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Constructive Noncooperation: Living in Truth

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Abstract

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Keywords: *behavioral systems science, campaigns of resistance, constructive noncooperation, Mohandas Gandhi, nonviolence*

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Constructive Noncooperation: Living in Truth

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Abstract

Mohandas Gandhi often indicated that nonviolence was “a science,” and he appears to have meant this literally. Consistent with this vision, in this paper, we outline and apply principles of behavioral systems science, an emerging data-based approach to understanding the dynamics of complex cultural systems, to the practice of constructive noncooperation (Gandhi’s “constructive programme”). Although Gandhi emphasized that constructive action was the most important and potent of nonviolent strategic options, constructive alternatives have been the least developed in the literature of nonviolent struggle. The reconceptualization of constructive noncooperation in behavioral systems terms offered here suggests that rigorous analysis of Havel’s “living in truth” and Gandhi’s “truth force” may be both possible and practically useful in challenging oppression and supporting human rights.

“I am but a humble explorer of the science of nonviolence”

M. K. Gandhi (*Young India*, November 20, 1924)

Vast resources have been dedicated to refining the science and practice of coercion, domination, killing, and war. Revolutionary movements and violent insurgencies, arguably natural responses to societal repression, have often drawn on the resulting knowledge and weaponry. There are, however, strong arguments for seeking

other strategic options for challenging oppression (Ackerman and Krueger 1994; Cortright 2006). Challenging an enemy with weapons in which he has an enormous advantage is usually self-defeating; even when such challenge appears successful, violent resistance commonly engenders a replacement system that is itself rooted in and sustained by threat of force (Deming 1971; Michnik 1985; Sharp 2005). Václav Havel (playwright, dissident, and ultimately the last president of Czechoslovakia and the first president of the new Czech Republic), suggested that should a liberation movement rely on violent resistance, “the future would be fatally stigmatized by the very means used to secure it” (1978, 93).

Intriguingly, there are strong scientific arguments that support these observations. Threat, violence, and other forms of coercion are deeply braided into contemporary societies. Sidman (2001) integrated decades of research on individual and cultural behavior to explain why coercive approaches can be so pervasive, so seductive—and so damaging. Established science demonstrates that extreme coercion, even when it produces immediate results, predictably and consistently produces grave side effects, germinating the seeds of its own ultimate failure (Sidman).

Systemic and structural violations of basic human rights cannot usually be resolved through negotiation processes (Sharp 2002). Fundamental rights ought not be negotiated away, and appeals to common humanity under such circumstances have seldom if ever resulted in the ceding of power. There is however one strategic option with a demonstrated history of adequate power: active nonviolent struggle (Sharp 2005). Hundreds of examples of nonviolent resistance to serious repression, with varying degrees of success, have been documented and are available for analysis (see Ackerman

and Duvall 2000; McCarthy and Sharp 1997; and Zunes, Kurtz, and Asher 1999, for examples).

Gandhi asserted that “we need experts to develop [nonviolence] into a science” (2002, 117), but only quite modest resources have been dedicated to such work (cf. Bond 1988). Dedicating only a small percentage of the resources devoted to weapons, war, insurgency and counterinsurgency, and other forms of violence to scientifically designed observational, analytic, and experimental research related to nonviolent struggle might yield enormous benefits (Martin 1997, 2005). Some valuable efforts have been made, particularly drawing on social science theory and methods. For example, Downton and Wehr (1998), drawing on and contributing to collective action theory, have examined factors predicting persistent peace activism. Jasper (1998) presented a detailed analysis of the important but neglected place of emotion in protest movements.

Klitgaard (1971) brought the power of game theory to analysis of Gandhi’s tactics, a valuable approach that has some commonalities with the approach taken here. Klitgaard fails, however, to make sense of demonstrably effective methods of nonviolent struggle against “tyrants;” Sharp (2010) has clarified strategic options for such cases. Nakre (1976) studied individual satyagrahi’s cognitive understandings of, and commitment to nonviolent norms using survey methods. Wiltfang and McAdam (1991), again using survey methods and multivariate analysis, studied predictors of willingness to engage in high-risk and high-cost activities among activists. Such social science investigations clearly have made valuable contributions. At the same time, the resources committed to such work are dwarfed by those dedicated to violent alternatives.

In this paper we draw primarily on a different body of scientific work, behavior

analysis and behavioral systems analysis (BSA; an approach for studying the dynamics of complex behavioral and cultural systems). Behavior analysis and BSA draw primarily on natural science rather than social science methods, and have more in common with biology, ecology, and astronomy than with the social sciences (Johnston and Pennypacker 1993). The social sciences generally bring statistical approaches to the study of an array of hypothetical cognitive and emotional constructs and conditions grounded in an array of midlevel theories (see, for example, Polletta and Jasper 2001). By contrast, the principles and theory undergirding a natural science approach to behavior have emerged from successive observations of individual organisms and cultural groups over time, typically using experimental methods. Although their origins and usual methods are quite distinct, the two strategic approaches also often draw from each other. Behavior analysis and BSA and the theory emerging from them offer methods for tracing the interlocking processes by which cultural practices and collective actions among individuals and groups function to support oppression or justice (*Behavior and Social Issues* 2004, 2006; Biglan 1995; Mattaini forthcoming; Mattaini and Strickland 2006), and may suggest accessible points for nonviolent intervention.

Nonviolent Resistance to Oppression

Nonviolent struggle is neither passive nor primarily symbolic. Effective nonviolent resistance rather involves “confront[ing] and undermin[ing] oppressive power with forceful action” (Cortright 2006, 121). Understanding this, Barbara Deming, a pivotal figure in the development of nonviolent struggle, called on oppressed groups and their supporters to “pass from protest to resistance, from merely ‘symbolic’ actions to

‘practical ones’” that disrupt an existing repressive equilibrium (1971, 216). Gandhi himself had no patience with mere symbol, championing nonviolent but forceful action (thus his emphasis on *Satyagraha*—commonly translated as “truth force”). Effective nonviolent struggle involves threat or practice of active disruption of the increasingly complex interdependencies of contemporary societies (Piven 2006; Sharp 2010). Nonviolent struggle is not designed to be safe; resistance to serious oppression is always dangerous. It is, however, designed to be powerful.

