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**Masks and Dances: Cybernetics and Systems Theory in Relation to
Flusser's Concepts of the Subject and Society**

In his introduction to *Vilém Flusser: Writings*, Andreas Ströhl quotes a passage of Flusser's where he writes: "In the same manner that a form of thinking based on writing opposed itself to magic and myth (pictorial thinking), so a new form of thinking based on digital codes directs itself against procedural, "progressive" ideologies, to replace them with structural, systems-based, cybernetic modes of thought."(xiii)

In this passage Flusser concisely describes one of the most profound shifts in critical thought, one that underlies the accompanying shift from "modernism" to "post-modernism:" the replacement of "procedural, 'progressive' ideologies," of which various "-isms" may be taken as prime examples, with "structural, systems-based, cybernetic modes of thought" in the period of the 1940s up to the present.

This shift in thinking can be clearly seen in the work of Gregory Bateson, Margaret Mead, and others who participated in the seminal Macy Conferences on Cybernetics, but it can also be seen in the work of contemporary philosophers such as Jacques Lacan, Michel Foucault, Gilles Deleuze and Felix Guattari. In the latter cases, it is formulated as an explicit reaction against the failed promises of Marxism culminating in the French student revolts of May, 1969. As Deleuze and Guattari set out to explore the theme of "capitalism and schizophrenia," they also set out to create a new model of the social, and of strategies of resistance, that draws upon Bateson, Mead, and concepts from cybernetics.

This shift is not without consequences; in the realm of critical social thought, one might say that there are now two camps, with a central figure presiding over each: on the "progressive" side there is Jürgen Habermas, torch-bearer of the Frankfurt School, and on the other, Niklas Luhmann, author of the massive, legalistically delineated *Social Systems*, which aims precisely at a dismantling of Habermas. Beyond the realm of theory, one's adherence to either camp is significant for looking at practical issues, such as the role of media and communication within a social system; where the Frankfurt school aims at a refinement of the Marxist concept of ideology and the participation of media within ideological structures, systems theory focuses less on the content of the media, and more upon its

structural role within the system; McLuhan's dictum "The medium is the message" may be taken as an extremely succinct synopsis of a systems approach to media. The strategies for resistance to repressive, authoritarian structures are also quite different; where Habermas and contemporary Frankfurt School adherents focus on an Enlightenment ideal of open and untainted public discourse resulting in a rather parliamentary form of consensus, social thought guided by systems theory tends to focus more on the relationships between individuals within the system, and the roles that are open to them for self-realization. On the progressive side, the goal is dialectical synthesis and a government guided by the will of the people, free from class-based ideological contamination; on the systems side, there is an inherent distrust of government ("micro-fascism" to borrow a term from Deleuze and Guattari, can inhabit any individual, group, or institution), and more focus on the life of the individual and ad-hoc "comings-together."

Where then, do we locate Flusser in relation to these differing theoretical camps? Ströhl places Flusser within this "new form of thinking," based on systems and cybernetics. But what is it about Flusser's thought that is cybernetic? While Flusser elaborates on his intellectual touch-points in the essay "In Search of Meaning," and even describes his interest in games and games theory, he does not draw any explicit relationship between his thought and that of contemporary cyberneticists or systems theorists.

Understanding what is "cybernetic" within Flusser's thought not only enables us to place him in relation to particular schools of critical thought, and see what is genuinely original within his own critical approach; it also enables us to understand what is at stake when Flusser, in "Designing Cities," calls, not for a new form of government, but "a civilization that should project the specifically human out of these intrahuman relationships." (180)

In this essay I will trace the relationship between Flusser's concepts of the subject and society and those found in contemporary systems theory and its theorists such as Niklas Luhmann, Humberto Maturana, and Francisco Varela. The basis for my comparisons will be two of Flusser's oft-deployed themes, the mask and the dance. Within systems theory, a primary focus of analysis is the subject positions that are open within a social system, and the way subjects are defined; one could look to Foucault and his work on the history of sexuality as an example of the way in which social systems create subject categories such as "heterosexual" and "homosexual," which, in Flusserian terms, are nothing more than masks that enable and regulate social interaction. As I will show, Flusser's concept of the subject, and masks, maps closely to concepts of the subject in systems theory, and serves as the foundation upon which he is able to build his larger vision of the individual functioning within society. Here the metaphor of the dance becomes important for demonstrating

the difference between Flusser's thought and that of the "progressive ideologies:" where the aim of the latter would be the creation of a "civil society" founded upon dialectical consensus, the metaphor of the dance suggests a group of individuals coordinating with one another in their movements, each following their own interpretation of the rhythm, creating a complex system.

