CHAPTER 14

Controlling Vandalism: The Person-Environment Duet

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Most efforts to understand and reduce human aggressive behavior—toward other persons or toward property—focus upon the perpetrator. Regardless of whether the persons making these efforts are specialists or members of the general public; teachers, psychologists, sociologists, or criminologists; theoreticians, researchers, or practitioners; or individuals concerned with prediction, prevention, rehabilitation, or public policy, the person or persons actually committing an aggressive act are almost always the primary target(s) of attention. Who he or she is, the person's relevant background experiences, history of similar behaviors, mood and rationality at the time the act occurred, and related intraindividual matters are the typical issues addressed. The abuser's parenting; the delinquent's early temperament; the student offender's personality traits; the vandal's hormonal levels or television viewing habits; and other in-the-person markers are posited, examined, and held responsible. In most attempts at explaining aggression, aggression is viewed as in the perpetrator, by the perpetrator, and from the perpetrator. This chapter presents an alternative view.

The present perspective is responsive to one of the most significant developments in the study of human behavior in recent decades: the ascendance of "interactionism." Broadly defined, the interactionist approach to understanding and predicting human behavior maintains that such efforts should reflect both intraindividual (e.g., trait) qualities *and* relevant characteristics of the individual's environment. These latter ecological features may be other people (e.g., victims, fellow students) or qualities of the immediate or larger physical location in which the behavior occurs (e.g., school size, disrepair). In recent years, this interactionist perspective has been brought to bear upon a wide range of behaviors, and aggression is certainly among them. This body of aggression-relevant knowledge, as it bears upon student aggression toward property, is the central focus of this chapter.

AGGRESSION TOWARD PROPERTY

Vandalism, whether it takes place in schools or in other settings, has been defined with varying degrees of inclusiveness. However, each of the 10 definitions I have located highlights at least to some degree the perpetrator's intentionality, the destructiveness of the behavior, and property ownership (Goldstein, 1995). The definition employed by the Federal Bureau of Investigation (FBI) for its annual uniform crime report seems quite fitting for a school context:

> The willful or malicious destruction, injury, disfigurement, or defacement of property without the consent of the owner or person having custody or control by cutting, tearing, breaking, marking, painting, drawing, covering with filth, or any such means as may be specified by local law. (FBI, 1978, p. 217)

Motivational typologies seeking to specify subtypes of vandalistic behavior have varied greatly in the degree to which they employ person-centered versus environment-centered perspectives. Viewing vandalism causation as essentially an in-the-person phenomenon, Cohen (1971) offers acquisitive, tactical, ideological, vindictive, play, and malicious subtypes. In full contrast, holding that vandalism "resides" not in persons but in the nature of buildings, school or park equipment, or other public facilities, Weinmayer (1969) categorizes the following vandalism subtypes: overuse, conflict, curiosity, leverage, deleterious, irresistible temptation, and "no-other-way-to-do-it" vandalism.

Across the several typologies that have been suggested, school (and other) vandalism is an expensive fact of U.S. life. Comprehensive monetary cost estimates of vandalism have been put forth; these collectively illustrate that the expense of vandalism, like its incidence, is both absolutely high and increasing. In the approximately 84,000 schools in the United States, for example, monetary vandalism costs estimates over the past 25 years show a near-linear upward trend, peaking in recent years at $600 million (Stoner, Shinn,& Walker, 1991).

Arson, a particularly dangerous form of vandalism, perhaps deserves special comment. Whereas window breaking is the most frequent single act of aggression toward property in schools, arson is clearly the most costly, typically accounting for approximately 40% of total vandalism costs annually (Mathie & Schmidt, 1977).

The costs of school vandalism are not only monetary but social, as perhaps explicated best by Vestermark and Blauvelt (1978):

> By limiting criteria of vandalism's impact to only monetary costs, we overlook those incidents which have low monetary cost but, nevertheless, tremendous impact upon the school. The impact of a seventy-nine cent

can of spray paint, used to paint racial epithets on a hallway wall, far exceeds the monetary cost of removing the paint. A racial confrontation could result, which might force the closing of the school for an indefinite period. How does one calculate that type of expense: confrontation and subsequent closing of a school? (p. 138)

In addition to the several reports of high levels of in-school violence and vandalism, data are now emerging on a parallel pattern of near-school aggression. In both San Diego (Roncek & Lobosco, 1983) and Cleveland (Roncek &c Faggiani, 1985), residences on blocks adjacent to public high schools had significantly higher crime victimization rates than did residences in areas even a single block further away from the schools. This was found to be so even after the investigators controlled for an array of demographic, social, and housing characteristics of the residential areas compared.

CAUSES AND CORRELATES

In a school context, the vandal may be a youngster who feels particularly alienated from the school, believes that he or she has been unjustly placed in detention, or is the recipient of what he or she deems an unfair grade. According toTygert (1988) and Zweig and Ducey (1978), vandalism reaches its peak frequency in seventh grade, and then progressively decreases with each succeeding grade. Socioeconomically, the typical school vandal is as likely to be a middle-class youth as one from a low-income background (Howard, 1978); emotionally, he or she is no more disturbed than are youngsters less prone to vandalize (Richards, 1976). However, vandals are more likely to have been retained (Nowakowski, 1966), to have often been truant (Greenberg, 1969), or to have been suspended from school altogether (Yankelovich, 1975).

Youngsters prone to vandalism also often appear to have a poor understanding of the impact of their behavior on others, and are primarily concerned with the consequences of such behavior for themselves, such as getting caught. In their view, public property in a real sense belongs to no one. In contrast, for youngsters less prone to vandalism, such property belongs to everyone; this view reflects their greater sense of themselves as part of a larger community ("Vandals," 1978). As is true for all forms of aggression, the single best predictor of future vandalistic behavior is similar past behavior (Tygert, 1988).

To turn from individual to environmental correlates, vandalism has been shown to be associated with autocratic or laissez-faire versus "firm but fair" school administration; inconsistent or weak administrative support and follow-through (Casserly, Bass, & Garrett, 1980); school governance that is too impersonal, unresponsive, nonparticipatory, overregulated, oppressive,

arbitrary, or inconsistent (Greenberg, 1969; Ianni, 1979); high teacher turnover rates (Leftwich, 1977); such teacher inadequacies as disrespectfulness, callousness, lack of interest, and middle-class bias (Bayh, 1978; Rubel, 1977); overuse of punitive control methods; and inadequate clarity of school and classroom rules and discipline procedures (Mayer & Sulzer-Azaroff, 1991). In contrast, aggression toward property in schools is lower in those venues whose social ecology is characterized by high levels of teacher identification with the school, even-handed rule enforcement, parental support of school disciplinary policies, teacher avoidance of the use of grades as disciplinary tools, and teacher avoidance of hostile or authoritarian behavior toward students (Bayh, 1978; Goldstein, 1992).

