An Ecological Perspective on Deafness

Michael A. Harvey  
*Framingham, Maryland*

Barry Dym  
*Framingham, Maryland*

Follow this and additional works at: [https://repository.wcsu.edu/jadara](https://repository.wcsu.edu/jadara)

Part of the [Social and Behavioral Sciences Commons](https://repository.wcsu.edu/jadara)

**Recommended Citation**  
AN ECOLOGICAL PERSPECTIVE ON DEAFNESS

Michael A. Harvey
and
Barry Dym
23 Pitt Road
Framingham, MA 01701

Abstract

This paper offers an ecological view of deafness to assist rehabilitation counselors and clinicians in the diagnosis and treatment of problems that deaf persons may present. An ecological perspective identifies the many hierarchically arranged, bio-psych-social levels which influence the development of deaf persons. It further identifies the sequences of interaction (the exchanges of information) which occur both within and between levels, and which include the creation, labeling and reifying of symptoms. The organization of ecological fields is described by a cybernetic model from the discipline of family therapy. A detailed case example is presented.

Rainer, Altshuler and Kallman established the first comprehensive psychiatric facility for deaf persons in 1955. Both treatment and research focused on the individual deaf patient. They identified a number of characteristics shared by their patients: egocentricity, lack of empathy, gross coercive dependency, impulsivity, and an absence of thoughtful introspection (Rainer, Altshuler, & Kallman, 1963). The prevalence of these character traits has been confirmed by numerous other clinicians and researchers, (Altshuler, 1962; Baroff, 1955; Levine, 1956; Myklebust, 1964; Schlesinger & Meadows, 1972) Unfortunately, together these traits became reified and known as The Psychology of Deafness; they became erroneously accepted as an a priori fact.

In searching for the etiology of these deaf characteristics, Schlesinger and Meadow (1972) broadened their focus to include the early family environment. They reasoned that early influences were a key element in promoting a deaf child’s psychological and linguistic development. Utilizing an Eriksonian framework, they examined how certain variables (Sign Language, appropriate mother-child interaction, and contact with deaf adults) impact the deaf child’s capacity to successfully complete the eight critical stages of psycho-social development.

Levine’s second book, The Ecology of Early Deafness (1960), takes a similarly broad view. She concluded that “to better understand people, we must look to and understand the environment that fashions them.” Vernon (1976) also noted that the important psychosocial influences on the personality structure of deaf children are their parents, the extent to which they communicate, and the educational process.

The movement toward an ecological perspective on deafness is not an isolated phenomenon. For example, Urie Bronfenbrenner’s (1979) theories about The Ecology of Human Development have become increasingly important in the study and treatment of handicapped and disabled people of all kinds. His disciples, Jay Belsky and Carl Dunst, have demonstrated the importance of treating disabled children by focusing as much on their families and their interpersonal networks as on the children themselves.

Naturally, these pioneering ecological efforts are not without problems. Environmental factors are viewed as multiple, independent influences, and from a linear perspective. For example, one study considered the influence of parents on the developing child, while another explored the influence of cultural attitudes, again on the developing child. One asserted that child development – the dependent measure – is simultaneously influenced by several independent environmental factors. Although these studies acknowledged the reciprocity of influence between the child and environment, the emphasis remains unidirectional. It is as if the child is a tabula rasa, passively reacting to external forces.

These approaches fail to emphasize that the...
environment of the developing child is an intricately woven fabric, with a form and an integrity different from any specific part. As the systemic axiom of nonsummativeffy maintains, "the whole is greater than the sum of its parts" (Von Bertalanffy, 1968). A woven design owes its form and integrity not to the individual colors of yarn, but to the relationship among the various combinations of colors — to the overall pattern. Thus, to help a disabled child, one should consider not only several important environmental factors, but also how these factors are related to each other. As any factor changes, the whole fabric changes; as relations among the parts change, so do the separate factors. Although it is important to recognize that family and school influence a child, it is equally important to identify how the relationship between family and school influences the child, just as the relationship between child and school influences the family, and so forth.

The ecological focus on the relationship among the various factors in the deaf child’s environment is the subject of this paper. There are three sections. The first places deafness in a broader field by identifying some of the many levels of human systems which touch the development of a deaf person. In order to make the ecological perspective more vivid to the reader, the second section describes a deaf person and his environment. The third section demonstrates how cybernetic theory can be utilized to organize an ecological field.