Gene Sharp, the doyen of nonviolence theory, offers a partial list of 198 methods of nonviolent action, divided into three major classes: (1) nonviolent protest and persuasion, (2) noncooperation; and (3) nonviolent intervention (1959, 1973, 2005). With such extensive possibilities, the choice of strategic and tactical options under varying contextual conditions is challenging (Aspey and Eppler 2001). While some (including Gandhi) have confidently asserted that nonviolent action is potentially a “full substitute” [for armed revolt] (Gandhi 1945, 3), others have strongly disagreed (Rigby 1995). Rigby concludes that nonviolence is not a functional alternative to violence; that certain ends can only be achieved through violence. This argument is based on the author’s notion that certain military interventions—such as pacifying a group of people by bombing them—hold no nonviolent alternative. Whether “pacifying” an oppressed people, by bombing or otherwise, is a worthy end is of course a separate question. A scientific perspective requires maintaining an open mind about the issue of substitutability. The extent to which nonviolence can substitute for force, whether in resistance, insurgent, military, or even policing situations, can only be determined through the kinds of rigorous study to which behavioral systems analysis can contribute.

Constructive Noncooperation

Gandhi believed that the central power of nonviolence lay in creating and constructing—rather than in obstructing. What he termed the *constructive programme* focused on building an autonomous healthy society that refused to rely on resources provided by the oppressor, while creating strategic improvements in practical, social, intellectual, and spiritual dimensions of daily life (Gandhi 1929, 1945; Nagler 2004). Gandhi understood the constructive program (or *constructive noncooperation*, Schell's [2003] term which we adopt in this paper) to be the most important strategic option for nonviolent action (Gandhi 1945). Paradoxically, this option is the single major dimension of nonviolent struggle that has been least fully explored and developed.

Gandhi's constructive programme was designed to support “construction of Poorna Swaraj or complete Independence by truthful and nonviolent means” (Gandhi 1945, 5). The core of the constructive programme is “living the social and political order [one] wants to create” (Hettne 1976, 230). Gandhi believed that if the population acted autonomously, the substance of political power would thereby already be gained; the inevitable subsequent takeover of the structures of government would be merely “a shadow, an emblem” (quoted in Schell 2003, 140). He was quite specific as to how independence in the economic, educational and governance arenas could be achieved in the Indian subcontinent; the final (1945) version of his pamphlet *Constructive Programme* was organized into 18 sections, including among others *khadi* (the independent production of local cloth, often symbolized by the spinning wheel), emphasis on local languages rather than the English of the colonial oppressors, and the full incorporation of all groups including Dalits (“untouchables”), peasants, lepers,

women, and aboriginals into society. Gandhi clearly understood that an educational system controlled by the colonial government profoundly strengthened foreign rule, and therefore included both a new approach to the education of children, and liberatory education (“true political education of the adult by word of mouth,” p. 15) in his program.

Constructive noncooperation on one level is a route to improving life for an oppressed group or population, but by its very nature is *simultaneously a means of active resistance*. Relationships of dependence and fear are essential to maintaining repressive structures; constructive programs directly challenge both. At its heart constructive noncooperation involves the construction and sustainment of a new, self-reliant and self-determining culture within the shell of—and in resistance to—structural oppression. Havel, who spoke of constructive noncooperation as *living in truth* (see below), noted, “As long as it remains what it is, the practice of living within the truth cannot fail to be a threat to the system” (1978, 112).

Other Views of Constructive Noncooperation

Gene Sharp (2002), whose work has been and is being used by resistance movements in Afghanistan, Myanmar, Palestine, and at least two dozen other countries over several decades, describes a process of “escalating freedom” as a central dimension of defying oppression under a dictatorship. Sharp indicates that the “growth of autonomous social, economic, cultural and political institutions progressively expands the ‘democratic space’ of the society and shrinks the control of the dictatorship” (p. 58), in time leading to “*de facto* freedom” (p. 59).

Ackerman and Kruegler (1994) view constructive programs somewhat differently:

Our use of the phrase “constructive work” is compatible, but not precisely synonymous with, Gandhi’s usage. In his philosophy, a constructive program was a voluntary effort outside the aegis of the state, which had the dual purpose of redressing material inequalities and training the participants to be more competent and self-reliant. We refer to positive actions that can be taken primarily with a view to improving the material situation in which a conflict may be developed.

(p. 53)

For Ackerman and Kruegler, then, constructive work is primarily a step toward preparing for nonviolent struggles of other kinds—a means toward an end, rather than, as it was for Gandhi, the central strategy for escaping oppression and achieving autonomy. There are many examples of such work to improve the material situation of African America in the century leading up to the civil rights struggles of the 1960s (du Bois 1907; Gordon 1991).

The essential distinction between constructive noncooperation and most other forms of nonviolent social action (e.g., persuasion, protest, disruption, obstruction, or boycotts) is that *the immediate targets for change in constructive nonviolent action are the actions of the resistance community itself, rather than the opponent*. Havel notes, “The primary purpose ... is always ... to have an impact on society, not to affect the power structure” (1978, 105). Such changes by and within the resistance community are important not just as a means, but rather as the primary end in constructive efforts. Because of the interdependencies between the grievance group and the opponent, however, ultimately the opponent’s actions also shift in response.