The history of cybernetics, and the foundation of its core concepts, can be traced to the famed Macy Conferences on Cybernetics, beginning in 1946. The original title of the initial conference gives a taste of the issues at hand: "Feedback Mechanisms and Circular Causal Systems in Biological and Social Systems." (American Society for Cybernetics). Plainly put, the central theme of the conference was to examine how systems interact with their environments. A room thermostat provides an illustration of this interaction; the thermostat is a mechanism that always seeks to be in equilibrium with its environment. It takes in information from the environment, which then causes a change in its internal functioning, which then affects the environment in which it is found. This is a "circular causal system" that is regulated by a feedback and results in homeostasis, a state of equilibrium between the system and environment.

In this model, a "system" is primarily an information-processor; it takes in information, processes it, and makes necessary adjustments to regulate its functioning. As the systems theorist Erwin Laszlo puts it, "The highly developed organism regulates its own internal environment, much as a thermostat regulates the temperature of a house. For this it requires reliable information concerning conditions in its surroundings." (41) The source of this information may be mechanical (a heat-sensitive switch), biological (sensory organs), or, in the case of social systems, media (television, newspapers, etc.) This information becomes the means by which systems undertake the process of self-regulation described above. They have the capability to "generate the very information that codes their structure and behavior." (47)

In this view, the instrument of data collection cannot be separated from the system itself. Gregory Bateson is said to have posed the question to his students of whether a blind man's cane was a part of the blind man. Common sense would say no, it is merely a tool. But in the cybernetic/systems theory view, it is an information channel that enables the blind man to navigate through his environment, and is therefore part of his overall sensory system. As a consequence, a media theorist like Marshall McLuhan can say that, because media constitute part of our sensory environment and give us almost superhuman powers of perception, they constitute part of our nervous system.

Though all systems see only themselves and the environment from which they distinguish themselves, the world is in fact composed of multiple systems in constant interaction with one another,

and the functioning of one system inevitably alters the functioning of all systems with which it is connected – consider the image of a crowded dance floor, in which each individual must adjust their movements to mesh with the other dancers, but whose movements also influence the movements of those around them. This principle has led some later systems theorists, such as Francisco Varela and Eleanor Rosch, to consider the relationship between systems theory and aspects of Buddhist phenomenology, such as “co-dependent arising,” where nothing exists as an independent whole, but rather is brought into existence as the result of multiple complex interactions.¹

If we turn to Flusser, several points of comparison emerge, notably around his concept of the subject, and the way in which relations between subjects are established. For Flusser the “self” is an empty vessel, and any self-conception we have is the result of social relations and interaction with the environment: as he puts it, we are “temporary pockets of force fields intersecting one another.” (104) The subject comes into existence only as a “node” in which “knots of relations” converge, and, depending on the type of force, or environment, in which the node is situated, different aspects of the self emerge:

The “I” is then that abstract point at which concrete relations intersect and from which concrete relations begin. We can then of course “identify” ourselves with these knots of relations within ourselves; for example, as a heavy body (nodal intersection in the electromagnetic and gravitational fields), and as an organism (nodal intersection in the genetic and ecological fields) and a “psyche” (nodal intersection in the collective psychological field), and as a person (nodal intersection in the mutually intersecting social and inter-subjective fields). Instead of a person, one can also talk of a “mask.” (104-105)

In this passage Flusser makes two points. First, there is no self apart from it being placed within a certain type of “field,” in which it comes into being as the result of “nodal intersections” of forces. The system, or self, comes into being only in relation to an environment (which, of course, includes other systems). Second, not only does the “I” come into being as a result of these intersecting concrete relations, but it is also the point at which “concrete relations begin.” The nodal subject is simultaneously brought into being by the intersection of forces, and serves as a force that brings other concrete relations into being.

