PERSON-CENTERED PLANNING AND CULTURAL INERTIA IN APPLIED BEHAVIOR ANALYSIS

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ABSTRACT: Person-centered planning (PCP) is a recent but popular approach in the developmental disabilities community, but it is in need of a behavior analysis. However, conventional applied behavior analysis requires levels of treatment integrity and outcome assessment that appear inconsistent with the methods and goals of PCP. The analysis would require addressing more socially valid goals with innovative procedures, and it would entail less of an experimental analysis and more of the empirical problem-solving process that characterized applied behavior analysis in its early years (see Risley, 1999). Some of the principles that distinguished applied behavior analysis as an effective discipline may now be interfering with its adaptation to the changing developmental disabilities environment, suggesting the presence of cultural inertia. Applied behavior analysts are asked to consider the contingencies and metacontingencies underlying the origin and survival of their discipline, and in particular, the social trends that may be extinguishing residential behavior analysis practices that are inconsistent with the new paradigm in developmental disabilities.

> Come gather 'round people
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> Wherever you roam
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> And admit that the waters
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> Around you have grown . . . .
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> For the times they are a-changin'.
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> —Bob Dylan, 1964

Smack in the middle of New York City's hip East Village there is a new giant K-mart store. It stands as an imposing symbol of middle class America among the chic cafes, psychedelic boutiques, and tattoo parlors catering to a counterculture trapped in the 1960's. It is too soon to know if the residents of this subculture will

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buy enough discount-priced fans, bathroom scales, and circus peanuts to keep the store open. If they do, one might surmise that the store contributes to the survival of this cultural enclave; if they do not, the East Village K-mart will close, plausibly because buying common products at discount prices is not important to the subculture. The contrast reminds us of applied behavior analysis and person-centered planning (PCP).

Person-centered planning, with its humanistic appeal and popular agenda of social inclusion, has established a tiny encampment within a community of science philosophers and behavioral technicians, struggling to remain distinct in their own right, and wary of outside influence that detracts from its technological and analytic underpinnings. Like K-mart selling products in the East Village, a practice of the mainstream has been introduced to the seemingly esoteric culture of applied behavior analysis, and so far, the smaller has bought little of what the larger is offering. The reluctance is not surprising. Person-centered planning appears to embody much of what applied behavior analysis rebelled against in the late 1960's during its nascency. Alternatively, applied behavior analysis is not portrayed with affection in the PCP literature. However, both practices offer the promise of improving people's lives, and if the scientific rigor of applied behavior analysis can demonstrate that PCP really does improve lives, so much the better for person-centered planning. More importantly, if applied behavior analysis can suggest improvements in person-centered planning, both practices would be strengthened. However, a behavior analysis of PCP will entail resolving problems in implementing it faithfully and measuring its effects reliably (Holburn & Pfadt, 1998; Holburn & Vietze, 1998).

There is another possibility in which the consequences for applied behavior analysis would be harder to predict. If PCP cannot stand up to the rigors of a behavior analysis, it would likely be ignored or rejected by the behavior analytic community. In this case, many non-behavior analysts might feel certain that lives are being improved, but behavior analysts themselves are rarely inclined to endorse an approach whose effects are not detectable using the rules of a scientific analysis. Indeed, if we cannot determine the degree of adherence to a prescribed intervention, nor accurately assess its outcomes, we cannot analyze it (Baer, Wolf, & Risley, 1968, 1987), and consequently we do not feel safe in offering conclusions about its effect on people's lives. Feeling certain about a result is especially reinforcing to applied behavior analysts, and the empirical epistemology underlying their practice is what sets it apart from other human service professions. Ironically, however, the assumptions and methods required for behavior analysts to feel safe about reporting an important finding is a gamble in the realm of cultural evolution.

We assume that a careful and gradual application of behavior-analytic methods to a growing number of increasingly complex social problems will serve applied behavior analysis well in the long run. We are betting that our apparently "analysis-resistant" society eventually will come to appreciate applied behavior analysis after enough demonstrations of its effectiveness and with improved packaging of our product, like the way applied behavior analysis finally became

publicly recognized for children with autism. However, the too-slow adoption of our practices by broader sectors of the culture tries our patience. At professional gatherings, we celebrate achievements, but we also speculate about why a scientific analysis of behavior isn't catching on faster. We've shown that our science works. When are they going to start listening to us?

Perhaps we could discover the reasons for the protracted acceptance of our techniques and accelerate their adoption by conducting " . . . science on our science" (Morris, 1992, p. 10). However, such an analysis implies listening more to *them*, and where we find a mismatch between what they need and what we offer, we might consider retooling our methods and expanding our services, at least in those areas where our methods are not compromised beyond utility. It is a more aggressive strategy for marketing. It entails figuring out ways to provide the culture with what it wants, rather than devising tactics to increase awareness of what we can already do so that others may be persuaded to give applied behavior analysis a try. This admittedly glib reasoning implies that the new methods would provide empirical certainty, that the culture would benefit, and that applied behavior analysis would be strengthened. With respect to person-centered planning, it also gives rise to speculation about the kinds of behavior analytic practices that are important to the developmental disabilities community. Thus, in this paper, we speculate about the kinds of practices that might survive and those that might perish in the changing developmental disabilities environment, but we speculate from the broad context of cultural selection of behavior analytic practices. Specifically, we consider a relationship between applied behavior analysis and person-centered planning.

Although we focus principally on behavior analysis in the developmental disabilities environment, many of the points relate to behavior analytic practices in overlapping service sectors such as mental health services, corrections, and special education. They also intersect with issues that have been raised before in areas such as behavioral community research (e.g., vol. 24, no. 4, *Journal of Applied Behavior Analysis*), organizational behavior management (Mawhinney, 1992b), and recent theoretical expositions of evolutionary theory and contingency (Baum, 1994; Glenn, 1991; Lamal, 1991).

We apologize early on to readers who might feel that we have portrayed applied behavior analysis unflatteringly. In arguing that the discipline is not adapting to the changed developmental disabilities culture, we have not focused on the progress that applied behavior analysis has achieved in general, nor in the recent growth of applied behavior analysis in specific areas such as autism or its expansion into newer areas such as behavioral safety. It would not be difficult to produce a list of procedural innovations discovered through the process of applied behavior analysis. However, as the discipline continues to seek and find ways to maintain convincing rules of evidence while intervening with increasingly subtle and complex behavior, we ask, "Are the advancements consistent with the interests of the culture that they purport to benefit"?

Skinner on Culture as Contingencies

An operant explanation holds that an individual's behavior operates on the environment and produces certain consequences. The environment, in turn, selects those behaviors, or classes of behaviors called operants, which are effective in producing those consequences (Skinner, 1953). This selective effect of the environment during the lifetime of an individual mirrors Darwinian notions of natural selection, which elucidated the action of the physical environment in selecting biological characteristics of a species favorable to its survival (Darwin, 1859). But Skinner (1953, 1974) formulated a third kind of selection that operates during the lifetime of an individual, whereby a group of people arranges and enforces a set of contingencies. Such are the ubiquitous contingencies that constitute a culture, usually referred to as the social environment of the group (Skinner, 1953). The resulting behaviors are observed as cultural practices that act principally to preserve the culture. A culture, like a species, will adapt and survive, or it will fail to adapt and perish. Skinner's nontraditional definition of culture as a set of contingencies departs radically from more conventional definitions of culture, which tend to be descriptions of a given group's beliefs, language, art, customs, and law (Coates & Vietze, 1996). The operant position holds that beliefs, customs, and so forth are products of the culture's contingencies, not it's essence. The essence of the culture is to know the function of certain beliefs and customs, which are ultimately traceable to the unique environment that selected them. As Baum (1994) put it " . . . to know a culture would be to know its contingencies" (p. 222).

