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13 PERCEPTIONS AND DECEPTIONS: ISSUES FOR INFORMATION SYSTEMS RESEARCH

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Abstract

Quantification at any stage of information systems research also depends on qualification. To attempt to eliminate all such qualifications is self-defeating. This paper argues that in our quest for "truth" in information systems research, whether quantitative or qualitative, it requires learning more about the nature of ourselves in order to be able to say more about the nature of information systems.

"Inquiry from the outside" calls for detachment on the part of the researcher, who typically gathers data according to a priori analytical categories and aims to uncover knowledge that can be generalized to many situations. "Inquiry from the inside" is characterized by the experiential involvement of the researcher, the absence of a priori analytical categories, and an intent to understand a particular situation (Evered and Louis 1981).

The "inquiry from the inside" concept implies that all scientific results in the socio-cultural sciences are impregnated with subjective judgments, contrary to the whole thrust of empirical or mathematical research methods. Two observations can help to reveal this fundamental point. First, both quality and quantity are mis-conceived when they are taken to be antithetical or even alternative. Quantities are of qualities, and a measured quality has just the magnitude expressed in its measure. Second, whether something is identified

as a quality or as a quantity depends on how we choose to represent it in our symbolism (Kaplan 1964).

Although any qualified property has the potential of being expressed in terms of a range along the scale, what has such a quantification really proven? This point is specifically addressed by Ackoff (1953) when he states:

> Quantification at any stage depends on qualification. What is qualified at one stage may be quantified at another, but at any stage some qualitative judgments are required. Consequently, progress in science is a function not only of an increased capacity to quantify efficiently (i.e., to measure) but also of an increased capacity to qualify efficiently.

The implication of this is that the attempt to eliminate all qualities from the research process is self-defeating. Thus, quantitative and qualitative phenomena in information systems research is much like the head of Janus, a double-faced process. Looking in one direction it tells us something about what we take to be the nature of the outside world. Looking in the other direction it tells us something about the nature of ourselves (Herbst 1976). This is so provided one accepts that the determination of qualities involves subjective judgments. This will be taken as self-evident. A challenge to this statement would have to be met by psychological and phenomenological arguments which lead away from the main purpose of this paper.

The principal point to be made here is that fully addressing the issue of our own perceptions and deceptions as it impacts research in information systems is paramount. This paper argues that in our quest for "truth" in information systems research, whether quantitative or qualitative, it requires learning more about the nature of ourselves in order to be able to say more about the nature of information systems.

Perceptions and Deceptions

The perceptual field of vision is restricted to those areas to which attention is directed and poses a sharp limitation on the eventual processing of information (Hambrick and Snow 1977). Perceptions are further limited because one selectively perceives only some of the phenomena included in the field of vision. Finally, the bits of information selected for processing are interpreted through a filter woven by one's own perceptual base and values (Hambrick and Mason 1984).

Stoessinger (1974) lends credence to the possibility that all individuals, regardless of intellectual endeavors, are vulnerable to perceptual deception. He studied the perceptions of key figures just prior to making decisions relating to the outbreak of several wars. In many cases, what appears now to have been pertinent and well-founded information available to these people was ignored while previously formed perceptions appear to have been practically impervious to change by newly acquired information.

Such findings suggest that perceptual distortions and deceptions permeate all information processing. It further suggests that irrationality permeates all rationality and is no respector of persons. Schein (1969) has found that many men who hold advanced

degrees are "mired in the code of rationality." Many researchers embrace the image of the rational intellectual and, in so doing, may foster further self-deception to measure up to the image of rationality.

To adhere to the image of rationality and reject the theory that by nature we are all irrational creatures has many implications. If we do so, we overlook that we are as much bound by what we reject as what we accept. In fact, we are more bound by what we reject than what we accept. For that which we accept can be transcended by insight and understanding but that which we reject and repress is beyond conscious control (Herbst 1976). Research has shown that when managers act as though the world is a certain way, these focused actions often ensure that subsequent data will confirm those initial presumptions (Argyris and Schon 1978; Manning 1980). It is suggested that when researchers act as though all actions are rational, it insures that subsequent data will confirm that assumption. Indeed, the need to be rational or to maintain the image of rationality may serve to enlarge even small cracks in the veneer, with self-deception either dynamically repressed or resulting in genuine and private agonizing (Anderson 1981).

