

THE THEORY OF LANGUAGES

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Semiotics proposes that the sign functions as the basic, constructive element of language, thought and culture. Signs represent the human, innate desire to

communicate with others, understand experience and create relationships. One of the most compelling questions asked in life is: “What does it all mean?” In using signs, we attempt to discover connection and wholeness in the seemingly disparate, arbitrary elements that compose existence. The capacity to make, interpret and respond to signs is central to the acquisition of *communicative literacy*, the essential ability to express meaning using language and other standard symbolic systems. Examining the nature of the sign is the beginning point for developing the theory of languages, the framework for the concept of communicative literacy.

Signs Generate Meaning

A sign is a message to someone. When employed, signs alert our attention and generate meaning. Basic to communication, learning, relationships and culture, signs such as verbal expressions, writing, visual images and sound infuse daily living. Interchange with others, objects, sounds, events, text or other phenomena—a puff of smoke rising from the forest, a vocalization such as a cry, a work of clay, a mélange of color, marks on paper, a physical movement such as shaking another’s hand, etc.—have potential for interpretation. Through interchange and education, people gain mastery of signs and symbols.

Although people are accomplished sign-makers and sign-interpreters, animals also demonstrate the ability to use signs. For example, a small fish noticing the shadow of a large fish, goes into hiding behind the coral. Thus the shadow of a predator signals danger to the prey, increasing the chance for the small fish's survival.

As suggested by this example, the content of a sign conveys an idea separate from the object itself. For example, smoke rising from the forest might be a sign of a fire, but only if interpreted in this way. Similarly, an experienced teacher discriminates among the many noisy sounds on the playground that particular yell that indicates injury. Her response to the emergency is to run outdoors with the first aid kit. Thus a sign communicates both meaning and potential action.

In addition to those inferred from objects, experience and natural phenomena, humanly created signs and symbols also convey personal or shared meaning. While many symbols are commonly recognized, like the alphabet, numerals and the yellow "happy face," other symbols such as a tattoo, have meaning known only to the individual. Also different representations can be used to express a similar idea such as the English written word, "LOVE," the Spanish spoken word, *amar* or the graphic valentine heart-shape. Semiotic theory investigates how signs and symbols are acquired, gain meaning and function in communication.

Eco's Theory of Semiotics

While the study of signs has its origins in ancient Greek philosophy, the modern field of semiotics is less than 150 years old. The most famous semiotician living today is Umberto Eco, a northern Italian. Born in Alessandria in 1932, Eco has held professorships at universities in Turin, Florence and Milan and since 1971, at the University of Bologna where he is Professor of Semiotics (Caesar, 1999). Earning him immediate, international acclaim, Eco's first book *Opera aperta* (1962) deals with the subject of "aesthetics." His classic texts on semiotics are *Appunti per una semiologia della comunicazioni visive* (1967) and *La struttura assente* (1968). English, non-translated versions by Eco include *A theory of semiotics* (1976) and *Open work* (1989b). Among Eco's numerous books, articles and publications, are his bestselling novels, including *The name of the rose* (1983), *Foucault's pendulum* (1989a) and other memorable literature. Indeed the current interest in semiotics has been attributed to Eco's immensely popular fictional writing (Danesi, 2000).

Like Peirce before him, Eco (1976) attempts to devise a general theory of semiotics. In contrast to Peirce's realism, the belief that reality is objective, Eco assumes the phenomenological stance that reality is subjectively perceived and culturally shaped. Moreover, Eco's theory rests on a substantive body of current research on linguistics and communication systems. In his theory of semiotics, Eco forwards two complementary sub-theories: *the theory of codes* (languages) and *the theory of sign production*. In developing these theories, Eco elucidates principles, establishes parameters and offers hypotheses guiding contemporary semiotic studies.

Culture and Semiotics

In Eco's semiotic theory, the sign is a manifestation of culture. Signs create culture: "a system of shared and interconnected meanings that have been organized over time into codes (language, gesture, music, etc.)" (Danesi, p. 35). In turn, existing culture influences the interpretation of the sign and contributes to meaning. In this transactional process, the meaning of a sign produces a "cultural unit" (p. 67). In Eco's view, culture depends on communication: "it is through thinking and speaking that a society, develops, expands or collapses."