The school's physical ecology also bears importantly upon its frequency as a context for vandalism. Noteworthy here are its age, as reflected in the obsoleteness of its facilities and equipment (Greenberg, 1969; Howard, 1978); its size, with larger schools having more incidents per capita (Garbarino, 1978; Goldman, 1961; Kingston 6c Gentry, 1977; Stefanko, 1989); its physical appearance (DeBunza, 1974; Pablant &c Baxter, 1975); its density (little space per student) (Stefanko, 1989); and the general facts that it is often unoccupied, is easily accessible, and is a public place owned by no one in particular (Vestermark & Blauvelt, 1978). In an attempt to determine physical ecological correlates of *low* school vandalism levels, Pablant and Baxter (1975) studied 16 pairs of schools. One school in each pair had a high vandalism rate and the other had a low rate; the two schools were matched for similarity in other respects (size, ethnic composition, grade level, and location). The schools with lower rates, as the authors had predicted, were (1) characterized by better aesthetic quality and maintenance of school property; (2) located in more densely populated areas with higher activity levels; (3) furnished a less obstructed view of school property to surrounding residents; and (4) were located in better-illuminated neighborhood areas.

A school is thus a prime ecological context for vandalism, not only because of the presence of large number of youths at a highly vandalism-prone age (the person component), but also because of a number of real and symbolic qualities of the school itself (the environmental component). Size, age, aesthetic appearance, public ownership, maintenance level, and location *vis-a-vis* possible sources of surveillance have been mentioned. Community characteristics are also often important influences upon in-school events: School vandalism tends to be correlated with community crime level and the degree of nonstudent (intruder) presence in the school (Casserly et al., 1980; Irwin, 1976). Furthermore, several of the vandalism-relevant physical ecological characteristics of the school site and its community location appear to constitute relevant contexts for vandalism elsewhere—libraries, museums, highway signs, trains, buses, mass transit stations, public telephones. All of these are easily accessible public sites; many have low levels of formal or informal

surveillance; and many, because of low maintenance effort, display the already vandalized "releaser cues" that permit and encourage further destruction. In addition, they are all "symbols of the social order" (Zimbardo, 1973, p. 73), and hence handy targets of dissatisfaction or frustration.

The ecology of vandalism has a temporal dimension as well. When does it occur? For many of the same contextual reasons that contribute to site determination—especially accessibility and presence or absence of surveillance—a high proportion of vandalism (of schools and elsewhere) occurs before and after school hours, at night, on weekends, during vacation periods, later in the school week, and later in the school year (Anderson, 1977; Casserly et al., 1980; McPherson *&C* Carpenter, 1981; Massucci, 1984; Rautaheimo, 1989).

THE PERSON-ENVIRONMENT DUET

The central tenet of the interactionist perspective on human behavior is captured well in the following quotation from two of its energetic proponents:

> The trait model and the psychodynamic model propose that actual behavior is primarily determined by latent, stable dispositions. Both assume that the sources for the initiation and direction of behavior come primarily from within the organism. The situational model assumes that the sources for the initiation and direction of behavior come primarily from factors external to the organism. The interactional model assumes that the sources for the initiation and direction of behavior come primarily from the continuous interactions between the person and the situations that he or she encounters. (Endler & Magnusson, 1976, p. 960)

Person-environment interactionism had its early roots in the works of Lewin (1935, 1936) and Murray (1938). In Lewin's well-known formula, $B = f(p > e)$, not only was behavior considered a function of both the person and the environment, but the environment most influential in its behavioral consequences was seen as subjective in nature—that is, the "environment-as-perceived" (also termed the "phenomenal field" or the "psychological situation"). Murray (1938) took a similar position in his description of behavior as a joint outcome of both the individual's needs (the person variable) and environmental "press" or need-satisfying potential (the situation variable). Others followed Lewin's (1935,1936) and Murray's (1938) early theorizing. Murphy's (1947) organism-field perspective, Rotter's (1954) and Mischel's (1968) social learning positions, and Angyal's (1959) phenomenological theory—all of which emphasize the inseparability of organism and environment, and the subjectivity of environment in shaping human behavior—are major examples of this interactionist theme in psychological theory.

In addition to the phenomenologists and social learning theorists, a third view advancing interactionism emerged, variously called "ecological psychology" and "environmental psychology." Roger Barker and his research group's studies of the "stream of behavior" in a variety of field settings were the pioneering works in this context (Barker & Gump, 1964; Barker & Wright, 1954). Their investigations were a major clarification of the effects of diverse real-world "behavior settings" on behavior, as well as a significant step forward in determining how environments might be optimally defined, classified, and measured. Both the spirit and substance of the interactionist perspective have continued to grow and find empirical support in modern psychological theory and research (e.g., Altman, Brown, Staples, fit Werner, 1992; Goldstein, 1994,1995; Little, 1987; Pervin, 1986; Stokols 6c Altman, 1987). Furthermore, and directly to the point of the present chapter, investigative support for a person-environment view of the sources and reduction of aggressive behavior has been amply forthcoming (Campbell, 1986; Cordilia, 1986; Forgas, 1986; Gibbs, 1986; Goldstein, 1994; Page 6c Moss, 1976;Rausch, 1965, 1972).

I have termed this section "The Person-Environment Duet" as a means of proposing that the person-context interactions at the heart of the interactionist position taken here are both probabalistic and reciprocal. "Probabilism" contrasts with both "determinism" and "possibilism." Determinism views the environment as the shaper of human behavior and the individual as the passive responder, inexorably led, with little ability or opportunity to select or alter his or her environment. By contrast, possibilism, sees the person as acting upon an environment that provides opportunities to grasp but that does little or no selecting or shaping of its own. Probabilism views the environment as neither determining nor merely providing possibilities. Instead, it makes certain choices more likely, enlarges them, and reinforces them. Moreover, in Krupat's (1985) view,

> the relationship of person to environment is dynamic, rather than static. There is a give and take, with each part of the system providing reciprocal influences on each other. We shape our environments and in turn are shaped by them in a never-ending cycle of mutual influence, (p. 12)

As the chapter now turns to consideration of vandalism intervention strategies, it will become clear that some are deterministic in their orientation, holding that the physical and social environment determines vandalistic behavior, and hence that environmental changes will reduce it. Other strategies are possibilistic, asserting person qualities as the predominant influences upon vandalistic behavior and its remediation. Still others are probabilistic and interactionistic, calling for both person- and environment-related means for altering vandalistic behavior.

