risk taking. The social context of stress seeking has been examined from both the functionalist and comparative perspectives (Klausner 1968; Bernard 1968), but there are no analyses of the relationship between political-economic variables and high-risk behavior.¹⁰ As a critical social psychological framework, the synthetic approach not only incorporates micro-level variables relevant to the analysis of edgework but also provides the conceptual foundation for a critical treatment of the broader system in which these variables operate. With these considerations in mind, let us now review the emerging literature on the Marx-Mead synthesis.

Marx and Mead: A Synthetic Framework

The literature dealing with Marx and Mead together tends to emphasize the various ways in which the work of these two theorists converges and diverges. The potential for a Marx-Mead synthesis lies not only in the fundamental convergences between the two perspectives but also in the claim by some scholars that the two systems diverge in a complementary rather than contradictory fashion. For instance, both Marx and Mead

¹⁰ Concepts from both the Marxian and Meadian traditions have been used in a previous study to analyze one type of high-risk activity—the sport of mountain climbing. Richard Mitchell (1983) employs a number of sociological concepts and perspectives to account for various aspects of the mountain-climbing experience but ignores the recent literature on the Marx-Mead synthesis.

assign priority to the role of human action in the ontogeny of self and society but differ on what forms of action deserve analytical attention, with Marx emphasizing survival behavior structured by macro-level economic forces and Mead focusing on social interaction at the micro level. Similarly, both theorists adopt a dialectical conception of the relationship between the individual and society, but while Marx sees “socially enjoined labor” in the mode of production as the mediating term between the two poles, Mead conceives of the dialectic entirely within the unit act (Blake 1976; Batuik and Sacks 1981). A particularly important link involves the “problem of consciousness,” with some scholars pointing to Mead’s interactional approach to meaning and self-consciousness as a logically consistent elaboration of Marx’s simple proposition that “consciousness is . . . from the beginning a social product” (Marx and Engels [1932] 1976, p. 49).

Among the various points of convergence and complementary divergence between the two systems, the one that is most relevant to the present study involves the dialectic between spontaneity and constraint. Therefore, I will devote more detailed attention to this issue in order to lay the theoretical groundwork for analyzing edgework within its social context.

Spontaneity and constraint.—The division of human experience into the categories of “spontaneous” and “constrained” action is one of the most important metatheoretical links between the Marxian and Meadian systems. This polarity is particularly central to Marx’s thinking. As Blake (1976) notes, this polar distinction is revealed in Marx’s analysis of the “life activity” involved in the creation of self: “In the course of historical development, and precisely through the fact that within the division of labour social relationships inevitably take on an independent existence, there appears a cleavage in the life of each individual, insofar as it is personal and insofar as it is determined by some branch of labour and the conditions pertaining to it” (Marx in Marx and Engels 1976, p. 87). Hence, the total self is constituted by both a spontaneous and a constrained self, with the character of each dimension reflecting the type of life activity that produces it.

In *The German Ideology*, Marx and Engels undertake a more detailed analysis of the various types of constraining factors that make up the “realm of necessity.” They identify the “primary historical relations” that arise as dialectically related stages in a progressive unfolding of human social potential (see Marx and Engels 1976, pp. 48–49). With the emergence of the most recent of these historical relations—the mode of production, social cooperation, and consciousness—a new historical dynamic is established. History is created through the interplay of the forces of production and the relations of production, leading to the transforma-

tion of socioeconomic systems through stages of internally driven dissolution and immanent growth.

Although central to his theoretical framework, spontaneous action is not described with the same detail that attends Marx's description of the constraints on human conduct. Simply put, spontaneous (creative) action is action that develops human powers, that broadens the range of our human capabilities. This kind of action appears phenomenally as "conscious," "purposive," "concentrated," "physically and mentally flexible," "social," "skillful," and "rational" (Ollman 1971, p. 120). As the "opposed but identical" side of constrained action, free action emerges only within a particular context of constraining structures. Therefore, spontaneous, free action can be fully described only by specifying the unique constraining conditions, which I discuss in some detail below.

For his part, Mead employs the metatheoretical concepts of spontaneity and constraint in his analysis of the formation and ongoing externalization of the self. Central to this analysis are the concepts of the "I" and the "me." The "me," which is the constrained dimension of the self, involves the "organized set of attitudes of others which one himself assumes" (Mead [1934] 1950, p. 175). Conscious interaction between self and environment is universally mediated by the organized set of attitudes of others that predisposes the individual to act in a prescribed manner within the social situation (Batuik and Sacks 1981, p. 214). Hence, the "me" can be thought of as the "voice of society" that is carried within the individual at all times, potentially shaping every act.

While the "me" involves the covert, interpretive phase of the social act, Mead's concept of the "I" refers to the actual response of the individual to this process of interpretation—the overt phase of the act. Thinking of the "I" and "me" in these terms instructs us about the temporal dimension of social action. The "me" is always rooted in expectations acquired in past interactions between self and other, and, therefore, "the 'me' can never fully anticipate the novelty of the present moment" (Batuik and Sacks 1981, p. 214). In contrast, the "I" exists only in the immediacy of the present moment. It has awareness of itself only as a memory image, only after it has been integrated into the "me." But the movement of the individual into the future is always undertaken by the "I" (Mead 1950, p. 177).

As the response of the individual to the attitudes of others, the "I" is the continually emerging, spontaneous, impulsive, and unpredictable part of the self. This part of the self possesses an ephemeral quality: "The 'I' is not a directly observable 'object.' . . . It is a theoretical construct, observable only through its effects" (Blake 1976, p. 133). The "I" is also the locus of creativity: "In the very temporal character of the social act itself . . . there is the opportunity for the creative action of an individual 'I'

which is exerted over and against the controlling influence of the social 'me'" (Batuik and Sacks 1981, p. 214). The creative potential of the "I" typically leads the individual to assign special significance to this realm of experience. As Mead notes: "The possibilities of the 'I' belong to that which is actually going on, taking place, and it is in some sense the most fascinating part of our experience. It is there that novelty arises, and it is there that our most important values are located. It is the realization in some sense of this self that we are continually seeking" ([1934] 1964, pp. 250–51). This latter feature is particularly important to the analysis of the empirical pattern I have designated as edgework.