Some signs tend to be more "intercultural" with fixed meanings. For example, people from different cultures ascribe the same meaning to a drawing of a "dog" even though they may use different naming words. Other signs have significant cultural variability. For example, Eco notes that in American culture, the color, "blue," in addition to the color term, can indicate a state of depression. Similarly, a traditional musical anthem may have many pleasant associations or specific historical allusions for those who grew up in a particular cultural setting.

Someone outside the culture may hear the same anthem as unfamiliar and strange. A practicing Christian, Buddhist, Jew or Muslim may respond very differently to the symbol of the cross.

For Eco, the sign is the "meeting ground" (p. 49) whereby the independent elements come together to produce meaning: "the sign-function is realized when

two *functives* (content and expression) enter into mutual correlation” (p. 49). In other words, a sign, or as Eco calls it, a “sign vehicle” puts an idea into motion. Communication is therefore an interactive, ongoing, dynamic process of sign production and interpretation.

Once realized, the sign, is full of possibility: an “open work.” For example, a piece of art may produce different emotions, associations and interpretations. Eco asserts with firmness that the sign is not a physical entity, but rather a mental abstraction signifying content with multiple, shifting meanings and connotations. Of particular importance, context affects the interpretation of a sign. For example, depending on the context, the word *plane* may be an aircraft, or a carpentry tool or the surface of an object. Context may be as broad as surrounding culture or as specific as the syntax of a sentence. Thus Eco believes that “the information of the message constitutes a range of probabilities” (p. 140).

Basic to language, the sign has the ability to tell or convey something else. Eco relishes the sign’s ambiguities, especially its potential “to lie” (p. 7).

Different from a fact, a sign can be deceptive or truthful. Revealing these semiotic interests, Eco’s intriguing historical fiction features codes, puzzles and multiple story lines typical of novels in the mystery genre, like *The Da Vinci Code* (Brown, 2003).

As previously discussed, the sign, its interpretation and the response are interrelated. The response to a sign becomes another sign in a “continuous progression . . . the chain of what Peirce called the *interpretants*” (p. 68). This process goes to “the very definition of ‘sign’ [and] implies a process of *unlimited semiosis*” (Eco, p. 69). Following an extended excerpt from Peirce’s description of the sign, Eco states that all languages are systems of codes that “provide the rules which generate signs.” When languages become standardized or codified, the sign “*dissolves* itself” (Eco, p. 68), becoming almost undetectable in the communicative network of symbolic relations.

Eco ponders how particular meanings emerge from the universe of all possible meanings. After discussing various types of labyrinths suggestive of the process, Eco (1984) settles on the “vegetable metaphor of the rhizome as suggested by Deleuze and Guattari (1976)” (p. 81). As the model for defining meaning in semiotics and the philosophy of language: A rhizome is a tangle of bulbs and tubers” (Eco, p. 81). According to Eco, some of the characteristics of the rhizomatic, net-like structure of meaning include: interconnectedness, easily cut off, has neither inside, outside or center, open in every direction and connectable, difficult to view as a whole and subject to continuous modification over time.

Meaning materializes in the semantic universe as “*a combinational interplay* of a highly indeterminate *game*” (Eco, 1976, p. 126), Eco utilizes the analogy of

marbles in a box: “by shaking the box we can form different connections and affinities among the marbles” (p. 124). Three possible options are as follows:

1. Random combinations of marbles: meaning is arbitrary and idiosyncratic.
2. Marbles have magnetic attraction and repulsion: meaning is fixed, predetermined and closed (strong, inherent magnetic effect).
3. Temporary, creative, marble match-ups occur in a combinational interplay. (weak, extrinsic magnetic effect).

Viewing culture as a primary influence in determining meaning, Eco chooses option three: making meaning is like an indeterminate, language game that changes as new data enters the cultural process, as suggested by Wittgenstein and others: Culture continuously translates signs into other signs” (p.71).