Strategic Principles Emerging from Behavioral Systems Analysis

Those studying nonviolence have in recent years reached a near consensus that explicit attention to strategic analysis and planning can increase the likelihood of positive outcomes (e.g., Ackerman and Kruegler 1994; Cortright 2006; Helvey 2004; Sharp 2005). For example, Sharp identifies 6 sources of political power (authority, human resources, skills and knowledge, intangible factors, material resources, and sanctions—termed by Helvey “pillars of support”, p. 9), and describes strategic approaches for restricting or withholding each in his essential volume, *From Dictatorship to Democracy* (2002) and elsewhere, an analysis that is further detailed by Helvey. As discussed later, established principles of behavioral systems science can help to further refine strategic approaches for effective resistance in politically complex situations.

Studies of dynamic systems and complex phenomena have established that complexity typically is emergent from repetition and continuous self-organization of simple processes and patterns over time (e.g., Granic and Patterson 2006; Wolfram 2002). Behavioral systems analysis, as discussed later, has an austere and parsimonious elegance grounded in experimental history. The approach begins with a modest number of empirically well-established principles explaining the dynamics that shape and maintain actions by individuals and small groups, then moves to study how those simple elements interlock to produce complex cultural-level processes and outcomes (Houmanfar, Rodrigues, and Ward 2010; Mattaini 2008). In the material that follows we begin by outlining a set of key principles established by behavioral research; we then sketch analytic methods for understanding how those principles contribute to explaining the emergence of cultural processes from networks of relatively simple transactions.

Table 1. *Central Principles of Behavior Analysis Contributing to BSA*

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- Constructional approaches that shape and sustain desirable actions have significant advantages over approaches that emphasize suppressing undesirable actions.
 - Both individual behavior and the processes within and among behavioral systems are selected by their consequences.
 - Behavior is allocated to possible alternatives proportionately to how successful those alternatives are in producing desirable outcomes within a specific environmental context (the *matching law*).
 - Extinction (planned discontinuation of previous available cooperation and compliance) is a central dynamic in nonviolent social action, including constructive noncooperation.
 - Changes in values and attitudes can occur through shifts in equivalence relations—ways of partitioning the world analogous to set theory.
 - Creativity is essential to maintaining individual action and cultural practices over time.
-

Key Behavior Analytic Principles

A number of well-established principles of behavioral analytic science have particular relevance for higher-level BSA, and therefore for strategic analysis in constructive noncooperation. Several of those principles, listed above in Table 1, are briefly summarized in the material that follows, with reference to their places in

nonviolent struggle. The principles listed are illustrative rather than exhaustive, but each is important for the analysis of constructive noncooperation.

The Advantages of “Constructional” Approaches

One well-established principle with broad applicability to strategic nonviolent struggle is the primacy of *constructional* (Goldiamond 1975) options over suppressive and coercive alternatives (Sidman 2001). Encouraging new, desirable action occurs through providing access to improved personal and group outcomes and conditions, which tend to stabilize the new practices (Goldiamond). Suppression of undesirable actions through coercion and threat typically requires constant surveillance, and tends to evoke resistance, defection, and efforts to exert coercive countercontrol (Sidman). Such coercive repression structures what Havel refers to as a persistent “latent social crisis” (1978, 105), leaving the oppressive system ever fragile and vulnerable to challenge, while increasing overall levels of fear and distrust within a society. And as noted by Kurlansky, “In most of history, people motivated by fear have not acted well” (2008, 97).

Constructional processes can often reduce undesirable actions indirectly, without the need for threats or punishment (Goldiamond 1975). Encouraging a resister to “stand and endure” attack by using constructional approaches produces substantively different outcomes than attempting to suppress “running” or “fighting back” through condemnation, coercion, or threat. Constructing the “stand and endure” repertoire helps prevent escape or counter-aggression, but without the side effects that are likely from such suppressive techniques. Constructive noncooperation is largely a constructional resistance strategy.

Selection by Consequences

Why do people, whether members of resistance movements or those maintaining oppression, do what they do—and how can that be changed? Why do members of groups act in concert? Within the framework of behavioral systems theory, the central process involved is *selection by consequences* (Skinner 1981). Both individual behavior and collective action are shaped and maintained by selective processes closely analogous to natural selection (Biglan 1995, 2003). A selectionist framework emphasizes that, all else being equal, actions that “work” within particular environmental conditions tend to be repeated (those actions are selected by their success in the world), both by individuals and by groups. Actions that produce no effect or negative effects tend not to be repeated, and are typically discouraged by social groups. Selection has some disadvantages. Because selection emerges from historical conditions, it may not produce responses that are effective when conditions changed. Piven (2006) terms this “the drag of the past” (p. 35). Analysis of behavioral systems dynamics present in the moment may help to mitigate this problem. (Other contextual conditions, discussed later, can potentiate or attenuate the power of selecting consequences.) The selection principle, which has considerable face validity, is being actively studied and refined in BSA (Biglan 2003; Houmanfar, Rodrigues, and Ward 2010; Mattaini 2008).

The critical difference in a selectionist perspective as contrasted with more cognitive understandings of human action common in contemporary social science lies in a central emphasis on changes in the environment, rather than in the person. As will be clear in what follows, this perspective offers novel options for social action. Neither the cognitive nor the selectionist approach should be viewed as “truth;” each has unique contributions to make.

Clarification of goals (what actions by whom are desired), the consequences and contexts that select those actions, and shifts in systems dynamics that could restructure consequential and contextual factors is the heart of strategic analysis (Mattaini, forthcoming; see also Helvey 2004, on strategic analysis). After the Stonewall Inn protest by 2000 members of the gay community in New York City in 1969, for example, activists intentionally targeted “coming out” (not only to each other, but to family, friends, co-workers and other contacts) as the desired behavior, and intentionally arranged strong social consequences that were likely to select that action (D’Emilio 1983). In a reverberating process, the increased collective power that resulted encouraged members of the gay community to escalate their efforts to achieve an array of targeted social changes, ultimately with major cultural effects.