In conceptualizing the *relationship* between spontaneity and constraint, Marx and Mead again adopt a common approach. Both theorists posit that spontaneous, free activity can occur only with constrained (necessary) activity as its basis. In addition to emphasizing the obvious point that free activity is possible only after people have provided themselves with the necessities of life—food, shelter, and clothing—Marx defines free action as that which leads to "the full development of human powers." At the most general level, human capacities are developed through interaction between human beings and their environment (designated by the term "activity"), which allows people to objectify their human powers in nature. A more specific form of activity that develops human potentials, however, is "work," or action that creates "use values." As the most demanding, skillful, and time-consuming of all human activities, work requires (under certain social conditions) the combined use of multiple human capacities. "According to Marx, the 'working up of objects' to satisfy man's material life purposes requires planning, skillful effort and concentration. We must have some notion of what we want beforehand, know how to make it, and be able to concentrate on its production. No other activity demands as much" (Ollman 1971, pp. 100–101).

Finally, Marx introduces the concept of "creativity" to distinguish between forms of work that extend human powers and those that do not.¹¹ As he carefully documents in his later studies (*Capital*), work under capitalism contributes very little to the development of human capabilities. Indeed, insofar as work in this system reduces the individual to an appendage of the machine, the process can be figuratively described as "dehumanizing." Free, spontaneous, creative activity arises only under

¹¹ In his exploration of the concepts of activity, work, and creativity, Marx employs the "relational" method of analysis (see Ollman 1971), in which he first establishes an identity among these three concepts (at some points using these terms interchangeably) and then later carefully distinguishes among them. This apparent inconsistency is a crucial analytical device: Marx uses each term to bring out "certain aspects of what is essentially the same interaction between man and nature" (Ollman 1971, p. 104).

structural conditions in which the “realm of necessity” (constrained action) assumes a historically unique character—when workers possess the power to organize the work process in a way that reflects their own human needs.

Adding further complexity to his conceptualization of the freedom-constraint dialectic, Marx also considers the role of community action in the genesis of spontaneity: “Only in community with others has each individual the means of cultivating his gifts in all directions; only in community, therefore, is personal freedom possible” (1976, p. 86). It is Mead, however, who teaches us the real significance of community for the emergence of free activity. For Mead, the possibility for creative, spontaneous activity is always found in the central, dialectical relation between the “I” and the “me.” In the earliest stages of development, the creative potential of the “I” cannot be fully realized because the “me” is only partially developed, reflecting at this point only the attitudes of specific individuals (“significant others”). However, as the individual matures and his or her range of interaction with others increases, he or she begins acquiring the attitudes of the “generalized other,” that is, the attitudes of the social community as a whole. With the emergence of this more fully developed “me,” the potential for creative action by the “I” is greatly enhanced.

Thus, Mead’s attention to the normative influence of community attitudes on individual action allows us to expand Marx’s proposition that creative action can occur only within a community context. True community, and the freedom it engenders, requires not only that the artificial barriers to the mutual involvement of people be torn down, particularly the barriers of class structure (Ollman 1971, p. 118); it also requires the fostering of those structural conditions that facilitate the formation of a “me” capable of taking the attitude of the entire social community (Batuik and Sacks 1981, p. 215).

The Marx-Mead Synthesis and Edgework

The Marx-Mead synthesis holds great promise as a framework for making sense of edgework. This approach directs critical attention to the divisions and separations of postindustrial society and the consequences of these divisions for the dialectic between spontaneity and constraint. Because society and the individual form a mutually determinant, interpenetrating relation, divisions within the social system associated with class conflict, alienation, and the consumption imperative have profound implications for individual experience. People who are denied the possibility of fully realizing their species nature through material production and who are so separated from their fellow community members that they

cannot live as part of a fully developed moral community do not possess the experiential resources needed for a unified definition of self. The paramount reality for the individual under these conditions then is a loss of ego. In the absence of a fully developed social self (involving not only "generalized attitudes" but also a broad range of social and economic roles), the ego fails to develop fully. The predominant sensation for the individual is one of being pushed through daily life by unidentifiable forces that rob one of true individual choice. This experience can be conceptualized as "oversocialization," defined as a "process in which the social world has become so reified that it becomes completely opaque to individual understanding and action" (Batuik and Sacks 1981, p. 210). A crucial problem for the present analysis is to consider the likely responses to oversocialization.

Borrowing from the "culture of narcissism" perspective (Lasch 1978), some contributors to the synthetic framework suggest that people do not always remain passive in the face of alienation and oversocialization. For many members of capitalist society, the central dynamic of day-to-day existence is an incessant search for self. This search can lead people in many different directions, but some avenues are more likely to be explored than others. For instance, the consumption imperative of the capitalist economy leads many people to the marketplace in the search for self and encourages the development of a consumer-oriented narcissism that rules the lives of many who have the material means to purchase identity-relevant goods.

Lasch's ideas are indeed compelling when examined in light of the "haute" consumerism and preoccupation with self that characterizes the "yuppies" of the 1980s, the signature group in American society during this decade. But people have no doubt articulated other ways of adapting to the structural conditions of alienation and reification. For instance, research on play (Huizinga 1950; Caillois 1961; Wilson 1981) suggests that this realm of human action often possesses characteristics that directly oppose the experience of people under conditions of alienation and reification. Play is characteristically spontaneous, impulsive, creative, and intrinsically rewarding and, for many people, gives rise to the "flow" experience (see Csikszentmihalyi 1981). Goffman focuses on a problem of greater interest here, that of risk taking in play. He notes that people experience focused attention and a heightened sense of reality and become more "unself-consciously engrossed" in games that offer uncertain outcomes and an opportunity for a sanctioned display of one's abilities (1961, p. 68).

Thus, for some, the dearth of possibilities for spontaneous and self-realizing action in the economic and bureaucratic spheres can be compensated for in the leisure-time pursuit of play, particularly those forms

of play that involve both risk and skill. As Stanley Aronowitz (1973, chap. 2) notes, the conditions of trivialized, degraded labor that prevail under capitalism lead many workers to view their labor as a purely instrumental activity—a means to upward mobility and commodity consumption rather than an end in itself. And since work offers none of the phenomenological experiences that define spontaneous, free activity, workers look to leisure time for experience that is self-determining and self-actualizing. People find in some leisure pursuits a requirement for the types of skills that have been systematically purged from the labor process under capitalist ownership and experience what they cannot in work—an opportunity for action that is conscious, purposive, concentrated, physically and mentally flexible, and skillful. In short, when the social context of constraint is distorted by separation, conflict, and contradiction, people often seek a substitute for spontaneous action in pursuits that offer some of the phenomenological characteristics of such action.