The Interpersonally Mediated Self

A pictoral illustration of how seemingly such irrational actions and self-deceptions occur in rational individuals is provided by the Johari Window. The Johari Window is a theoretical conceptualization developed by Joe Luft (12970) of the interpersonally mediated self—the self-image that each individual builds and maintains. The Johari Window divides knowledge about an individual into four areas according to the degree of self-knowledge and the knowledge others have of the individuals as shown in Figure 1.

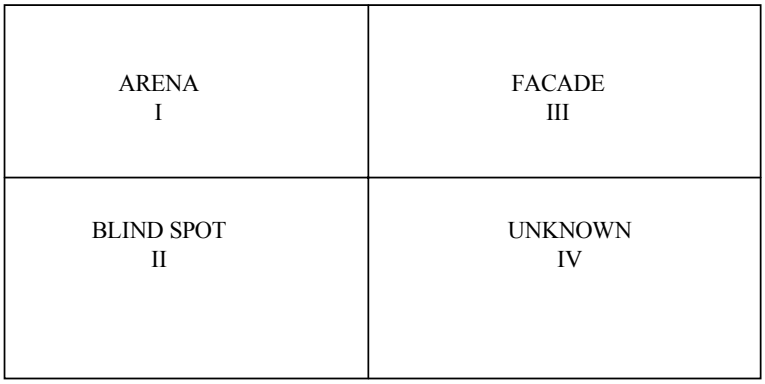

Figure 1. Johari's Window

The arena is the area of free activity. This area contains information about the self which is known to self and to others. It is an open area where feedback and self-disclosure are interchanged freely. The second area, "the blind spot," is the part of ourselves that the

world sees but we are unconscious of its existence. In this area, the self is not aware of the information being disclosed; yet by style of relating to others, certain information is disclosed to others. The third area is the facade (III). In the facade, there is information about which the self is aware and unwilling to disclose to others. This area becomes the facade either because the self is afraid to take risks or is using the private information to manipulate others. Finally, the fourth area in an individual is that which is unknown. This is the part hidden from one's consciousness as well as from the world.

The shape of the four areas, the relative sizes of the panes, are not concrete limits but change based on feedback from others and introspection. As originally designed and used, the Johari Window was an awareness model of self. Research conducted by Luft has shown that the arena area could be increased dramatically if individuals were seeking to know themselves better. Lewin's model is used to describe how such change can occur.

Lewin's Model as a Process for Change

The process of expanding the size of the arena area parallels Lewin's notion of unfreezing, changing, and refreezing as a way to facilitate this needed shift in self-perception (Lewin 1952). It is suggested that the environment facilitates unfreezing. As the current state becomes frustrating and the status quo no longer satisfying, it can cause one to examine the way things currently are and question if these things must be.

The unfreezing process, according to Lewin, implies a tension between present circumstances and an emergent felt need not being addressed. This unfreezing precipitates a self-confrontation. Such a confrontation is a soul-searching endeavor examining previously adhered to beliefs and values. During the self-confrontation, one examines interpersonal and emotional aspects of behavior that were suppressed and disguised—falling within the blind and unknown areas of Johari's Window. This process is essentially one of overcoming deceptions to the point of realizing that the way of dealing with the environment is no longer adequate to explain the multiplicity and complexity of issues requiring explanation.

Moving to fill the void between "what is" and "what is to be" constitutes the transition stage. From this transition, current perceptions are reformulated, leading to a new self-awareness, a new self-intimacy. This reformulation is paralleled with Lewin's refreezing stage. This process for change is illustrated in Figure 2.