The Many Levels of Deafness

There are many levels of organization in human experience, from subatomic particle and living cell, to complex organs and organ systems, to whole persons, to families, communities, cultures and larger societies. These systemic levels appear to be arranged hierarchically — each level is more complex than the one before and encompasses all those that come before it. Bronfenbrenner (1979) has depicted this hierarchy as “a set of nested structures, like a set of Russian dolls” which are inextricably linked with one another. Most research studies and clinical modalities address only one, or perhaps two, levels. This practice is much like the blindfolded “wise men,” each of whom argues that the one part of an elephant he is in contact with comprises the whole entity — be it a tree trunk, a snake, or a mountain.

What follows is a brief discussion of those systemic levels which are most relevant to the study of deaf people.

(1) Biological

It is obvious that biological factors are important. Here we include the etiology of deafness, the age of onset, the degree of hearing loss, the rate of hearing loss, the prognosis for continued hearing loss or gain, the configuration of an individual’s audiogram across the speech range, and the amount of residual hearing. In addition there may be related medical conditions and/or disabilities, depending on etiologic factors. For example, rubella-deafened persons may show cardiac abnormalities, visual deficits, neurologic deficits, etc.

(2) Psychological

The particular characteristics of an individual person have a great influence on how he or she adapts to deafness, and on how deafness is treated by the family, school and greater society. While a deaf child passes through some common and identifiable stages of development, each does in a unique way which is determined by his or her personality. The idea of personality can be further refined by discussing cognitive, behavioral, and emotional elements. For example, a child who thinks that deafness is severely limiting will develop differently than a child who does not. An adult who considers him/herself Deaf (that is, as a member of an identifiable community of deaf people) will obviously think, feel, and behave differently than one who considers him/herself deaf (one person alone with a hearing impairment). Behavioral responses at each developmental stage, such as the degree of success at achieving independence, also become central to the psychological makeup of the deaf child.

(3) Family

The family is the main environment for the developing child, particularly the young child. The family exerts powerful influences on the child through its behavioral patterns, concepts about deafness, emotional responses to deafness, interactions with the deaf child, etc. Furthermore, family development is powerfully influenced by the deaf child and by the demands of raising a deaf child in this society. In this sense, the deaf child influences everything from the use of time and space to financial arrangements, travel patterns, patterns of communication among all family
members, and to the family’s image of itself—as well or not well, competent or incompetent, nurturant or not nurturant. The deaf child influences, and is influenced by, hearing siblings, grandparents, and extended family members.

(4) Professional

As with virtually all disabled or chronically ill people, many deaf clients have extensive, and often intense, relationships with numbers of professional systems. For each ramification of deafness, there is often a corresponding professional. The list includes professionals from school and medical systems and other service agencies, like the state vocational rehabilitation agency, state department of mental health, state department of education, etc. These professional systems can be more or less relevant at different stages of the deaf person’s life. For example, physicians tend to be important early on and remain important for a while, but school systems later become the most influential. In addition, the relationship among the professionals may be conflictual, as exemplified by the well known “oral/manual debate.”

Professional systems and their relationship with family members become patterned over time, and therefore exert an on-going influence on the family. For instance, parents often differ in their attitude toward plans for their deaf children, and advice from a particular rehabilitation counselor or other professional can tip the scales. A professional’s continued support for one parent’s position can exacerbate a split between the parents. Alternately, a professional’s continued support and guidance of the child can undermine parental authority—for example, when a psychotherapist meets exclusively with the child (the identified patient) and covertly thinks that s/he does a better job at parenting than do the child’s actual parents. The undermining of parental authority also frequently emerges in the relationship among schools, parents, and children when schools and parents compete over who is in charge.

The interpersonal patterns which emerge between parents and professionals may become so powerful that the boundary between these two systems virtually disappears. Therapeutic efforts to help the deaf child and his/her family are frequently impossible unless the therapist also addresses the ways in which professional systems reinforce family patterns, and vice versa.

(5) Informal Networks

Informal networks, made up of friends and extended family members, can exert strong influences on the development of the family, and thereby on the development of the individual deaf child. Simply the amount of support that parents receive may determine how well they cope with the extra demands a deaf child places on them. But networks may also assume more complex functions in much the same way that professionals do, i.e., by the support or opposition of implementing American Sign Language or school “mainstreaming,” or by supporting one parent over another. Networks, like professionals, can reinforce functional or dysfunctional family patterns.

