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Self-talk and Self-awareness: On the Nature of the Relation

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This article raises the question of how we acquire self-information through self-talk—i.e., of how self-talk mediates self-awareness. It is first suggested that two social mechanisms leading to self-awareness could be reproduced by self-talk: engaging in dialogues with ourselves, in which we talk to fictive persons, would permit an internalization of others' perspectives; and addressing comments to ourselves about ourselves, as others do toward us, would allow an acquisition of self-information. Secondly, it is proposed that self-observation (self-awareness) is possible only if there exists a distance between the individual and any potentially observable self-aspect; self-talk, because it conveys self-information under a different form (i.e., words), would create a redundancy—and with it, a wedge—within the self.

Each and every day of our waking life, at every hour, and even, arguably, at least once a minute, we talk to ourselves. No doubt, this makes self-talk (or internal dialogue, inner speech) a rather important psychological activity. But not only do we use inner speech frequently: it also shapes our thoughts, feelings and behaviors in a great variety of ways. For instance, it has been shown that inner speech plays a decisive role in self-regulation (Luria, 1959, 1961; Meichenbaum, 1976, 1977; Vygotsky, 1934/1962; Zivin, 1979), in problem solving (Harris, 1986; Hunsley, 1987; Roberts, 1979; Sokolov, 1972), and in planning (Meacham, 1979; Morin, 1988). A large number of pathologies, ranging from anxiety (Cacioppo, Glass, and Merluzzi, 1979; Meichenbaum and Butler, 1980) to depression (Beck, Brown, Steer, Eidelson, and Riskind, 1987), and including gambling (Gaboury and Ladouceur, 1989; Ladouceur, Gaboury, and Duval, 1988), guilt (Firestone, 1987), agoraphobia (Chambless, Caputo, Bright, and Gallagher, 1984), and many others, are mediated by mal-

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adaptive self-talk. An asymmetry between positive and negative self-statements seems to exist, where negative thoughts would have a greater functional impact (Schwartz, 1986); this effect could be even more pronounced with people having psychological problems (Clark and Channon, 1987). Studies have also linked self-talk to alcohol consumption (Oei and Young, 1987), performance in sport (Highlen and Bennett, 1983), reading (Yaden, 1984), effectiveness of counseling (Fuqua, Newman, Anderson, and Johnson, 1986; Kline, 1983; Kurpius, Benjamin, and Morran, 1985; Uhlemann, Lee, and Hiebert, 1988), and creativity (Bibler, 1987). It is thus my opinion that what we say to ourselves represents a cornerstone in the way we think and act.

We can also be self-aware, that is, we can take ourselves as the object of our own attention (Duval and Wicklund, 1972). This ability, unique to humans and some higher primates (see Gallup, 1985), also represents a cornerstone in the way we think and act because self-reflection shapes our feelings and behaviors in a variety of ways. To illustrate this point, just consider the following examples. Research has shown that highly self-aware individuals, in comparison to low self-aware individuals, perceive the content of their subjective experience more intensely and more acutely (Scheier and Carver, 1977, 1981), react more strongly to social rejection (Fenigstein, 1979), and know themselves better (Carver and Scheier, 1981; Turner, 1976). Self-awareness motivates self-evaluation and self-regulation: self-aware individuals find themselves in a better position than non self-aware individuals to compare their current states with their standards or goals and to try to conform to them (Duval and Wicklund, 1972; Scheier and Carver, 1988; see also Pinard, 1992). Also, self-awareness affects, among many social behaviors, conformity and attitude change (Froming and Carver, 1981), and compulsive self-awareness mediates psychopathology (especially depression and social anxiety) [Buss, 1980; Ingram, 1990]. Another important consequence of self-awareness is the capacity it brings to make inferences about others' mental states (Gallup and Suarez, 1986)—a capacity which, in turn, shapes our social relationships. Obviously, self-awareness represents a central psychological parameter.