Thus, in Skinner's formulations, it is the environment that ultimately selects the shape of an ear of a species, the topography of an operant in the repertoire of an individual, and the cooperative practice of a group within a culture. Fortunately, the environment in which individual operant behavior and organized cultural practices evolve is more malleable than the environment that selected ear shape. Because of the reciprocal nature of behavior-environment relations and the relatively rapid speed of that interchange, we are able to alter the environment to manage individual and group behavior. The apparent contradiction that humans shape their own controlling environment is mitigated by the fact that much of the environment selecting cultural practices consist of the behavior (mostly verbal) of other people. As noted by Skinner (1984a), "Individuals shape each other's behavior by arranging contingencies of reinforcement, and what contingencies they arrange and hence what behavior they shape are determined by the evolving social environment, or culture, responsible for their behavior" (p 506).

Although Skinner repeatedly makes the point that culture consists of the contingencies underlying cultural practices, he occasionally uses the term "culture" to refer to the environment that selects cultural practices, as in the above quote, or to the aggregate members of a culture. (We too are guilty of multiple usage of the term, which seems unavoidable in discussing culture). Nonetheless, it is clear that Skinner saw cultural evolution working in this manner: Physical and social environments inevitably change, creating challenges for people in those

environments. When new practices are adopted by a group that helps it meet those challenges, the survivability of the group is enhanced, as are those practices responsible for its survival. A practice is effective if it contributes to the well being of the members of the group over the long term, and, in this respect, it endures long after the death of its originator. Despite the temptations of the immediate pleasures responsible for selfish behavior, a successful culture has brought its members into contact with the deferred contingencies of group survival that generate behavior often referred to as altruistic. Thus, for a culture to survive, personal reinforcers are often subordinated for the good of the group, as Skinner (1987) clarifies in stating, "It is the effect on the group, not the reinforcing consequences for individual members, that is responsible for the evolution of the culture" (p. 54). Hypothetically, the ultimate reciprocal effect is achieved by designing a cultural environment that maximizes the reinforcing consequences to individuals of the culture (Skinner, 1948), which, ironically, is achieved by people acting for the good of their cultural group.

A recent theoretical innovation said to bridge the gap between selection of (a) individual behavior by consequences and (b) cultural practices by their effect on the group, was Glenn's (1988, 1991) theory of metacontingency. Metacontingencies consist of interlocking social contingencies connected to aggregate consequences within a society. Conceptually, they extend basic behavioral contingencies to hierarchical contingent relations between cultural practices, described as patterns of cooperative behavior among cultural subgroups. The fact that one cultural practice can have an effect on the consequences and behavior patterns of another underscores the complexity and interconnectedness of higher-level cultural practices. Delineating salient cultural relations, Glenn describes structural components of cultures, and borrows from Harris' (1979) cultural materialism, which emphasizes the role of economic reinforcers in governing social practices. At a lower level of cultural analysis, complexity is apparent in the multiple functions of social interactions. For example, Guerin (1992) illustrated how a given social practice can function simultaneously as a consequence of one behavior and as an antecedent stimulus context for other behaviors maintained by generalized social consequences.

The notion of metacontingency is consistent with Skinner's nontraditional definition of culture as a set of contingencies. Thus, as pointed out by Baum (1994), the behavior of making a bowl and its particular shape are secondary; the primary cultural consideration is knowing why bowls of that particular shape are made by members of that culture. Given the conceptual embellishments of Harris and Glenn, when considering bowl making one might first speculate about the contingency interplay between the available foods, resources for bowl construction, cost versus benefit considerations, and imitation of earlier bowl shapes. A second level of analysis might entail exploring "higher level" cultural factors affecting each of those variables, as well as the interplay at that level. To give a more related example, consider the behavior-analytic format of relational frame theory as a basis for psychotherapy (Hayes & Wilson, 1993). Its emergence and survivability might be related to the hypothetical first and second order

selective influences of factors such as its effectiveness relative to other therapies (and the means of disseminating results); the kinds of problems it resolves (and social pressures contributing to those problems); the acceptability of the approach to clinical programs in universities (and the prevailing competing conceptual preferences of administrators, professors, and incoming students); and the cost to insurance companies (and trends in management entities).

Selection of Applied Behavior Analytic Practices

Applied behavior analysis is usually considered a behavioral discipline (Baer, et al., 1987), whose goal is to make socially important changes in the lives of the members of the greater culture (Baer, et al., 1968). The group that practices applied behavior analysis also might be considered a subculture of the larger society in which it operates and whose members it purports to change in socially important ways. If applied behavior analysis is indeed a subculture, it would be more accurately described as the aggregate contingencies and metacontingencies underlying behavior analytic practices. It would consist not of its members, nor of their achievements, but of the contingencies that have resulted in its survival. Accordingly, the paramount cultural contingency in applied behavior analysis would seem to be the degree to which it produces socially important changes relative to other practices with similar missions. However, there are exceptions to this rule. For example, as explained by Pennypacker (1992), selection of an intervention practice by the larger culture may not necessarily hinge on the intervention's effectiveness. Pennypacker and others have described how the competing financial and social contingencies supporting existing educational doctrine acted to suppress the adoption of the superior Direct Instruction Model in educating young children. In a similar vein, Lindsley (1992) voiced concerns about the fate of other effective instructional systems, including Precision Teaching, that were " . . . ignored or rejected because of popular myth and bigotry" (p. 21). Such outcomes illustrate the importance of accounting for competitive practices of various cultural sectors in understanding the selective forces at work in the larger culture.

We are not aware of attempts to systematically identify contingencies underlying the survival of the entire subculture of applied behavior analysis. Such an analysis would be speculative, and even if its contingencies *were* specifiable, the relevance of the analysis would fade at the pace of the changes occurring in the environment. Moreover, the undertaking would require consideration of metacontingent relations between pertinent economic, political, and bureaucratic elements (Pennypacker, 1992), as well as lower-level contingencies operating within the practice of behavior analysis itself, descriptions of which can be found in abundance in the *Journal of Applied Behavior Analysis*, and *The Behavior Analyst*, an example being "The Aim, Progress, and Evolution of Behavior Analysis" (Morris, 1992).

Interestingly, as formidable as it seems to account for contingencies and metacontingencies of a subculture, there is apparently enough interest about

cultural practices and cultural evolution within the applied behavior analysis community to attempt cultural analyses of higher education (Greenspoon, 1991), preventive medical services (Hovell, Kaplan, & Hovell, 1991), and correctional practices (Ellis, 1991). The above analyses describe contingencies that define and constrain each system, including economic, political, and other public forces that influence their practices. However, we have not found such an analysis for applied behavior analysis. Glenn (1993) established the need for one in a discussion of behavior analysis as a cultural system. She described the infrastructure of behavior analysis, some of its strengths, weaknesses, and opportunities, and she urged behavior analysts to recognize the political and social realities that will affect their professional futures and their discipline's future. Presumably, these realities are higher-level metacontingent forces outside of behavior analysis. Glenn warns that a "lack of political sophistication" in behavior analysis could lead to a disconnect between what behavior analysis offers and what the public wants, which would erode the infrastructure of behavior analysis and threaten its future: "The failure of behavior analysis as a cultural system to deal with these realities is as real as the failure of the larger cultural system to recognize and deal with its own survival" (p. 143).

But what are these political and social realities? We do not have the wherewithal to attempt a comprehensive descriptive analysis of the applied behavior analysis culture, nor to conduct an experimental analysis of the political and social variables affecting it, but in this paper we describe a recent trend in the developmental disabilities environment that we think will have a significant influence on residential behavior analysis. We concede that a trend does not constitute an environment and the accuracy of our description is unknown. Nevertheless, if one were to attempt an empirical demonstration of conditions favorable to applied behavior analysis, one should begin with a process of discovering some of the variables of which applied behavior analysis is a function (Morris, 1992) and a description of relevant trends in the environment is probably a good way to begin that process. Hypothetically, an analysis of multiple environmental influences could form the basis for a kind of cultural self-management in which relevant selective features would be specified and then strategies devised to directly alter those features. If it proves impossible to conduct science on our science in this empirical manner, an accurate description of an environment in which applied behavior analysis is operating at the moment would at least bring us closer to an understanding of the current contingencies of the applied behavior analysis culture, including the political and social metacontingencies that affect its practices.