VANDALISM INTERVENTION STRATEGIES

Changing the Ecology of the School

The deterministic perspective on vandalism control and reduction has appeared and reappeared under a variety of rubrics: "utilitarian prevention" (Cohen, 1973), "deopportunizing design" (Wiesenthal, 1990), "architectural determinism" (Zweig 8c Ducey, 1978), "crime prevention through environmental design" (Angel, 1968; Wood, 1991), "situational crime prevention" (Clarke, 1992), and "environmental criminology" (Brantingham &c Brantingham, 1991). Unlike the person-oriented strategies, all of which in a variety of ways seek to reduce the potential or actual vandal's *motivation* to perpetrate such behavior, the environment-oriented strategies seek to alter the physical setting, context, or situation in which vandalism might occur, so that the potential or actual vandal's *opportunity* to perpetrate such behavior is reduced. This ecological strategy, of altering the physical or social environment to prevent or reduce the occurrence of vandalism, has been an especially popular choice, particularly in a society as technologically oriented as the United States. Thus, venues as diverse as school districts, mass transit systems, museums, shopping malls, national and state parks, and many others have time and again opted for target hardening, access controlling, offender deflecting, entry-exit screening, surveillance increasing, inducement removing, and similar environment-altering intervention strategies as their first, and often only, means of defense against vandalism. Later in this chapter, I enumerate and catalog the several dozen strategies of this sort that have been implemented. I suspect the reader will respond (correctly) to this lengthy, technology-oriented enumeration with the sense that we Americans certainly love our hardware!

Yet, paradoxically, very little other than anecdotal, impressionistic, or testimonial "evidence" exists for the actual vandalism control effectiveness of these widely used strategies. Furthermore, the very scope of their implementation—in their most extreme form, the "Bastille response" (Ward, 1973) or the "crimeproof fortress" (Zweig &c Ducey, 1978)—has in some settings had a very negative impact on the very mission for which the setting was created in the first place. For example, "More and more high schools are becoming mechanical systems ruled by constraints on timing, location, and behavior. The similarity between schools and jails is becoming ever more pronounced" (Csikszentmihalyi & Larsen, 1978, p. 25).

Not only may the setting's mission be compromised, but as a sort of paradoxical self-fulfilling prophecy, the environmental alterations put in place to *reduce* vandalism may be experienced by a vandal-to-be as an inviting, potentially enjoyment-providing challenge to his or her vandalistic skills, and thus may actually serve to *increase* such behavior (Wise, 1982; Zweig & Ducey, 1978). The fence around the school, the graffiti-resistant wall surface, the theftproof parking meter, the slashproof bus seat, toughened glass, the aisle store camera—each is a possible opportunity-reducing deterrent; as such, each is also a challenging invitation to vandalism.

Thus, the "down side" of reliance on alterations to the physical environment as *the* means of vandalism control and reduction is not inconsiderable. Yet an important "up side" also exists. First, without concurring with a position as extreme as Weinmayer's (1969) assertion that "ninety percent of what is labeled vandalism can be prevented through design" (p. 286), one may still accept and act on the belief that venue changes can be significant components of effective person-environment interventions. First, design innovations may be relevant to deopportunizing vandalism in more than one way. Wiesenthal (1990), for example, observes that "property damage can be avoided by design elements that do more than resist attack; design can be used to subtly steer the user away from destruction or defacement" (p. 289). Wise (1982) suggests that design may be employed to channel attention away from potentially damaging activities, to reduce the effects of natural processes (e.g., erosion, weathering) that vandals may augment, and to eliminate or reduce the type of environmental feedback that may serve to reinforce vandalistic behavior.

Levy-Leboyer (1984) augments the case for design-as-intervention by noting that some locations are more prone to vandalism than others—a view also put forth by Christensen, Mabery, McAllister, and McCormick (1988) in their call for a predictive framework for identifying various degrees of site vulnerability. The public sites, the newer sites, the ones previously vandalized, the ones previously damaged by something other than vandalism, the ones located in "low-status" institutions, and the venues providing inadequate service are all common targets—and thus desirable sites for environmental alteration. Wilson (1977), writing as an architect, summarizes the case for design-as-intervention succinctly:

> The shape of buildings can dictate patterns of use and the circulation of people around them and hence help to structure the networks of social relationships that develop. In addition, buildings, by the amount of surveillance they afford, may prevent or offer opportunities for certain activities to take place unobserved. Finally, attrition and damage to buildings can be prevented to an extent by careful use of materials and finishes. It is eminently sensible to suppose that there is some connection between design and behavior, including vandalism, (p. 795)

Those taking a deterministic view believe that individuals choose to engage in vandalistic behavior in response to characteristics not only of their physical environment, but also of their social environment. This is purported to be the case on both micro and macro levels. At the micro, immediate level, the central social-ecological intervention concept is perceived and actual surveillance. Vandalism, it is held, is less likely to occur if the potential perpetrator believes he or she will be observed and perhaps appre-

hended. Thus, for example, Blauvelt (1980) urges making the school "occupied." He claims:

> The key to controlling vandalism is to make the school a place that in some sense is continuously occupied by some form of human or mechanical presence, which will deter or respond to the vandal. The heart of any effective approach to controlling vandalism will be establishing that sense of "presence" which defines the building as no longer being an inert target, (p. 4)

Added bus conductors, real and dummy TV cameras in stores, Neighborhood Watch programs, improved neighborhood lighting, and increased number of store employees are all examples of opportunity-reducing, surveillance-increasing social-ecological interventions.

Blauvelt (1980) extends the notion of "presence" in his emphasis on shared responsibility. The broader the responsibility within an institution for deopportunizing vandalism, the more likely such an approach is to succeed. Thus, in a school setting, such matters are ideally the concern not only of security personnel or administration, but also of all teachers, secretaries, custodians, kitchen personnel, and fellow students. Porter's (1980) "place defense model" suggests a taxonomy of means for citizens in general, and not only institutional personnel, to join the social-ecological intervention effort against vandalism. Included are incident-specific personal confrontations, in which citizens are urged when appropriate to threaten transgressors and physically stop vandalistic behavior; incident-specific appeals to authority, in which police or other authorities are requested to confront transgressors; and non-incident-specific social interventions, such as forming a crime watch group or hiring security personnel. Ducey's (1976) call for heightening citizen involvement via antivandalism public relations efforts, and Yambert and Donow's (1984) highlighting of the need for enhanced "community instincts" and "ecological commandments," are further citizen-oriented social-ecological calls for intervention.