Self-talk and self-awareness clearly are, in the author's opinion, at the heart of many psychological phenomena. The existence of a link between inner speech and self-awareness has been recently proposed (Morin and Everett, 1990a). When we ask: How do we learn about ourselves? (or: How do we develop a self-concept?), three sources of self-information can readily be identified: the social world, one's physical environment (i.e., self-reflecting devices such as mirrors, photographs and videotape recordings), and the self. We have a rather sophisticated knowledge of how the social world, for instance, brings about self-information. According to Mead (1912/1964, 1934, 1982; see also Meltzer, 1991; Natsoulas, 1985), being confronted with different ways of thinking, feeling and behaving would first allow the individual to

perceive that he or she is endowed with unique qualities, and then would motivate him or her to take others' perspectives to gain an objective vision of himself or herself. Cooley (1902; see also McCall, 1977) proposed that we learn about ourselves by being repeatedly exposed to verbal comments—or appraisals—others emit about us.

But what about the self? Self-awareness, so it seems, is a rather mysterious phenomenon. When the individual is self-aware, he or she becomes his or her own source of self-information. But an intriguing question here is: What *really* takes place when the individual *examines*, *analyzes* himself or herself, *reflects* or *focuses* on himself or herself? As Gibbons points out (1990, p. 250), little is known about what happens cognitively when the individual is self-aware.

In answer to the above-mentioned question, it can be proposed that when self-aware, the individual, more often than not, *talks to himself or herself*. In other words, self-talk would be a mediator of self-awareness—an important tool involved in the acquisition of self-information.

The hypothesis of the existence of a link between self-talk and self-awareness has been shown to be both logically and empirically plausible (see Morin, 1992; Morin, Everett, Turcotte, and Tardif, 1993). What is less clear and of interest here concerns the *nature* of this relation. Of course, we can easily conceive of self-awareness *activating* (i.e., causing) a self-conversation. However, perceiving the relation in the other direction, where self-talk would *mediate* self-awareness, raises perhaps more intriguing—and more interesting—questions: How does self-talk mediate self-awareness? How do we learn about ourselves through self-talk? These questions are the focus of the present article.

Reproduction by Self-talk of Psychosocial Mechanisms Responsible for the Acquisition of Self-information

I mentioned above that one possible source of self-information is the social world. I would suggest that social mechanisms proposed by social interactionists (or *inter*-personal modes of acquisition of self-information) could be reproduced by cognitive processes (or *intra*-personal modes of acquisition of self-information), and especially by self-talk, where conversations with ourselves would permit an internalization of others' perspectives [Mead] and a replication of comments emitted by others [Cooley] (see Morin and Everett, 1990a, 1990b; Morin and DeBlois, 1989; see also MacKay, 1979). Luria (1978) proposed that the organization of the brain's "higher" and more "noble" functions has been shaped by the social environment in which it evolved. I believe that the social world is a necessary, but not a sufficient condition for the emergence of self-awareness. We know for instance that a motivation to communicate with others, although rooted in the social environment, needs

to be mediated by linguistic processes in order to manifest itself effectively. The same could be true for self-awareness: once initiated by the social environment, it could be argued that this initial social movement should then be taken over and extended by cognitive processes (Morin and Everett, 1990b). Moreover, if we were only to have social feedback as a source of self-information, we could hardly acquire self-information *outside social situations* (Morin and DeBlois, 1989).

Now, since the social milieu brings self-information, and self-talk could reproduce the mechanisms by which this social milieu conveys self-information, it is reasonable to assume that self-talk mediates self-awareness. Let me examine and illustrate this idea.

Creating an Objective Point of View by Self-talk

The first inter-personal mode of acquisition of self-information I identified was Mead's idea that confrontations with others force the individual to take others' perspectives in order to gain an objective point of view regarding himself or herself. Once in this position, the individual can acquire self-information.

Before going any further, it should be pointed out that this mechanism, although psychosocial in nature, must surely be mediated by some cognitive process—by inner speech, for example—to open into an effective acquisition of self-information. Just consider the following steps involved in the social mechanism under scrutiny. The individual must first observe others. He or she might say to himself or herself "So, that's what these people think!" Then, self-observation must take place so as to realize that there exists an incongruence between what the individual perceives of others and what he or she perceives of himself or herself: "But I've never thought that way!" And finally, the individual must identify the difference in order to perceive a particular self-aspect. He or she might engage in the following internal dialogue: "These people conceive of (this thing, this problem) in terms of *x*, whereas I see (the same thing or problem) in terms of *y*." In this interaction between social feedback and self-talk, the individual will identify diverse self-aspects, be it behaviors, physical characteristics, attitudes, values, opinions, beliefs, motivations, and so on.