The edgework response.—There are several obvious reasons for placing edgework in the same theoretical category as Aronowitz's leisure activities. First, it is apparent that most of the activities I have classified as edgework are leisure pursuits for the vast majority of people involved in them. Few people earn their livings as sky divers, rock climbers, motorcycle racers, and such (although some try, and a celebrated minority succeed). Hence, edgework seems to be a desired choice—a way of fulfilling unmet needs—when people have the freedom to spend their time as they please. Second, it is also clear that edgework typically involves the use of specific skills. Edgeworkers tend to give high priority to the development and use of skills. Sky divers must develop the skill of flying their bodies in free-fall, and mountain climbers must be adept at using their climbing equipment. Even Hunter Thompson's practice of binge drug taking involves the highly developed skills of a veteran substance abuser, that is, knowing how much to ingest of a particular drug, what combinations of drugs are safe, and so on.

Thus, the emphasis on skills, so central to the types of leisure activities discussed by Aronowitz, is also a feature of edgework. But there is another dimension of skilled performance in edgework that distinguishes it from other skillful pursuits. Edgework involves not only activity-specific skills but also a general ability to maintain control of a situation that verges on total chaos. It is this ability that edgeworkers believe most determines success or failure in negotiating the edge, and the chance to exercise this "survival skill" seems to be what they value most.

One explanation for the edgeworker's sense of the survival capacity as an objectively demonstrable phenomenon emerges from work belonging to the psychological and microeconomics tradition of risk analysis (see Kahneman et al. 1982). Ellen Langer (1975) notes that, when factors

traditionally associated with skill situations (choice, familiarity, involvement, and competition) are introduced into chance settings, actors develop an "illusion of control"—that is, they behave as if they could exercise control over events that are actually chance determined. Moreover, the adoption of a skill orientation by actors engaged in chance-determined endeavors leaves them with a pronounced sense of their own competence: "Most social scientists agree that there is a motivation to master one's environment, and a complete mastery would include the ability to 'beat the odds,' that is, to control chance events. The more difficult a problem is, the more competent one feels in being able to solve it. The greatest satisfaction or feeling of competence would therefore result from being able to *control the seemingly uncontrollable*" (p. 323; emphasis added).

This calls attention to an interesting irony in the edgework experience. Unquestionably, success in negotiating the edge is, to a large extent, chance determined. Yet edgeworkers generally reject this notion, believing instead that one's survival skills ultimately determine the outcome. Thus, edgework may create more powerful feelings of competence than other types of skillful activities because it offers the right mix of skill and chance, a combination that maintains the illusion of controlling the seemingly uncontrollable. This would also explain edgeworkers' aversion to gambling. Since a pure gamble is an entirely chance-determined enterprise, it holds little attraction for edgeworkers because it offers no opportunity for exercising control over the outcome. In other words, gambling cannot provide the illusion of control that is a key feature of edgework.¹²

The illusion of control may also help to explain some of the characteristics that distinguish people who value edgework from those who have an aversion to it. My informal observations of various edgework groups generally corroborate the findings of others (see esp. Bernard 1968) that edgework is more common among young people than among older people and among males than among females. Although the characteristics of edgework give rise to an illusory sense of control over the fateful aspects of the endeavor, it is likely that age plays a role in its emergence as well. As many commonsense observers of young people are aware, adolescents often harbor an abiding sense of their own immortality. Thus, if the illusion of control allows edgework to appear less threatening than it actually is, then young adults are good candidates for edgework since they are particularly susceptible to this illusion.

This explanation could also be used to account for the sex specificity of edgework. Males are more likely than females to have an illusory sense of

¹² It should be acknowledged that many forms of gambling *do* involve highly developed skills such as calculating odds, executing bluffs, etc. These forms of gambling can be properly classified as edgework.

control over fateful endeavors because of the socialization pressures on males to develop a skill orientation toward their environment. Insofar as males are encouraged to use their skills to affect the outcome of all situations, even those that are almost entirely chance determined, they are likely to develop a distorted sense of their ability to control fateful circumstances (see Deaux and Emswiller 1974). Hence, edgework may attract more males than females because the male skill orientation may lead them to underestimate the risks involved.

The edgeworkers' belief in the survival instinct notion also highlights a crucial aspect of the relationship between edgework and the broader social structural characteristics of modern society. As several scholars have noted (e.g., Lasch 1978; Erikson 1976), increasing numbers of people in modern postindustrial society feel threatened, both physically and mentally, by forces entirely beyond their control, for example, threats posed by toxic chemicals in the environment, nuclear war, financial instability, the general instability of personal relationships, and so forth. Consequently, many people have developed an all-encompassing preoccupation with the idea of personal survival. What complicates matters for such people, though, is the overwhelmingly *reified* nature of modern society. People want to be "survivors," but they sense that their chances of surviving are determined by mysterious, capricious forces having little to do with the individual survival capacities they may possess.

By contrast, participants in edgework perceive that there is a direct link between survival capacities and the survival outcome. In one sense, this perception is accurate since one's ability to control fear, focus attention, and so forth is crucial to whether or not one can successfully negotiate the edge. At the same time, the illusion of control probably contributes to this perception as well. In any case, edgework is one of the few experiences in modern life where "success" (survival) can be unambiguously attributed to individual skill. Every successful instance of "crowding the edge" is regarded as empirical proof that one possesses the essential survival instinct (the "right stuff," as it were). And the evidence of this ability is offered immediately and straightforwardly; it has none of the ambiguity that attends one's efforts to respond to threats within the institutional order.

This orientation is at the root of another apparent paradox in edgework. It seems odd to suggest that people who feel threatened by external social forces beyond their control seek experiences that are even more threatening to their survival, but this is precisely the dynamic that operates in edgework. Langer's suggestion that the illusion of control may be the inverse of "learned helplessness" helps to explain this dynamic. "Learned helplessness is the perception of independence between actions and outcomes. It is the belief that one cannot influence the production of

positive events. Just as one may erroneously come to learn an independence between actions and outcomes, so too may one erroneously learn a dependence between actions and outcomes" (1975, p. 325).¹³ One could argue that an element of learned helplessness is involved in the experience of oversocialization. Whereas the former condition involves an erroneous belief in the independence of action and outcome, the latter depends on the erroneous assumption that the institutional world exists apart from the actions of living human beings. If one views the social world as something other than a human product with coercive power over behavior, there is little possibility for a sense of individual authorship in one's actions. Hence, it seems that the absence of control experienced in institutional routines is the direct counterpart of the heightened sense of control experienced in edgework, even if the latter sensation is largely illusory.