The Theory of Languages

Eco’s theory of codes has the ambitious goal to classify all semiotic communication into an organized system. Eco asserts that he theory of codes outlines the “format of the semantic universe.” (p. 142). Given the elaborateness and complexity, Eco suggests that such a theory is more akin to an encyclopedia than a dictionary. Similar to “Wikipedia,” the online, participatory encyclopedia where people from all over the world add terms, ideas and explanations, the theory of codes must also account for the perpetually branching out of new signs and the continual evolution of meaning in an ongoing cultural process.

For Eco, “codes provide the rules which generate signs” (p.49) in signification systems. Prior to discussing these codes, Eco eliminates from consideration certain mechanical and automatic signals such as electrical or chemical stimuli, as well as the internal fixed structures within a discipline. Eco maintains that these types of signifying elements fall under information theory rather than semiotics. For Eco, semiotics is concerned with the generative properties of language and the connotations and denotations of meaning subject to human interpretation.

In semiotic theory, verbal and written languages are but two examples of the of the many other code systems. For classification purposes, every code has its own logic: “A specific semiotics is . . . the ‘grammar’ of a particular sign system” (Eco, 1984, p.5). Moreover the theory of codes explains how one possesses rules of competence that permit one to . . . form and interpret given messages or texts.” (p. 129). In this process of creating meaning, “the very activity of sign production and interpretation nourishes and enriches the universe of codes 9p. 129).

In setting out his code theory, Eco presents a glossary of language: The format of the semantic universe.” This compendium for communication follows:

- *Zoosemiotics*. Is concerned with the communication behavior of animals.
- *Olfactory Signs*. Includes scents with emotional connotations as well as a precise reference.

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- *Tactile Communication*. Involves communication in braille and social behavior such as a kiss, slap on the back and an embrace.
- *Code of Taste*. Present in culinary practice.
- *Paralinguistics*. Entails the accompaniments to linguistic communication that include “voice sets” connected with gender, age; “vocal qualifiers” such as intensity and pitch; “vocal characterizers” such as laughing, whispering; “vocal segregates” such as noises like grunts and breathing.
- *Medical Semiotics*. Includes signs or symptoms of illness.
- *Kinesics and Proxemics*. Includes gesture and the use of space as an aspect of culture.
- *Musical Codes*. Musical signs and compositions.
- *Formalized Languages*. Includes algebra, chemistry and Morse code. Also the attempt to find an interplanetary or cosmic language.
- *Written languages, Unknown Alphabets and Secret Codes*. Includes analysis of writing systems of all types, riddles and puzzles and also relates to the fields of archeology and cryptology.
- *Natural Languages*. Includes linguistics, logic, philosophy of language and structural linguistics.
- *Visual Communication*. Ranges from graphic systems, color systems and iconic signs to less well recognized forms such as advertisement, comic strips, cards, paper, money, maps and film.
- *Systems of Objects*. Includes architecture and objects in general.
- *Plot Structure*. Includes myths, folklore, detective stories and romance.

- *Text Theory*. Involves plot analysis, poetic analysis and generative text grammar.
- *Cultural Codes*. Examples are behavior and value systems such as etiquette, myths and legends, and cultural and social models such as the family system.
- *Aesthetic Texts*. Involves the aesthetic use of codes and their elements.
- *Mass Communication*. Studies the characteristics, structures and effects of media.
- *Rhetoric*. Includes communication of intention and persuasion.

(Eco. 1976, p. 9-14).

The theory of languages requires new thinking about education and how these communication systems can be developed.

Semiotics and Education

Education entails learning standard symbolic codes necessary for acquiring knowledge, values and culture. Communicative literacy in different standard symbolic systems or “languages” including oral language, literacy, mathematics, science, visual and performing arts, etc. ensures educational success as well as an individual’s efforts to find meaning and direction in life. Communicative literacy is also intimately connected with life-long learning and the preservation of cultural values. As a constructive process, education in multiple sign systems enhances curriculum providing children with more meaningful learning experiences developing concepts, vocabulary and practical skills (Clay, 1986, Clyde, Miller,

Sauer, Leibert, Parker & Runyon, 2006; Genishi, Stires, .& Yung-Chan, 2001). A learning environment enriched by materials and experiences in visual arts and other languages promote thinking, relationships and other areas of development (Gandini, Hill, Cadwell & Schwall, 2005). Acquiring communicative literacy in these standard symbolic systems takes a great amount of time, effort and instruction. Therefore education for communicative literacy should be part of the mission of schools. These systems must be acquired to further symbolic communication in our increasingly global society and virtual world.