Now—and this is my point—it can be suggested that *this inter-personal mode of acquisition of self-information* (taking others' perspectives) *could be reproduced by self-talk*, thus leading to self-awareness. We sometimes engage in a fictive dialogue with ourselves in which we state to imaginary persons our motives for behaving in a given way or for having some personal characteristics. When, in response to the imagined speeches of others, we explain our actions or describe ourselves in self-talk, we take others' perspectives into

account and thus gain a relatively objective vision of ourselves. Children spontaneously engage in such fictive dialogues. In the following example, David is playing alone with a toy while his private speech is recorded:

> The wheels go here, the wheels go here. Oh, we need to start it all over again. We need to close it up. See, it closes up. We're starting it all over again. *Do you know why we wanted to do that? Because I needed it to go a different way.* Isn't it going to be pretty clever, don't you think? But we have to cover up the motor just like a real car. (Kohlberg, Yaeger, and Hjertholm, 1968, p. 695; italics added)

The first two self-statements in italics represent a good example of self-conversation through which a question about one's action is directed toward a group of imaginary people [of which David seems to be a part, since he says "we"] and is answered by the person emitting the target-behavior [David, the "I"]. Here, an objective vision of oneself and an acquisition of self-information are reached because (a) when David asks to himself "Do you know why we wanted to do that?" he gets to know how other persons could interpret his behavior, and (b) when he answers the question for himself ["Because I needed it to go a different way"], verbal self-information is acquired. David thus reproduces, via self-talk, a process of acquisition of self-information initially triggered by the presence of others.

This process also takes place in adults, but is likely to differ in some respects. First, to my knowledge, adults rarely use the pronoun "we" in their internal dialogue: they fully distinguish themselves from others by using "I" and "you." Moreover, any reference to others in the internal dialogue tends to become highly understated—it even disappears altogether in most instances. An example of such self-talk could be: "I hope my new look will be appreciated!" [objective vision of oneself produced by an anticipation of the reaction of an imaginary group of persons—the *generalized other* of Mead]; "Some might say it gives me a more 'serious' look—that's what I wanted—up to a certain extent, anyway. Obviously, I look older—more 'mature'" [acquisition of self-information]. Another example, in which there is this time an explicit reference to others, would be: "X might wonder why I did that. She [or he] should be aware that my relation with y is serious, and that although I show her [or him—i.e., x] affection, it is y that I am in love with. X shouldn't feel hurt if I didn't accept her [or his] advances—or maybe I wasn't clear enough to start with?" We can clearly see here in what way perspective taking allows an objective vision of oneself, and in what way the self-observation brought by this objective vision allows in turn the identification of a precise self-aspect—the acquisition of self-information (here: the actions of the person toward *x* and his or her feelings toward y). Finally—and more often than otherwise, I would think—any reference to others disappears despite the fact that this reference still motivates the speech for oneself: "How did I look

when I gave this lecture? I probably looked nervous—God I *was* nervous! Fortunately, I think I looked competent despite my nervousness." So, one first way to understand the nature of a link between self-talk and self-awareness consists in recognizing that an objective vision of oneself, originally dependent upon the presence of others, can be internally reproduced through inner verbal conversations we have with fictive persons.

