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COMMUNICATION: INHERENTLY STRATEGIC AND PRIMARILY AUTOMATIC

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I hold two central beliefs about communication. First, I believe that *all* communication is strategic; that communication, by its very nature, cannot *not* be strategic. Second, I believe that communication is primarily automatic; that strategies are, for the most part, tacitly acquired and tacitly deployed. To many, these two beliefs appear contradictory. Why? Because, I would argue, a great deal of conceptual baggage is carried by the words "strategic" and "automatic." Strategic communication is explicitly chosen; automatic communication is implicitly activated. Strategic communication is directed, intentional, thoughtful, and controlled. Automatic communication is accidental, involuntary, unconscious, and unresponsive. Strategic communication is based on goals, plans, scripts, and understandings; automatic communication is based on functions, connections, ingrained habits, and dependencies. Strategic communication is about free choice; automatic communication is about mechanical regularities. I believe these conceptions of strategies and automated processes are not just wrong but also divisive in that they generate pseudo-issues that distract from more central concerns. In this essay, I will argue in defense of both of my beliefs and outline certain implications of adopting them. The thrust of my beliefs is, however, straightforward: Because there is no such thing as nonstrategic communication, *all* communicative behavior should be considered for its strategic implications.

Communication is Inherently Strategic

The first claim I forward is simple, though admittedly extreme, for I believe that communication is always strategic. I offer as support for this claim a three-part argument. I argue that (1) all communication is goal-directed and constraint-responsive, (2) all communication is adjusted for these goals and constraints, and (3) this constant process of adjustment makes communication inherently strategic.

Communication is purposive. I start the argument that communication is goal-directed and constraint-responsive by noting that communication is purposeful. We don't communicate (i.e., engage in symbolic exchange) randomly. Symbols are not selected like poker chips by reaching one's hand into a bag and drawing them out in random combinations. Symbols are selected and structured. Symbols are also not cast into the wind willy-nilly for whomever might wish to grab one going by. Even when we beam symbols into outer space in a search for extraterrestrial intelligence, these symbols are organized and transmitted for a

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purpose (unrealistic though it might be). The symbols are directioned. Consequently, communication always involves selection, it is always structured, and it is always directioned. This is not to say that communication is perfect—the selected symbols can confound, their structure can confuse, and/or they may mistakenly or accidentally be misdirectioned. Nonetheless, one cannot communicate without selecting, structuring, and directioning symbols, and it is this selection, structuring, and directioning that makes communication purposeful.

So, for what purpose(s) do people communicate? The most general answer is that people communicate in order to satisfy their needs (Athay & Darley, 1985)—needs such as existence, security, belongingness, esteem, and self-actualization (Maslow, 1954); inclusion, control, and affection (Schutz, 1966); and pleasure, escape, and relaxation (Rubin, Perse, & Barbato, 1988). To fulfill their needs, individuals strive for goals whose achievement leads to need satisfaction (Emmons, 1989). However, goal achievement and need satisfaction depend on the actions of other people (Athay & Darley, 1985) and it is this dependence that generates communication. No reason to communicate exists apart from a dependence on others for need satisfaction. All communication is, consequently, purposive and goal-directed.

Goals are states of affairs individuals are trying to bring about (Argyle, Furnham, & Graham, 1981; Dillard, 1989; Emmons, 1986; Read & Miller, 1989; Weir, 1984) or, stated differently, goals are what individuals hope to accomplish by their actions (Haslett, 1987). Goals persons commonly seek to accomplish communicatively include conveying information, helping others, having fun, expressing emotions, and seeking advice (Graham, Argyle, & Furnham, 1980; Kellermann & Kim, 1991). Achievement of these goals facilitates satisfaction of such needs as social acceptance and one's own security and well-being (Graham et al., 1980). However, to be achieved these goals require the accomplishment of various communicative objectives that are intrinsic to the process of exchanging symbols. That is, regardless of the extrinsic goal(s) for which communication occurs, the act of communicating itself is directed by and towards goals. Communication cannot occur absent the coordination and interpretation of action; goals are intrinsic to the process of symbolic exchange (Clark, 1985; Clark & Brennan, 1991). Coordination and interpretation are states of affairs individuals are trying to bring about; they are at least part of what individuals hope to accomplish by their actions when they communicate. All communication is thus goal-directed both intrinsically (in the process of symbolic exchange) and extrinsically (in the reason for the symbolic exchange).