Applied behavior analysis is a particularly introspective culture, and such analyses would surely compete with the abundance of literature already speculating about what behavior analysts should do to maintain the survival and growth of their culture. In fact, each year at the annual meeting of the Association for Behavior Analysis, a kind of cultural steering takes place through the recommendations in the presidential address. Interestingly, Rider (1991) contends that none of the recommendations made about strengthening behavior analysis will

be heeded because cultural evolution of practices and the underlying survival contingencies are established by the natural environment, not "by proclamation" (p. 174). Even so, we suggest that if the natural environment of a culture comprises mainly the verbal behavior of other people, proclamation may indeed have a powerful effect on this malleable environment. It may induce others to try new ways of doing things, adding to the pool of practices and potentiating selectivity. Skinner (1953, 1972) advocated for the deliberate design of cultural practices that bring its members into contact with the remote consequences of survival, and he implied that failing to intervene in the design of a culture is irresponsible because it increases the chances of selecting practices that are not beneficial to the culture in the long run.

Applied Behavior Analysis as an Organizational Culture

As a whole, the applied behavior analysis community is a small but robust culture. Although it is not possible to know how many people practice the trade, promote it, or contribute to it in other ways, it is clear that the Association for Behavior Analysis (ABA) has had a slow but steady growth of about 4% per year from 1977 to the present membership of about 2700 (Malott, 1999). In addition, there are an estimated 6000 professed, non-dues-paying behavior analysts represented by affiliated ABA state chapters and national chapters of other countries. Size is important because greater numbers of people favor greater cultural survivability (Skinner, 1972). This phenomenon is probably due to the likelihood that as the number of individuals in the culture increases, variations in the pool of cultural practices increase as well, which, of course, is an extension of the proposed relationship between size and survival advanced by Darwin (1859) in discussing species viability. More proximate disadvantages of ABA's smallness have been said to be poor name recognition, limited potential for political lobbying, and susceptibility to an under supply of behavior analysts when behavior analysis starts to catch on (Glenn, 1993). Given its relatively small size, applied behavior analysis has made remarkable progress in a wide variety of areas in our society.

As a culture, applied behavior analysis might be best viewed as an organizational culture in competition with organizations of similar mission. A commonly used definition of organizational culture by Schein (1985) appears to incorporate the rudiments of survival contingencies, environmental adaptation, and rule transmission of effective practices:

> Culture: a pattern of basic assumptions, discovered or developed by a given group as it learns to cope with its problems of external adaptation and internal integration that has worked well enough to be considered valid and therefore to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (p. 9)

The above definition is a bit clouded with customary mentalistic vernacular, but it is much closer to a behavioristic formulation of culture than are conventional

definitions of culture. Mawhinney (1992a) has discussed evolution of organizational cultures, including their birth, course, and sometimes death, all based on selection by consequences dictated by the market forces of the population in the greater culture. In the world of business, it is understood that organizational survival depends on the extent to which the larger culture selects (pays for) its product or service in the context of competing organizations. Knowing the market and knowing your competition are fundamental to organizational survival.

It would be hard to refute that applied behavior analysis operates in a competitive environment. In the area of residential behavior analysis, one needs only to attend an interdisciplinary team meeting to observe the competitive interplay between professional discipline practices, family and consumer interests, standards compliance accountability, agency policy fiscal constraints, and realities at the direct-support staff level. Zooming in on just one of those areas, professional discipline practices, it would not be unusual to observe a team struggling with an individual's behavior problems to contemplate the merits of applied behavior analysis, psychoactive medication, sensory integration therapy, special diet, recreation therapy, and yes, person-centered planning. As summarized by Mawhinney (1992), "One thing the organizational ecology position makes abundantly clear is that the fate of each organizational culture is intimately related to its overall competitive environment" (p. 22).

Skinner, however, was unclear about the role of competition in a cultural context. To be fair, he appeared to be referring to macro-cultures or societies, rather than subcultures such as organizations. His positions ranged from depicting competition as facilitating innovation to competition as a distracter to cultural adaption. For example, one might deduce that competition has an evocative function by his assertion that (a) new practices arise and are selected if they strengthen a culture while it competes with other cultures and the physical environment (Skinner, 1972); although competition appears superfluous to cultural survival when he argues that (b) competition with other cultures may not accelerate the evolution of effective practices because the selective environment is the principal governing force (Skinner, 1984b); and finally, conditional survival value of competition is conveyed when he notes that (c) cultural competition only comes into play when there are conflicts between cultures, such that, for example, the practice of developing better weapons is advantageous (Skinner, 1984a). Perhaps the type of practice and its immediate goal in serving the culture explain the varied roles of competition offered by Skinner. To illustrate, consider some 20th-century innovations in the USSR and in the United States. The discovery of classical conditioning in the USSR and the subsequent identification of instrumental conditioning in the United States resulted from unique selective environments, rather than competition between two countries. On the other hand, the innovations by both countries for space exploration were accelerated by the race to land a person on the moon in the late 1960's. However, competition had a harmful effect on the USSR in national defense weapons development programs in the 1980's. Trying to keep up with America in this arena siphoned the USSR's scarce resources and contributed to her ultimate collapse.

Fortunately, the practices that reflect contingencies constituting a subculture, such as the organizational culture of applied behavior analysis, are less complex and more easily managed than the parent society which selects those practices. Still, the effort to catalogue the prevailing contingencies and metacontingencies underlying the survival of applied behavior analysis would be daunting. It seems more feasible to do market analyses (Bailey, 1991) of the various sectors that behavior analysis is trying to reach, similar to the way a major corporation identifies markets for products made by its corporate divisions and ascertains consumer preferences within those targeted markets. In some businesses, new products are piloted, evaluated, and changed continuously because of the ever-changing consumer environment. As summarized by Mawhinney (1992a), marketing is a dynamic process requiring a balance between organizational efficiency, competitor products, and needs of the population. Further, the marketing decisions that determine whether an organization will live or die are essentially rule-governed guesses about what the future will bring and how the organization should respond. The challenge is to locate the selection rules and adjust practices accordingly.

Market analysis in applied behavior analysis appears to be limited to retrospective accounts of failures, such as Bailey's (1991) suggestions for making educational procedures more user friendly and Fawcett's (1991) general rules for expanding community applications of behavior analysis. Malott (1992) conducted a preliminary front-end marketing analysis about how we should be *teaching* applied behavior analysis to students (he looked at a printout of the ABA roster and inferred from educational level that we need to train more practitioner-oriented content). Perhaps that content should include market analysis for *doing* applied behavior analysis in the field. Has anyone ever done a "true" market analysis for behavioral interventions?

The Changing Developmental Disabilities Environment

Thus far we have argued that applied behavior analysis is an organizational culture subject to a myriad of environmental pressures that ultimately select, maintain, and extinguish its practices. Behavior analytic attempts at making socially important changes in people's lives operate in a social context that has not been scientifically analyzed with respect to identification of contingencies that govern its survival. Although it may only be possible to guess about what course applied behavior analysis should take to improve its cultural fitness, a better understanding about metacontingent forces such as politics, economics, and market competition should improve the guess. If we could be more certain about the conditions that favor and threaten its growth, we would be positioned to intercede, accommodate, or take other actions to benefit the culture. Such molar intervention is permitted by the reciprocal or contextual relationship of cultural practices to their larger environment. The operant process changes both the environment and the behavior modifier (Skinner, 1953) or in this case, the larger society and applied behavior analysis.