Reproducing Appraisals Made by Others by Self-talk

Let me now consider Cooley's thesis according to which individuals emit observations about us that enrich our self-concept. Someone might say to me "I called you three times this week and you didn't call me back. I don't find this very polite! I would even say that you don't show much respect!" Such a remark suggests, as far as it applies to me, that one is *inconsiderate*—that one *lacks respectfulness*. Inner speech allows one to consolidate such self-information: "That's true . . . ." Inner speech also allows oneself to *question* such self-information: "That's untrue! The fact that I didn't call back doesn't mean I lack respectfulness: I was out of town!" But more importantly, *self-talk would allow a reproduction for oneself of these appraisals we get from others*. This is where the nature of a link between self-talk and self-awareness becomes clear. People address to themselves many verbal comments—for instance: "My God you get angry easily!"; "Why did you do that?"; "Did you ever notice this tendency you have to take yourself way too seriously?"; "You're very bright!"; "Admit that this is what you are thinking about!"; "You seem to be a very sensitive person!"; "You are sad, aren't you?" and so on. Such comments (observations and inferences about one's thoughts, feelings and behaviors) by others might, upon repetition, *imprint on one's self-talk a propension to address to ourselves such remarks*. A mode of transmission of self-information that was originally inter-personal (verbal comments made by others about ourselves) would gradually become an *intra*-personal mode of transmission of self-information (verbal comments about ourselves that *we address to ourselves*). Examples of such self-statements would be: "My God I get angry easily!"; "Why did I do that?"; "I take myself way too seriously!"; "I'm bright, sensitive, sad," and so on. (Of course, these examples amount to rather simple, short self-conversations; we often engage in much more sophisticated verbal self-analyses. I could illustrate such lengthy self-conversations, but I must here restrict myself.)

Creating a Redundancy of Self-information by Self-talk

I will now put aside any reference to psychosocial considerations and focus on the intrapsychic world of the individual. The following citation will guide

my next proposition concerning the nature of a relation between self-talk and self-awareness:

> A subject completely immersed in experience would not be conscious of it [the experience]. It is a platitude that we are indeed unconscious of most of the background noises, pressures, luminosities, odors, and visceral sensations that impinge upon us at any given moment. We are unaware of them not because they are remote but because they are too near. There is no distance between us and them. . . . A person can be conscious of something only if a wedge has been inserted between him and it. . . . In complete immersion in experience there is no sense of ownership. (Johnstone, 1970, p. 106)

The essence of the above quotation boils down to this: an observation is possible *only if* there exists a *distance* (a wedge) between the observer and the observed thing. By the same token, a *self*-observation is possible *only if* there exists a distance between the individual and any potentially observable self-aspect. A clear relation can be established here between the capacity to operate a backward movement on oneself and self-awareness. By definition, self-awareness represents the capacity to become the object of one's own attention. This, again, can be done by taking others' perspectives: the individual "introduces" himself or herself (in imagination) into someone else and observes himself or herself under this new perspective. In doing so, a (mental) distance is created within the self (between the individual and himself or herself).

I already have suggested how self-talk would allow the individual to take the perspective of others; consequently—and although the discussion centered on another aspect of the problem—we already have seen how self-talk could create a distance within the self. I will now propose that self-talk can *also* create a *redundancy* of self-information within the self, and that such a redundancy creates in turn a distance within the self.[1] Thus, a second way to understand the nature of a link between self-talk and self-awareness will be presented.

The term "redundancy" implies that some already given information, or self-information, is brought under a new form (Robert, 1973). To illustrate, let us imagine an individual experiencing a given subjective feeling—for example, an emotion of joy; this emotion represents a potential bit of self-information. The individual talks to himself or herself and says "God! This is fun!" A replication takes place, and with it comes the same self-information under a new form. How does self-talk produce a redundancy of self-information? In what way is the already given self-information brought under a new form? Self-talk *carries* information. The self-information in question here refers to any *already given* self-aspect (in the above example, an emotion) since it is intrinsic to the individual: self-information is, as a matter of fact,

[1]Routtenberg (1980) proposes a psychobiological model of (self-) awareness in which the notion of "redundancy" in the nervous system plays a central role. His model, however, does not have much in common with the present analysis.

what the individual is. This self-information is brought *under a new form* because any self-information conveyed by self-talk presents itself in *words and sentences*—which is clearly different than an emotion, a physical characteristic, or any other given subjective experience.