Informal networks of deaf people play a major role in the development of deaf individuals. In a typical situation, for example, non-signing parents who are supported by their friends and their school system may find themselves increasingly opposed by an adolescent who has finally found support for his emerging deaf identity from his signing deaf friends. This battle between parents and child may take on a quality that is even more intense than usual. Resolution may be more difficult because both sides’ positions are “locked in” by their respective networks. On the other hand, the developmental task of adolescence—to individuate from the family—may be made easier for the teenager by the existence of a strong peer network. In a like manner, parental networks may help parents through this rocky period. Networks are thus important to consider, for they have many different influences on other systemic levels.

(6) Cultural And Political

The way that a particular culture or subculture views deafness and, through its political process, the way that a culture provides for deaf children, have a major influence on the development of each child. Some of the most poignant illustrations of the imagery of the predominant culture include the efforts of the hearing culture to disband residential schools for the deaf, to banish the use of American Sign Language, to forbid deaf marriages, and even to advocate sterilization of deaf people (Lane, 1984). All too frequently, hearing people have viewed themselves as knowing what is best for deaf people. This ethnocentric bias has profound and pervasive effects on the developing child. Many deaf per-
sons have incorporated the cultural prescription to act "normal," which they define to mean "like hearing people." Thus, they spend much of their lives pretending to understand oral communication, frequently fearing that someone will discover their secret. The impact of culture on a deaf child's self esteem is apparent. As put by Frank Bowe, himself deaf, "The deaf child is typically bombarded with 'can't, can't, can't.' The result is the deaf adult who believes it. I was brought up with 'can, can, can.' It took me twenty years to believe it (Bowe, 1973)."

AN ILLUSTRATIVE CASE*

In order to ground ecological concepts in ordinary reality, we offer an illustrative case. This case describes the multiple levels of the systems which are inextricably involved in the lives of many deaf persons whom we see in treatment.

We begin with Martin, age 16 years. He has a congenital, bilateral, profound, sensori-neural hearing loss of unknown etiology. Following the diagnosis of deafness when Martin was two years old, his mother, Judy, enrolled in an early intervention program for support. She soon became ostracized from this group, however, because other parents and the group leader told her that she did not grieve properly — that is, she did not "properly" show anger about having a deaf child. Judy withdrew and looked more to her husband, Mark, for support. Mark, in turn, offered platitudes — "everything will be all right."

A year later, however, a neurologist diagnosed Martin as exhibiting "soft neurological dysfunction, manifested by hyperactivity, poor impulse control and rigidity." The neurologist informed Judy of his suspicion that the etiology of Martin's deafness was maternal rubella. Judy angrily disagreed, feeling threatened and perceiving this as an insult to her "motherly intuition." She therefore refused to follow the neurologist's suggestion to administer Ritalin to Martin. Mark overtly supported Judy, feeling caught in the middle between his wife and the neurologist, but with noticeable ambivalence and reluctance. This struggle became a prototype for similar struggles which were later enacted among Mark, Judy, Martin, and professionals.

Martin was the youngest of six hearing siblings, ranging from 30 to 16 years of age, in an intact family. His primary and preferred mode of communication was American Sign Language. He utilized a hearing aid but had minimal usable residual hearing and minimal aural/oral skills. Within his family, Martin had relied primarily on his mother and his brother, Andrew, for interpreting both the formal discussions and much of the day-to-day chit-chat. Judy and Andrew were the only family members who had taken courses in Sign Language. However, their courses emphasized manually coded English, not ASL. Thus, even when Judy or Andrew interpreted family discussions for him, Martin understood only a limited amount. When asked whether he understood, he either shrugged his shoulders or nodded his head, pretending to understand.

Judy was most sensitive to Martin's pain, for she herself had witnessed physical abuse as a child growing up. Consequently, when she became pregnant with Martin, she vowed to save him from experiencing a similar fate. In particular, she ardently protected Martin from Mark when the latter spanked him. Mark, who had been raised by a "spare the rod, spoil the child" philosophy, naturally used this form of discipline. When Mark spanked Martin, Judy comforted Martin and berated his father. Mark withdrew; and Martin acted out by screaming, ripping apart his room, and so on. This "dance" became an enduring pattern in their family and formed the basis for several cross-generational coalitions (when one parent unites with a sibling against the other parent) — for example, Judy and Martin against Mark, or Mark and Martin against Judy.