Communication is also responsive to and regulated by constraints. Unlike goals that are impermanent and can be achieved at particular moments in time, constraints are ongoing regulators of behavior. Social appropriateness and efficiency are two constraints that communicative behavior is responsive to and regulated by. Communication is selected, fashioned, edited, enacted, and evaluated on these grounds (Argyle et al., 1981; Brown & Levinson, 1978, 1987; Carbonell, 1983; Grice, 1975; Hample & Dallinger, 1987, 1990; Kellermann, in press; Price & Bouffard, 1974; Wilensky, 1983). This is not to say that individuals always will be (or want their behavior to be) appropriate and efficient; rather it is saying that individuals are constrained by the *level* of appropriateness and efficiency expected in particular situations (which could call for high, moderate,

or low levels). Communicative behavior is always regulated by these constraints, even in their violation (as it is the operation of the constraints that allows violations to be noticed and confronted!). Consequently, communication is always purposive in that it cannot escape being regulated by constraints and directed by intrinsic and extrinsic goals.

Communication is adjusted to purposes. Communication is adjusted for the goals for which it is enacted and the constraints that regulate its enactment. People communicate in ways relevant to their goals; they fashion what they say and do in response to the goals they have (Haslett, 1987). For example, when seeking information, people ask questions (Berger & Kellermann, 1983); when testing the status of their relationships, they avoid such direct requests (Baxter & Wilmot, 1984); when comforting, they orient to the distressed feelings of others (Burleson, 1984); when gaining compliance, they appeal to their own and other's benefit (Miller, Boster, Roloff, & Seibold, 1987); when starting relationships, they increase self-disclosure (Altman & Taylor, 1973); when ending relationships, they reduce self-disclosure (Baxter, 1987); when starting conversations, they indicate they want to talk (Krivonos & Knapp, 1975); when ending conversations, they indicate they want to stop talking (Kellermann, Reynolds, & Chen, 1991). As persons' goals change, so do the communicative behaviors they enact. Likewise, people adjust their communicative behavior to overcome resistance from others that would make their goals more difficult to achieve. For example, people frame requests to overcome potential obstacles (Gibbs, 1985) and to attend to costs others might incur (Roloff & Janisziewski, 1989). Communication is adjusted so that goals external to the process can be achieved.

Communication is also adjusted to achieve objectives intrinsic to the process of symbolic exchange, i.e., coordination and interpretation. Communication, unlike solitaire, is not accomplished in a lone and solitary way; rather it is an inherently collaborative and cooperative activity (Brennan, 1991; Clark & Schaefer, 1986; Levelt, 1989). Even when fighting, individuals are collaborating and cooperating in order to coordinate the process of symbolic exchange. One way people collaborate and cooperate is by adjusting *what* they say for their intended recipients. Communicators' understanding of recipients' knowledge and point-of-view affects the form and content of messages (Clark, 1985; Harris, Begg, & Upfold, 1980; Krauss, 1987; Krauss & Fussell, 1991). People use different words, different sentence structures, and different descriptive orientations when constructing messages for themselves, strangers, and friends (Krauss, 1987; Krauss & Fussell, 1991). These adjustments are not just made by adults; even very young children adjust their communicative behavior for their recipients (Sachs & Devin, 1976; Shatz, 1983; Wellman & Lempers, 1977). People also collaborate and cooperate in their *responses* to others' presentations: They collaboratively develop referring expressions (Clark & Wilkes-Gibbs, 1986; Fussell & Krauss, 1989; Schober & Clark, 1989); they give evidence of their understanding of others' meaning (Clark & Schaefer, 1989); and they provide feedback that, in turn, alters the content and form of the communication that follows (Krauss & Weinheimer, 1964, 1966; Kraut & Lewis, 1984; Kraut, Lewis, & Swezey, 1982). Communication is a process of grounding, or stated differently, developing a mutual belief that the participants have understood what has been offered at a level sufficient for current purposes (Clark & Brennan, 1991;

Clark & Schaefer, 1989). This process of grounding is, by definition, a collaborative and cooperative one and, as such, requires adjustment of communicative behaviors for its accomplishment.