Historically, a large market for applied behavior analysis has been the developmental disabilities community, which has selected variations of behavior analysis and contributed to the survival of the practice. Of course, much of our impact in this community originated from laboratory research, but a great deal of the how and what of effective application was learned in settings where people live and work. In fact, we have been so successful in the larger developmental disabilities community that the two cultures appear to overlap, and where applied behavior analysis is both service provider and consumer, behavior analysts have bought their own services. Indeed, as stated recently by a former president of the Association for Applied Behavior Analysis, "We wrote the book on DD . . . [and now] . . . we are the yard dogs" (Favell, 1999). This is a refreshing perspective given our hard-fought history, and there is good reason to applaud the recent national demand for applied behavior analysis for children with autism. However, some of the turf that we are encouraged to protect is changing—indeed, the entire developmental disabilities landscape appears to be changing—and to survive it in the long run, so must our practices. Unfortunately, the rallying point for many of these changes in the developmental disabilities culture have been misperceptions of behaviorism (e.g., Lovett, 1985, 1996) and misuses of residential behavior analysts (Himadi, 1995; Holburn, 1997).

However, if Skinner (1953, 1972) was right, novel practices are selected by a community because they are effective under the prevailing circumstances of the social environment, irrespective of how or why they emerge. In the field of developmental disabilities, a significant shift in circumstances has already begun. The shift is commonly referred to as the new paradigm in developmental disabilities (Bradley, 1994), with values such as community inclusion and community participation (O'Brien & Lovett, 1992; Wolfensberger, 1983), improved quality of life (Schalock, 1996), meaningful relationships (Bogdan & Taylor, 1987), and self-determination (Deci & Ryan, 1985; Wehmeyer, Kelchner, & Richards, 1996). (The new paradigm renounces institutional living, professional decision-making about personal matters, and deficiency-oriented service provision for people with disabilities). With the emphasis shifting to community inclusion, agencies are assuming less of a protector role, and agency staff are taking on more responsibility for helping consumers become part of their community (Knoll & Ford, 1987). Ideally, the support needed by people with disabilities will be spread throughout the community, and agencies will provide services in a way that makes the person less dependent on those services (Bogdan & Taylor, 1987). In the new developmental disabilities environment, more control over one's personal life is prerequisite to a better quality of life (Racino, 1993), so more emphasis is being placed on supporting the choices of adults with disabilities (Bambara, Cole, & Koger, 1998).

The language of the new paradigm is deliberately nontechnical. It includes terms such as empowerment, citizenship, people first, personal achievement, natural support, and building community. Technical jargon is thought to contribute to the segregation of people with disabilities from the rest of the community, while plain English is believed to have the opposite effect. The values and goals referred

to above are said to reflect a different understanding of people with disabilities and to stimulate thinking about how services and supports can be provided toward those ends (Bradley, 1994; Oliver, 1996). More subtly, they reflect a shift to a less organismic conceptualization of disability. Rhodes (1967) maintained that the disease model used frequently to explain disturbing behavior obscures the role of the environment, and he pointed out that the "dis-ease" (p. 449) is actually experienced by observers who are disturbed because the behavior violates cultural rules. In the context of the new paradigm, Rhodes' radically environmentalistic position on behavior problems seems avant-garde: "In the community participation analysis . . . the problem is seen as a community condition" (Rhodes, 1970, p. 311).

Collectively, the values and goals of the new paradigm constitute a platform or framework for moving toward their achievement. According to Hayes and Wilson (1993), values and goals add coherence to the changes toward which we work. Values are said to " . . . provide the verbal context in which events function as reinforcers and punishers" (p. 293). Perhaps the values and goals of the new paradigm are providing a context that functions as a cultural establishing operation that is changing what consumers want and acting to motivate them. If so, the new paradigm context is likely altering the functions of discriminative stimuli associated with former and contemporary values. For example, the practice of withholding privileges associated with maintaining "compliance," a goal that used to appear commonly in behavior plans, has a diminished function in the new verbal context; whereas the modeling of sharing behavior associated with establishing friendship is likely to acquire an expanded function in the new context. It might seem expansive to characterize an organized practice as a discriminative stimulus having a selective function in a cultural context, but it must be remembered that practices of a culture and the environment of the culture consist primarily of the behavior of people who arrange and support contingencies.

If the new paradigm in developmental disabilities were to be short-lived, behavior-analytic adjustments to accommodate the trend would be misguided over the long term. However, the roots of this movement are more than 30 years deep, and there appears to be a growing consensus in the developmental disabilities community that its principles will be shaping many of the services and supports in the foreseeable future. According to Bradley (1994), the paradigm metamorphosis now underway began in the late 1960's when the medical and custodial models of care began to shift to the developmental and rehabilitation models, respectively. She specified three eras. The first was the era of institutionalization, dependence, and segregation, which ended near the mid-1970's and ushered in the era of deinstitutionalization and community development, characterized by burgeoning group homes and sheltered workshops that provided for physical, but not social integration. The third and still developing era, dubbed community membership, is marked by functional supports to achieve the goals and values of the new paradigm, many of which can be traced to the general principle of normalization developed in Sweden by Nirje, (1969) and promoted in America by Wolfensberger (1972).

The principles of the new paradigm have pervaded federal initiatives such as the Americans with Disabilities Act and the Individuals with Disabilities Education Act. They can also be found in the invitational priorities of federal grant applications issued through the federal register by agencies such as the Department of Health and Human Services and The Office of Special Education and Rehabilitation. The new paradigm philosophy has even influenced the assessment and diagnostic criteria of (a) the term "mental retardation," as promulgated by the American Association on Mental Retardation (Luckasson, et al., 1992), and (b) the term "disability," as defined by the World Health Organization (World Health Organization, 1997). A shift in focus from *dis*ablement to the more action-oriented notion of *en*ablement is detected in the title of the new World Health Organization classification manual. The former manual is entitled *International Classification of Impairments, Disabilities, and Handicaps*; the new name is *International Classification of Impairments, Activities and Participation.* Perhaps the values of the new paradigm are most apparent in the premier accreditation body in the field of developmental disabilities, The Council on Quality and Leadership in Supports for People with Disabilities (called The Council). The Council accredits organizations based on 20 criteria, nearly all of which refer to consumer choice, relationships, community participation, or personal satisfaction (Gardner & Nudler, 1998).

A burgeoning force in the new paradigm in developmental disabilities is the self-advocacy movement. By advocating for their own rights, consumers are achieving a measure of countercontrol against cultural traditions that are viewed as oppressive. Poster slogans such as "Nothing about us without us" and "Do not speak *for* me; listen *to* me" (Attitude, 1999) epitomize the mission of the self-advocates for more control over their own lives. A growing number of consumers who would otherwise be "provided for" by one agency that determines nearly all aspects of a person's life, now are selecting their own services and controlling their own money (Nerney & Shumway, 1996; Weymeyer, 1998) and creating possibilities for more direct consumer market competition. To behaviorists, of course, arranging one's own life circumstances is equivalent to self-management, a practice which many behaviorists hold as the ultimate form of behavior modification. Unfortunately, behaviorism has become the whipping boy for the self-advocacy movement. The cherished prediction and control attained by the behavioral scientist is held up as the antithesis of consumer empowerment and self-determination, and thus, applied behavior analysis, or at least the philosophy of behaviorism, is an easy target in the crusade for consumer autonomy. Some of this resistance hearkens back to the argument that autonomous action yields freedom and dignity (Skinner, 1972). As concluded by Baer (1998) in discussing self-determination, the guiding principle of the self-advocacy movement, "This argument does not seem to be about arranging environments to maximize some behaviors and minimize others; it seems to be about who chooses the environments and which behaviors to maximize and minimize" (p 52).