A language, such as an ancient tongue, may no longer be spoken if not passed on to the next generation. Similarly, without education in the vocabulary of symbols found in varied forms of communicative literacy, for example, when music, art or science is no longer part of the curriculum in the elementary school or home arts and shop not taught in high school, knowledge and use of these symbolic languages may weaken and even die out. For society's treasured symbols to continue to enrich our lives, experiences with all of these prized communicative systems must be restored to the school curriculum. Certainly in early education programs, acquiring communicative literacy should be the main endeavor.

The Hundred Languages of Children

The preschools in Reggio Emilia, Italy demonstrate great commitment to developing children's symbolic languages. Central to the philosophy of these schools is the belief that children have a *hundred languages* for communicating their ideas and understanding (Edwards, Gandini & Forman, 1998; Forman, 1994, 1996; Gandini, 1993; Gandini & Edwards, 1988; Malaguzzi, 1998a, Rinaldi, 2001; Vecchi, 1998). This conviction is beautifully distilled in Loris Malaguzzi's poem, *No way: The hundred is there*, that begins with the affirmation: "The child is made of one hundred/The child has a hundred languages/a hundred hands/ a hundred thoughts/a hundred ways of thinking of playing of speaking." (Malaguzzi, 1998b, p. 3). This philosophy of education and learning seems consistent with semiotic theory (Abramson, 2004)

A powerful semiotic exploring this philosophy, *The Hundred Languages of Children Exhibition* is the renowned exhibit of children's work from the schools of Reggio Emilia, Italy that has traveled the globe for more than 30 years. First organized by Malaguzzi with later versions continuing to include some of the original content, the exhibit comprises a large body of magnificent children's work related to specific project studies from a number of Reggio schools. Beautiful and moving examples of children's individual and collaborative drawings, paintings, collage, wire constructions, clay sculptures and other creative work as well as the children's astute observations and hypotheses offer vivid testimony to the immense range and sophistication of children's thinking and expressive abilities. The exhibit should be considered a primary source, a vital reference for studying the philosophy from Reggio Emilia. Moreover the exhibit affords profound

insights on communicating in a hundred languages and the meaning of this philosophy for human development and education.

The exhibit catalogue, *I cento linguaggi del bambini/The hundred languages of children* (1997), points out: "The human species has the privilege of expressing itself through a plurality of languages (in addition to the spoken language) every language has the right to be fully developed each child is the constructor and co-author of these languages, participating fully in their historical and cultural variations." (pp. 34-35). The exhibition is a visual testimony to the versatility of the sign as a means for children's symbolic expression.

In the U.S. version (1987), an introductory panel entitled, "Semiotics from a Hot Air Balloon," suggests a link between the theory of signs and the hundred languages. As described in this panel, "you are invited to climb aboard a hot air balloon with us, to look down at the children, adults, things, events, but also traces, signs and symbols that provide clues to information and messages just barely sketched out." The "proposals," or themes, show young children as competent, capable learners deeply engaged in representing their ideas using a variety of semiotic sign systems to represent meaning. The work of the children communicates in many of Eco's semiotic languages .

Throughout the exhibit, children show their immense capacity for expressing ideas and feelings using *visual communication*. An incredible range of individual and collaborative drawings, paintings, collage, wire constructions, clay sculptures and

other creations reflect children's thinking on particular themes, that overwhelm the viewer with feelings of wonder and deep respect for children's originality and expressiveness.