The Matching Law

As resistance movements strengthen their internal networks and advance their autonomy, they are concurrently developing an internal culture of mutual reinforcement that can further support both desired actions and autonomy—initiating a self-organizing and self-sustaining collective dynamic. As individuals gain support, resources, and recognition from within the activist culture and the societal changes it initiates, whatever resources and blandishments the oppressor has to offer become less attractive—their relative value is eroded. There is a well-established mathematical formula, the *matching law*, which predicts with surprising precision how human behavior will be allocated among possible choices under such circumstances (McDowell 1988, 2005). In general, the matching research indicates that action is allocated among possible alternatives proportionate to the relative level of reward each offers (Herrnstein 1997). Allocation of

behavior is not precisely proportionate, but the variations are well understood, and the approximation here is close enough for current purposes (McDowell 2005). If participating in the resistance provides the most desirable outcomes (including personal satisfaction and opportunities to act in altruistically valued ways), those actions are likely to occur at high rates.

Significantly, matching also accounts for what often are seen as inconsistencies in behavior. Consider, for example, current discussions of the actions of persons and communities in Afghanistan who may at one moment appear to ally with Western counterinsurgency efforts, and at other times with the insurgents. In part, differences in moment-by-moment context are obviously involved—one tends to agree with the armed man standing in front of them—but each side often has something distinctive to offer. Typically, human beings do not exclusively choose the single option that will maximize overall rewards; rather they allocate behavior between options proportionately to the relative levels of payoffs they each offer, an approach that may have had survival value (Herrnstein 1997; McDowell 1988). If each side offers something of value, some cooperation will be allocated to each where this is possible. Such choices may be a resilient strategy under changing conditions, and should not be viewed as irrational.

The Central Role of Extinction in Nonviolent Struggle

The *extinction* process is perhaps the most common and powerful behavioral dynamic involved in nonviolent struggle (at least two-thirds of Sharp's 198 methods involve extinction). Extinction is also among the best understood processes in all of behavioral science (Kazdin 2008; Malott and Trojan 2008). All else being equal, when a behavior has previously produced a positive outcome, that behavior is likely to be

repeated. If, however, a previously established positive outcome consistently stops occurring, the rate of the associated behavior ultimately will decline. For example, repressive governments commonly maintain their power through threats, intimidation, and violence; they continue to use these strategies because they produce compliance. Most forms of nonviolent action involve withdrawing cooperation and compliance, even in the face of threats, coercion and violence, and such noncompliance has proven powerful (the United States civil rights struggle relied primarily on these strategic options). When their coercive actions no longer produce compliance, however, the typical response is a rapid escalation of coercive efforts. This escalation is technically termed an *extinction burst* (Kazdin 2008; Sidman 2001). Such escalation, from mild threats to fire hoses, dogs, and murder was evident in the U.S. civil rights struggle (Finkelman 2009). Resistance movements need to be prepared to maintain nonviolent discipline until such escalation has run its course, knowing that it eventually will if it consistently fails to produce an effect.

Constructive noncooperation inherently involves a substantial element of extinction in its refusal to be intimidated or cooperate with injustice. Escalation of oppressive actions in response is then to be expected; power lies in maintaining the resistance in the face of such responses. If, however, the resistance movement succumbs to such escalation, they reinforce escalation of coercion. Standing firm even in the face of gunfire (as the Pashtun resistance did at Kissa Khani Bazaar in Peshawar in 1930; Raqib 2005) is a powerful strategic choice. Turning and running, natural as that may be, is usually worse than not engaging at all—it not only gives the opponent a “win” but is also likely to evoke more severe treatment in future campaigns.

Shifting Equivalence Relations

Downton and Wehr (1998) identified attitudinal availability, specifically a set of activist beliefs and values, as central to maintaining activist commitment. Recent advances in behavioral research have contributed to the rigor of our understanding of attitudes, values, and related verbal behavior (Clayton and Hayes 1999). Think, for example, about the shift from imported cloth to that made locally—one strategic element in the American Revolution (homespun), Te Whiti's 1867 campaign to protect Maori rights in New Zealand, and Gandhi's Indian Independence movement (*khadi*), among others. In each case, the colonized people had come to value goods that profit the colonizer more highly than the less expensive locally-made goods, thus reinforcing dependence while sapping local resources. Technically, new *equivalence relations* had been formed: {British cloth \approx high quality \approx cultured}, and {local cloth \approx poor quality \approx primitive}; the " \approx " symbol indicating equivalence along one or more important dimensions (Sidman 1995). Equivalent constructs function interchangeably in selective processes (Sidman).

Understanding of the place of such equivalence relations in human behavior and cognition has advanced dramatically in the past two decades, and offers important keys to changing values and attitudes. Equivalence relation theory connects human behavior to mathematical set theory. *Relational frame theory* (Hayes, Barnes-Holmes, and Roche 2001) is a related body of work that differs theoretically in significant ways (Clayton and Hayes 1999), but for our purposes here the differences are not substantive.

Once established, equivalence relations are often quite insensitive to environmental changes (Masuda et al. 2009), and the processes of shifting equivalences

can be counter-intuitive. For example, repeating “local cloth is *not* primitive” multiple times paradoxically is likely to *strengthen* the equivalence between “local cloth” and “primitive”—while repeating and reinforcing a conflicting equivalence like {local cloth≈ support for the resistance} can attenuate the problem equivalence (Dixon, Dymond, Rehfeldt, Roche, and Zlomke 2003; Spradlin, Saunders, and Saunders 1992).