When we consider that edgework is particularly conducive to the development of an illusory sense of control, the paradox of people's seeking dangerous situations as a response to the threats they confront in an already dangerous world can be more easily understood. From the perspective of those who practice edgework, this activity is a rational and therapeutic way to respond to a sense of helplessness in the face of social-ecological threats because they believe that edgework is dangerous only to those who lack the survival capacities required for successful outcomes. And, as I noted previously, a pervasive tautology insulates this belief from the reality of high rates of death or injury in edgework—an unsuccessful outcome is taken as evidence that the individual simply did not possess the basic survival skills required for edgework.

Edgework also involves the other phenomenological characteristics that Marx linked to skillful effort—planning, purposive and flexible action, concentration. For instance, planning is a particularly important part of skydiving. Sky divers spend more time *preparing* for a jump than they do making it. In addition to packing their canopies and checking their equipment, they work out the exact sequence of formations in advance and rehearse the jump on the ground before entering the airplane (in a procedure called "dirt diving"). The methodical and almost ritualistic character of these preparatory activities suggests that they are not merely ancillary to the "essential" experience of free-fall; rather, they are integral parts of the total experience.

Equally important is the requirement for mental and physical flexibil-

¹³ Another area of study that is relevant to the problem under discussion here is research on the subject of the "locus of control." Langer's polar distinction between the "illusion of control" and "learned helplessness" may correlate with the more general distinction between an "internal" and an "external" locus of control (see Rotter 1966; Lefcourt 1982).

ity. Although edgework may not demand any more training or planning than more mundane leisure activities, the degree of flexibility called for in edgework sets it apart from most other pursuits. As a form of “experiential anarchy,” edgework involves circumstances that simply cannot be negotiated by relying on internalized institutional routines. Edgeworkers must be flexible enough to innovate an on-the-spot strategy for maintaining control over the situation. It is the ad hoc character of edgework that most distinguishes it from other skillful pursuits.

The nonroutinized, ad hoc quality of the experience is also associated with the unusually high degree of concentration displayed by individuals negotiating the edge. In the completely novel circumstances of a true edgework situation, the individual can respond appropriately only by absorbing as much information as possible about the environment. Minute changes in the situation must be responded to, potential threats anticipated. The requirement for concentrated effort is, in fact, one of the alluring features of edgework. In a social world in which large numbers of people perform their day-to-day routines either through forced concentration or mental detachment from the task at hand, the automatic, innate character of focused attention in edgework is unique. People engaged in edgework do not have to force themselves to concentrate—since their lives often depend on concentrating, they do it automatically.

Edgeworkers’ positive evaluation of the spontaneous elements of the experience seems to contradict the emphasis they give to careful planning and safety precautions: on one level, they seek a highly structured experience in which hazards can be anticipated and controlled, while on another level they attempt to place themselves in a highly unstructured situation that cannot be planned for. This contradiction can be understood by realizing that the ultimate goal of those who pursue edgework is to survive the experience. A person who is killed or injured by hazards that could have been avoided through planning and attention to standard safety precautions is not much admired by edgeworkers. The first challenge in edgework is to negotiate one’s way past hazards that can be anticipated. But the ultimate challenge is to survive those hazards that *cannot* be anticipated, that require the use of one’s innate survival ability. Hence, planning is one of the components of a skillful approach to dangerous situations but is also a prerequisite for getting edgeworkers past more mundane challenges to where the edgework sensations are most intense—where one’s actions are automatic and unplanned.

It is also likely that planning and organization play some role in maintaining the illusion of control. Since prior organization of one’s actions is one of the factors typically associated with skill situations, establishing a plan of action in preparation for an edgework encounter could contribute to a sense of control over the situation, even though the actual course of

events may be largely chance determined. Thus, planning may be an additional "skill" factor that helps support edgeworkers' belief in the existence of a survival instinct as well as their pronounced sense of personal competence.

One conclusion that could be drawn from this argument is that the people most likely to seek edgework are those individuals who work in jobs traditionally thought of as highly alienating, for example, factory work or other blue-collar employment. To embrace such a proposition, however, would be to adopt an oversimplified view of the matter since other factors besides alienation account for one's participation in a specific form of edgework. For example, the great expense of many of the high-risk sports discussed in this study means that only people with considerable discretionary income can participate in these forms of edgework. Thus, the sky divers I studied tended to be either people with well-paying jobs or lower-level workers without family responsibilities who could dedicate a large proportion of their incomes to the sport. In general, however, it appears that lower-income edgeworkers tend to gravitate toward more financially accessible activities such as high-risk subcultures ("biker" groups, "survivalists," etc.), or they completely reject highly alienating factory or service work in favor of high-risk occupations such as police work, fire fighting, or combat soldiering.

In seeking to identify which groups are predisposed to risk taking, we must also avoid a simplistic and crude application of the Marxian notion of alienation to work in modern American society. The assumption that blue-collar workers experience high levels of alienation while white-collar workers generally escape degrading working conditions has little to do with the reality of work life in the United States today. Indeed, the distinction between blue- and white-collar work has been increasingly abandoned by sociologists of work and occupations in favor of an approach that divides the labor force into primary and secondary sectors. This distinction, which emphasizes such things as income and the degree of control that workers have over the conditions of their labor, cuts across the blue- and white-collar categories (Edwards 1979, p. 174). The crucial point here is that alienation, understood theoretically as the worker's estrangement from skilled activity and control over the productive process, is no longer represented archetypically by factory work. The general tendency toward a "deskilling" of work in economies dominated by mass-production industries (Braverman 1974; Piore and Sabel 1984) and bureaucratic decision-making and authority structures (Edwards 1979) means that workers at many different levels, ranging from service workers to certain types of professionals, may be forced to work under alienating conditions. Hence, many highly paid professional and managerial workers are just as likely as factory workers to value edgework as a

response to conditions in their work lives that deny them an opportunity for creative, skillful, self-determining action. This is the feature that most edgeworkers have in common, regardless of the particular positions they may occupy in the labor force.