As Martin grew older, one of the ways that Judy tried to take care of herself was to belong to an informal support group for parents of deaf children which, as usual, was composed almost entirely of women. Judy felt supported by these women, who validated her views of needing to protect Martin from "excessive discipline." Mark found himself spending more time at work; in fact, he took on an additional job "to make ends meet." While he never discussed his domestic situation in any detail, he did make cryptic references to Judy's "coddling," which brought sympathetic nods from others. In this way both Judy and Mark consolidated their attitudes and their disengagement from each other.

Judy and Mark only deviated from this pattern to shelter Martin from dangers which he might confront outside the family. Both parents easily recounted many instances when their friends and acquaintances had been insensitive to Martin and had misunderstood Martin's "mis-
The third oldest sibling, 22-year-old Andrew, still lived at home and was Martin's only friend. At first he enthusiastically accepted this role, for it satisfied his need to nurture and gain him recognition from their parents. However, when Martin displayed aggressive behavior toward him, Andrew disciplined Martin, thereby opposed their mother's wishes. Judy and Andrew argued. Since Andrew also favored discipline, the coalitions within the family now expanded to include Andrew and Mark against Martin and Judy. Having lost Andrew as an ally, Judy became overwhelmed and depressed. When Martin noticed his mother crying, he screamed and banged his head, serving to distract Judy from her depression; or else he consoled Judy more directly by hugging her. In this way, he became more cemented to the family.

Meanwhile, the two older children, 26-year-old Sue and 28-year-old John, had already left home, married, and started their own families. When they visited, Martin became jealous of Judy's attention to them, and he acted out in his stereotypic ways. Mother then attended to Martin. With father's tacit approval, Sue and John criticized mother's parenting skills, half compassionately and half scornfully. As the tension mounted, Sue and John announced that they must leave earlier than expected. Judy and Mark felt a mixture of relief, disappointment and guilt. However, Martin again became the sole recipient of his parents' attention. In this manner, the boundary surrounding the family system became more intact, with Martin's acting out serving the important function of rigidly maintaining the boundary.

Martin's behavior at school had also worsened. Since the age of five he had been attending a specialized facility for deaf children. His education had been oral during the initial five years and was now slowly becoming "total communication." As the changes were enacted, Martin became academically frustrated. He was labelled as disruptive and was felt to be uncontrollable in the regular, non-special education program in his school. Additionally, his teachers frequently exercised strict, physical methods of discipline with him, which also served to escalate Martin's acting-out behavior.

The school's method of behavior management initially caused strife between Judy and Mark, with Mark supporting it and Judy opposing it. However, as the punishment at school became more severe, the couple soon united against the school, jointly labelling it as "abusive." Judy became the spokesperson and met with the school personnel. The program director found Judy's tone to be "accusatory" and "controlling" and therefore became defensive. He recommended that the family get psychological treatment, and justified this tactic by citing a counselor's diagnosis of Judy as having a "borderline personality disorder."

However, Mark and Judy had already initiated psychotherapy on their own because they felt that Martin's behavior was getting out of hand. The therapist was knowledgeable about deafness and signing. He met with Martin and his parents to provide support. The therapist found Martin to be a boy who "feels markedly intimidated by his interpersonal environment and who frequently acts out in a counter-phobic manner," that is, by "inappropriately asserting himself in order to feel in control of situations." Both Judy and Mark found the therapist to be empathic and supportive, and they appreciated the opportunity to vent their frustrations. However, Martin soon became bored with the meetings and, in a manner similar to family gatherings at home, he began to disrupt the discussions. The therapist, in turn, began to feel helpless and decided that a more comprehensive intervention strategy was required. Martin's behavior at home and school continued to worsen, as did the conflict between parents and school.

Judy then sought help from the educational liaison of her town, who facilitated having Martin change schools to a "more appropriate" specialized deaf program. This school agreed to accept Martin since they felt they could do a better job. Beginning with the first day of Martin's enrollment, Judy, now firmly entrenched in her role as an advocate for Martin, made sure to visit the school frequently, to call teachers regularly to "share ideas," and to be on guard for evidence of abuse. The teachers, feeling invalidated and crowded, complained to the program director. In order to ameliorate this situation, the program director and counselor met with Judy and set limits on the allowed frequency of her contact with teachers. To console her, they agreed to meet regularly with Judy themselves.