Communication is not only adjusted because it is goal-directed but also because it is constraint-responsive. People adjust their communicative behavior in response to situational, relational, and personal factors that constrain how appropriate and how efficient they are expected to be at particular times (Kellermann, in press). People exchange vows very rapidly at shotgun weddings; they increase task-oriented talk (and decrease chit-chat) when under time pressure at work (Isenberg, 1981; Sutton & Rafaeli, 1988); they speak indirectly in order to mitigate face threats (Brown & Levinson, 1978, 1987); and they equivocate so they need not tell a hurtful truth (Bavelas, Black, Chovil, & Mullett, 1990). People adjust their behavior to meet appropriateness and efficiency constraints and, moreover, often confront others when these constraints are violated (Newell & Stutman, 1988, 1991). All of these responses to constraints (and their violations) are adjustments in communication behavior. These adjustments are continuous and ongoing as constraints are not achieved at one moment in time but are met (or violated) at each moment of time. Consequently, these adjustments are made on a continuous basis and are inherent to the process of communication (Hovy, 1988).

Ongoing adjustment makes communication strategic. The process of communicative adjustment is, at its most basic, a process of selection and choice. Rather than all symbols being exchanged in all possible configurations at each moment in time, communication is the selective use of particular symbols in particular configurations at particular moments in time. This process of selection inherently involves choice (Bialystok, 1990) and these choices are made relative to both intrinsic and extrinsic goals and relevant operating constraints. Symbols (both verbal and nonverbal) are chosen to facilitate the exchange of particular meanings for recipients (Bialystok, 1990; Sanders, 1987). Communication is adjusted such that certain meanings increase in likelihood and others decrease (Sanders, 1987). Choices can be made to both illuminate and obscure particular meanings (Clark & Schaefer, 1987; Schober & Clark, 1989). These choices, whether made to reveal or conceal, inherently affect how communication might be understood; and it is this fashioning of communication to alter how it might be understood that makes all communication strategic.

The challenge for those who reject the position that all communication is strategic is to indicate what is in control of communication when it is not strategic. For communication to be nonstrategic, times must exist when it occurs devoid of goals, constraints, selectivity, choice, and fashioning of meaning. I believe it is possible to identify instances of nonstrategic *behavior* on these grounds, but not nonstrategic communication. Clearly, certain behaviors are purely reflexive, guided neither by goals nor regulated by constraints; they are neither selected, chosen, nor fashioned; these behaviors are involuntary, unadjustable, and uncontrollable. However, *no* communication is purely reflexive, absent all selection, purpose, direction, choice and control. Even sufferers of Tourette's syndrome with coprolalia (the inappropriate uttering of obscenities) are able to suppress their symptoms temporarily (Robertson, 1989). Moreover, cultural and demographic differences in the uttering of obscenities by Tourette's

patients suggest that it is at least partly regulated by display rules: Coprolalia occurs most frequently among Tourette's sufferers in the US (roughly 60%), less frequently for UK, Dutch, and Danish sufferers (26%–36%) and least frequently among Japanese sufferers (4%); it is also infrequent in Tourette's sufferers from middle-class and strict religious backgrounds (Robertson, 1989). Nonetheless, Tourette's syndrome offers an interesting case for consideration of whether all communication is strategic in that it separates issues of symbol selection from symbol expression. Coprolalia appears due to a temporary and involuntary inability to control, inhibit, or edit out the expression of these symbols rather than it being due to their involuntary and uncontrollable selection (Friedhoff, 1987). While editing of expressions may break down for a variety of reasons, only rarely might it do so for systemically (neurologically, genetically) involuntary and uncontrollable ones. These involuntary and uncontrollable breakdowns in the editing system suggest that while the selection of symbols is still communicative (and hence strategic), that the expression of them is not. I would be willing to grant that in these rare instances when a part of the communicative process (e.g. the selection, expression, etc. of symbols) is involuntary and uncontrollable, that what occurs is not strategic; however, neither is it communication. Communication is selected, structured and patterned; it is not random, unrestrained, and lawless; it is voluntary, controllable, directioned, chosen, and purposeful; it is not "unreflectively driven, without direction and orientation" (Hacker, 1985, p. 267).