Looking beyond Marx's conceptualization of creative action, we also find in edgework most of the phenomenological characteristics associated with Mead's concept of the "I." Mead's descriptions of the "I" could be used interchangeably with my descriptions of edgework. The "I" is the locus of the creative, spontaneous, impulsive actions of the individual. Found at the "razor edge of the present," the "I" reflects all the uncertainty and uniqueness of the moment.

The Meadian elements of the synthetic framework are also relevant to the analysis of the various sensations associated with edgework. As noted above, edgework typically gives rise to feelings of omnipotence, self-determination, mental control over environmental objects, ineffability, and hyperreality. These sensations are often associated as well with perceptual alterations such as the restriction of one's perceptual field and a radical change in how one senses the passage of time. To understand how these sensations emerge, we must focus on the dynamic relationship between the "I" and "me" portions of the self.

While Mead himself failed to explore the relationship between the "I" and the "me" under a broad range of structural arrangements, later work in the Meadian tradition has directed attention to the "I"/"me" relation under certain unusual structural conditions. For example, Herbert Blumer's ([1934] 1969) effort to account for spontaneous, anarchic behavior in crowds focuses on the effect of crowd dynamics on the "I" and "me." He posits that, as people become agitated in a crowd and begin moving about aimlessly ("milling"), their thought processes are transformed because they lose the ability to interpret their actions from the point of view of the other. The process of "imaginative rehearsal," which under normal circumstances serves as the basis of reflective consciousness, is disrupted by the inability of people to focus on specific respondents to their actions. As ongoing interaction between self and other breaks down, the "me" recedes and leaves in its absence a residual, nonsocial self. Blumer maintains that this process underlies the anarchic, antisocial behavior that arises in crowds.

Although troublesome in some respects,¹⁴ this model succeeds in directing attention to social conditions that may suppress the social self. We could consider the possibility that milling is just one of several processes that can set in motion the dynamic described by Blumer. Equally effec-

¹⁴ This model belongs to an older tradition of collective-behavior theories that rest on the assumption that crowd behavior is pathological.

tive in disrupting the process of imaginative rehearsal, and the self that is associated with this process, are the conditions typically prevailing in edgework. People confronting a life-and-death situation often must respond immediately to save themselves; they must act instinctively rather than rely on the reflective process involved in everyday problem solving. One simply does not have time to review mentally what one knows about such situations, nor is such socially acquired knowledge even useful since *true* edgework involves completely novel circumstances. Consequently, in edgework imaginative rehearsal is disrupted, the "voice of society" ceases to speak, and the individual is left with a residual self. Although it would be incorrect to designate this residual self the "I," it does possess many of the same characteristics: it is an "acting" self that responds without reflective consciousness, it is spontaneous and creative insofar as the dictates of society and culture are absent, and it is "nonpersonal" and "noninstitutional" because the "me" component of the self is missing.¹⁵

The experience of self in edgework, then, is the direct antithesis of that under conditions of alienation and reification. If life under such circumstances leads to an oversocialized self in which numerous institutional "me's" are present but ego is absent, edgework calls out an anarchic self in which ego is manifest but the personal, institutional self is completely suppressed. It is the suppression of reflective consciousness that ultimately produces the sensations specified above.

Chief among these sensations are the feelings of self-determination and self-actualization reported by people involved in all types of edgework. Although the notion of self-actualization has long been regarded with some suspicion by hard-nosed social scientists, the present framework provides a conceptual basis for this idea. Simply put, people feel self-actualized when they experience a sense of direct personal authorship in their actions, when their behavior is not coerced by the normative or structural constraints of their social environment. No longer impelled by intangible social forces, their actions reflect the immediate desires and goals of the ego.¹⁶

Conceptualized in this way, the idea of self-actualization serves to designate the essential condition of the edgework experience. When the

¹⁵ I have chosen the terms "nonpersonal" and "noninstitutional" rather than "nonsocial" in recognition of some insights into Meadian theory provided by scholars researching self-esteem. Franks and Marolla (1976) argue that action by the individual on an impersonal, physical environment (which is the basis of inner self-esteem) is no less "social" in nature than symbolic interaction between social actors.

¹⁶ This way of conceptualizing self-actualization is probably relevant only to the experience of members of Western culture. Only within the context of Western individuality would we expect to find such a positive emotional response to the experience of personal authorship in one's actions.

“me” is obliterated by fear or the demands of immediate survival, action is no longer constrained by social forces, and the individual is left with a sense of self-determination. As I have pointed out, behavior in edgework appears to the individual as an innate response arising from sources deep within the individual, untouched by socializing influences. Thus, edgeworkers experience this action as belonging to a residual, spontaneous self—the “true self,” as it were. Mead’s (1964, p. 239) statement that the “I” response “is, in the experience of the individual, an expression with which the self is identified . . . a response which raises him above the institutionalized individual” applies equally well to action in edgework.

The fact that some Americans find their “true” selves in edgework seems to place them in Turner’s category of impulse-anchored selves. Moreover, Turner’s scheme receives further support from evidence indicating that other people in American society have the defining characteristics of institutional selves. As Turner’s analysis suggests, even in a predominantly impulse-oriented society, not everyone experiences self-actualization in the pursuit of impulsive, anarchic activities like edgework. Although “institutionals” may indeed be a dying breed in contemporary American society, it appears that they can still be found among those people who experience self-actualization in their commitment to family, occupation, or an ideology like Christian fundamentalism.

Following Turner’s lead, I have stressed that the self-determining character of edgework is specific to certain types of societies or groups in a given society. But where my model differs from Turner’s framework is in the dialectical conceptualization of the relationship between the opposing ends of the polarity, that is, the idea that spontaneous and constrained actions exist in an opposed and *necessary* relationship to each other. Thus, while Turner implies that the institution and impulse self-anchorage offer people equal possibilities for a sense of self-determination, the Marx-Mead framework posits that self-determination exists only in spontaneous, creative behavior, which, in turn, arises only under ideal constraining conditions. I have further suggested that, under the dehumanizing constraining conditions of modern capitalism, some individuals experience a degree of self-determination in behavior that mimics the creative action of the “I.”