Within the new, less structured environment,
AN ECOLOGICAL PERSPECTIVE ON DEAFNESS

however, Martin’s disruptive behavior continued to escalate. Both the director and counselor felt frustrated and recommended to Judy that Martin receive psychotropic medication from a psychiatrist whom they recommended. The parents complied. The psychiatrist prescribed various trials of medication. Although Martin’s behavior did improve for a period of time, Judy and Mark complained that the psychiatrist “changes prescriptions all of the time, and uses Martin as a guinea pig,” and that the medications caused unwanted and potentially dangerous side effects. Moreover, the parents also came to view the psychiatrist as allied with the school against both Martin and themselves. They discontinued the medication, but without informing the school “in order to see if the teachers would notice.” As the tension between school and parents escalated, Martin’s behavior worsened and other parents soon complained to the director about Martin. Shortly after Judy informed the school that she herself had decided to discontinue Martin’s medication, the program director terminated Martin’s academic placement, stating that his aggressive behavior posed a danger to the other students.

Martin was then confined to spending his days and evenings at home. He slept late, seldom bathed, and regressed. Both parents now felt quite thwarted in their efforts to place Martin in school, and enlisted the services of a State agency which advocated for children’s rights. An advocate agreed to meet with their town’s special education director. For the first time in months Judy and Mark felt that there was hope. Judy and the advocate quickly formed a close, mutually supportive relationship, with the advocate empowering Judy, and Judy validating the advocate. However, the advocate also hit a “roadblock” with the special education director, and came to view him as uncooperative. The special education director was a bit miffed at Judy and Mark for “not following doctor’s orders” and for criticizing the original educational placement which he had made. Moreover, Martin’s special education needs were expensive. The advocate’s efforts became futile.

The advocate and Judy now consoled each other. During one of several discussions, the advocate suggested that Judy and Mark hire a private attorney. The parents complied. The attorney, who herself had disabled parents, undoubtedly had experienced feelings of disempowerment herself, at least vicariously. Perhaps as a way of compensating for such experiences, she insisted on taking total charge of everybody, even going so far as to forbid any meetings or discussions between Judy and the advocate without her explicit permission and/or presence. Judy then became more distraught, experiencing a conflict of loyalty between the advocate and lawyer. Again, as with her older son Andrew, she felt she had lost an ally.

Meanwhile, Martin’s behavior had informally become well known among the educators and other professionals in the extended geographic area. (The efficiency of the “skuttlebutt” network rivals modern-day telecommunications!) Other school principals relied on the judgments of personnel from the original two schools and therefore refused to accept Martin for placement, adding a conclusion of their own — namely, that “his reality testing is so impaired as to suggest psychosis.” Each had enlisted the services of other professionals, who supported their conclusions. In addition, Martin was denied admission to various deaf community functions and programs, again based on a typecast of being “disturbed.”

THEORETICAL NOTES

It is one thing to observe that deafness and the dilemmas of deaf people are part of a complex, ecological field. However, it is a quite different task to describe the specific organization of that field. Toward that end, we will briefly describe the ideas of nested structures, co-evolution and cybernetics.

We turn first to nested structures, or the hierarchical system levels in Martin’s world. We note that Martin had a profound, bilateral, sensorineural hearing loss of congenital origin, possibly as a result of maternal rubella during the first trimester of pregnancy. The severity and audiologic configuration of his hearing loss was such that manual communication, specifically ASL, was his primary and preferred mode of communication. Lipreading was ineffective. Psychological testing described Martin as intimidated by his environment, impulsive, and as exhibiting interpersonal relationship problems.

Within his family, concern for Martin’s deafness and his multiple needs tended to “detour” or modulate the fighting and distance between his parents. They spent hours discussing and worrying about Martin. On the other hand, his problems could be viewed as keeping his parents
Consider the ecology which included Martin. We can list several examples of co-evolutionary relationships:

1. The more intense the conflict among the educators (professional level), the more Martin impulsively acted out (psychological level).
2. An increased level of conflict between the parents (family level) and psychologist (professional level) was related to increased polarization between the schools and lawyer (professional level).
3. The more Martin fought with his peers (informal network level), the more Martin rebelled at home (family level), and the more the stereotype of deaf people as impulsive was strengthened (cultural level).
4. The way that the hearing culture pathologized deafness (cultural level) was related to the earlier support group advocating oralism (informal network level); which was related to professionals advising Martin’s parents against signing (professional level); which was related to linguistic misunderstandings within the family (family level); which was related to increased impulsive-like behavior by Martin (psychological level); which was related to Martin experiencing increased stress, physically manifested by increased release of adrenocorticotropic hormone (biological level).

