Simulation seems to give at least a partial methodological answer to the pragmatic concept of learning by experience (and to the rising cry for social relevance in school curricula). Expecting, in the years ahead, increasing practices of various simulation techniques in classroom situations, there is need to re-examine some basic assumptions of the purposes of simulation and its efficiency as an educational method. In this paper, several concepts likely to help make simulation a heuristically useful process of communication education are discussed. This paper explores and supports the theoretical position that "an educational simulation should be a method of metaphor, not a realistic simile." (LG)
SIMULATION AS A METAPHORIC METHOD
OF COMMUNICATION EDUCATION

by

Jae-won Lee
Malcolm S. MacLean, Jr.
Albert D. Talbott

School of Journalism
University of Iowa
Iowa City, Iowa 52240

International Communication Association
Atlanta, Georgia
April 19-22, 1972
SIMULATION AS A METAPHORIC METHOD
OF COMMUNICATION EDUCATION

Teachers employ various forms of simulation techniques for learning-teaching purposes even if the term "simulation" may not be explicit in their approaches. Law students hold mock trials, and political science students simulate the General Assembly of the United Nations. In a more modest effort, high school students bring in the city council to their classrooms. Even young children experience rather a sophisticated form of simulation when they try theatrical versions of fairy tales, or when they "act-out" various roles and situations in the games they play.

Simulation as a learning-teaching device has such an ample potential that its scope and variety may be limited only by the ingenuity of the teacher himself. An editing instructor may lead his students to work out the front-page layout for a given newspaper by providing them with the day's pool of wire stories and photos. A sleepy class in public opinion study can be readily turned into election campaign headquarters, where groups of students engage themselves in working out campaign strategies for their political candidates.

Simulation seems to give at least a partial methodological answer to the pragmatic concept of learning by experience and to the rising cry for social
For that matter, it is expected that there will be increasing practices of various simulation techniques in classroom situations in the years ahead. Here we need to stop for a moment and re-examine some basic assumptions of the purposes of simulation and its efficacy as an educational method. Otherwise, we are likely to fall into the pitfalls of one of the more "popular" concepts of simulation, such as imitation of reality.

In this paper, I would like to emphasize several concepts that are likely to help us make simulation a heuristically useful process of communication education. These concepts will start from, and return to, the main argument that an educational simulation should be a method of metaphor, not a realistic simile.

INTELLECTUAL PROFESSION--Our concepts of communication as well as the way we see the communication profession determines the way we pursue our goals in communication education. In this regard, there are two most pervasive concepts that have been self-defeating. One is the chronically irresistible temptation to see communication as an act of information delivery much as the conveyor belt does for commercial goods, and the other is the frame of mind that aspires to professionalize communication à la medicine or law.

The two concepts are very closely interrelated. They purport to analyze inter-personal and higher-order systems of communication at the cost of intra-personal communication processes. Where the human element is involved, an inadequate concept of intra-personal communication processes cannot but lead to an elaborate extension of that "un-sound" concept in any examination of higher-order communication systems. Such is the nature of the relatedness between the two pervasive concepts: that of information transmission and that
of professionalized communication.

Norbert Wiener seems to suggest a more appropriate posture of communication studies when he attempts to see the "root" of "intellectual originality" of a communication system in the communicator himself. With this belief, he makes a further point that deserves our close attention: "....the people who have elected communication as a career so often have nothing more to communicate." If this criticism seems off the point, then our concepts of communication process may as well be off the track.

Wiener's implications can be summarized as: A communicator should first be an in-former for himself and then an informer for others. For instance, a newsman first makes his own image of a news event and then writes about this image for his audience. In this sense, he is rather a news-maker than a translator of news events. Transformation for transmission, such is the nature of a communicator's in-forming process for his informing function.

When this in-forming characteristic in intra-personal communication processes is neglected, what we see in the analyses of higher-order systems of communication are, very naturally, rootless views of borderline relationships. An outstanding example is the concept of professionalizing communication in the fashion of law or medicine. The pervasiveness of this view is told by the popularity of the social responsibility theory of the press and the press council movement.

All this fuss about comparing and contrasting communication to other professions, along with the sudden discovery of social responsibility, is at best an excellent demonstration of other-directed mentality and loss of identity. Professionalism today takes a variety of forms, and this is very natural. I just wonder what the press should do now that some nations have
nationalized their medical services. Will the mass media service be nationalized, too?

In a time when every job is becoming professional, we need to grasp major factors influencing the unique potentialities of the communication profession itself. A step toward this effort is to examine characteristics of the in-forming process in the communicator, this process being the guiding principle of not only intra-personal communication, but higher-order systems of communication as well.

The in-forming process starts from sensuous experience where one's heightened sensitivity plays the dominant role. This sensuous plane connects an individual and his environment in which culture promises him how and what to see and how to experience what is seen. The in-forming process at any given moment has another characteristic, the plane of sympathetic identification. This plane, a state of empathy, is a meaning-giving phase; one gropes for a meaning of his lived experience in his "symbolic universe." This second phase creates felt or virtual experience, which is actually a meaning-loaded image of lived experience.