Many of the other languages from Eco's theory are also featured in the exhibit. One of the most well known panels in the exhibition (1987) is the story of an infant and her encounter with a watch told in six photographs. This panel is often utilized as a vehicle for discussing of *the image of the child*, central to the Reggio approach, a child with rights and unlimited potential. It is also an exceptional example of semiotics, the language of *kinesics and proxemics*, used by the children in many of the exhibit panels.

In the first photograph, Laura, who is about nine months old, looks at a store catalogue with the support of her teacher. Upon finding a page of watches, Laura leans in toward her teacher, closing the space between them, and visually studies the watches. Then, in a revealing expression of facial inquisitiveness, she makes eye contact with her teacher as she points at the watches. Seeing her gestures, this observant teacher then presents her own wristwatch to Laura and Laura touches it. Next her teacher holds the watch to Laura's ear, sharing its secret "tick." Laura's eyes grow wide. In the final photograph in the panel, Laura appears to place her ear on the watches in the catalogue as if to listen to the sound. Thus, this story shows how the language of kinesics and proxemics provides a major mode of communication between an adult and a not yet verbal

child. Moreover it reveals the keen intelligence behind these communication efforts.

Kinesic and proxemic communication is again present in *The Importance of Seeing Yourself Again* (1987 exhibit). In several panels, the children examine how various body parts can be used to communicate feelings. Children represent, in drawings and clay, the eyes, hands, brain and body in various poses and configurations to creatively convey feelings such as anger, love, sadness, etc. For example, a drawing of hands with fingers upright, but rigid and curling ends has the description, “angry hands are scratched;” another with hands with numerous fingers curling over the palm, “sad hands are closed;” and one of colorful hands with fingers spread apart, “happy hands are open.” Universal signs and symbols are frequently shown, including the heart-shape symbol placed within a pair of eyes to show “eyes in love.” In another example is the “Mime of the Feet.” In this panel, the children tell a story of the rocky relationship between a man and a woman symbolized in the movements of a pair of feet. The pair of feet separate, come together, battle and separate again.

The languages of Kinesics and proxemics help conceptualize thinking in the children’s investigations in *Shadows and Shadowiness*. As they engage in various shadow “games,” the children create a multi-limb monster (they stand together as a group and raising their hands), change and distort shadows into improbable shapes, (they make shadows on different surfaces such as stairs, sand, columns and water), observe how the shadow changes in relation to the

location of the light source (a bird shape on a window makes a shadow that migrates across the floor as the sun changes position over the course of the morning) and project unusual shadows (umbrella, hoop, colored cellophane). Children reflect again and again on their actions and the actions of objects in making shadows and then represent these relationships using a variety of gesture, words, stories, drawings and constructions.

Communication among animals, both real and imagined, *zoosemiotics*, is the subject of several panels (1987 exhibit). *To Make a Portrait of the Lion*, a project from an earlier European version of the exhibit as well as the subject of the film *To Make a Portrait of the Lion* (1980), frequently shown in connection with the exhibit tells the story of a statue of the lion in front of a church in Reggio Emilia. This famous project documents the journey of a group of children and teachers as they construct relationships, find ways to communicate with the lion and extend their understanding and express "lioness" in clay, painting, shadows and puppets. The panel *Pigeon Talking*, within the shadow study, contains the visual image of two large shadow pigeons created by children wearing costumes. The children's comments about the many ways pigeons and doves communicate include: "If a dove sees a dove and he goes near, they look at each other and walk toward each other;" "If a lady pigeon sees a handsome pigeon and wants to make him fall in love with her, she coos sweetly;" and "If there is a strong enemy like an eagle and the pigeon is alone, it lowers its head and wings, that's how it shows it doesn't want to fight." In studying these paths of communication among animals, children also learn important lessons about human interaction and

social behavior. A newer exhibit (1999) continues the investigation of zoosemiotics in the *Amusement Park for the Birds* and in *Catness*, a panel from a collection of work on various topics.

In *Color in Our Hands* (1987 exhibit), *systems of objects* such as two breathtaking light box displays—one of small objects arranged behind small origami-like paper flaps and another of leaves woven in string—show the endless and complex possibilities for communication when simple objects are combined. In another example, the children make collages of leaves, pods and other natural materials representing a human figure, turkey, butterfly and other insects.