Finally, and in quite a different manner, Shaw (1973) also accords the vandal's social ecology a central intervention role with this macro-level observation:

> Vandalism is a rebellion with a cause. To prevent it, we must combat social indifference, apathy, isolation and the loss of community, neighborhood and family values. We must reaffirm the principle that human rights are more important than property rights, and property rights are acknowledged by all only when all have a share in them. (p. 18)

Changing the Vandal

The other half of the person-environment duet is now considered. In contrast to intervention efforts directed toward the actual or potential vandal's physi-

cal or social environment, here the intervention target is the vandal himself or herself. Cohen (1974) suggests three such person-oriented strategies:

1. *Education.* Here the effort is made to increase the potential vandal's awareness of the costs and other consequences of vandalistic behavior. These interventions assume that once this awareness is increased, the person will consider the possible consequences and choose to refrain from perpetrating vandalism.

2. *Deterrence and retribution.* These strategies rely on threat, punishment, or forcing those committing vandalistic acts to make restitution. Punishment strategies are especially widely employed. Ward (1973) comments:

> The most frequent public reaction to vandalism is "Hit them hard": all that is needed is better detection by the police and stiffer sentences by the court. The general tendency is to support heavier fines, custodial sentences. .. . Other, extra-legal sanctions include banning offenders from swimming baths, sports fields, youth clubs or play centers. Some local authorities have suggested the evicting of tenants whose children are responsible for vandalism, (p. 256)

3. *Deflection.* These strategies "attempt to understand and redirect the motivational causes of vandalism into non-damaging means of expression" (Cohen, 1974, p. 54). They include allowing controlled destruction, providing substitute targets, or furnishing alternative outlets for energetic activity.

Koch (1975) describes a parallel array of person-oriented strategies, employing either coercive controls, the indoctrination of information, legal regulations, or the substitution of functional equivalents:

> The first model has as its goal the total prohibition or elimination of some objectionable behavior. It implies strict enforcement and punishment of offenders. The second is an educational and/or propagandistic strategy. It has as its major goal the objective of changing behavior and attitudes. The third model is a regulative approach which utilizes rules or laws and prescribes allocations of time, space, age groupings, and monetary costs, in order to influence behavior. . . . The final alternative involves the substitution of some functional equivalent for an identified objectionable behavior, (p. 61)

To repeat an earlier-mentioned distinction, environment-focused interventions target opportunity reduction; person-oriented efforts seek to alter motivation. Although punishment, as noted above, appears to be an especially frequently used person-oriented strategy (Heller &c White, 1975; Stoner et al., 1991), there is evidence that heavy reliance on it may often actually result in an increase, not a decrease, in the frequency of vandalism (Greenberg, 1969; Scrimger & Elder, 1981). These same investigators, as well as others, report a substantial decrease in vandalism as punitiveness decreases and such

interventions as increased use of teacher approval for desirable student behaviors are used more frequently (Mayer 8c Butterworth, 1979; Mayer, Butterworth, Nafpaktitis, & Sulzer-Azaroff, 1983; Mayer, Nafpaktitis, Butterworth, & Hollingsworth, 1987).

In contrast to such use of extrinsic rewards (e.g., teacher approval) targeted toward altering vandal behavior, Csikszentmihalyi and Larsen (1978) focus more directly on a strategy calling for enhancement of intrinsic processes. Reliance on extrinsically provided rewards or reinforcement, they propose, is cumbersome and cost-ineffective; most significantly in their view, it functions to diminish the individual's intrinsic motivation not to engage in vandalistic behavior. A second vandal-oriented strategy, of which they are similarly critical on these very same grounds of diminished intrinsic motivation, is that of "strengthening the means-ends connection between adherence to school constraints and achievement of desired future goals" (p. 29). This is a difficult strategy to implement, as it requires a considerably closer correspondence between school performance and future rewards. For many youths and in many schools, such a connection is not easy to perceive. And when it is perceived, it is yet a second instance of training youths to guide their behavior on the basis of extrinsic rather than intrinsic motivations. As their recommended alternative strategy, Csikszentmihalyi and Larsen (1978) suggest reorientation of school procedures and curriculum in a manner designed to stimulate and respond to youths' intrinsic motivation for challenge, for extension of their skills, for mastery, for growth, and for (in their terms) the experience of "flow." In their view,

> the state of enjoyment occurs when a person is challenged at a level matched by his or her level of skill. . . . Ideally, learning should involve systemic involvement in sequences of challenges internalized by students. . . . In the absence of such opportunities, antisocial behavior provides an alternative framework of challenges for bored students. Disruption of classes, vandalism, and violence in schools are, in part, attempts of adolescents to obtain enjoyment in otherwise lifeless schools. Restructuring education in terms of intrinsic motivation would not only reduce school crime, but also accomplish the goal of teaching youth how to enjoy life in an affirmative way. (p. 1)

My own strategic perspective regarding vandal-oriented intervention suggests that both externally imposed incentives *and* intrinsic motivators serve the cause of vandalism reduction well. Vandalism is a domain of interest that has a remarkably meager research base. When rigorous and relevant studies on aspects of this topic do exist, they need to be listened to especially closely. Mayer and colleagues[1] extrinsic-reward studies (Mayer *ik,* Butterworth, 1979; Mayer et al., 1983, 1987), and relevant intrinsic-motivation studies (deCharms, 1968, 1976; Dcci, 1975) stand in support of the value of both orientations in enhancing vandals' prosocial motivation.

One final point needs to be offered regarding vandal-oriented intervention strategies. I urge the desirability of a prescriptive intervention response plan. Ideally, both who the vandal is (Griffiths &: Shapland, 1979), and what level his or her vandalistic behavior has reached (Hauber, 1989) will in part determine the nature of the intervention implemented. Griffiths and Shapland (1979) correctly assert that the vandal's motives and the very meaning of the act itself change with age and context, and that strategies need to vary accordingly:

> The preventive measures that need to be taken to make any given environment vandal-proof may be different according to the nature of the vandal. . . . As an example of this, look at how a window in a deserted house may be broken. This may have been done by kids getting in to play; by older children as a game of skill; by adolescents or adults in order to remove the remaining furniture or fittings; by someone with a grudge against the present or previous landlord; by a pressure group to advertise the dereliction of empty property; or by [a vagrant] to gain attention or to [get in to spend] the night, (pp. 17-18)

Person-Environment Strategies

Earlier, I have offered a rationale for my preferred intervention strategy. Every act of vandalism, I hold, springs from *both* person and environment sources—a dualism that must similarly characterize efforts at its prevention and remediation. The separate person-oriented and environment-oriented vandalism intervention strategies I have now explored—in addition to their several strengths and shortcomings—will optimally be implemented in diverse, prescriptively appropriate combinations. Casserly et al. (1980), Cohen (1973), Geason and Wilson (1990), Kulka (1978), Vestermark and Blauvelt (1978), and Wilson (1979) are among the several vandalism theorists and researchers also championing multilevel, multimodal, person-environment intervention strategies. Several practitioners have already put in place such joint strategies, and at least impressionistically report having done so to good advantage (Hendrick & Murfin, 1974; Jamieson, 1987; Levy-Leboyer, 1984; Mason, 1979; Panko, 1978; Scrimger & Elder, 1981; Stover, 1990; Weeks, 1976; White *&C* Fallis, 1980). In the section that follows, I provide a comprehensive listing and cataloging of the many environment-oriented and person-oriented tactics that have been employed in an array of commonly vandalized settings as means of enacting the strategies we have considered.