For heuristic purposes, we can think of a third phase of in-forming process, the critical plane. In this phase, one articulates (expands, re-creates, elaborates, etc.) on his meaningful experience. To do so, he keeps a reflexive distance from his experience by feeling apart from it. By doing so, he creates an "image of the image." The making of the second image is a matter of an individual's initiative; he who plays this initiative finds himself engaged in an articulation of his meaningful experience. Some professions are characterized by such an articulation, an exercise of critical faculty toward creative products. As much as a writer is a writer when he
is able to articulate, a communicator should necessarily articulate with his chosen medium of communication.

Each of the three aspects may be regarded as occurring discretely with one of them preferred to the other two; in that case, the person belongs to a type of that characteristic in his in-forming process. However, it is far more heuristic to see them as happening all at once, each aspect influencing each other aspect in a sort of circular fashion. Let us call such a balanced in-forming process intellectual; in the same vein, a communication profession can be seen as an intellectual profession.

Any intellectual profession requires a metaphoric capacity as its primary qualification. There is a sense of "actual reality" in one's lived experience, whereas an odor of "virtual reality" is there in his felt experience, the image of lived experience. However, an image of the image, two steps removed from the sensuous plane, is necessarily a metaphor, a "postulated reality." An intellectual communicator performs this metaphoric capacity throughout his in-forming process, with this capacity determining the mode of his experience and the kind of meaning he gives to it.

PROPERTIES OF METAPHOR--An intellectual communicator lives on the level of metaphoric meaning, beyond the level of simile. Both simile and metaphor occur in organized contexts, such as personal constructs, unique to the creator and the audience. A crucial difference lies in the structural rigidity of simile and functional fluidity of metaphor. A simile is a relatively closed construct, where an isomorphic relation is directed to the two given items or subjects. On the contrary, a metaphor is free to take on any form of personal constructs—to the extent of one's critical faculty. To that extent it is open.
Both simile and metaphor are figurative. But, simile is rather a "realistic" imitation, whereas metaphor is an expressionistic creation. The process of art understanding has this metaphoric nature. If read in childhood, Swift is an adventure storyteller; if read in adulthood, he is a satirist. This is the magic of our experience, the metaphoric growth of creativity. One's personal construct undergoes a "progressive evolution," with the person construing and reconstruing it successively. George Kelly calls this a process of experience.  

Both simile and metaphor are composed of two different things that illuminate a certain relationship, but a substitution of the "secondary subject" (the metaphoric word itself) is freer and, to that extent, more delicate in metaphor than in simile. In a metaphor, a bold creation of meaning is possible with the meaning claimed dependent only on the extent of imagination. But, in a simile, a substitute should be something like something. That is what makes a metaphor a more creative process than a simile. Metaphor is dramatic, a dramatic distortion, and "matter is energy" is revolutionary. 

A metaphor is abstract-expressionistic, where a deliberate distortion of its subject is made for dramatic effects. The cost of this deliberate distortion is omission of the subject's minor attributes. That is why most of Paul Klee's drawings at first glance look like children's drawing exercises. A metaphoric form is simple, wild, and bold. It is fresh and illuminative. It is "cold," like McLuhan's weather. 

Most normal children show aesthetic innocence with which they express the world of childhood. It is unfortunate, however, that most girls begin an artistic decline when they become "preoccupied with realistic renditions of brides in meticulously designed wedding dresses." In the same fashion,
most boys begin to abandon their artistic creativity when they become "absorbed in acutely detailed schemes for the construction of racing cars, sailboats, and space rockets." The gain of realistic simile is the loss of metaphorical creativity.

Metaphor is economical with a potential for an infinite variety of meanings. On the contrary, "something is like something" is not merely redundant but also potentially limited. Jerome Bruner finds in this "metaphoric economy" a "fundamental principle" that art shares with other forms of knowing.

Shall we name some examples of simile that are non-art? A rubber stamp is a simile, and an iron stamp makes a better simile. Most biographies, family memorial pictures, functional poems, program music—all these tend to be similes. A common trait here is that all roads lead to the reality on the level of sympathetic identification. The closer to the given reality, the better the simile is.

There are pseudo-similes and pseudo-metaphors. The currency forgery and artistic forgery are respective examples. There is a deceptive purpose in a pseudo-simile. An artistic forgery shows an artistic achievement of its own right, but it belongs to pseudo-metaphor for its deceptive purpose. Our "cultural beliefs" do not yet approve of this deception and, in the words of Leonard Meyer, "to continue to admire a proved forgery.....is a pretentious form of inverted snobbery." If not a snobbery, there is a touch of inverted ignorance in one's belief in the isomorphic relation a simile promises him. An intellectual communicator goes beyond the level of simile. With his metaphoric capacity, he designs his environment and the role he plays in a manner highly similar to the
way an artist creates his audience and the kind of artist he is by articulating on the game of his metaphor. He can think of a reporter's role without necessarily thinking of a particular reporter. Such a role belongs on the level of simile. There is a reporter's role that vanishes with the occupant fading away. Such is a creative role, the role created by the individual's person-

SIMULATION, A METAPHOR--The properties of metaphor are the attributes of a good simulation, the simulation considered as a learning-teaching method. It is tempting to recall the etymological affinity between simulation and simile, and such a pitfall has victimized not a few simulators and those who talk on simulation.