Though we might generally think of this nodal subject as a person, what we actually recognize within the fields of social and inter-subjective relations is a “mask.” Masks are simply markers of a node, and enable us to understand the kinds of relations that can be established with that particular node. In the social field, these relations can take two basic forms; the exchange and processing of information (dialogue), and coordinated action (which is the product of communication). The nature

of the mask determines the types of communication and action that can take place; the type of mask you wear (banker, bridge player, homosexual, shaman, to borrow a few examples from Flusser) determines how others interact with you. As Flusser puts it “One is what one is only by wearing (dancing in) a particular mask, by other members of the tribe recognizing the mask and giving it its due.” (105) “Giving it its due” means not only acknowledging the mask as a person, but also recognizing its status and place in the overall social structure and reacting accordingly. The totality of our interactions, whether through dialogue or action, and the masks we wear that enable these interactions, constitutes the “dance” of a given social system.

Because it is only a node that is brought into being through the intersection of social and intersubjective forces, Flusser’s subject can never exist in isolation, and must in fact be engaged in a constant process of interaction: “That which I am, I only became through collective ‘dialogue.’” (106). Thus, each node is constantly engaged in a collective dialogue with other nodes, creating a vast information processing network that generates the very environment that brings the nodes into being. This environment is what Flusser calls “culture and civilization”.

The field of dialogical intrahuman relationships is networked with other fields in a way that is almost too complex to understand. Nevertheless, it possesses its own unique structure; it functions negentropically. It is a relational field where information is generated, stored, and distributed. When viewed from this perspective, the terms *culture* and *civilization* can be formulated; they are two forms of connecting to the intersubjective relational field, two strategies for the generation, storage, and distribution of information by means of the threads of interhuman relations. (*Designing Cities*, 174)

There is a feedback mechanism at work here; masks determine the positions that can be adopted within the social and inter-subjective fields, and, subsequently, the types of communications and interactions that can take place. At the same time, the social system itself is what produces the masks and selves: “society . . . represents a network within which physical, biological, psychological, (and other) nodes are captured in the shape of masks so as to be condensed into ‘persons.’” (105) Flusser’s nodal subject comes into being as the result of intersecting social and inter-subjective forces, recognizes itself in the intersection of these fields, and then functions as part of the societal network that produces the very masks that enable the subject to recognize itself. Like the thermostat, this subject is a system that takes in environmental information, adjusts itself in relation to its environment, then outputs information that further modifies the environment.

Given that masks are the means through which “persons” are made concrete within the social system, and it is the relations between these masks that shape the way in cultures and civilizations produce themselves, the creation of masks “is a political matter” (105). Like Foucault, Flusser under-

stand masks as subject categories; for Foucault it is a matter of the way in which society, through those wearing the masks of “doctors” and “administrators,” produce masks such as “normal” and “deviant,” “heterosexual” and “homosexual,” and he, like Flusser, sees this as an historical process.

Flusser writes:

Originally there were relatively few masks: those belonging to the shaman, the hunter, the homosexual. Later on, masks became more numerous: today they can be worn on top of one another. One can, for example, dance as a bank manager and wear underneath one’s mask that of a connoisseur of art, a bridge player and father.” (Shamans and Dancers with Masks, 105).

As societies grow and become more complex, so too do the subject categories available within them, but, in every case, these positions are generated by the process of discourse, of dialogue, within the society itself. It is for this reason that the creation of masks is a political matter, in that it determines the very nature of the *polis* and the exchanges that can take place between its members.