INTERVENTION: IMPLEMENTATION TACTICS

The present section consists of a cataloging of vandalism intervention tactics that have been employed in school settings. In arranging this listing, I

have incorporated and built upon Clarke's (1992) taxonomy for categorizing methods of situational crime prevention. I have employed his taxonomic system elsewhere to good advantage in an ecological analysis of aggression interventions targeted more broadly than just at vandalism (Goldstein, 1994), and I believe that with the modifications and new categories I have added to it, it will serve the current purposes well. It should be noted that Clarke's (1992) categories (I through XI) list vandalism interventions directed at the physical and social environment, and that my own categories (XI through XVII) are directly or indirectly targeted toward changing the potential or actual vandal himself or herself.

I. *Target hardening.* This situational crime prevention approach involves the use of devices or materials designed to obstruct the vandal by physical barriers:

1. Toughened glass (acrylic, polycarbon, etc.)
2. Latticework or screens to cover windows
3. Fire-retardant paint
4. High-impact plastic or steel fixtures
5. Hardened rubber or plastic swing seats
6. Concrete or steel picnic tables, benches, bleachers
7. Trash receptacles bolted to concrete bases
8. Rough-play-tolerant adventure playgrounds
9. Original planting of large-diameter trees
10. Slashproof transit vehicle seats
11. Steel-framed bus seats
12. Antigraffiti repellent spray on bus seats
13. Tamperproof sign hardware and fasteners
14. Door anchor hinges with nonremovable pins

II. *Access control.* This approach involves architectural features, mechanical and electronic devices, and related means for maintaining prerogatives over the ability to gain entry:

15. Key control systems
16. Locked gates, doors, windows
17. Electromagnetic doors unopenable from outside
18. Deadbolt and vertical-bolt locks
19. Metal door/window shutters
20. Protective grills over roof access openings
21. Fenced yards
22. Vertical metal or small-mesh (unclimbable) fencing
23. Reduced number of building entrances
24. Unclimbable trees/bushes planted next to building
25. Prickly bushes planted next to site to be protected

26. Sloped windowsills
27. Elimination of crank and gear window mechanisms
28. Steeply angled roofs with parapets and ridges
29. Use of guard dogs
30. Use of student photo identification
31. Partitioning off of selected areas during "downtime" hours
32. High curbs along areas to be protected

III. *Deflecting offenders.* This is the channeling of potentially criminal or aggressive behavior in more prosocial directions by means of architectural, equipment, and related alterations:

33. Graffiti boards, mural programs
34. Schools/studios to give graffiti writers exposure and recognition
35. Interesting wallpaper, daily newspaper, chalkboard on bathroom wall
36. Litter bins
37. Wash fountains and towel dispensers in school hallways
38. Steering of pathway circulation:
    • Paving the shortest walk between connecting points
    • Avoiding sharp changes in direction
    • Paving natural shortcuts after demonstrated use
    • Installing or landscaping traffic barriers (e.g., benches, bushes)
39. "Next step" posters on broken equipment

IV. *Controlling facilitators.* This is the alteration of the means to criminal or aggressive behavior by making such means less available, less accessible, or less potentially injurious:

40. Control over sales of spray paint and indelible markers
41. Removal of debris from construction/demolition sites
42. Removal of waste paper, rubbish, and other combustibles
43. Use of tamperproof screws
44. Placement of permanent signs, building names, and decorative hardware out of reach from ground
45. Placement of school thermostats, fire alarms, and light switches far from "hang-out" areas

V. *Exit-entry screening.* Instead of seeking to exclude potential perpetrators (as in access control), this set of tactics seeks to increase the likelihood of detecting persons who are not in conformity with entry requirements (entry screening) or detecting the attempted removal of objects that should not be removed from protected areas (exit screening):

46. Closed-circuit TV
47. Metal detectors

48. Vibration detectors
49. Motion detectors
50. Perimeter alarm system
51. Library book tags

VI. *Formal surveillance.* This is surveillance by police, guards, monitors, citizen groups, or other paid or volunteer security personnel:

52. Police, citizen, senior citizen, tenant, parent patrols
53. Neighborhood Watch, School Watch, Block Watch, Rail/Bus Watch groups
54. Provision of on-site living quarters for citizens or security personnel (e.g., "school sitters," "campground hosts")
55. Informant hotlines (e.g., "rat-on-a-rat program," "secret witness program")
56. Crime Solvers Anonymous reward program
57. Mechanical, ultrasonic, infrared, electronic intruder alarm systems
58. Automatic fire detection systems
59. After-hours use of school public address system for monitoring

VII. *Natural surveillance.* This is surveillance provided by employees, home owners, pedestrians, and others going about their regular daily activities:

60. Community after-school use
61. Reduced teacher-student ratio
62. Increased number of employees (e.g., playground supervisors, bus conductors, teachers)
63. Round-the-clock custodial staffing
64. Live-in custodian/caretaker
65. Distribution of faculty/staff offices throughout the school
66. Assignment of additional faculty/staff members to hall, cafeteria duty
67. "Youth vacation vigil" student surveillance program
68. Use of bus/train employees to report vandalism on their routes
69. Improved exterior and interior lighting
70. Low trimming of shrubbery and plants

VIII. *Target removal.* This is the physical removal or enhanced inaccessibility of potential vandalism targets:

71. Use of graffiti dissuaders
   • Teflon, plastic laminate, fiberglass, or melamine covering
   • Rock cement, slanted siding, or deeply grooved surfaces

   • "Paint-outs" or use of contrasting colors in patterned surfaces
   • Fast-growing wall vines or shrubbery, or construction of wall barriers
72. Removal of pay phones from high-loitering areas
73. Removal of corner bus seats, hidden from driver's view
74. Removal of outside plant bulbs
75. Windowless school or other buildings
76. Omission of ground-level windows
77. Concealed school door closers
78. Concealed pipework
79. Fittings moved out of reach (e.g., from wall to ceiling)
80. Signs/fixtures made flush with wall or ceiling
81. Key-controlled light fixtures in public areas
82. Removal of (or no replanting of) easily damaged trees/bushes

IX. *Identifying property.* This is the physical identification marking of potential vandalism targets:

83. Property marking with school district identification
84. Property marking with business logo
85. Property marking with identification seals
86. Property marking with organization stencil
87. Property marking with individual's Social Security number