Strategic behavior is often defined by a host of other characteristics and qualities, some of which I find problematic and some of which cohere quite nicely with the position I have offered here. Adjustment is a characteristic commonly contained or implied in definitions of strategic behavior, although this adjustment is typically envisioned as only occurring part of the time when communicating, i.e., communication is strategic (and adjusted) when people face a communicative problem (Candlin, 1983; Corder, 1983; Færch & Kasper, 1983a, 1983b; Tarone, 1983; Varadi, 1980). Despite the presumption that only some communication involves problem-solving, I would argue that all communication is problematic. The fashioning of meaning is coterminous with communication and the process of selection, choice, and adjustment suggests that all communication should be understood as problem-solving, making all communication both adjusted and strategic. Systematicity, i.e., the recognition that behavior is nonrandom and regular, is another characteristic often suggested or implied in definitions of strategic behavior (Bialystok, 1990; Dockrell & Campbell, 1986). This regularity is presumed to be dependent on action-outcome contingencies, that is, on the relationship between strategies and the goals they might achieve. In this view, strategies are options to be employed voluntarily (Bialystok, 1990; Frauenfedler & Porquier, 1979; Gruber, 1989). I accept this perspective on systematicity, though perhaps with wider application than intended by those suggesting it. I believe that all communication is systematic; all communication is based on action-outcome contingencies; and all communication involves options that are employed voluntarily. The necessary implication of this position is that communication is intentional, a characteristic often assumed necessary for behavior to be strategic (Bialystok, 1990). Intent occurs because choice is necessary; choices are necessary because options are available

(Fiske, 1989). There is social utility to making these choices, which in terms of communication, is the social utility stemming from the fashioning of understandings (Sanders, 1987).

Despite communicative choices being intentional (i.e., not involuntary or uncontrollable), they need not, indeed most often are not, consciously made. Quite common in definitions of communicative strategies is the presumption of awareness of communicative choices (Bialystok, 1990). I reject wholeheartedly that purposeful behavior must occur within conscious awareness. Communicative choices for selecting, structuring, and exchanging symbols can occur completely outside conscious awareness. Communicative options can be cognitively available without being consciously considered (Fiske, 1989). In the next section I will argue, in fact, that communicative choices are routinely learned and made tacitly, that is, outside conscious awareness. For the moment, however, I simply want to make it clear that consciousness should not be confounded with strategic behavior. Consciousness is independent of and unrelated to selection and choice, structuring and patterning, adjustment and purpose, and it is these features that make communication strategic.

Communication is Primarily Automatic

Not only do I believe that communication is inherently strategic, but I believe that it occurs primarily automatically. I take the position that most strategies are automated in both their acquisition and enactment; that they are learned and used tacitly. I am not claiming that communicative strategies are *not* consciously acquired, for certainly they can be. Nor am I claiming that communicative choices *always* occur without conscious awareness, for certainly that is incorrect. Rather, I am arguing that strategic behavior in general, and communicative behavior specifically, must be uncoupled from assumptions of conscious acquisition and use. I am arguing that communication, as strategic behavior, occurs *primarily* automatically.

Automated behavior is often assumed to be unintentional, involuntary, effortless, autonomous, and outside awareness (Bargh, 1989). These criteria work nicely for behavior stemming from certain nearly reflexive "preconscious" processes, but ignore a wide range of behavior stemming from postconscious and goal-dependent automatic processes. Automated behavior is often intentional and monitored while still occurring outside awareness (Bargh, 1989). Some of this behavior is acquired consciously but then repeated sufficiently for it no longer to be dependent on conscious monitoring and control. Mindless behavior falls into this category of behavior that is automated because it is familiar or overlearned (Langer, 1978, 1989). Other behavior, however, is acquired and enacted without ever having been consciously mediated (Lewicki, Czyzewska, & Hoffman, 1987; Lewicki, Hill, & Bizot, 1988). "Every complex knowledge acquisition task is accomplished largely in the absence of conscious control. We include here the likes of socialization, acculturation, becoming a skilled diagnostician, becoming an expert in an academic field, learning a complex game like chess or go, and acquiring a natural language. Knowledge in these cases is primarily tacit; rules are not overtly specifiable" (Reber, Allen, & Regen, 1985, p. 22). Much of what we know and most of what we do—language, socialization, perception—happens unconsciously (Gruber, 1989; Lachman,

Lachman, & Butterfield, 1979; Lewicki, 1986b; Lewicki & Hill, 1987; Reber, Kassin, Lewis, & Cantor, 1980). Strategic behavior is a classic instance where processes of knowledge acquisition and use are often implicit (Gruber, 1989). Consequently, my claim is not only that communication is primarily automated, but that this automation reflects primarily tacit (implicit) processes of acquisition and use rather than initially mindful behavior becoming practiced, overlearned, and then mindless.