In *The Tree of Knowledge*, systems theorists Maturana and Varela describe social systems in a very similar way, and describe the consequences of the system for individuals in congruent terms. For them, social phenomena are the result of a “third-order coupling” between individual vertebrate creatures that permits them to “participate in relations and activities that arise only as coordinations of behaviors between otherwise independent organisms.” They discuss, for example, the coordinations that take place between a herd of elk, or a pack of wolves, in which the relational field gives rise to “a new realm of phenomena that isolated individuals cannot generate.” (190) The interactions between two individuals make up a set of social phenomena, while the relationships that form as a result of these interactions, between two or more individuals, make up a social system (a “third-order unity”). In both cases, the individuals themselves are affected, and their behavior modified, by these couplings. As Maturana and Varela describe it, social phenomena and social systems “generate a particular internal phenomenology, namely, one in which the individual ontogenies of all the participating organisms occur fundamentally as part of the network of co-ontogenies that they bring about in constituting third-order unities.” (193) By participating in a social system, in other words, individuals evolve in relation to one another, and the shape of their particular society is formed. As in the pack of wolves, individual identity is set in relation to one’s place within the systems, the way in which the individual enters into a system of coordinations. “To an observer of the social system” according to Maturana and Varela, “from the outside it will appear as a remarkable congruence of a dance of coordinations.” (209)

The dance metaphor brings us back to Flusser. A social system can be seen as a dance, a series of coordinations between individuals who occupy certain subject positions or wear certain masks,

which then determine the kind of exchanges and coordinations that can take place between them. When Flusser describes society as “a network within which physical, biological, psychological, (and other) nodes are captured in the shape of masks so as to be condensed into ‘persons’” (105), he is describing a process by which the discourse that is taking place within the society, the exchanges and coordinations among its members, is also generating the masks or subject positions that are available within it. This process of condensation is analogous to the “co-ontogeny” of Maturana and Varela, in that both represent a process by which a given social system evolves the positions available within it, and the subsequent interactions that can take place, through a relational process. The roles within a wolf pack, from Alpha male on down, are fashioned through biological imperatives that enable all members to place themselves within the system and gives each of them a function. Human social systems function in the same way, though, as Flusser points out, the range of masks that are available has become very broad, and one can wear a number of them at any time. And in the case of human societies, though there are biological imperatives at work, it is theory, or the discourse that a society generates, that plays a major role in defining the subject. In both cases, that of Flusser and Maturana and Varela, this is a political process, in that the system itself generates the positions available within it.

At the same time that societies are organizations for the generation and hiring out of masks, they are also information systems. Masks function as the means for one “system” to communicate with another; they enable recognition, and the ability to say “you” to another. For systems theorist Niklas Luhmann, communication is the “basal process” of social systems, and the means by which subjects come into existence: “Social systems are based on either a type of action or on an aspect of action, and through action, so to speak, the subject comes into the system . . . the basal process of social systems, which produces their elements, can only be communication.” (137-138). Put in Flusser’s terms, these “elements” are masks, and they are the product of communication and dialogue. In this way, masks are prosthetic devices that open up the possibility of information exchange between two nodes in a relational field. This dialogic relationship is the end state for social systems, because it functions, in Flusser’s terms, “negentropically” that is, it enables the system to overcome entropic forces, and generate new information. Flusser defines communication as “a process by which a system is changed by another system in such a way that the sum of information is greater at the end of the process than at its beginning.” (8) Here Flusser is again adopting a cybernetic view of social systems, one in which the goal is the collection of information that enables the system to regulate and maintain itself. In this view, media (whatever allows the flow of communication between nodes) and masks (what marks a node and enables it to be recognized within the system as being capable of re-

ceiving communication) function in the same way as the blind man's cane in Bateson's example; they are extensions of the system that enable it to receive and process information.