X. *Removing inducements.* This is the physical alteration of potential vandalism targets:

88. Rapid repair of damaged property
89. Rapid removal of graffiti
90. Use of small windowpanes
91. Elimination of school washroom and toilet stall doors
92. Elimination of bars over toilet stall doorways
93. School restroom thermostats kept at 62°F
94. Removal of gates and fences
95. Repainting of playground equipment in bright colors
96. Beautification programs (e.g., landscaping, painting, maintenance)

XL *Rule setting.* This is the making of explicit prior statements about acceptable and unacceptable behaviors, as well as about penalties for noncompliance:

97. Model "hate crime" bill
98. Antivandalism laws
99. Building design specifications
100. Building security codes
101. Parental liability statutes

102. Prohibition of sale of spray paint and indelible markers
103. Codes of rights and responsibilities
104. School rules of student conduct
105. Rigorous, irregular, no-warning fire drills

XII. *Education.* These are direct efforts to dissuade potential and actual vandals by informing them about vandalism costs, consequences, and alternatives:

106. Vandalism education programs
107. Arson education programs
108. Vandalism awareness walks
109. Vandalism case study classroom discussions
110. Classroom brainstorming on vandalism reduction
112. Year-round education
113. Student orientation handbook and meetings
114. Multicultural sensitivity training
115. Antivandalism lectures by older students to younger ones
116. Antivandalism films
117. Antivandalism games
118. Antivandalism slide or tape program
119. Antivandalism brochures
120. "Ride with pride" antivandalism transit program

XIII. *Publicity.* These are indirect efforts to inform potential and actual vandals, as well as the general public, about vandalism costs, consequences, and alternatives:

121. Antivandalism advertising
122. Antivandalism news releases
123. Milk carton/grocery bag antivandalism messages
124. Antivandalism decals on mass transit vehicles
125. Antivandalism slogan contests
126. "Sign amnesty" day (a day of no fines or other penalties for those who return stolen signs)
127. "Help the playground" campaigns
128. Antivandalism buttons, T-shirts, rulers, bookmarks, posters

XIV. *Punishment.* These are negative experiences directed to perpetrators consequent to their vandaiistic behavior:

129. Suspension from school
130. Monetary fines
131. Restitution
132. Student vandalism account
133. Group billing for residence hall damage

XV. *Counseling.* These are remedial experiences directed to perpetrators consequent to their vandaiistic behavior:

134. Student counseling programs
135. Conflict negotiation skills training
136. Moral reasoning training
137. Interpersonal skills training
138. Aggression replacement training
139. Behavior modification treatment for arson
    - Stimulus satiation
    - Contingency management
    - Assertion training

XVI. *Involvement.* These are efforts to increase the sense of involvement with and ownership of potential vandalism targets:

140. Encouraging students in residence halls to personalize (paint, furnish) their rooms
141. Permitting students in residence halls to retain same room several semesters
142. Student participation in school decision making
143. School administration collaboration with student organizations
144. School-home collaboration
145. Hiring of unemployed youths as subway vandalism inspectors
146. "Adopt-a-station" antivandalism program

XVII. *Organizational climate.* These are procedures for enhancing the quality of the potential or actual vandal's social/educational/daily living context:

147. Teacher/staff approval/reward for student prosocial behaviors
148. Teacher respect toward students
149. Teacher/parent modeling of respect for others and for property
150. Regular, visible presence of school principal
151. Involvement of school principal in community activities
152. School curriculum revision
153. Improved student-custodian relationships
154. Improved school-community relationships
155. Reorganization of large schools into schools-within-a-school or house plans

This extended list of context-oriented and vandal-oriented interventions forms a substantial pool of diverse means for seeking to prevent, control, and reduce vandaiistic behavior. In the next section, I propose and examine meaningful rationales for selecting wisely from this intervention pool, in order

to put together synergistic sets or programs of vandalism interventions that are likely to have significant impacts on such behaviors.

INTERVENTION: COMBINATIONS AND EVALUATION

Viewed collectively, the array of preventive and remedial tactics employed in the schools and in other venues frequently targeted for vandalism is diverse and creative; it reflects the substantial energy that a wide variety of professionals continue to expend in their attempt to control and reduce such costly antisocial behavior. This array *of potentially* effective interventions is the good news. The bad news is that anything approaching hard evidence (or even "soft evidence" in most instances} that would aid potential users in sorting through and selecting among these numerous interventions simply does not exist.

One intervention issue that can be addressed with certainty at this point, however, is the need to identify potent *combinations* of interventions. Vandalism, like all instances of aggression, is a complexly determined behavior. Every act of vandalism derives from several causes, and therefore is best combated with equally complex interventions. In this section of the chapter, I seek to examine and elaborate these assertions regarding complexity of causes and the parallel need for complexity of interventions.

Complexity of Causes

Suppose that a teacher walking down a school corridor turns a corner and comes upon one of her students spray-painting his initials across the doors of several other students' lockers. Later that day, the teacher meets with the assistant principal to discuss the incident—both its causes and its consequences. In my experience, it is quite common that in discussions such as these, both teacher and administrator will focus their attention *exclusively* on the perpetrator. "Johnny is a chronically bad kid [or a good kid]. He is angry [or aggressive, or misunderstood, or abused, or sleepy, or whatever]. We should caution him [or deny him certain privileges, discipline him, detain him, or suspend him]."

Is something missing here? Are the teacher's and the assistant principal's views of both causality and cure too limited? I do not want to belabor the central theme of earlier chapters of this book; I simply wish to reiterate that every act of aggression, including vandalistic acts, is a person-environment event. This perspective on complexity of causes is elaborated in Table 14.1. If the table's assertion of complex causality for all acts of aggression is correct, then it logically follows that such complexity must also optimally characterize intervention attempts. Cure must follow cause. In a related context, I have sought to describe this perspective more specifically:

TABLE 14.1. Multiple Causes of Aggressive Behavior

General category	Specific factors
Person variables	
Physiological predisposition	Male gender and associated testosterone and temperament levels
Cognitive-affective patterns	Attribution of hostile intent; projection of blame; mislabeling; low level of moral reasoning
Interpersonal skills	Absence of self-control, anger management, prosocial skill alternatives
Environmental variables	
Cultural context	Societal traditions and mores that encourage aggression
Immediate interpersonal environment	Parental/peer criminality; peer pressure; video, film, live models of aggression
Immediate physical environment	Temperature; crowding; low probability of surveillance; incivilities
Presence of disinhibitors	Alcohol, drugs; successful aggressive models
Presence of means	Weapons, tools (spray paint, markers, bricks, etc.)
Presence of targets	Windows, walls, transit vehicles, fencing, etc.