Thus, my analysis would suggest that some members of modern society experience self-actualization in their commitment to occupation or religion because the constraining conditions of their occupational or religious participation approximate the ideal conditions specified by the Marx-Mead synthesis. A Marxian critique of capitalist society does not imply that work and social life are *uniformly* dehumanizing and degrading in this system: while the governing logic of capitalist production creates

alienating conditions for most workers, other structural factors (e.g., perhaps those that are involved in certain types of professional work) may stimulate possibilities for real human growth and community in the workplace and other domains. It is important, however, not to equate the experience of self under these social conditions and the experience of self in edgework.¹⁷

In addition to self-actualization, other sensations can be attributed to the transforming effects of edgework on the "I"/"me" dialectic. Mead's analysis of the relationship between these two dimensions of the self repeatedly emphasizes the ephemeral character of the "I." The "I" is not directly given in experience and can appear experientially only as a part of the "me" (Mead 1964, pp. 229–37). As the repository of all social elements, including the attitudes of others, societal knowledge, and language, the "me" is the medium through which "I" responses can be made intelligible and can be normatively assessed. It follows, then, that action dissociated from the "me" is not easily revealed in reflective consciousness; it is action, in other words, that may possess a quality of ineffability.

Thus, if people typically find it difficult to describe edgework, it is very likely because the reflective self is simply not present at the height of the experience. As spontaneous action not immediately directed by the "me" and not mediated by the knowledge component of the "me," edgework is not easily expressed in language. Hence, the edgeworkers' admonition that "if you want to know what it's like, then do it" is appropriate.

The same dynamic may also underlie the sense of edgework as a hyper-reality. The primacy of the spontaneous self in edgework stands in stark contrast to "normal" social experience, in which action initiated by ego is

¹⁷ There are additional reasons to question the applicability of Turner's locus-of-self model to edgework. While edgeworkers seem to belong to the category of "impulsives," closer examination reveals some problems with classifying edgeworkers this way. In a section of Turner's essay that describes the key differences between the institutional and impulsive loci of self, the following crucial passage appears: "Under the institution locus, the real self is revealed only when the individual is in full control of his faculties and behaviors. . . . When control is impaired by fatigue, stress, alcohol, or drugs, an alien self displaces the true self. . . . If use of alcohol is viewed with favor, it is only on condition that the user is able to practice moderation or 'hold his liquor,' *maintaining control in spite of alcohol*" (1976, p. 993; emphasis mine). If the ability to maintain control is a key characteristic of institutional behavior, then conceiving of edgeworkers as "impulsives" is problematic. I have noted that maintaining control in situations in which one's faculties are altered by fatigue, stress, drugs, etc., is an essential feature of edgework. Hence, while some aspects of edgework are consistent with the impulse locus, this latter feature belongs, by Turner's definition, to the institutional locus. In discussing the difference between institutional and impulsive loci, Turner stresses that the two categories are *analytical* constructs that do not necessarily distinguish clear-cut empirical types. He explicitly notes that most people are a mixture of the institutional and impulse anchorages of self. The data I have used for describing edgework speak to the importance of this point.

almost always undertaken as a response to the "me." Hence, to the extent that people do meet most of the expectations of the social community and adhere to the routines and definitions that have been imparted to them in socialization, there is an artificial character to their behavior. They act in a purposive fashion, yet they often feel (and sometimes verbalize) a genuine ambivalence about the goals they seek. This problem is, of course, a manifestation of one of the central ironies of social life: most people dedicate heart and soul to maintaining role patterns associated with social structures that they themselves had no part in creating. Normal social life is "unreal" in the sense that most of the individual's action contributes to a social agenda that is little understood and that often appears trivial when examined critically. We often take for granted that some things "must be done" while remaining ignorant of the real reasons for such requirements (see Harris 1974).

If the constraining effect of the "me" leads to a feeling of artificiality among people engaged in normal social behavior, then the absence of the "me" in edgework accounts for the sense of authenticity that often accompanies this experience. The intensification of fear and the demands for immediate response obliterate the process of imaginative rehearsal and the sense of one's actions' being directed by a social agenda of someone else's making. The responses of the individual engaged in edgework are self-interested, spontaneous, and fully intelligible. In contrast to the aims of normal, day-to-day behavior, the immediate goal of one's actions in edgework cannot be regarded as trivial. The point is to survive, and most people feel no ambivalence about the value of this goal.

The suppressive effect of edgework on the reflective self is also the basis of those perceptual transformations typically associated with the experience, that is, the sense of time passing either much faster or slower than usual and the breaking down of the distinction between self and environment. As Mead points out, the characteristics and qualities that we find in time and space are not features of an objective reality. They are social constructs rooted in deep-seated cultural assumptions, as revealed by the great variability in the perception of time and space across different human cultures. Even the distinction between time and space itself, as fundamental as it may appear, is a contingent one: "The seemingly timeless character of our spatial world and its permanent objects is due to the consentient set which each one of us selects. We abstract time from this space for the purposes of our conduct. Certain objects cease to be events, cease to pass as they are in reality passing and in their permanence become the conditions of our action, and events take place with reference to them. Because a whole community selects the same consentient set does not make the selection less the attitude of each one of them" (in Mead 1964, "Time," p. 341).

So we return again to Mead's axiom that the "me" is the medium through which the processual elements of human experience acquire an objective form, in either self-construction or the construction of time and space. To remove the "me" from the field of experience, then, is to remove the culturally bounded reference points for objectifying time and space. Without these reference points, the taken-for-granted spatial and temporal distinctions of "normal" perception break down and reality assumes a more relational character. Hence, it becomes difficult to gauge the passage of time, and the normal distinctions between "long" and "short" time lapses disappear. Similarly, spatial distinctions are altered, giving rise to a feeling of connectedness with one's environment. No longer capable of distinguishing between self and certain environmental objects, edgeworkers develop a sense of oneness with these objects or, in the most extreme form, feel as if they could mentally control them. This sensation is especially valued because it articulates with the ultimate edgeworking skill—the ability to control a situation that verges on complete chaos.