Now, how is it that a distance is created between the subjective experience of joy (the already given self-information) and its linguistic representation (the self-statement—the new self-information resulting from the replication)? The individual, before the redundancy, was *immersed* in his or her subjective experience. After the redundancy, he or she now has access in his or her perceptive field to a self-information to which he or she did not have access to previously—we thus have here the creation of a distance. The example illustrates the redundancy of a precise subjective experience; but the principle it allows me to expose applies to any possible personal characteristic as well—to any "private" or "public" self-aspect.

To summarize: self-talk, by verbally identifying self-information that is inherent to the individual, brings it under a new form—hence a redundancy. In producing redundancy within the self, self-talk also creates a distance between self-information and the individual (the self). The individual, as a result, can observe—acquire—the self-information. Self-awareness is dependent upon a distance between the individual and himself or herself; a redundancy of self-information creates such a distance; self-talk in turn creates redundancy. Insofar as this reasoning makes sense, the nature of the relation between self-talk and self-awareness can now be understood within a second perspective.[2]

Conclusion

In humans at least, self-awareness is pretty much taken for granted (Gallup, 1987). It is its *underlying mechanism* that keeps puzzling psychologists and philosophers. What is introspection? How do we have access to the con-

[2]In another article (Morin and Everett, 1990b), I discussed this hypothesis by using the following analogy: the brain would be equipped with "internal mirrors" allowing the subjective experience it generates to detach itself from itself. These internal mirrors could consist of cognitive processes capable of reproducing, as a whole or in part and at a given moment, the subjective experience, thus producing redundancy within the self. Self-talk would be one such cognitive process.

Of course, this "mirror" analogy does not tell us much about the nature of the link between self-talk and self-awareness; but it allows me to counter a difficulty raised by Johnstone (1970). According to this author, to become the object of one's own attention represents a logical impossibility: "*The incapacity of consciousness to be its own object is structurally identical with the incapacity of the pointing needle to point to itself. Consciousness of consciousness is a contradiction*" (p. 105). This argument seems to me to be misleading, because a needle can indeed point to itself *if a mirror is disposed at its extremity*. By extension, an individual placed in front of a mirror can contemplate his or her secular image—that is, he or she can become the object of his or her own attention. This analogy applies to the individual's subjective experience as well, which, by self-reflection, could become the object of its own attention.

tent of our subjective experience or to any other self-aspect? Does self-awareness require some sort of "mental eye" or any other mysterious internal device? These represent highly intriguing questions, and no doubt their answers will prove to be extremely complex.

In this article and elsewhere (see Morin, 1992; Morin and Everett, 1990a, 1990b; Morin et al., 1993), I proposed that more often than not, self-awareness is mediated by self-talk. But only to put forward such an hypothesis is theoretically unsatisfactory: one must also try to understand *how* self-talk mediates self-awareness. As Churchland (1983, p. 88) puts it: "What is it about self-consciousness such that it requires linguistic representations, and what is it about language such that it brings about the special capacity for self-consciousness?"[3]

The following propositions about the nature of the relation between self-talk and self-awareness were explored. The social mechanism initiating the taking of others' perspectives, and resulting in an objective vision of oneself, can be reproduced by self-talk; also, self-talk allows a reproduction for oneself of the appraisals we get from others. And finally, self-talk creates a redundancy of self-information within the self, and with it a distance (essential to self-awareness) between self-information and the individual (the self). Although, at this point, further studies are needed to confirm the existence of a link between self-talk and self-awareness, the cogency of the main propositions put forward in this article should be empirically explored as well. One possibility, for example, might consist in training one group of subjects to have inner verbal conversations about themselves with fictive persons. If self-talk directed toward fictive individuals facilitates perspective taking and increases self-awareness, significant differences in self-awareness should be observed between control and experimental groups. Such attempts to put to test the aforementioned hypotheses about the nature of the relation between self-talk and self-awareness represent one of many possible avenues toward a better understanding of the mechanisms the self uses in thinking of itself.

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[3]Of course, language does not, alone, "bring about" self-consciousness. Language—and more precisely, self-talk—represents one factor among many others that might contribute to self-awareness. It would be naive to suppose that probably the most complex operation the mind can perform upon itself—to reflect upon itself—could be mediated by a single cognitive process.

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