The crucial problem for systems theorists, post-structuralist theory based on systems theory, and Flusser, is the control of information and information systems, the way these systems generate subjectivity, and the possibilities that exist for individual subjects. Returning to Maturana and Varela, they consider the problem of system functionality, and whether individuals exist to improve the overall functionality of the system, or whether the system exists to allow the full realization of individuals within it: "[There are] those human communities which, because they embody enforced mechanisms of stabilization in all the behavioral dimensions of their members, constitute impaired human social systems." (199) It's a very small step to compare this tendency of systems to enforce stabilization within the behavioral dimensions of its members to the disciplinary systems described by Foucault, where systems of knowledge delineate the subject positions that can be occupied, and the means for "correcting" errant and deviant behaviors. From Foucault's disciplinary systems we can also draw the comparison with Flusser's villages and cities which are factories for the masks with which people identify themselves . . . there is no one who lays on a mask to identify himself, but rather that these masks secrete those wearing them out of themselves This is another way of formulating the assertion that culture and civilization generate anthropologies, which claims to serve as their foundation. (*Designing Cities*, 174)

These anthropologies have a tendency, in Flusser's view, to create positions in which elites broadcast, through functionaries, "behavioral models for the consumption of material or ideal goods in which the holders of power are interested." (*On the Theory of Communication*, 19). In all cases, from Maturana and Varela to Foucault to Flusser, the concern is the way in which the system accumulates, stores, and generates information that furthers its own functioning and regulates the behavior of individuals. This is typically achieved by both regulating the flow of information among individuals, and by the generation of "knowledge systems" or "anthropologies" that delineate subject positions, also known as masks.

If information processing is the primary function of a system, and the method by which a system processes and disseminates information can be repressive and authoritarian, there are also means by which systems can process information in an emancipatory way. Flusser also imagines a utopian city as a new "theoretical space" where "all humans are connected in such a way that currently available information must be subsumed in more and more new fields and entered into the computations." (*Designing Cities*, 178). Information is not being processed in order to further the functioning of the system, but to project meaning for its individuals:

The intention of this projected space is neither to create politics and business nor to lead to them. Instead, it is to give meaning to the intersubjective network in the face of universal entropy – in the face of death and the fall into ever-increasing probability. In short, to understand theory no longer as the discovery of truth, but rather as the projection of meaning.”(178)

In this space, what becomes important is not the masks it secretes in relation to politics and business, but rather the way in which it opens up the field of intrahuman relationships, the way it enables the development of theory, of new information. As Flusser writes slightly later in the same essay “The new civilization should no longer identify humans as individuals with masks or in masks. Instead, using our creative accumulation, it should project the specifically human out of these intrahuman relationships.” (180) This seems to describe a kind of immanent bliss that would be found in the act of dialogue itself, rather the discovery of transcendent truth, and it is this process of exchange that marks the “specifically human” action. We return, in other words, to that initial dance, where individuals move in their own way in relation to their multiple partners, together creating the form of a dance that is uniquely their own, which will not survive their parting, but gives them joy and companionship while it takes place. In this way, we recognize each other as humans, rather than as masks.

In this treatise, as Flusser would term it, I have pointed out some similarities between Flusser’s concept of the self in society, and that of contemporary theorists of social systems. In both cases, subjects and subject positions (“masks” in Flusser’s terms, “third-order couplings” for Maturana and Varela) are created through a circular causal mechanism in which a subject forms itself in relation to its environment (other systems), and in turn affects those systems. The mechanism for this process is communication; each subject functions as a node in the overall information processing system of a society, and through dialogic exchange, masks/subject positions are recognized and reinforced. For both Flusser and theorists of social systems, the question arises of what sort of masks/subject positions the social system makes available (“secretes”), and whether the overall functioning of the system is authoritarian (whether subjects exist to further the functioning of the system) or emancipatory (whether the system enables true interhuman relations, such as love, to blossom, and whether it secretes subject positions that allow for true dialogue).

Flusser may not be a “pure” systems theorist, in terms of a direct adoption of specific positions laid out by those who would describe themselves as such. However, his interest in relational/reciprocal processes, and their role in subject formation, does mark his work as having far more in common with “structural, systems-based modes of thought” than those associated with “procedural ideologies.” For this reason, it would seem worthwhile to continue developing a dia-

logue between Flusser and contemporary systems theory, in that hope that both might gain something through the process.

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¹ This is an admittedly cursory overview of cybernetics and systems theory. For a detailed history that delves into such topics as the difference between first and second-order cybernetics and their theoretical implications, see Hayles, N. Catherine. *How We Became Post-Human*. Chicago: University of Chicago Press, 1999.