If there is an essence to the new paradigm, it might be stated as, "Give people what they want." This rule appears particularly important with respect to relevant

application of behavioral technology, which according to Glenn (1993) requires either marketing or " . . . contingencies must be rearranged to allow the real consumers to make clear the criterion of effectiveness" (p. 143). Determining what consumers want ranges from technical procedures for identifying preferences of people with profound disabilities (e.g., Fisher, Piazza, Bowman, & Amari, 1996; Green, et al., 1988) to the general assumption that people with disabilities, like all of us, desire relationships, achievement, respect, and so forth. What people desire or value most, according to Skinner (1953, 1972), is ultimately tied to the evolution of our species and culture, and ranges from such basics as food, sex, and water, to treating each other well. Some may question the validity of the general assumption that life in the community or more autonomy is a good thing for a person with mental retardation. The behavioral scientist in us asks, "Where are the data showing that community inclusion or more autonomy is truly an improvement for this person"? Skinner (1959) had an interesting response to questions like this when discussing the design of new cultural practices:

> To confuse and delay the improvement of cultural practices by quibbling about the word "improve" is itself not a useful practice. Let us agree to start with that health is better than illness, wisdom better than intelligence, love better than hate and productive energy better than sloth. (p. 6)

Can we agree that integration is better than segregation? That more autonomy is better than less? And that respect is better than disrespect?

Based on Skinner's writings, Baum (1994, p. 241) provides an interesting behavioral account of what people want. Accordingly, people want to be happy, and they tend to report feeling happy when they (a) are free of aversive consequences and threats thereof; (b) exercise choices that lead to positive reinforcement; (c) experience nonexploitive relationships; and (d) receive equitable reinforcement in comparison with the majority in the culture. Not coincidentally, these conditions are remarkably similar to what the self-advocates are asking for, and the correspondence seems to bestow a kind of behavioristic validity to the claims.

The seeming irreducibility of these basic wants is seductive, but a closer look reveals at least two unresolved issues that were inherited with the proclamation of self-determination for people with significant developmental disabilities. One issue pertains to the presumption of knowing how the conditions for happiness in (a) through (d) above apply precisely to each individual. In other words, what exactly is reinforcing, aversive, exploitive, and equitable to the person? Baer (1998) argues that although proponents of self-determination may criticize behavioral scientists for not ascertaining ahead of time what changes are desired by consumers with severe communication impairments, reliance on measures such as sensitivity, informal experimenting, and shared living, as advocated by some proponents of self-determination, can be used to impose our own values on others *and* conceal that we have done so.

The notion of self-determination also raises concerns about risk versus benefit. The developmental disabilities culture cannot support absolute self-

determination, or as dubbed by Wehmeyer (1998), self-determination does not mean " . . . absolute dominion and authority" (p. 11). For many service providers and family members, the idea of entrusting people with mental retardation to make important decisions about their own lives is untenable, because by diagnostic definition, such people are not good decision-makers. Indeed, consumers often require residential services and other forms of professional support *because* of inadequate judgement. Admittedly, the generality of self-determination begins to blur when its potential benefit competes with issues of risk and personal safety. However, it is easy to make the case for self-determination when the confines of traditional congregate home and day-program environments preclude such basic decision making as what to have for lunch and when to go to bed. Wehmeyer's (1998) response to the problem of not knowing how much choice to honor rests on a conceptualization of self-determination as a transition from dependence to interdependence, rather than to absolute dominion. Presumably, in an *interdependent* relationship the consumer participates in a negotiated decision, although it is not clear as to whose decision prevails when significant conflicts arise. More likely, in some circumstances, interdependency constitutes circular reasoning that functions to camouflage control by others, while in others, it constitutes reciprocal interaction by which control is shared.

In a cultural sense, the solutions to the problems of understanding what people want and supporting their decisions are less important than the fact these struggles are taking place in the theater of the new paradigm. Their solutions will shift the paradigm further, as will advances in improving quality of life and achieving community membership. The changing developmental disabilities environment is determining what is socially valuable and establishing contingencies that are shaping practices that will prevail in the future. Some of these contingencies are a result of backlash against former paradigm practices, but the social environment of the new paradigm is not only conceptually opposed to the former paradigm; it is extinguishing practices that are ineffective in it. Conversely, it is selecting and maintaining practices that are promoting the new values and achieving its goals, practices which, because of the reciprocal nature of behavior-environment relations, are having the greatest influence on the new environment and on what it will select next. On a less conceptual level, the new paradigm environment is largely shaped by the verbal behavior of others, who, as individuals, will be listening to, and influenced by, those who are discovering efficient ways of achieving more inclusion, autonomy and equitable quality of life. Collectively, these individuals are influencing relevant metacontingent relations established through funding sources, government policy, courts of law, and even certification boards. To have a voice in this process, applied behavior analysts must participate in the contingencies of this culture. Those who are not influenced by the new paradigm environment will have no effect on it. On the other hand, individuals who develop competitive practices that compete in its marketplace have the power to change it.

Person-Centered Planning in the Changed Environment

This new paradigm culture has selected person-centered planning, instead of applied behavior analysis, as the vehicle to bring its new values to fruition. Person-centered planning has risen to prominence rapidly, and it now appears in rule-governed form in small-agency policy, procedure manuals, governmental regulation, and in some states, even law (Schwartz, Jacobson, & Holburn, in press; Wagner, 1999). Different forms of person-centered planning have sprung up around the country, and they vary according to consumer disability, age, and paradigmatic emphasis. Popular forms include Personal Futures Planning (Mount, 1992, 1994; Mount & Zwernick, 1988); Life-Style Planning (O'Brien, 1987a; O'Brien & Lovett, 1992); The McGill Action Planning System or MAPS (Vandercook, York, & Forest, 1989); Essential Lifestyle Planning (Smull & Harrison, 1992); and Planning Alternative Tomorrows with Hope or PATH (Pearpoint, O'Brien, & Forest, 1993). The above variants of PCP are similar in that they are highly supportive group efforts in which participants envision and work toward a future for an individual that is guided by the new paradigm values. Strategically, the values of the new paradigm are hard-wired into the PCP process, which purports to increase access to preferred activities, reduce social isolation and segregation, establish friendships, and promote respect. Such direct compatibility with the prevailing social environment of the new paradigm implies a high degree of cultural fitness of the practice, and it bodes well for continued selection, so long as that compatibility is maintained. Endorsements of PCP from a behavioristic point of view can be found in Risley (1996) and Holburn (1997).

It might be tempting to dismiss PCP as an easy, feel-good exercise that simply attacks convention (Osborne, 1999), but such a conclusion is equivalent to a selection rule by which applied behavior analysis would fail to "tool up" and compete in the new-paradigm marketplace. True, PCP is a counterculture approach with positivistic assumptions, but participants do not sit barefoot in a circle, holding hands while singing Kumbaya. On the contrary, it is a highly prescriptive, long-term process that accesses interlocking organizational and community contingencies in redesigning an individual's environment. It challenges the residential behavior analyst in two major ways. First, as a *participant* in the process, the behaviorist (and consumer) encounter behavioral cusps (see Rosales-Ruiz & Baer, 1997) that will take each far from their usual behavior patterns. Second, as an *evaluator* of the process, the behaviorist encounters new measurement problems in maintaining the fidelity of the intervention and in quantifying its outcomes. Despite these challenges, person-centered planning's direct approach of identifying what would make a person's life better and then figuring out how to make that happen, has a behavior-analytic ring to it, although we tend to prefer more defined parameters in which to operate. Perhaps the appeal is the boldness of the goals of person-centered planning, which, as dependent variables, are rather utopian and on principle hard to refute; or perhaps it is the obvious potential that they hold as powerful independent variables in the analysis of behavior problems.