These simulators, of course, do not mean to make life-size exact copies as NASA has of its lunar modules. What matters here is their belief that a good simulation is closer to the referent subject in "reality." If it is so, then a good simulation in communication education would be to install complex mass media facilities on the campus or to make all the four-year curricula into internships in various communication systems.

Such a closed-type simulation automatically guarantees a production of "potatoes in a sack," forming nothing but "a sack of potatoes." It becomes a training ground for "functional rationalists," whose goals are given and fixed by their systems. If in trouble, report to your foreman--that is the end of the trouble in a closed system. An educational simulation has something to do with the strategic mind, not the tactical mind, for a metaphoric approach to problematic ideas. Strategy is the goal, and tactics are situational.

The realistic simulator cannot think of simulation without recalling such nuances as imitation, replication, copy, forgery, false, phony, mimicking,
exact reproduction, etc. And he begins to see an ultra-violet light as a simulation of sunlight, acrylic pile as a simulation of lamb's wool, oleomargarine as a simulation of butter, and so on. This kind of reasoning is exactly the inevitable outcome of the view of simulation-like-a-simile. John Raser gives an ironical consequence of copy imitating the original—"The iroar about coloring margarine yellow, stirred up by the dairy industry, suggests that in this case some people were worried about deception."\(^1\)

Richard Dawson sees the "central problem inherent in all simulation processes" as that of "adequate reproduction of the real system." To follow this view, it would be necessary to make a "valid model" of the referent system. If the "replication" of the system is not "valid," the experimenter will find the use of simulation dysfunctional rather than useful.\(^2\) In this view, the "real system" is given and fixed, and here nothing can be done except producing functional rationalists.

Raser also likes the idea of isomorphic validity, so he sets "realistic" or "isomorphic" as his main criterion for validity in simulation.\(^3\) This "validity" concept inevitably arises only if one is possessed by the notion of an isomorphic reproduction of reality. Simulation for educational purposes should itself be a metaphoric creation; it may be a good metaphor or a bad one and no more.

Let us recall John Canaday's observation that a child begins to show his artistic decline when he becomes preoccupied with realistic descriptions of details. Likewise, only at the price of metaphoric decline, we can make an educational simulation more complicated by bringing it closer to reality. And this is the beginning of simulation as an organized form falling into its mechanical rigidity and methodological narcissism. What we see here is a
stereo set that amplifies the worst music best.

Whether all-man or man-machine, a simulation for learning purposes necessarily employs gaming processes, and these game concepts carry with them a bunch of technical terms, many of them with commercial shadings. Technical terms rarely permit us to do our own naming of their meanings; for the cause of metaphor, they may be better replaced 'n educational simulation. Technical terms, in turn, carry with them a heap of meticulously defined rules that are liable to stifle individual variety and creativity. A metaphoric simulation and superfluity of minute rules are self-contradictory.

The gaming process also carries a strong concept of goal and value. A goal, to be an effective goal, should first be internalized by the participant; in other words, a participant in a game simply wastes his time if he does not have his own goal image. A game player is assumed to desire to win, and is assumed to learn something from the gaming process. However, one can win a game without learning anything in the process. Hence, it becomes crucial to see that game or simulation participants have a belief in the method as a metaphoric process. If simulation is understood as a realistic copy, then the participants will become disenchanted at the seeming simplicity of simulation structure and its poor imitation of reality.

A simulation or a game is experimental; it has a purpose of developing a theory. A mechanically complicated simulation may have little to do with anything theoretical, hence anything metaphoric. If a theory can evolve only from complicated simulations, it is far better to use the electronic computer. On the contrary, a good simulation is itself a theoretic construct or a "form of theory" that "postulates reality."

Where simulation is a metaphoric construct, it can absorb a variety of
In this case, simulation functions in the role of a guiding frame of learning environment. In this postulated environment, what matters are the bolus and wild designings of the simulation and the matching metaphors coming from the participants. In its last analysis, the success of an educational simulation depends on the extent to which participants can metaphorically in-form themselves in the gaming process.
Footnotes


10. Karl Mannheim means by "functional rationalization" a total submission of individuality in a well-structured hierarchical system. He offers "substantial rationality" as an alternative of a better kind, where one can perform independent judgement taking responsibility to himself. See *Man and Society in an Age of Reconstruction* (New York: Harcourt, Brace & World, 1940), pp. 58-60.

11. What the game theorists casually call "strategy" is rather close to the concept of "tactics," because strategy is rather a goal or an overall
approach to a problematic idea and tactics are the specific means or procedures for carrying out and supporting the strategy. See, Otis M. Walter, Speaking to Inform and Persuade (New York: Macmillan, 1966), p. 7.


13. Ibid.