There is also recent related research that may be helpful in supporting courageous action among resisters, based on *acceptance and commitment* theory (Hayes, Strosahl, and Wilson 1999). In acceptance and commitment work, there is no effort to block out fear. Rather, fear is accepted as natural under the circumstances—but fear or not, acceptance and commitment research indicates that commitments to act in accordance with one’s values can be made and honored (Biglan, Hayes, and Pistorello 2008). The shift is roughly from, “I’d like to resist, but I am too afraid” to “I accept that I am afraid, and I am nevertheless committed to resisting.” Attempts to directly block the experience of fear (“don’t be afraid”) may have the opposite effect, and often produce immobilization.

Creativity

The importance of creativity, particularly for sustaining activism over time, also emerged clearly in Downton and Wehr’s study of persistent activists (1998). The behavioral underpinnings seem clear. The impact of both positive and negative consequences tends to fade over time in a behavioral process termed *satiation* (Malott and Trojan 2008). As can happen with a favorite food, tactics that were once exciting and powerful for participants in a nonviolent campaign become less reinforcing for participants—and less disruptive for the opponent—with repetition. While consistency of

response is essential in strategies relying on extinction, extended campaigns generally require attention to keeping activists interested and opponents off-balance through new initiatives and tactical shifts.

Behavioral Systems Analysis

Behavioral systems analysis clarifies the dynamics of interlocking actions among people and transactions among human groups (Mattaini 2008; Sandakur 2006). Considerable scientific attention is currently being directed toward understanding the behavioral dynamics that shape organizations, collectives, and cultural groups using these methods (e.g., Malott 2003; *Journal of Organizational Management* 2009a, 2009b; *Behavior and Social Issues* 2006). These analyses contribute to a unique and rigorous understanding of how basic behavioral processes are organized into collective action, and therefore have important implications for addressing critical human problems (Biglan 1995; Mattaini and Thyer 1996; Todorov 2009). Applications of BSA for clarifying the exercise of nonviolent power have been almost nonexistent (Mattaini 2003), but the material that follows suggests that there is value in taking this perspective.

Collective nonviolent action by definition requires the coordinated behavior of a group of people. Sustaining such coordinated action requires the construction of culture—patterns of mutual reinforcement for shared practices (Skinner 1984). For example, the history of nonviolent action indicates that *solidarity, discipline, courage, living in truth*, and the *sharing of power* among members of a movement are among the essential requirements for effective nonviolent struggle (e.g., Ganz 2009; Klitgaard 1971; Sharp 2005). Resistance groups whose internal cultures encourage those practices are likely to survive, and widespread participation in those practices progressively expands

collective power (Sharp 2002). BSA offers a methodology for embedding these dynamics within the activist/grievance group by providing analytic tools for capturing the dynamics of interlocking transactions among multiple classes of actors.

For example, even a relatively simple (but enormously courageous) campaign like that of the Mothers of the Plaza de Mayo (Buenos Aires, 1977-1983) involved intra and intergroup transactions among mothers of the “disappeared,” the military junta, functionaries of the civilian government, paramilitaries, and ultimately workers and the middle class (Paulson 2005a). Strategically, it seems evident that being able to analyze the matrix of interlocking factors contributing to current undesirable actions, as well as those that could encourage desired actions within and between these groups could be of value. Both retrospective analyses of former campaigns and proactive analysis for current campaigns may be valuable. The material that follows describes some of the analytic methods and tools on which BSA draws. (For fuller presentations, see Mattaini 2008, and Mattaini, forthcoming.)

Analytic Diagramming

The education of women and girls in Afghanistan is widely recognized as crucial in terms of both human rights and development (Yacoobi 2008). Despite severe threats and punitive violence, in a contemporary example of constructive noncooperation, many Afghan women girls continue to attend schools (Maron 2009; Wiseman 2010). A sample diagram analyzing the practice of attending school among Afghan girls (the class of actors) is shown in Figure 1. Visualization tools have proven useful for BSA, as they have for other sciences dealing with complexity, because their wide bandwidth enables concurrent attention to multiple variables (Mattaini 1993).

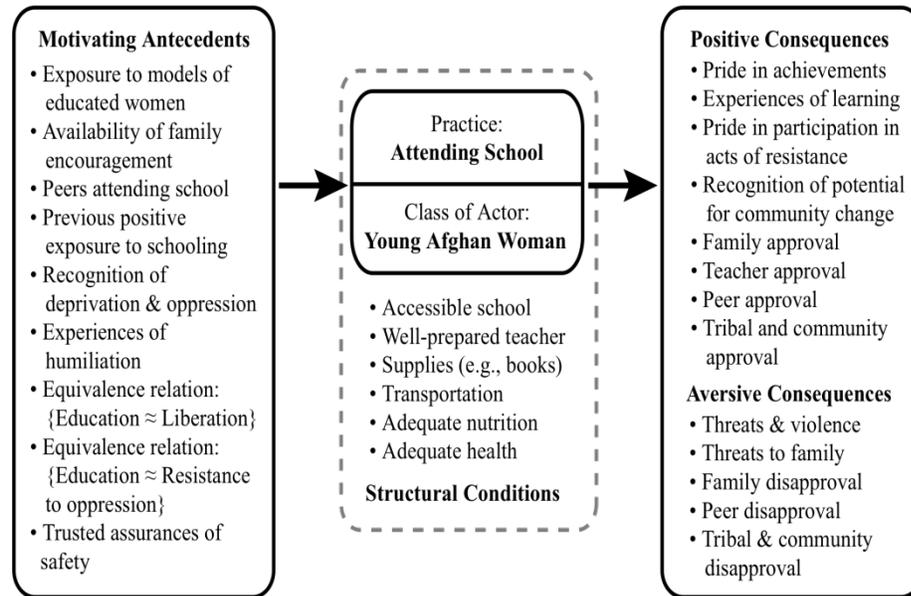


Figure 1. A practice diagram, simplified for presentation, tracing key antecedent, structural, and consequent factors associated with attending school for a young Afghan woman. To encourage attendance, levels of motivating antecedents might be increased, adequate levels of structural antecedents assured, levels of positive consequences increased, and levels of negative consequences decreased. Nearly all such changes involve the practices of interlocking groups. (Note that for very young girls, the primary emphasis would be on practices of parents, although the courage of the very young should not be dismissed.)