Unfortunately, as we have witnessed so frequently in the developmental disabilities culture, we are confronted with a trendy and pervasive procedure with no empirical base. To complicate matters, there is no broadly accepted definition of PCP (Schwartz, et al., in press), and the degree of misapplication of the technique even has its architects wondering if it is a fad (O'Brien, O'Brien, & Mount, 1997). The misapplications are understandable. It is often a difficult and lengthy process requiring ingredients that tend to be scarce, and in many ways it is not system-friendly (Holburn & Vietze, 1998). It can be so demanding of time and resources that an agency's capacity is quickly overwhelmed if it begins PCP with all of its consumers at once, so the process is prescribed at the slow pace of one person at a time (Mount, 1994; O'Brien, 1987b). Surprisingly, residential agency administrators across the country now describe their programs as person-centered models of service provision that are improving quality of life and affording individuals more choices and opportunities. It is commonplace to hear the director of an agency tell a heartwarming success story about how PCP changed a consumer's life and how it is transforming the way staff members think about people with disabilities. These administrators are not boasting about how their behavior analysis programs are leading to more satisfying lifestyles and raising expectations for people with disabilities. A question arises about the extent to which the more developed practices of those who "wrote the book on DD" are adjusting to changed developmental disabilities culture.

Cultural Inertia in Applied Behavior Analysis

Is applied behavior analysis adapting? As stated by Glenn (1991), "Cultural practices that exist do so because they fit the environment of a previous time, which is to say that they may not continue to exist" (p. 65). The early dimensions of applied behavior analysis were described over three decades ago (Baer, et al., 1968) under conditions that prevailed in the 1960's. Back then, it was we who were giving hope to a disenfranchised group by demonstrating that people with significant disabilities were capable of learning skills of daily living. It was acceptable, back then, to *treat aberrant behavior of mentally retarded clients in institutional environments with relatively simple, and occasionally, aversive procedures.* We were pretty much It! Normalization had not caught on yet, and Medicaid funding had not started flowing into residential facilities. There were no protection and advocacy programs, nor was special education free and appropriate. Today the scene is different. Now the struggle is to *improve the quality of community life for people with developmental disabilities using services and supports that are personalized and positive.* To the extent that the current goals and interventions of applied behavior analysis are part of that struggle, they are adapting to the new paradigm in developmental disabilities.

The argument that applied behavior analysis should broaden its application is not new (see Fawcett, 1991; Hayes, 1991; Hopkins, 1987; Johnston, 1991; Kunkel, 1987). The importance of extending its application was apparently foreseen by its founders, as implied by the second word in the title of the seminal article, "Some

Current Dimensions of Applied Behavior Analysis" (Baer, et al., 1968). Later, Baer stated more explicitly, "It certainly is time for applied behavior analysis to go beyond its present parameters. In fact it has always been time to do that; probably, it always will be" (1987, p. 335). Ironically, while Wolf (1978) and Risley (1996) have challenged these parameters in pursuing such areas as social validity and PCP respectively, the great majority of behavior analysts have held fast to the methodological criteria proposed by Baer, Wolf, and Risley in the 1960's. Is our reverence for certain methods blurring our view of what is important to our constituents? It is conceivable that our early successes in applied behavior analysis deified its rules of methodology to the extent that they have delayed our contact with the contingencies of the changing developmental disabilities culture. (See the experimental literature investigating the effects of rule-governed behavior on changing contingencies; e.g, Hayes, Brownstein, Haas, & Greenway, 1986). An informed calculation of the wrong survival course is one thing, failing to sense the available courses is another.

A critical factor in the survival of existing organizations is synchronism between the rate of organizational change and environmental change (Mawhinney, 1992a). Rider (1991), who reminds us that behavior analysis, like all lineages, is headed for extinction, predicts that our demise will come because our pace of change in acquiring adaptive characteristics will lag behind the speed of change in the natural environment. However, as Mawhinney (1992a) points out, organizational extinction also occurs when the rate of organizational change exceeds that which the natural environment will support (perhaps programmed instruction through teaching machines suffered this fate). Conversely, when adaption is impeded because organizational change lags the rate of change in the environment, it is said to suffer from cultural inertia. According to Mawhinney (1992a):

> To the extent that members have been conditioned to respond to the environment traditional ways of the organizational culture, they can be expected to contribute to cultural inertia . . . [and] . . . . To the extent that cultural practices within the organization resist or impede rates of cultural and technological change required by the rates of change among competitors and in their competitive environment, the organizational culture's survival related meta-contingencies will deteriorate and it will be at risk of death. (p. 22)

Although there may be an epistemological objection to the construct of cultural inertia, the term appears to refer to contingencies that maintain the immediate stability of the organization but simultaneously operate to delay the emergence of practices appropriate to a changing environment. Thus, cultural inertia interferes with the organization's adaption to the deferred consequences of its own survival, and applied behavior analysis, like any organizational culture, is subject to this hazard. On the other hand, cultural inertia is verifiable only with hindsight, and because environments change, today's cultural inertia could be tomorrow's adaptation. Further, because applied behavior analytic practices are selected by various sectors of the larger culture, the practices that constitute inertia

in one sector might produce growth in another. However, a recent publication trend suggests the possibility of general cultural inertia within applied behavior analysis. A review of articles from 1975 to 1997 in *The Journal of Applied Behavior Analysis* reveals a trend away from new authors and an increase in publications of frequent contributors (Dunlap, Clarke, & Reyes, 1998). Below, we argue that applied behavior analysis appears to be in a state of cultural inertia, and we discuss four factors that have served applied behavior analysis well in the past but which now may be impeding its expansion and survival, particularly within the area of residential behavior analysis.

Natural Settings Versus Controlled Environments

Behavior analysts are often critical of their own trade. It has been said that the standards for behavioral research have limited the research questions in applied settings and produced an avoidance of important contextual variables (Fawcett, 1991). Johnston (1991) argued that the experimental rigor of technological research constrains the effectiveness of behavioral services in the natural environment. Observers from outside of the behavior analysis culture often criticize such rigor as pedantic preoccupation with method over outcome or as misplaced interest in behavior for the sake of behavior itself. Indeed, behavior as the focal subject has been described as shallow, based on the rationale that the important things in life are our accomplishments, not *how* we accomplish them (Gilbert, 1996, chap. 3). Admittedly, Skinner set out to discover laws of behavior, and such study has contributed to the types of accomplishments to which Gilbert refers, as well as behaviors fundamental to the broader achievements it is now said to deter. But a science of behavior requires sufficient internal validity so that, for most behavior analysts, the achievement of reliable demonstration of effects through experimental analysis is, by itself, reinforcing. Zuriff (1985) viewed this tendency as advantageous and extrapolated that the interest in prediction and control would prove to be adaptive for behavior analysis: "Other communities, not possessing equally effective methodologies, will not survive as well in this cultural form of competition and natural selection" (p 278). Skinner himself (1953, p. 433) maintained that science provides a superior foundation for the "practice of changing practice" for the good of the culture, because the business of a science of human behavior is to demonstrate the consequences of practices. Thus, it would seem that applied behavior analysis is well positioned to arrange cultural contingencies favorable to its own survival. It seems unlikely that a laboratory model will shed light on the solution to this puzzle; to discover practices fostering cultural survival, behaviorists must operate comfortably in the culture of the natural environment and analyze the variables within it.

A reasonable compromise to the competing requirements of natural settings and controlled environments is to select behavioral goals that are modest but reliably achievable. However, this solution is often not available to the applied behavior analyst. As an illustration, assume that you are employed as an applied behavior analyst and must select one of the following socially valuable outcomes:

(1) a modestly valuable outcome with 100% believability or (2) an outcome that is four times more socially valuable but with only 50% believability. If you chose (1), you probably don't work in an applied human service setting. If you chose (2), and you do work in a human service setting, you probably agree that (2) is not an unrealistic scenario of what service providers often *must* select because of immediate consequences, cost-benefit concerns, politics, and a myriad of other often diverging interests that constitute the Big Picture (Jacobs, 1991). Various proposals have been advanced to address the disparity between applications in natural settings and controlled environments, including rules for balancing research rigor and social relevance (Fawcett, 1991), more theory-generated applications (Hayes, 1991), systems analysis of behavioral interventions, (Redmon, 1991), stepwise phasing-in of procedures similar to clinical trials in medicine (Mace, 1991), more service-oriented training for students of behavior analysis (Johnston, 1991; Malott, 1992), and implementation of long-term interventions based on natural experiments (Kunkel, 1987).