Implications for Information Systems Researchers

From all evidence, there is an emergent need to conduct research impacting the crucial issues in the information systems environment. Keen (1981) suggests that the status quo in information systems research is no longer satisfying. Mitroff (1983) says that the problems we face have become so complex that we need more than ever before a perspective that allows us to grasp this complexity and make sense of it.

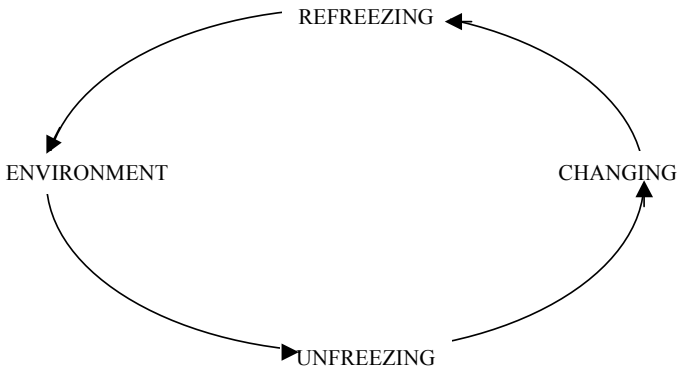

Figure 2. Lewin's Model

It is suggested that continuing to conduct the same type of research methodologies using the same perceptual focuses stand little chance of making significant impact in the information systems field or helping the practitioner in information systems development. In other words, it is time for a self-confrontation.

This self-confrontation requires taking a hard look at what it is we are doing and asking if it is adequate. Researchers must ask themselves whether genuine progress in research can crystalize unless subjected to the most comprehensive and unbiased evaluations. It is argued that genuine progress in information systems research cannot occur unless researchers develop a capacity to observe and question what they are doing and to take responsibility for making intelligent choices about the means they adopt and the ends these serve. This runs counter to a prevailing theme that depersonalizes the research process and tends to remove responsibility for what the researcher does from the researcher, often reducing his or her role to that of an agent engaging in the kind of research he or she feels the institutionalized system demands (Morgan 1979).

The transition phase in information system research calls for a change in self-perception. Abraham Maslow (1943) said "self-awareness is the key to self-growth." Morgan (1979) supports the notion that our inner world is reflected in all that we do when he says "in research, as in conversation, we meet ourselves." In other words, the self-perception of the researcher must change before anything else can change. The arena of Johari's Window must expand to allow for a freedom of actions and thinking that is not dictated by unknown inner impulses. Or as Tobert (1983) puts it, to be able to sculpt action so that it is responsive to both inner and outer worlds. An increased self-awareness and a desire to know one's self widens the range of vision and understanding in research issues (Chardin 1959). To take that statement one step further, the better one understands one's own perceptions, the better able one is to accurately study the behavior of others.

It is suggested that, although some refreezing occurs after the transition, out of necessity it must be an iterative process. Self-awareness and self-intimacy is not a stable condition but rather an ongoing process that requires constant monitoring of our inner world in an attempt to perceive the outer world more accurately. A quest for truth in the

inner world precedes the quest for truth in the outer world including information systems research.

Summary

The world gives a position of power to researchers, that is to present "great truths" and in many instances these truths are accepted without question. In some respects, researchers are very much like three baseball umpires who were discussing the problems of their profession. The first umpire said "some are balls and some are strikes and I call them as they are." The second umpire said "some are balls and some are strikes and I call them as I see them." The third umpire said "some are balls and some are strikes but they aren't anything until I call them." Let us be as wise as the third umpire in realizing that many of our research findings are "nothing until we call them." Certainly, such a thought issues a challenge for more self-critical inquiry and a more open self-perception than ever before in an attempt to make the calls in our research as accurate as possible.

The real worth of information systems research does not lie in what has been achieved but in its potential for going beyond. The challenge for us, as information systems researchers, is to move to the next stage of inquiry, which is to understand better the inner world of the one engaged in information systems theory creation. With our enhanced self-awareness and our confirmed commitment to understanding more fully both what goes on within us and what goes on in the world of those we seek to study, research in information system will be enhanced.

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