Note that such *practice diagrams* are nomothetic representations of factors relatively common to multiple individual cases; what is being analyzed is not one person's behavior, but a practice shared by a class of actors. Examples of motivating antecedent variables are shown on the left, structural variables below the practice, and consequences (both positive and aversive) to the right. Such diagrams can be developed from observations, experiences of and interviews with those who know the situation on the ground most intimately, archival information, and field experiments. Factors selected

for inclusion in such analyses are determined in significant part by application of basic behavioral principles, particularly those discussed earlier. From this kind of analysis, a variety of possible interventions (antecedent, structural, or consequential) can commonly be derived. This, however, is only the first level of analysis. The practices of other classes of actors (parents, tribal and religious leaders, NGOs, the Taliban, and others) constitute the behavioral and cultural field within which school attendance occurs. The principle value of BSA therefore lies in aggregating multiple analyses to explore the interlocks between multiple practices among multiple classes of actors, as discussed below.

Force Field Analysis

Before turning to aggregational analysis, one additional useful tool should be briefly noted. *Force field analysis* was first developed by Kurt Lewin (1951), and variations have been widely used as analytic tools in organizational and community change efforts (Brager and Holloway 1993; Hanson 2007). On a force field diagram as used in BSA, motivating (“driving”) factors that support a desirable practice are displayed in a single column on the left of the page, and factors that restrain that practice by a particular class of actors (e.g., young women, religious leaders) in a column on the right, with a vertical line between the two. Arrows are drawn from each motivating or restraining factor toward the middle line; the relative weight (width) of each arrow is determined based on the strength of each factor. Conceptually, motivating forces “push” the line toward the goal state, while restraining forces push away. Possible action points include increasing the strength of motivating forces, adding additional motivating forces, decreasing the strength of restraining forces, or some combination of these. Force field diagrams can be developed with members of the activist or grievance group, and can be

helpful in ensuring completeness of analysis. Data from these diagrams can be used to refine the practice diagrams discussed earlier. It is important to note that actually drawing such diagrams, and not just thinking about them, typically produces a more complete analysis (Mattaini 1993).

Aggregating Practice Diagrams

The full power of BSA emerges from analysis of the transactional interlocks among the practices of multiple classes of actors. There are always reciprocal interlocks between oppressors and the grievance population, but the actions of other classes of actors (military, police, paramilitary, religious, business, non-governmental, tribal, consumers locally and globally, and many others) may be involved in maintaining structural violence and oppression, and may also play roles in challenging those conditions. Multiple groups may be involved in structuring or weakening Sharp's pillars of support, in shifting attitudes and beliefs, and in supporting cultures of resistance.

Take as an example a (conceptually) simple case of a powerful dictator, and an oppressed population undertaking a campaign of constructive noncooperation. BSA would examine factors for motivating constructive action by progressively larger numbers of resisters (diagramming and force-field analysis could be part of that work). The analysis would also, however, use similar tools to analyze factors shaping the reactions of the dictator. Such analysis would involve looking at the classes of actors who could affect his actions, e.g., police, bureaucrats, workers, and how they might do so. Antecedent, structural, and consequential factors that might affect the practices of each of those groups can also be examined. Where BSA offers its full power is in integrating all of this. It is possible to aggregate practice diagrams that clarify in a single graphic the

most powerful factors scaffolding the practices of each of the groups that structure the current matrix of exchanges, and in a separate graphic the interlocks that might characterize the desired end state. Such diagrams might clarify, for example, the impact of weakening cooperation of civil service workers with the dictator, the possible impact of religious practices to support that shift, and the practices of the resistance movement that might motivate religious leaders to do so. The same figure might include practices of industrial workers required to support the economy, offering additional strategic options. Although drawing on the best available information, such analyses would necessarily be fluid and dynamic, based on shifts in conditions and events as well as further information as it emerges. (For an example of such aggregated diagramming, see Mattaini and Strickland 2006.)

Levels and Examples of Constructive Noncooperation

Successful nonviolent struggle emerges from action at multiple levels, based on strategic analysis of existing interlocking systems dynamics. For heuristic purposes, we discuss here three levels of constructive noncooperation as resistance: (a) “living in truth”; (b) the development of parallel institutions; and (c) the broad emergence of cultures of constructive resistance. These manifestations support each other, and commonly blend seamlessly at their borders.

Living in Truth

Nakhre stated, “Gandhi derived the word Satyagraha, from the words ‘Satya’ meaning truth and ‘Agra-ha’ meaning grip taking. Literally it means ‘holding on to the truth’”—even in the face of pressure to submit (1976, 186). Living under oppressive conditions as if all is well—“living within the lie” in Václav Havel’s (1978) terms—does

tremendous personal and collective damage. As Havel notes, in addition to damaging themselves, in living the lie “individuals confirm the system, fulfill the system, make the system, *are* the system” (quoted in Schell 2003, 196). A seemingly counterintuitive reality widely recognized by nonviolence practitioners and theorists of resistance movements is that oppressive systems require the cooperation of the oppressed to survive (Freire 1972; Gandhi 1945; Piven 2006; Sharp 2005). The behavioral dynamics are clear: The oppressor threatens and coerces; the population cooperates to avoid further coercion, living as well as appears possible within the narrow confines involved. Because of the interdependencies present, only if social institutions and the general population continue to cooperate can coercive power be maintained.