The call for complexity of solution has been heard before, from the community psychologist (Heller, Price, Reinharz, Riger, Wandersman, 6c D'Aunno, 1984), the ecological psychologist (Moos 6c Insel, 1974), the environmental designer (Krasner, 1980) and the systems analyst (Plas, 1986). . . . [To] have even [a] modest chance of enduring success, interventions designed to reduce aggression towards persons or property in school contexts must be oriented not only towards the aggressor himself, but also at the levels of the teacher, school administration and organization, and the larger community context. Furthermore ... an optimally complex intervention designed to reduce school violence ought to seek to do so via a variety of modes or channels. The first requisite, therefore, which we propose as necessary for the effective planning of a successful aggression reduction intervention is multilevel, multichannel complexity. (Goldstein, 1988, p. 294)

Below, I draw upon the pool of vandalism interventions presented earlier in order to illustratively reorganize samples of these interventions into just such multilevel, multichannel configurations. In the absence of efficacy evaluations, no particular interventions or intervention configurations can be singled out for recommended use at this time. However, I believe that this

emphasis on the selection and implementation of meaningful intervention *combinations* is likely to prove a major step toward truly effective vandalism prevention, control, and reduction.

Complexity of Interventions

Table 14.2 presents a level x channel intervention schema targeted to the reduction of vandalism in school contexts. My intent here is to urge both practitioners and evaluators of vandalism prevention/reduction efforts to make sure that interventions at all levels and through all channels are included in their packages or sets of interventions.

A second factorial schema seeking to reflect in its particulars the desirable complexity of vandalism intervention programming is that offered by Harootunian(1986). Instead of mode or channel of intervention, Harootunian's proposal crosses level of intervention with intended goal. In a later publication (Goldstein, Harootunian, & Conoley, 1994, p. 204), he observes:

> Various actions taken against aggression are initiated to prevent or discourage hostile acts directed against persons or school property. Such measures as 24-hour custodial service and better lighting are designed to prevent aggression. The use of Plexigias windows may not prevent aggressive acts, but it will certainly reduce the incidence of broken windows. Compensatory interventions do not in themselves change aggressive or disruptive students, but they do offset the consequences of their actions. Remedial interventions, on the other hand, are aimed at changing students, not simply providing them with ways of circumventing their aggressive acts.

Table 14.3 illustrates this levels x goals perspective.

Beyond the multilevel, multigoal vandalism intervention combinations derivable from Table 14.3, the schemas of Tables 14.2 and 14.3 may be combined in the actual practice of planning and implementing vandalism prevention/reduction programs. Such a three-dimensional schema based simultaneously on intervention levels, channels, and goals may be a bit complex to conceptualize, but it is no more complex than the multiply determined behavior it seeks to alter—vandalism. Furthermore, as Harootunian (Goldstein et al., 1994, p. 206) notes,

> any one strategy in isolation often has resulted in confusion, if not contradictory findings. A multiple perspective strategy makes it possible to determine where a suggested intervention or approach fits and how it may influence or be influenced by adjacent solutions. Also, a comprehensive view of school aggression may reveal gaps and overloads in the system. There is evidence, for example (Zwier & Vaughan, 1984), that almost one-half of the literature on school vandalism focuses on the physical dimensions of the school.

TABLE 14.2. A Multilevel, Multichannel Schema for the Reduction of School Vandalism

Level of intervention	Mode of intervention				
	Psychological	Educational	Administrative	Legal	Physical
Community	"Youth vacation vigil" program	Arson education programs	"Adopt-a-school" programs	Monetary fines	Citizen, police, parent patrols
School	Conflict negotiation programs	Year-round education	Schools-within-a-school	Codes of rights and responsibilities	Lighting, painting, paving programs
Teacher	School–home collaboration	Multicultural sensitivity training	Reduced teacher–student ratio	Property marking with school ID	Distribution of faculty offices throughout school
Student	Interpersonal skills training	Vandalism awareness walks	School detention, suspension	Restitution, student vandalism accounts	Graffiti boards, mural walls

TABLE 14.3. A Multilevel, Multigoal Schema for the Reduction of School Vandalism

Level of intervention	Goal of intervention		
	Prevention	Compensatory	Remediation
Community	Adopt-a-school programs	Less restrictive child labor laws Short-term treatment centers	Family support services
School	24-hour custodial service	Use of Plexiglas windows	Prescriptively tailored courses
Teacher	Programs to enhance knowledge of ethnic and minority milieu	Better teacher-pupil ratio	Acquisition of new training techniques in psychological skills (e.g., structured learning)
Student	Identification cards	School transfers Part-time programs	Interpersonal training Behavior modification

Note. From Harootunian (1986, p. 131). Copyright 1986 by Pergamon Press, Inc. Reprinted by permission.

In quite the same factorial spirit as Tables 14.2 and 14.3, Zwier and Vaughan (1984) propose a schema for combining vandalism interventions—one that crosses level of intervention (defined differently than it is defined above) with ideological orientation. Educational practices in U.S. public schools have long been fair game for broad and often intense public concern and debate. This spotlight of attention most certainly includes disciplinary practices. Harootunian (Goldstein et al., 1994) quite correctly notes that in order for a specific intervention to be accepted, to be implemented, and to have a chance of succeeding, the values it elicits must overlap to an appreciable degree with the values or ideologies of those who are asked to accept and participate in its implementation. Table 14.4 details this level x ideology perspective.

As noted above, the different ideological perspectives included in this table have generated considerable historical and current debate and contentiousness in the United States. My own belief is that the appropriate position at this point is an empirical one. Whether a set of vandalism interventions reflecting one or another ideological orientation (crossed with levels) proves most efficacious, or a mixing of ideological implementations is to be preferred, is a matter for yet-to-be-conducted efficacy evaluations. Whichever ideological stance or stances guide the selection and implementation of interventions, and whichever levels, channels, or goals are also reflected therein, I believe that three qualities of such programming are essential to success: Vandalism interventions must be comprehensive, prescriptive, and appreciative.

TABLE 14.4. The Relationship between Ideological Orientations and Assumptions Concerning the Cause of School Vandalism, and Types of Solutions Offered

Ideological orientation and assumption of cause	Type of solution		
	Specific ◀——————————————————————▶ Diffuse		
	Physical environment	School system	Community at large
Conservative Vandals are deviant. They must be caught and punished.	Protection of school and school grounds, employment of security officers and security officers and caretakers[a]	Encouragement and enforcement of school rules, use of contingency contracts	Involvement of community in antivandalism patrols and (parent) restitution programs, dependence on judicial system
Liberal The school system is malfunctioning. Vandals capitalize on this.	(Superficial) improvement of the design, appearance, and layout of the school grounds	Modifications in school climate, curriculum, and use of special conflict management programs[a]	Extension of recreational activities, use of school after hours for health and social services
Radical The school system is debilitating. Vandalism is a response of normal individuals to abnormal conditions.	Promotion of radical changes in the structure and appearance of the school, approval of policy to decrease the size of large schools and maintain small schools	Provision of student involvement in decision-making process, adoption of changes in assessment procedures, and exploration of alternative schooling methods	Involvement of the whole community in school affairs, installment of community education programs, improvement of social situation in society at large[a]

Note. From Zwier and Vaughan (1984, p. 269). Copyright 1984 by the American Education Research Association. Reprinted by permission.
[a]The solution considered most favorably by the particular ideological orientation.