A set of panels (1987 exhibit) explore a changing tableau of scenes depicted in paper dolls made by the children that are placed in front of a photograph of a street in the city at different times of day. In each diorama, different people and activities make appearances depending on the time of day. In the early morning, the street is cleaned and people walk on the street. A market opens later in the morning. There are social gatherings and family activities in the late afternoon. Although they may lack first-hand experience, children conjecture that at night, boyfriends and girlfriends go out to the street and have ice cream. A series of creative box displays of small objects and a big free-standing structure, composed of many boxes to make a horse, convey beauty and imaginative, evocative qualities.

Another series of panels (1987 exhibit) suggests that color acts as an *aesthetic text* that affects emotions and interpretations. For example, the same drawing of a tiger in a forest rendered in four different color schemes elicits very different responses. For example, when the drawing is tinted yellow, the children make this interpretation, “ It’s an enchanted and hot forest full of sun light and enormous fire. The tiger is also on fire and ferocious.” Tinted blue, the interpretation changes: “It seems like a dream. The tiger seems to be a fantasy. It’s like a forest at the bottom of the sea . . . In green, “Its like being immersed in a sea of tall grass . . . It’s a quiet forest. It makes me feel tired. You can almost smell the scent of mint.” A black and gray version causes another response: “It’s frightening, scary because it’s dark, like the night. There isn’t even a ray of sun. It’s a magical forest with strange noises. It’s like being in a place that doesn’t exist, like a ghost town.” Thus aesthetic perception influences their thinking.

Some hints of semiotic languages, *olfactory signs* and *code of taste*, can be found in the exhibit. the panel, *Magic in Your Mouth* (1987 exhibit), the children note, “if something has an orange skin, it tastes wonderful,” and in the panel, *Onion Striptease* (1987 exhibit),, “it’s a color that nips.” As their comments suggest, children’s experiences with food become an early source for communicating through the senses.

Several themes deal with different aspects of *cultural codes* specific to the northern Italian context of the preschools. The traditions and symbols associated with *vendemmia*, the grape harvest, in the Emilia Romagna region of Italy are the

subject of *Harvesting Grapes With the Farmers* (1987 exhibit). The social, cultural and historical significance of farming and the vibrant, age-old rituals and routines of living on the farm, tending the vineyards, making wine and celebrating the harvest are shown in this photo essay. The commentary describes how the visit to the vineyard and its continuation in classroom projects contributes to learning about their heritage: “the children see, discover, question, broaden their experience and knowledge by touching a world that still bears the signs (but for how much longer?) of their life culture.” A large photo juxtaposes the elderly face of the farmer with that of a child as together they pick a cluster of grapes. This photo and another of feet crushing the grapes are unforgettable visual statements of cultural continuity and change.

In *City in the Rain* (1987 exhibit), stories told by the children follow the *plot structure* of legends to explain the origins of rain, its effects and where rain goes after it falls. These often mythical stories include archetypal characters such as the devil, an angel, dead spirits, etc., who are cast as causal agents of natural phenomena such as rain, thunder and lightening. One child explains, “The lord makes it rain when he is watering his flowers. . . It doesn’t always rain because he doesn’t always water.” Another child suggests, “The devil makes the rain fall . . . he’s nasty and he makes the rain fall because the rain is bad. The devil gets buckets of water from his house, he puts them on his cart . . . He dumps down the bucket and that’s how it rains.” Other theories involve more mechanistic solutions such as pipes that funnel water to and from clouds. One of the

children's theories about where rain goes after it falls concerns holes in the ground with channels to an underground lake where rats drink from it.

In *The Sea is Born from the Mother Wave* (1999 exhibit), children offer mythological stories on birth, the origins of life and natural phenomena. They tell surprising, original stories of their gestation and birth: "I was all wet. I was inside a water balloon. I didn't ask if I had a bathing suit on," "One time when I was in my mommy's tummy, I smelled the perfume my mommy wore when she and my daddy got married," and "I was a boy inside my mom's tummy. Then the doctor gave me a name and I became a girl . . . Then I got formed like a Stephen. The doctor said, 'keep the name Stephen.' And so I stayed a boy." This story reveals children's awareness of the potential for language to shape experience.