Noncooperation begins with individual acts of truth. Havel indicates that most expressions of truth are “elementary revolts against manipulation: you simply straighten your backbone and live in greater dignity as an individual” (1978, 85). He further states:

The point where living within the truth ceases to be a mere negation of living with a lie and becomes articulate in a particular way, is the point at which something is born that might be called the “independent spiritual, social and political life of society” ... living within the truth becomes articulate and materializes in a visible way. (p. 85)

For Havel, living in truth may begin with acts as small as placing a poster in a window (or refusing to do so) or circulating the script of a play that cannot be publicly produced through an underground network. Typically, actions taken are one step closer to those that would occur in an autonomous society, but not enough to evoke consequences for which the person is not prepared.

Living in truth for Havel is a form of resistance—but it is more. As Schell (2003) notes:

Living in truth—directly doing in your immediate surroundings what you think needs doing, saying what you think is true and needs saying, acting the way you think people should act—is a form of protest, Havel admits, against living in the lie, and so those who try to live in truth are indeed an opposition.... But [for Havel] that is neither all they are nor the main thing they are. Before living in truth is a protest, it is an affirmation. (p. 196)

As Havel notes, in acting in this way, “something is born” (p. 85); or as noted by Horton and Freire, “We make the road by walking” (1990). The critical question here is what initiates and maintains such individual action. Here the power of selection is clear; while individual action may and often does emerge immediately as a reaction to coercive conditions, constructive action over the longer term must produce positive results for those involved, or extinction will occur. Although some individuals can sustain long periods of autonomous action, for most, continued resistance in the face of threats or pain is most likely when social, material, spiritual, and other supports are provided. Given the challenges, living in truth is most likely to be sustained, then, within parallel structures and cultures of resistance.

Parallel Structures

A key strategic option in campaigns of constructive noncooperation is the creation of what the Czech activist Václav Benda termed *parallel structures*—a step toward constructing a new society within the shell of the old as populations move toward living in truth. Those structures may be cultural, economic, educational, labor, political,

religious, legal, medical—historical examples are extensive, each emerging from local realities. In each case, parallel institutions take on necessary communal responsibilities while denying the government legitimacy. Havel (1978) notes:

These parallel structures, it may be said, represent the most articulated expressions so far of “living within the truth.” One of the most important tasks the “dissident movements” have set themselves is to support and develop them ... For what else are parallel structures than an area where a different life can be lived, a life that is in harmony with its own aims and which in turn structures itself in harmony with those aims? (p. 102)

During the Vietnam War, the construction of *hiérarchies parallèles* (Fall 1967), arrangements that structured autonomous political, economic, and social governance, were the core of the ultimately successful National Liberation Front (NLF or Viet Cong) strategy (Schell 2003). These parallel structures, “the true innovation of the Indochina war” (Fall, p. 133), organized the population into networks of interlocking associations and governing groups (the *Lien-Viet*) by which the NLF took and maintained control of countryside ostensibly occupied by the enemy. This dynamic, popularly supported underground system gradually assumed responsibility for supporting and directing the lives of the population. For individuals and for communities, the consequences of allying themselves with the NLF were more reinforcing than allying themselves with the government—a clear example of selection. The matching law suggests that some cooperation with the government would also continue, particularly when surveillance was present or something was immediately to be gained, and that too occurred. Ultimately,

the *Lien Viet* strategy, rather than military action, was largely responsible for the outcome of the struggle (Fall; Schell).

There are many other examples of the development of parallel structures throughout the history of resistance movements. Alternative institutions were an important component of the resistant movements in South Asia and South Africa (Easwaran 1999; McCarthy and Sharp 1997). Barred from dominant society opportunities, key segments of African America have from the earliest days in the New World constructed independent Black media, women's associations, churches, and political and civic associations, building the financial, human and social capital on which survival, resistance, and liberation rely (Finkelman 2009; Gordon 1991). Black Nationalist and Black Power movements (both violent and nonviolent) emphasized self-reliance including the construction of parallel structures and institutions (Breitman 1994; Robinson 2001). These parallel structures also provided a grounding for the eventual obstructive campaigns working for social and economic justice. In indigenous communities in Canada, New Zealand, and the U.S., parallel justice systems based in traditional practices are emerging (Ross 2006; Sawatsky 2009). Grounded in communal and restorative processes, these systems remove Native (and in some cases non-Native) offenders from the Western criminal justice system, which is experienced as both oppressive and counterproductive.

The behavioral systems dynamics of parallel institutions explain their power. Building an autonomous resistance community functions as a constructive challenge that is difficult to effectively combat even as it offers important resources and experiences for the community, thereby selecting continued and increasing participation. For example,

prior to the American Revolution, colonists often refused to serve as jurors in British courts (Schell 2003). Independent colonial justice arrangements were established as needed, however, to maintain public order. Furthermore, the coercive efforts of the British government could not bring the colonists to cooperate—those efforts were put on extinction. Parallel structures often offer better outcomes from the perspective of participants (more responsive justice, or land reform, for example), selecting participation. Furthermore, parallel institutions come to participate in equivalence relations with autonomy, freedom, and resistance for the grievance population. At the same time, parallel institutions by their very existence deny important consequences that have previously selected the actions of the oppressing group, destabilizing and disrupting the interdependencies that have maintained the power of the oppressor.

Strengthening Civil Society as a Culture of Constructive Resistance

Constructive noncooperation ultimately involves the progressive shaping of an autonomous civil society or culture that functions largely independently of official or accustomed arrangements (Gandhi 1945; Havel 1978; Schell 2003). Such civil society is built through the development of interlocking, independent organizations and institutions, but most importantly through the emergence of self-organizing *associations* and *communities* (Havel), which by their very nature reduce dependence on oppressive power structures. What we know about emergence in many contemporary scientific disciplines including physics, biology, and behavioral systems analysis suggests that once such self-organizing systems appear, they may under the right conditions initiate self-amplifying processes that lead to progressively greater differentiation and complexity—so a small beginning may ultimately lead to cascading and irreversible changes (Mattaini 2008).