SUMMARY AND CONCLUSIONS

I have endeavored in this essay to articulate a new approach for understanding voluntary risk taking. To conceive of this form of behavior as edgework is to understand it as a type of experiential anarchy in which the individual moves beyond the realm of established social patterns to the very fringes of ordered reality. The fact that many people find this type of experience alluring and seek to repeat it as often as possible is an important critical statement on the nature of modern social life. To present this statement in an explicit, comprehensive, and systematic form, I have examined the phenomenon from the critical social psychological perspective of the Marx-Mead synthesis. This framework has allowed me to trace the links between elements of edgework and the micro- and macrostructures of modern American society.

There can be little doubt that the greatest impediment to further progress in the study of voluntary risk taking is the lack of data on this important subject. It is hoped that the present study will help to guide future empirical analyses in this area of research. Complete validation of the model I have proposed will require, at the very least, more evidence relating to the institutional circumstances (especially in the domain of work) of edgework enthusiasts—in particular, data that measure the degree to which alienation and oversocialization characterize the institutional routines of those who value the edgework experience. Also, the present framework would acquire even greater explanatory utility if it

can be documented that the number of Americans engaging in edgework is increasing (relative to other kinds of leisure activities) with the number of people who experience alienation and oversocialization in their institutional roles. I have specifically avoided the implication that this paper tests such a thesis because of the lack of relevant data, but this is clearly one important avenue for future research.

As a final note, I would like to call attention to an even greater paradox than the one referred to at the beginning of this essay. It is certainly strange that people voluntarily place themselves at risk even as public organizations endeavor to reduce the risks of living in modern society. It is even more startling to realize that these people value risk taking because it is the only means they have for achieving self-determination and authenticity. The same society that offers so much in the way of material "quality of life" also propels many of us to the limits of our mortal existence in search of ourselves and our humanity.

REFERENCES

- Achte, K. A. 1980. "The Psychopathology of Indirect Self-Destruction." Pp. 41–56 in *The Many Faces of Suicide*, edited by N. L. Farberow. New York: McGraw-Hill.
- Alexander, J. C., B. Giessan, R. Munch, and N. J. Smelser. 1987. *The Micro-Macro Link*. Berkeley and Los Angeles: University of California Press.
- Aronowitz, S. 1973. *False Promises: The Shaping of American Working Class Consciousness*. New York: McGraw-Hill.
- Balint, M. 1959. *Thrills and Regression*. New York: International Universities Press.
- Batuik, M. E., and H. L. Sacks. 1981. "George Herbert Mead and Karl Marx: Exploring Consciousness and Community." *Symbolic Interaction* 4 (2): 207–23.
- Bernard, J. 1968. "The Eudaemonist." Pp. 6–47 in *Why Men Take Chances*, edited by S. Z. Klausner. Garden City, N.Y.: Anchor.
- Blake, J. A. 1976. "Self and Society in Mead and Marx." *Cornell Journal of Social Relations* 11 (2): 129–38.
- Blau, Theodore H. 1980. "The Lure of the Deep: Scuba Diving as a High-Risk Sport." Pp. 410–27 in *The Many Faces of Suicide*, edited by N. L. Farberow. New York: McGraw-Hill.
- Blumer, H. (1934) 1969. "Outline of Collective Behavior." Pp. 65–88 in *Readings in Collective Behavior*, edited by R. R. Evans. Chicago: Rand McNally.
- Braverman, H. 1974. *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century*. New York: Monthly Review.
- Caillois, R. 1961. *Man, Play and Games*. New York: Free Press.
- Coleman, J. S. 1985. "Social Theory, Social Research, and a Theory of Action." *American Journal of Sociology* 91 (6): 1309–35.
- Csikszentmihalyi, M. 1981. "Leisure and Socialization." *Social Forces* 60 (2): 332–40.
- . 1985. "Reflections on Enjoyment." *Perspectives in Biology and Medicine* 28 (4): 489–97.
- Csikszentmihalyi, M., and E. Rochberg-Halton. 1981. *The Meaning of Things*. Cambridge: Cambridge University Press.
- Cycle*. 1985–88. New York: CBS Magazines.

- Deaux, K., and T. Emswiller. 1974. "Explanations of Successful Performances on Sex-linked Tasks: What Is Skill for the Male Is Luck for the Female." *Journal of Personality and Social Psychology* 29:846-55.
- Delk, J. L. 1980. "High-Risk Sports as Indirect Self-Destructive Behavior." Pp. 393-409 in *The Many Faces of Suicide*, edited by N. L. Farberow. New York: McGraw-Hill.
- Edwards, R. 1979. *Contested Terrain: The Transformation of the Workplace in the Twentieth Century*. New York: Basic.
- Erikson, K. T. 1976. *Everything in Its Path: Destruction of Community in the Buffalo Creek Flood*. New York: Simon & Schuster.
- Farberow, N. L. 1980. "Indirect Self-Destructive Behavior: Classification and Characteristics." Pp. 15-27 in *The Many Faces of Suicide*, edited by N. L. Farberow. New York: McGraw-Hill.
- Fawcett, R. 1987. "Rock Climbing." Pp. 14-77 in *The Climber's Handbook*, edited by A. Salkeld. San Francisco: Sierra Club.
- Fenichel, O. 1939. "The Counterphobic Attitude." *International Journal of Psycho-Analysis* 20:263-74.
- Filstead, W. J. 1980. "Despair and Its Relationship to Self-Destructive Behavior." Pp. 57-75 in *The Many Faces of Suicide*, edited by N. L. Farberow. New York: McGraw-Hill.
- Franks, D. D., and J. Marolla. 1976. "Efficacious Action and Social Approval as Interacting Dimensions of Self-Esteem: A Tentative Formulation through Construct Validation." *Sociometry* 39 (4): 324-41.
- Freud, S. 1925. "On Narcissism: An Introduction." *Collected Papers*, vol. 4. London: Hogarth Press and Institute of Psychoanalysis.
- Giddens, A. 1984. *The Constitution of Society: Outline of the Theory of Structuration*. Berkeley and Los Angeles: University of California Press.
- Goff, T. W. 1980. *Marx and Mead: Contributions to a Sociology of Knowledge*. London: Routledge & Kegan Paul.
- Goffman, E. 1961. "Fun in Games." Pp. 15-81 in *Encounters: Two Studies in the Sociology of Interaction*, edited by E. Goffman. New York: Bobbs-Merrill.
- . 1967. "Where the Action Is." Pp. 149-270 in *Interaction Ritual: Essays on Face-to-Face Behavior*, edited by E. Goffman. Garden City, N.Y.: Doubleday.
- Gross, A. C. 1986. *Endurance: The Events, the Athletes, the Attitude*. New York: Dodd, Mead.
- Harris, M. 1974. *Cows, Pigs, Wars and Witches: The Riddles of Culture*. New York: Vintage.
- Heimer, C. A. 1988. "Social Structure, Psychology and the Estimation of Risk." *Annual Review of Sociology* 14:491-519.
- Huizinga, J. 1950. *Homo Ludens: A Study of the Play Element in Culture*. Boston: Beacon.
- James, J. 1980. "Self-Destructive Behavior and Adaptive Strategies in Female Prostitutes." Pp. 341-59 in *The Many Faces of Suicide*, edited by N. L. Farberow. New York: McGraw-Hill.
- Joas, H. 1981. "George Herbert Mead and the 'Division of Labor': Macrosociological Implications of Mead's Social Psychology." *Symbolic Interaction* 4 (2): 177-90.
- Jung, C. G. 1924. *Psychological Types*, translated by H. Goodwin Baynes. New York: Harcourt Brace.
- Kahneman, D., P. Slovic, and A. Tversky, eds. 1982. *Judgement under Uncertainty: Heuristics and Biases*. Cambridge: Cambridge University Press.
- Klausner, S. Z. 1968. "The Intermingling of Pain and Pleasure: The Stress Seeking Personality in Its Social Context." Pp. 137-68 in *Why Men Take Chances*, edited by S. Z. Klausner. Garden City, N.Y.: Anchor.