OPTIMAL INTERVENTION CHARACTERISTICS

Comprehensive Programming

As quite directly implied in the presentation and discussion of Tables 14.1 through 14.4, I view vandalism as a complexly determined phenomenon requiring equally complex intervention responses. The notions of the person-environment duet, levels of intervention, multiple channels or modes of response, diverse intervention goals, and varied intervention ideologies all call in their different ways for comprehensive intervention combinations.

Prescriptive Programming

The second highly desirable quality of interventions offered is that they be differential, tailored, individualized, or prescriptive interventions. "Vandalism" is a term identifying a very wide array of behaviors that express exceedingly diverse motivations; are carried out in a great variety of settings; and are enacted by persons differing widely in age, experience, past antisocial behavior, peer group affiliation, system support, and numerous other characteristics possibly relevant to intervention effectiveness. One size does not fit all.

Understandably, most discussions of differential or prescriptive intervention programming, whether directed toward vandalism or other problem behaviors, have focused on examining which type(s) of interventions should be employed with which type(s) of perpetrators. There is, however, an important third aspect of optimal prescriptions:

> . .. optimal prescriptions should be tridifferential, specifying type of intervention by type of client by type of change agent. This last class of variable merits attention. Interventions as received by youths to whom they are directed are never identical to the [intervention] procedures as specified in a textbook or treatment manual. In actual practice, the intervention specified in a manual is interpreted and implemented by the change agent and perceived and experienced by the youths. The change agent looms large in this sequence. . .. Who administers the intervention does make a difference. (Goldstein, 1978, pp. 479-480)

Appreciative Programming

Vandalism is committed by European-American, African-American, Latino, Asian, Native American, and other children, adolescents, and adults. Such diversity among perpetrators has implications not only for how a given intervention is best presented and by whom, but also for the very structure and content of the intervention itself. One prime route to maximizing the impact of intervention structure and content is to involve persons representative of the ultimate target group(s) in the intervention's development.

Effective interventions cannot be developed only "from the outside in." The very meaning of vandalistic behavior; the perception and potency of its consequences; the role of peer pressure, neighborhood incivility, and other external influences; and the apparent appropriateness and utility of alternative interventions must all be viewed through the age-graded, gender-associated, and cultural lenses of its likely perpetrators and intervention targets. Whether such "inside information" is obtained by means of formal or informal "consumer consultants," through focus groups, or in other ways, it is likely to prove highly useful in the effort to enhance intervention efficacy.

I have urged that rationally composed vandalism intervention combinations be planned comprehensively, prescriptively, and appreciatively. When such interventions are implemented, I further encourage that adequate attention be paid to intervention integrity, intensity, and coordination.

Intervention Integrity

Intervention "integrity" is the degree to which an intervention as actually implemented corresponds to the intervention as planned. Intervention integrity may be problematic for a number of reasons. An adequately detailed plan may never have been developed. Ideally, interventions to be carried out will first be described in full, sequential, user-friendly detail in "treatment manuals" that can be widely distributed and can serve as concrete, step-by-step, systematic guides for intervenors. Even when such a manual has been developed, distributed, and read, intervention monitoring will often reveal substantial discrepancies between plan and reality (i.e., low intervention integrity). Other responsibilities, large teaching loads, extra bus routes to drive, and larger areas to keep under surveillance may all lead to overburdened, tired, or lazy intervenors. Distractions, emergencies, exigencies, or other realities may detour the practitioner from the intervention plan. Supervision or monitoring of intervenors, intended to "keep interventions on track," may be inadequate or may fail to materialize altogether. Even if a plan is appropriately described, detailed, and exemplified in a vandalism intervention procedures manual, it may fail to anticipate an array of significant circumstances. For interventions to succeed in their intended purpose, integrity is a crucial prerequisite.

Intervention Intensity

"Intensity" means the amount, quantity, or dosage of the intervention provided. Vandalism, as but one expression of aggression, is often a chronic, overlearned, well-reinforced behavior. One-shot, short-term, or otherwise limited interventions will rarely if ever be potent enough to prevent or reme-

diate such behavior on anything approaching a sustained basis. Consider a small sampling of the intervention tactics listed earlier in this chapter—locks, tamperproof hardware, steering of pathway circulation, control of spray paint sales, use of closed-circuit TV, hiring citizens for watch patrols, collecting restitution, curriculum revision, and antivandalism education and publicity. In each instance, the intervenor needs to ask: Is this enough, or strong enough, or numerous enough, or sustained enough? These are questions about intervention intensity.

Intervention Coordination

I have placed a great emphasis in this chapter on intervention combinations or sets as a necessary requirement for successful vandalism prevention and reduction; moreover, person-environment targeting, multiple levels of intervention, and multichannel interventions all mean that a variety of persons and agencies may be offering parts of an intervention combination. Accordingly, the coordination of effort rises to become a significant concern, as I have observed elsewhere:

> Society's agents often work in splendid isolation from one another. Their efforts are sometimes conflicting or at cross purposes, often quite independent, and infrequently additive. Not unlike the far too specialized physician who has not a "whole patient" but "an interesting liver" on his ward, agency personnel often fail to see and respond to ... youth as a gestalt. Instead, they concern themselves exclusively with their own segmented, limited domain, or mandated agency focus. When this occurs, the potential for uncoordinated, nonadditive, and conflicting interventions is high. Major attention to intervention coordination is crucial, especially in the context of comprehensive intervention programming, in which a number of diversely targeted agencies may be simultaneously involved with the same youth. (Goldstein, 1993, p. 484}

CONCLUSION

Vandalism in U.S. schools is a frequent, costly, and persistent fact of educational life. Like its counterpart, aggression toward persons, it is causally a person-environment event; thus, parallel interactionist strategies and tactics are required for its reduction and control. I have sought in this chapter to provide such rationales and means, as well as to propose meaningful bases for selecting among and grouping these several alternatives in order to constitute intervention programs that are likely to be effective. The monetary, social, and educational costs of contemporary vandalistic behavior are quite major; so too must be efforts at its prevention and reduction.

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