According to behavioral systems science, culture (a set of common values and actions) emerges from interdependencies within a group. Recognizing this, a culture of resistance can be consciously created in which actions supporting autonomy are selected through shifts in consequences members of the group provide for each other, as well as through shifts in equivalence relations. Such actions as maintaining nonviolent discipline, living in truth, and constructing valued parallel institutions can be constructed intentionally based on an analysis of the specific interdependencies present in the situation. In Havel's Czechoslovakia, for example, the Charter 77 movement supported and sustained the actions of dissident leaders, and inspired further individual and collective action, progressively weakening the communist government.

The emergence of cultures of constructive resistance was central to the revolutions in Czechoslovakia, Poland and Hungary, and ultimately brought down the Soviet Union (Schell 2003). Leading activists—Havel in Czechoslovakia, Adam Michnik in Poland, and Gyorgy Konrád in Hungary in particular—agreed that it would be a mistake to try to directly overthrow the system (Schell). Rather, they believed that the focus of resistance should be on “achieving immediate changes in daily life,” strengthening autonomous civil society (Schell, p. 193). Schell indicates, for example, that “Konrád wanted society to ‘absorb’ the regime in a ‘ripening social transformation.’ He wanted the ‘iceberg of power ... melted from within’” (p. 198).

The Polish people resisted occupation and oppression first by the Nazis, and later by the Soviet Union. This resistance included both violent and nonviolent elements. The first substantial rebellion against the Soviet Union, which was ruthlessly suppressed, occurred in 1956, and a number of further periods of major unrest by labor and

intellectuals followed over the next 25 years. By the 1970s, it was clear to Polish activists that efforts to directly challenge the Communist government (with its Soviet support) could not succeed at that time—but also that beginning to make improvements in people’s lives did not require such a challenge. In 1976, Michnik called for the construction of a “post-totalitarian” society, in which society rebels against the totalitarian government by setting up its own institutions, and “giv[ing] directives to the people on how to behave, not to the powers on how to reform themselves” (quoted in Schell 2003, 195). The government would thus become increasingly irrelevant. An important beginning in Poland was the Committee for Defense of Workers, established in the mid-1970s by intellectuals to help establish unofficial labor organizations; provide assistance to workers—which was labeled “social work” (Schell 2003, 195); and support independent, underground press and publishing efforts, among other activities (Paulson 2005b; McCarthy and Sharp 1997).

In another example, in the 1930s, Badshah Khan, the Pashtun “Frontier Gandhi,” formed a militantly nonviolent Muslim army (the *Khudai Khidmatgars* or Servants of God) 100,000 strong at its peak (Banerjee 2000) to resist the British in the tribal areas between present-day Pakistan and Afghanistan. Most of the work of the *Khudai Khidmatgars* consisted of constructive work in educational, economic, and community development, and the development and support of local youth leagues, councils, and a newspaper, in close alliance with Gandhi’s efforts to the south (Easwaran 1999; Raqib 2005). Those developments clearly contributed to the end of the British colonial era—and suggest that even in this conflict-torn area, nonviolent action and the construction of cultures of constructive resistance have serious potential.

The growth of queer cultures, both within the U.S. and abroad, can also be viewed through the lens of constructive noncooperation. Barred from full participation in civic life, queer-identified people have created independent communities and institutions in response to systemic discrimination (Boyd 2003; Ingram, Bouthillette, and Retter 1997). Queer activists have established health care and social service systems, and have promoted economic self-reliance through the establishment of a variety of thriving queer-owned and queer-friendly businesses, foundations and scholarship programs. The efforts of queer activists to resist oppression and improve their lives through tactics of constructive noncooperation has helped foster a sense of cultural self-determination and expand options for self-expression in family life, relationships, gender identity, art forms and consumer power. These queer communities have served as the foundation for establishing political power (D'Emilio 1983) through a wide variety of political groups and associations, including Parents, Families and Friends of Lesbians and Gays, Lambda Legal, the Human Rights Campaign, Gay and Lesbian Alliance against Defamation, American Civil Liberties Union, Stonewall Democrats, Log Cabin Republicans, and the Gay Lesbian and Straight Education Network, to name a few.

Conclusion

During the late twentieth century, campaigns of resistance became increasingly intentional and strategic. It has become clear that those who lead nonviolent campaigns need both extensive knowledge of the principles of strategic nonviolent struggle and deep personal grounding in the local context (G. Sharp, personal communication, April 9, 2009). We suggest here that supplementing these with knowledge of behavioral systems

science has potential for refining strategic analysis. A personal commitment to *Satyagraha* or living in truth can be an important start, but a sophisticated scientific understanding of the dynamics of individual and collective action is likely to offer substantive help in supporting collective nonviolent struggle. At the same time, not every activist can or should be expected to become a scientist. A next step forward, therefore, is to extract practice principles from this science that could become part of the core knowledge needed by those designing campaigns of nonviolent struggle (Helvey 2004), an effort that we are currently pursuing (Mattaini, forthcoming).

Constructive noncooperation is a powerful but largely neglected area of nonviolence practice. To be useful, much of the research required must be participatory, conducted in partnership with those who are intimately involved in nonviolent struggle. How might indigenously driven constructive noncooperation help in long-troubled areas like the borderlands of Afghanistan and Pakistan, in East Africa, or in the most neglected urban areas in the U.S.? And what might “living in truth” look like for the privileged, in an interdependent world in which the luxury enjoyed by some produces utter devastation for many others (paraphrasing Juan Segundo, as discussed in Farmer 2003)?

We simply do not yet know the power of constructive strategies on their own or in combination with other strategic nonviolent options, although the existing examples appear promising. If scientific analysis can offer additional knowledge to guide constructive action for human rights and justice, pursuing such analysis appears to be a moral imperative.

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