Tacit or implicit learning refers to unconscious processing, an automatic and naturally occurring cognitive activity. In tacit learning, knowledge is acquired implicitly, held tacitly, and used unconsciously (Lewicki, 1986a; Lewicki & Hill, 1987; Reber, 1976; Reber et al., 1985; Reber & Lewis, 1977). Tacit learning is intentional in that people must attend to the stimulus structure and attempt to learn its pattern (Nissen & Bullemer, 1987). Tacit learning is unconscious, however, in that people do not know they have learned anything at all and are unable, even when highly motivated, to specify the knowledge they acquired (Lewicki, 1986a, 1986b; Lewicki et al., 1987; Lewicki et al., 1988; Lewicki & Hill, 1987; Schacter, 1987).

Tacit learning occurs for highly complex stimulus structures where people are unable consciously to discover and formalize the rule systems characterizing the structures (Reber, 1976). Language is a complex stimulus structure that is learned primarily implicitly (Lewicki, 1986a; Lewicki & Hill, 1987; Reber et al., 1980). Investigations of the implicit learning of language are quite fascinating (Allen & Reber, 1980; Gordon & Holyoak, 1983; Reber, 1967, 1976; Reber & Allen, 1978; Reber et al., 1980; Reber & Lewis, 1977). Individuals are exposed to an artificial language (words of letter strings that are generated by a rule-governed transition process such as a Markov generator) after which they are asked to make acceptability judgments of other previously unseen words from the language. Individuals not only make accurate acceptability judgments of these words, but they do so despite being unable to express any rule of the language, often without awareness that the words were even generated according to a set of rules, and often insisting their judgments were only guesses (even though their judgment accuracy invalidates this claim). Indeed, instructions to search consciously for a language's rules have been found to inhibit learning of the language (Reber, 1967). While aspects of language acquisition no doubt are accomplished consciously, much of it occurs implicitly (Lewicki & Hill, 1987; Reber et al., 1980). All sorts of interpersonal perceptions and nonverbal behaviors are acquired implicitly as well (see, e.g., Lewicki, 1986a). Consequently, communication is primarily acquired tacitly.

Tacitly acquired information can be, and is, tacitly and strategically used. Knowledge acquired implicitly is used without awareness to enhance performance on other tasks by automatically priming specific responses (Lewicki et al., 1987, 1988; Reber, 1967). Moreover, this implicit knowledge is selectively applied depending on its fit with encountered circumstances (Lewicki, 1986a). Consequently, the use of implicit knowledge is strategic, being selective (rather than haphazard), purposeful (rather than purposeless), chosen (rather than driven), adjustable (rather than reflexive), and controlled (though not conscious).

Evidence of tacitly guided and inherently strategic communicative behavior is

easy to point to. Words are routinely chosen without conscious awareness (Bialystok, 1990) and these choices reflect strategic considerations in the fashioning of meanings. Implicit knowledge is used to develop and decide between different goals and plans to be pursued interactively (Semmer & Frese, 1985). Uncertainty reduction is also largely a tacit process. For example, persons who implicitly learned to distinguish personality types on the basis of "long" and "short" facial structure, subsequently unconsciously applied what they had learned to others (Hill, Lewicki, Czyzewska, & Schuller, 1990). Similarly, when persons implicitly learned that long-haired persons were intelligent, they then tacitly used this implicit knowledge to assess the intelligence of newly encountered persons (Lewicki, 1986b). And, when persons implicitly learned, based on *one* friendly or unfriendly gesture in *one* interaction, that kind (or unkind) experimenters wear glasses, they implicitly used this knowledge to assess another's friendliness in a subsequent interaction (Lewicki, 1985). In other words, people tacitly acquire information and tacitly use it strategically. Communicative behavior reflects both this tacit acquisition of information and its tacit and strategic use. Even when certain aspects of communicative behavior may not be tacitly acquired and/or guided, actions taken as whole may still be primarily so. Only part of any action may be conscious while other (larger) parts are unconscious (von Cranach, Kalbermatten, Indermühle, & Gugler, 1982). Consequently, communication is not primarily mindless because it was never primarily mindful; rather, communication is primarily implicit while being inherently strategic.

Implication

It is possible to argue that if the concept of automatically strategic communication is to have special meaning, that it needs to be distinguished both from nonautomatic and from nonstrategic communication. I do not believe that communicative behavior must or should be distinguished on strategic versus nonstrategic grounds for the concept of strategies to be of intellectual use. Strategies are useful conceptual tools even if all communication employs them; adopting a strategic perspective permits questions to be raised about which strategies are being used when and for what reasons; that is, questions can be raised about what choices are being made, what options are being pursued, and what options are forgone. The implication and value of taking the position that all communication is strategic is that communicative behavior previously thought of as nonstrategic can be considered for its strategic implications. I do, however, find it useful to differentiate consciously acquired from tacitly acquired communicative options and to differentiate consciously acquired communicative options that are mindfully enacted from those that are mindlessly enacted. Automated behavior is generated by different processes than nonautomated behavior and the way in which it is automated (mindlessly, implicitly) also engages different processes for its generation. Consequently, it is useful to explore differences in nonautomated and automated (both mindless and tacit) communicative behavior from a strategic perspective.