- Knorr-Cetina, K., and A. Cicourel, eds. 1981. *Advances in Social Theory and Methodology*. Boston: Routledge & Kegan Paul.
- Kretchmer, E. 1936. *Physique and Character: An Investigation of the Nature of Constitution and of the Theory of Temperament*. London: Routledge & Kegan Paul.
- Kusyszyn, I. 1980. "Gambling: An Existential-Humanistic Interpretation." Pp. 300–310 in *The Many Faces of Suicide*, edited by N. L. Farberow. New York: McGraw-Hill.
- Langer, E. J. 1975. "The Illusion of Control." *Journal of Personality and Social Psychology* 32:311–28.
- Lasch, C. 1978. *The Culture of Narcissism*. New York: Norton.
- Lefcourt, H. M. 1982. *Locus of Control: Current Trends in Theory and Research*. Hillsdale, N.J.: Erlbaum.
- Lichtman, R. 1970. "Symbolic Interactionism and Social Reality: Some Marxist Queries." *Berkeley Journal of Sociology* 15:75–94.
- Litman, R. E. 1980. "Psychodynamic of Indirect Self-Destructive Behavior." Pp. 28–40 in *The Many Faces of Suicide*, edited by N. L. Farberow. New York: McGraw-Hill.
- Loudis, L. A., W. C. Lobitz, and K. M. Singer. 1986. *Skiing Out of Your Mind: The Psychology of Peak Performance*. Champaign, Ill.: Leisure.
- Lowe, J. 1987. "Ice Climbing." Pp. 78–133 in *The Climber's Handbook*, edited by A. Salkeld. San Francisco: Sierra Club.
- Lyng, Stephen G., and David A. Snow. 1986. "Vocabularies of Motive and High Risk Behavior: The Case of Skydiving." Pp. 157–79 in *Advances in Group Processes*, vol. 3. Edited by E. J. Lawler. Greenwich, Conn.: JAI.
- Marshall, S. L. A. 1968. "The Better Part of Man's Nature." Pp. 61–70 in *Why Man Takes Chances*, edited by S. Z. Klausner. Garden City, N.Y.: Anchor.
- Marx, K., and F. Engels. (1932) 1976. *The German Ideology*. Moscow: Progress.
- Mead, G. H. (1934) 1950. *Mind, Self, and Society*, edited by C. W. Morris. Chicago: University of Chicago Press.
- . (1934) 1964. *George Herbert Mead on Social Psychology*, edited by A. Strauss. Chicago: University of Chicago Press.
- Mitchell, R. G., Jr. 1983. *Mountain Experience: The Psychology and Sociology of Adventure*. Chicago: University of Chicago Press.
- Ollman, B. 1971. *Alienation: Marx's Conception of Man in Capitalist Society*. Cambridge: Cambridge University Press.
- Piore, M. J., and C. F. Sabel. 1984. *The Second Industrial Divide: Possibilities for Prosperity*. New York: Basic.
- Playboy. 1974. "Playboy Interview: Hunter Thompson." November, pp. 75–90, 245–46.
- Rotter, J. B. 1966. "Generalized Expectancies for Internal vs. External Control of Reinforcement." *Psychological Monographs* 80:1–28.
- Schwalbe, M. L. 1986. *The Psychosocial Consequences of Natural and Alienated Labor*. Albany: State University of New York Press.
- Short, J. 1984. "The Social Fabric at Risk: Toward the Social Transformation of Risk Analysis." *American Sociological Review* 49:711–25.
- Skow, J. 1983. "Risking It All." *Time* 122 (9): 52–59.
- Thompson, H. S. 1971. *Fear and Loathing in Las Vegas: A Savage Journey to the Heart of the American Dream*. New York: Warner.
- . 1979. *The Great Shark Hunt: Strange Tales from a Strange Time*. New York: Warner.
- Toch, H. 1980. "Self-Destructiveness among Offenders." Pp. 313–26 in *The Many Faces of Suicide*, edited by N. L. Farberow. New York: McGraw-Hill.

American Journal of Sociology

- Turner, R. H. 1976. "The Real Self: From Institution to Impulse." *American Journal of Sociology* 81:989-1016.
- Wilkinson, Sylvia. 1973. *The Stainless Steel Carrot: An Auto Racing Odyssey*. Boston: Houghton Mifflin.
- Wilson, R. N. 1981. "The Courage to Be Leisured." *Social Forces* 60:282-303.
- Wolfe, T. 1979. *The Right Stuff*. New York: Farrar, Straus & Giroux.
- Works, M. T. 1975. *Parachuting: The Art of Freefall Relative Work*. Fullerton, Calif.: R.W. Underground Publishing.
- Zucherman, M., E. A. Kolin, L. Price, and I. Zoob. 1964. "Development of a Sensation-seeking Scale." *Journal of Consulting and Clinical Psychology* 28:477-82.