The above proposals are but a few examples of ways in which behavior analysts might extend the principles of behavior analysis to bear on socially important problems. The fact that these proposals are very different, and some even incompatible, is desirable in the long run because selection of cultural practices by their consequences requires variation in practice, which, according to Glenn (1991) is provided by " . . . permutations in the behavior of individuals participating in the practice" (p. 63). Selection of any of these practices on a wide scale could have multiple beneficial effects, including valued improvement to consumers, strengthening of applied behavior analysis as a whole, and changes in the culture's environment that would make it amenable to additional applied behavior analysis.

What appears to be at the heart of the problem in extending behavioral principles from the laboratory to natural settings is that the former requires minimizing countercontrol (Miller, 1991), and the latter is enhanced with countercontrol (Brown, 1986). Skinner wrote a great deal about the importance of countercontrol in designing a culture and noted that " . . . designing a culture is like designing an experiment; contingencies are arranged and effects noted" (Skinner, 1972, p. 153). However, he did not elaborate on the differences between designing an experiment and designing a culture or less ambitious interventions in the real world. Perhaps the greatest strategic difference is that the countercontrol necessary in natural settings occurs *during the intervention*, which means that the methodology does not remain stable throughout the intervention. For example, to redesign an environment that promotes inclusion, autonomy, and relationships, and to make the necessary follow-up adjustments, a person-centered team must come under the influence of the effects of the process. It cannot administer a uniform and fully replicable intervention, as is typical in controlled research. In fact, PCP seems to morph as more circumstances are accommodated and more changes occur in the behavior of the consumer (Drake, 1999), creating challenges in assessing adherence to the process, as well as replicating it.

Interestingly, as crucial as treatment integrity is to a behavior analysis (Baer, et al., 1968; Baer, et al., 1987; Sidman, 1960), its verification is absent in most behavioral interventions. A study by Gresham, Gansle, & Noell (1993) revealed that only 16% of studies with children in the *Journal of Applied Behavior Analysis* assessed accuracy of implementation, and only one-third of those operationally defined the independent variable. We are not suggesting that treatment integrity is unimportant; rather, it seems that a behavior analysis which omits an assessment of implementation accuracy hinders interpretation, possibly rendering superfluous the usual precise quantification of the dependent measure.

Despite threats to treatment integrity, the building of countercontrol into applied interventions may have advantages besides increasing the responsiveness of the interventionists. By including people with disabilities, staff, and other members of the community in the design, implementation, and support of the intervention, the enterprise may be more likely to survive the departure of the behavior analyst (K. Miller, personal communication, August 21, 2000). In addition, the convergence of ideas from diverse sources may increase variation in responding to problems and therefore increase the chances of discovering unique solutions and practices.

Measurement Limitations

Paradoxically, the main obstacle in extending applications of applied behavior analysis appears to be obtaining sufficient measurement accuracy, a principle that has been fundamental to its success. This requirement has functioned as a double-edged sword in defining our subject matter and permitting experimental analysis of socially important phenomena, but it has also blocked our entrée into what might be the most important subject matters of the greater culture, effectively impeding our competition with other disciplines. As the first editor of the *Journal of Applied Behavior Analysis* put it, "Well, why should we let the others have all the best human goals and social problems?" (Wolf, 1978, p. 210). Clearly, we have extended applied behavior analysis since Wolf's quote, but our influence still has reached only a relative few in our society in the common struggles for balanced relationships, successful careers, and other personal achievements (including the resulting feelings of happiness, respect, and fulfillment). It appears that our traditional assumptions and methods are insufficient for investigating such matters. It is possible that the current culture of applied behavior analysis is not sufficiently encouraging variations in practice that would permit a behavior analysis of these matters. Will "the best human goals and social problems" always be left to others? Behavior analysts who tackle them tend to encounter resistance from their own community as they confront aging, unresolved measurement problems involved in assessing treatment integrity (Gresham, et al., 1993), analyzing private events (Friman, Hayes, & Wilson, 1998), and evaluating outcomes such as lifestyle (Carr, 1997; Horner, Dunlap & Koegel, 1988). No one knows the long-term consequences to the practice of applied behavior analysis for failing to resolve such issues or for failing to adopt methods sufficient for analyzing complex,

extended interventions aimed at achieving what might be the most important goals of the greater culture.

The closest our field has come to putting a toe in these epistemologically muddy waters is through social validity assessment (Schwartz & Baer, 1991; Wolf, 1978). Social validity is considered to be a secondary but necessary measure of effectiveness, and it entails assessment of subjective matters, such as determining the importance of the goals, treatment acceptability, and consumer satisfaction. The concept of social importance, originally presented in the definition of applied behavior analysis (Baer, et al., 1968), suggested a general direction in using behavioral principles to help people in our society, but the practice of assessing social importance with social validity measures was a *behavioral innovation*. Wolf (1978) describes, in nearly apologetic terms to the behavioral community, how he overcame the tendency to avoid subjective data, despite agreement among the first Board of Editors of the *Journal of Applied Behavior Analysis*, himself included, that objective measurement would be the first priority of the journal. Wolf traced our tendency to evade subjective data to a reaction against introspection, and, in particular, Skinner's refutation of inner causation. However, Skinner's position helped to define and advance early formulations of a science of human behavior under conditions prevailing in the 1950's. Because of the conditions prevailing today, subjective measurement now might facilitate the advancement of the science of human behavior, or at least the application of that science to what is socially important to the members of the larger culture. Our eschewal of subjective measurement for so many years was tantamount to a powerful cultural practice vestige, finally overcome a full decade after the concept of social importance became a parameter of applied behavior analysis!

However, the challenges and shortcomings of subjective assessment are not necessarily the principal considerations in extending applied behavior analysis into new areas. Some constructs can be operationalized into components to which there is public access, permitting reliable measurement and modification. Such constructs should be viewed as "behavioral realities not yet analyzed as such" (Baer, et al., 1987, p. 315). An example of a new paradigm value that has become a behavioral reality is self-determination. This construct has been deconstructed into discrete units, taught in task-analysis fashion (Foxx, Faw, Taylor, Davis, & Fulia, 1993), and ultimately applied to help people select where they would like to live (Faw, Davis, & Peck, 1996). Another example is the empirical assessment of happiness of people with profound multiple disabilities (Green & Reid, 1996; Ivancic, Barrett, Simonow, & Kimberly, 1997). Happiness was inferred through public observation of facial expressions and vocalizations; then happiness and unhappiness indices were constructed and modified with preferred stimuli. Most recently, Reid, Everson, and Green (1999) showed how personal preferences identified through PCP can be verified empirically using an approach-avoidance assessment. Seventy-five percent of preferences identified through PCP were confirmed as either strongly or moderately preferred.

One recent effect of the behavior-analytic standards of precise description of an intervention and accurate measurement of its outcomes is the emergence of a

splinter group that has coined the term "positive behavior support" (Koegel, Koegel, & Dunlap, 1996). This approach is said to be evolving from applied behavior analysis, although distinctly different from it in its emphasis on external validity, ecological relevance, meaningful outcomes, and systems analysis (Carr, 1997). If a real split is occurring, it could be tantamount to cultural speciation, described by Rider (1991) as a natural evolutionary process. Presumably, a separate discipline or culture emerges because it adapts to a different environment within the larger culture. Indeed, a recent review of 109 articles employing positive behavior support published between 1985 to 1996 indicated an increasing prevalence in the approach, with about one-half of the interventions achieving at least 90% reduction in problem behavior (Carr, et al., 1999). A recently established journal, the *Journal of Positive Behavior Interventions*, has reached a circulation of 1725, and there is planning underway for a national organization to promote positive behavior support (G. Dunlap, personal communication, August 19, 2000). By comparison, the circulation of the *Journal of Applied Behavior Analysis* is about 4000 (M. L. Wright, personal communication, August 22, 2000), and the *Journal of the Experimental Analysis of Behavior* is about 1800 (V. Laties, personal communication, August 22, 2000). If the growth in this practice continues to accelerate as an entity disconnected from its parent organization, it might bode poorly for conventional applied behavior analysis by reducing market share. However, from the perspective of the larger society, positive behavior support simply adds to the pool of practices that may benefit its members.