I will look at three areas of communicative behavior typically treated either nonstrategically or consciously from this tacitly strategic perspective: language learning, language use, and biological rhythms. Language learning, as with all

implicit knowledge, involves acquiring rules that are not available to direct, conscious examination (Lewicki & Hill, 1987). Consciously trying to interfere with implicit processes for acquisition of linguistic rules decreases the quantity of what is learned, encourages learning of consciously invented and inaccurate rules, and interferes with accurately learning the linguistic rules implicitly (Reber, 1967, 1976; Reber & Millward, 1968). The implication of this research is two-fold. First, many aspects of complex structures such as languages are best learned implicitly rather than explicitly. Second, conscious regulation of the resultant highly automated linguistic behavior is difficult. Implicitly learned linguistic rules unconsciously prime particular linguistic behaviors. Behavior that is implicitly primed can be recognized once engaged; however, because its engagement occurs outside awareness, it is difficult to prevent it from occurring (Semmer & Frese, 1985). Consequently, linguistic behavior that is implicitly primed (e.g., obsessively saying "you know" or "like") is easier to stop than prevent, and awareness that one engages in that behavior may not be enough, by itself, to prevent it (Semmer & Frese, 1985). If the tacit aspect of linguistic behavior is overlooked, then language learning is reduced to the explicit memorizing of rules and the belief that certain behaviors can be inhibited through conscious intervention.

Similarly, if the strategic aspect of linguistic behavior is overlooked, then certain "disorderly" behaviors appear to be "errors" or "slips" when they are nonetheless strategic (Sanders, 1987). Verbal slips are highly monitored and controlled behaviors that are not haphazardly, but instead systematically, produced. The type of verbal slip that occurs is highly predictable; not any random slip will be produced (Logan, 1989; Motley, Camden, & Baars, 1981). In other words, there is strategic order in these linguistic disorders. Confusion often arises here because of the idea that strategic communication must somehow be successful communication. Communication that is strategic need not be communication that is successful; it only need be selected, chosen, adjusted, and potentially controllable. When communication goes awry, it does not mean that it is not strategic, just that the strategy did not accomplish what was intended (Logan, 1989). Rather than thinking of various communicative behaviors as errors, slips, or mistakes, it would be worthwhile to look for order in these disorders, that is, their strategic value.

It is also likely to be worthwhile to look for strategic value in other orderly, though presumed nonstrategic, communicative processes. Recently, the biological origins of communicative behavior have received attention with particular emphasis on the timing and rhythm of interaction (Cappella, 1991). I would argue that despite such rhythmic entrainment having biological origins and occurring primarily outside awareness, that it is nonetheless intentional, purposeful, adjustable, and potentially controllable, that is, it is tacitly strategic. Rhythmic coordination is intentional and purposeful (Damon, 1981) and the available research evidence strongly supports the idea that it is adjustable, selective, and purposeful (Bruner, 1982). The timing of communicative behavior is contingent on, responsive to, and adjusted for that which comes before it and sets the stage for that which comes after it (Shatz, 1983). As with linguistic disorders, disorders in these rhythmic systems lead to purposeful adjustments in communicative behaviors. As one example of such purposeful adjustment, mothers of infants

with Down's syndrome rhythmically react with an increased pace to the slowly timed and infrequently generated communication behavior of their babies in order to elicit more regularly timed responses from them (Cunningham & Miffler, 1981). Despite this response being unsuccessful, it is nonetheless strategic for it is purposeful adjustment of behavior. It is also, for the most part, tacitly guided in that these reactions are not generally consciously mediated in either their acquisition or use. Moreover, these reactions are at least potentially controllable. When mothers were able to slow their responses and time them better to those of their infants, the behavior of the infants then changed as well. The point to be made here is simple: These processes may be implicitly acquired and strategically used and the strategic implications of the tacit choices that are made are worth exploring. Indeed, all communication should be examined for its strategic implications, because communication cannot not be strategic. And all communication should be considered for its mode of enactment, because most communication is primarily automatic, indeed, primarily tacit.

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