There is an elegant simplicity about the idea of co-evolution. However, there must be an idea which combines this simplicity with the complexity of many simultaneous and intersecting co-evolutionary relationships. Cybernetic theory unites the two. It is based on the idea that change and stability are in complimentary relationship with each other — that living systems maintain their essential form through processes of change. Change is necessary for stability; stability is necessary for change. In addition, this complimentary relationship is crucial to evolutionary processes and to the development and maintenance of a variety of different systems. For example, in order to maintain its stability, a family must constantly adjust both to the developmental crisis of its individual members and to the changing demands of the environment.

Brad Keeny (1983) illustrated this relationship by describing a tightrope walker who makes frequent adjustments to achieve balance on the high wire. Without these constant yet almost imperceptible changes, the acrobat could not maintain stability on the high wire; and without this stability,
AN ECOLOGICAL PERSPECTIVE ON DEAFNESS

the acrobat could not perform the pattern of changes. With each effort of walking on the tightrope comes new sensory information allowing for better balance. We can describe this process as a series of intersecting and constantly changing feedback loops. Each feedback loop carries "news of a difference" — each loop is different than the one before, although the differences are usually slight, almost indiscernible. Nevertheless, both the system itself (in this case, the acrobat) and the complementary feedback loops appear stable; but they are, in fact, slightly different as a function of time and motion.

Within cybernetic theory, these feedback loops are called recursive cycles. A recursive cycle is a sequence of interactions which occur within and between the various ecological levels. The concept of the recursive cycle helps us to understand and track the co-evolutionary relationships occurring among the multiple levels of the complex ecological field. The idea of a cycle being "recursive" refers to the idea that although the cycles appear to be stable as they process new information, in fact they are actually changing in significant ways, as exemplified by the acrobat. As noted before, the acrobat makes constant adjustments to maintain balance; the stability of the acrobat and his/her continual positional changes on the tightrope are complementary to each other.

We can now return to our illustrative case to track an actual recursive cycle. At present, the situation appears to be largely stable as it moves through the complex ecological field which we previously described. We begin with Judy and Mike arguing about disciplining Martin. As their argument reaches a specific level of intensity, Martin reports that he is being excessively reprimanded at school. Mark and Judy immediately unite against the school. The school pulls in professionals against Judy and Mark, while Mark and Judy do the same against the school. Having been triangulated into the conflict, the professionals begin to enact their own disagreements, power issues, turf issues, etc., and/or they simply do not initiate contact with each other. Martin then acts out more. His behavior confirms the cultural stereotype of deafness and, in particular, confirms his parents' view of him and the deaf community's view of him. Mark and Judy then coddle Martin and try to calm him down. After a period of relative quiescence Mark disciplines Martin, and he and Judy again begin to argue about Martin. And this cycle repeats itself.

This recursive cycle contains eight discrete steps which transmit and process information, i.e., information about Martin. It is important to note that Martin's behavior and the resultant labeling (and thus reification) of his psychiatric symptoms is quite entrenched in this interplay of the ecological relationships. Although the steps and events in the cycle are constantly changing, the changes may be imperceptible. Thus, as in the case of Martin and his family, recursive cycles may appear to be circular — that is, unchanging.

The identification of a recursive cycle serves as the clinician's and rehabilitation counselor's basic diagnostic unit. It represents a concise portrait of a complex field. It locates symptomatic behavior (Martin's acting out) in an ecological context.

What, then, is the counselor to do with this cybernetic portrait? In brief, the counselor must have a thorough knowledge about both systems theory and deafness. The cycle must be disrupted in such a way that it no longer provides an enduring and supportive context for the symptomatic behavior. However, that is the subject of a further treatise dealing with intervention in the ecological fields of deafness. Hopefully what we have provided here is an ecological view of deafness which first places the problems of deafness in a broad social context, and then condenses that context sufficiently for it to be manageable to clinicians and rehabilitation counselors.

*Naturally, the names and the facts have been changed enough to protect the identities, but not so much as to distort the meaning or spirit of the case.
AN ECOLOGICAL PERSPECTIVE ON DEAFNESS

REFERENCES