In "Children and Computers" (1987 exhibit) and the "The Fax Machine" (1999 exhibit), children play with *mathematical codes* and investigate *mass communication*. In the panel, *A Fax for Communicating Long Distance*, the children theorize about how the fax machine works as part of a project that involves exchanging messages by fax between a preschool in Reggio Emilia and a school in Washington, DC. One child suggests, "I know what we need. It's a kind of telephone that's called fax. They take a letter. They put it inside a little slot and they send it to somebody. Inside the telephone, there's a printer that maybe copies the letter. Then the letter stayed there and the copied one went there with a strong wind and it made it fly to the country where they wanted to send it." In

discussing and using the fax, children contemplate the mysteries of communication across great distances and in different languages.

Educators in Reggio Emilia believe that children have the right to an education that promotes learning in all the languages that comprise culture and that the development of these languages occurs in project-based experiences such as those shown in the exhibition (Gandini, 1993; Malaguzzi, 1998a). In relation to semiotic theory, "The Hundred Languages of Children" exhibition amply demonstrates that children possess "a plurality of languages" and "that every language has the right to be fully developed" (Reggio Children, 1997, p. 34).

Semiotic Competence for Diverse Learners

Because communication and culture figure strongly, semiotics offers another perspective on language and literacy development in education, especially for diverse learners in US classrooms and differs significantly from the structurally-based theories of language used for literacy instruction. Many children having diverse ethnic, cultural and linguistic backgrounds do not respond to these traditional methods.

Recognizing the cultural dimension of second language learning, Danesi (2000) defines *semiotic competence* as "the ability to interconnect verbal and conceptual structures in speech in culturally appropriate ways." (p. 14). An education for "semiotic competence" encourages interchange in multisymbolic languages and

the acquisition of communicative literacy. According to Berghoff (1998), when the curriculum incorporates multiple sign systems, learners grow in their “sensitivity to the full range of human meaning . . . a way of knowing what is possible in their world” (p. 523). Allowing different forms of communication expands the possibilities for interchange and education for those with diverse cultural backgrounds, experiences and/or language differences.

When educational experiences are grounded on semiotic theory and principles associated with communicative literacy, diverse learners are provided with “ a hundred languages,” a wide repertoire of alternatives for communicating ideas when the spoken language and cultural setting are not yet familiar to them.

Project work and visual and performing arts education for diverse learners foster semiotic competence. Multi-symbolic, projects provide educationally challenging content for English language learners increasing language and literacy development, social interaction and cultural awareness (Abramson, Ankenman, & Robinson, 1994; Heath, 1996; Holloway & Krensky, 2001; Shier, 1990; Thwaites, 1999). As they acquire multiple languages, second language learners demonstrate greater communicative literacy.

Eco (1989b) remarks: “Openness . . . is the guarantee of a particularly rich kind of pleasure that our civilization pursues as one of its most precious values, since every aspect of our culture invites us to conceive, feel, and thus see the world as

possibility.” (p. 263). Concurring with this position, Rinaldi (2001) affirms the inseparability of language, thinking and culture:

Cultural education is not a separate discipline, nor is it simply the illustration of the customs and religions of a countryIt is more than this: it is primarily a style of educational-relational thinking. It is what we call “project-based thinking” . . . a way of thinking that is open to others It is the interweaving of multiple cultural codes, multiple languages It plays on boundaries . . . as places that generate the new that is born of contagion and interchange. (p. 46)

Key to the semiotic dimension of the educational process, interchange allows children, teachers and parents to use symbolic languages, build relationships, respect cultural differences and share values essential for our society. In programs that teach for communicative literacy, children exercise all of their communicative abilities in order to gain understanding and express meaning. At this time of great public concern over students’ mastery of language and literacy, the acquisition of communicative literacy is a crucial concern for designing programs that achieve educational excellence for all children, not regardless of their abilities, but with the highest regard for children and all the languages that make learning possible.

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