Eliminating Problem Behavior

Another factor that might be impeding innovation in residential behavior analysis is our tendency toward decelerating behavior, as described by Glenn, Ellis, and Hutchinson (1993). Skinner believed that operant conditioning would have its greatest impact in the construction of repertoires in the classroom (Evans, 1968). However, the majority of applied behavior analytic research has focused on eliminating troublesome behavior. Dealing successfully with behavior problems has become so common among applied behavior analysts in the developmental disabilities community that sometimes the term "applied negative behavior analysts" seems more apt. Because of this expertise, we sometimes proceed directly to "the problem," often failing to assess what the consumer wants, even though such inquiry is recommended as a standard in applied behavioral research and practice (Schwartz & Baer, 1991). At times, the goals that are most important to the consumer are made contingent on behavioral improvement, a strategy that has been stridently opposed by self-advocates in the developmental disabilities community.

The common goal of correcting behavior is no doubt related to the guiding principle that applied research is a curative endeavor (Azrin, 1977). However, the new paradigm environment is more interested in social acceptance and assimilation than curing people with developmental disabilities. Baumeister (1997) concludes that the last 30 years of intensive prevention and treatment initiatives in behavioral

research have been disappointing compared to the profound improvements in life circumstances for people with mental retardation resulting from advocacy during this time period. He argues, " . . . we have handicapped ourselves by reliance on inadequate, inappropriate, and inbred models of inquiry, conceptually and methodologically" (p. 5). The point here is not that we should curtail prevention and curative efforts in the field of developmental disabilities; rather, it is that the focus on eliminating behavior may have obscured behavior analysts' skills and potential for broader endeavors. In the area of residential services, for example, behavioral principles might be more productively used for engineering environments favorable to the establishment and maintenance of repertoires consistent with personal aspirations.

Comfort in Congregate Care

Behavior analysts have been associated with restrictive, residential environments since the inception of applied behavior analysis. One reason for our presence in such environments is that they were thought to afford better control in implementing behavioral procedures compared to other settings (Miller, 1991), but also, residential facilities are where people with the most significant behavior problems have tended to reside, and, as humanitarians, we were drawn to them. Thus, we have become associated with much of the trappings of congregate living, including aversive control and over-regulation, and because the functional role of many residential behavior analysts shifted to regulation-compliance analyst, we became direct participants in the contingencies of funding for agency survival and largely removed from direct consumer contact (Holburn, 1997). Unfortunately, the excessive bureaucracy of larger residential systems not only discourages innovation, it rarely permits durable gains resulting from behavior analytic efforts (Cullari & Ferguson, 1981; Holland, 1978), and it prevents access to the interlocking political contingencies responsible for their failure (Himadi, 1995; Reppucci, 1977; Repucci & Saunders, 1974).

The fact that the residential behavior analysis culture has overlapped with the developmental disabilities community is a liability to the extent that the overlap has occurred in the institutional sector of that community, mainly because the demand for institutional services has been shrinking since the late 1960s. From a transactional perspective, this means that for more than three decades many residential behavior analysts were having a substantial effect on a moribund sector of the disabilities culture. Actually, we adapted quite well to it, although it nearly extinguished the helping repertoires among those who were trapped in such environments. If the zeitgeist suddenly shifted to a segregated services model, there would be a rapid increase in the demand for applied behavior analytic practices that were prevalent during the institutional era and a decrease in demand for procedures that facilitate community inclusion, self-determination, and a better quality of life.

Interestingly, Skinner recognized the futility of the institutional environment long before the inclusion movement was born. The following passage appears avant-garde if translated into today's "correct" language:

> At the present time, retardates tend to be controlled through aversive techniques even though the attendants may be full of goodwill. No one really benefits from that. I believe the institutional retardate . . . can be placed in an environment which he will not only live reasonably happily all day long, but will also be productive. (Evans, 1968, p. 44)

Summary and Conclusion

Applied behavior analysis can be classified as an organizational culture subject to a variety of environmental forces that select, maintain, and extinguish its practices. We have argued that many of the hallmarks which defined applied behavior analysis and distinguished it as an effective discipline may now be operating to delay its adaptation. For example, the practice of eliminating problem behavior with procedural specificity in unnatural environments will not likely be a flourishing enterprise for applied behavior analysts. If applied behavior analysis is in a state of cultural inertia, it must become more relevant to consumers who are turning to other sources of assistance. The adjustment would entail attacking new problems with innovative procedures that do not place internal validity concerns above social relevance. Ironically, it would constitute a reversion to the empirical problem-solving process on which applied behavior analysis was founded (Risley, 1999).

We have argued that in the area of residential behavior analysis, our practices have not been sufficiently modified by the changed circumstances in the developmental disabilities culture that selects those practices. The developmental disabilities community has been infused with the values of a new paradigm, and it has selected the principles and practices of PCP to achieve those values. Unfortunately, there are significant difficulties in faithfully implementing PCP and reliably assessing its outcomes. Thus, a widely-used, complex intervention with high social validity is in need of an analysis. Person-centered planning and applied behavior analysis seem poised for each other—and both would benefit from the analysis.

However, there are caveats to consider in characterizing the developmental disabilities community as "new paradigm." The community consists of more than new paradigm forces and the contingencies and metacontingencies generated by it. Other forces operating in this culture include trends toward privatization, managed care, decentralization, fiscal restraint, growing waiting lists for residential services and day activities, and possibly reduced government oversight of programs. Moreover, the notion of a cultural environment selecting cultural practices is abstract and often elusive in a practical sense. By comparison, Darwinian evolution is easier to conceptualize because there is basically one environment that changes very slowly. Today's cultural environments can change rapidly, and their members participate in multiple cultures. Adding to that, the selected practices alter the

selecting environment, all of which makes it difficult to pinpoint the prevailing contingencies and metacontingencies of a given environment.

With all of these ambiguities, how can we detect cultural inertia in residential applied behavior analysis? We didn't detect it; we inferred it. Our first premise is that Skinner was right about cultural selection: Practices are maintained by the culture if they benefit its members. We inferred inertia from the vastly changed assumptions and aspirations of the developmental disabilities environment in which much of residential behavior analysis operates, compared to the deliberately modest pace of change in behavioral practice during the same time period. We recommend the following for accelerating the discovery of behavioral technology that makes possible a better fit between applied behavior analysis and the changed developmental disabilities environment: (a) participate in multiple-component interventions such as PCP that encourage countercontrol and identify replicable components of such interventions; (b) assess new paradigm values; (c) engineer environments and build repertoires consistent with consumer desires; and (d) loosen the bond with bureaucratic residential treatment environments and promote community inclusion.

It is difficult to consider the possible extinction of an organizational culture to which one belongs. That the survival of applied behavior analysis is threatened will likely be disputed by most applied behavior analysts. It would seem that a discipline based on the philosophy of science would be sensitive to the dangers of nonadaptive practices of its own discipline, yet this has not been an area of investigation for applied behavior analysis. Perhaps its current methodology does not lend itself to such analysis, or perhaps the slow but steady growth in the Association for Behavior Analysis suggests no cause for alarm. In any case, a safer position would be to consider how we might identify and then alter the conditions favorable to applied behavior analysis. To use the words of Morris (1992), "Why wait to see how the science of behavior may develop? Why not seek an understanding of its development by engaging the variables of which it may be a function?" (p. 24). Such activity might constitute the beginning of cultural self-management of applied behavior analysis.

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