

The City as Wave-Trough in the Image-Flood

Vilém Flusser

Translated by Phil Gochenour

While theorists such as Niklas Luhmann, Norbert Bolz, and Friedrich Kittler have begun to rise in prominence, thanks in large part to translations of major works, scant attention has been focused on Vilém Flusser, of whom Kittler wrote, “while media studies institutes have begun to spring out of the ground in order to draw closer to industry wishes or third-party funding, Flusser remains one of those who thinks.”

*Born in 1920 in Prague, Flusser undertook a course of study in philosophy at Prague’s Karl University before leaving the country in 1940 for Brazil. In 1959 he became a docent of the philosophy of science faculty at the University of São Paulo. In 1963 he published his first book, *Lingua e Realidad*, and became a professor of communication philosophy at the College for Communication and the Humanities (FAAP) in São Paulo. From 1966 to 1967 he served as an emissary for the Brazilian Foreign Minister for Cultural Cooperation with America and Europe, as well as a professor of communication at the Escola de Superiore de Cinema, São Paulo. During this period he undertook guest lectures at Harvard, Yale, MIT, Cornell, and Columbia and made regular contributions as a columnist to the *Frankfurter Allgemeinen Zeitung* and *Folha de São Paolo*. In 1973 he relocated to Provence and taught at the *École d’Art d’Aix-en-Provence*, the *École Nationale de la Photographie Arles*, and the *Université de Provence Aix-Marseille*. In 1991 he briefly served as a visiting professor at the *Ruhr-Universität Bochum* before being killed in an auto accident on 27 September 1991.*

*In the United States Flusser is known primarily for his writings on photography and design, thanks to the publication of two works in English, *Towards a Philosophy of Photography* and *The Shape of Things*. A collection of his essays, under the title *Vilém Flusser: Writings*, has also been recently pub-*

lished. Here, again, the emphasis is largely on Flusser's writings on urbanism, the city, and the creative act.

The essay translated here, "Die Stadt als Wellental in der Bilderflut," appeared in *Die Revolutionen der Bilder: Der Flusser-Reader zu Kommunikation, Medien, und Design*. Written in 1988, it illustrates some of Flusser's most advanced thinking on the topic of human subjectivity in relation to technology and media. It also locates him in relation to an intellectual current in German social theory, seen most notably in Luhmann's work, that draws heavily upon cybernetics and systems theory. Flusser's concept of the subject as a "knot" of relations, as the intersection of various "channels" of information, out of which the "net" of a city is formed, parallels similar concepts developed by Humberto Maturana and Francisco Varela throughout the 1980s and 1990s. Similar considerations also feature prominently in the work of Heinz von Foerster and Ernst Glasersfeld, among others, and laid the foundation for the Radical Constructivist movement in German theory and second-order cybernetics in general. Indeed, echoes of concepts from Gregory Bateson, Maturana, Varela, and other cyberneticists form the very backbone of Flusser's work, though their acknowledgement by him is slight, if even existent.

The significance of this school of thought, and Flusser's work, comes from two directions. First is the reaction against the Frankfurt school in general and against Habermas in particular. The talk here is no longer of a priori autonomous subjects who emerge into the public sphere in order to engage in a process of consensus; rather, Flusser sees systems of relations functioning to allow participants to discover the manifold subjects within themselves, the city as a dance of masks rather than as a parliamentary proceeding. Like Habermas, but also like Maturana and Varela, Flusser points to the necessity of dialogic relations between subjects, but here the dialogue is part of an autopoietic process of distinction and formation. It provides the subject with an opportunity to explore and develop itself internally in relation to an environment rather than as a process in which two systems attempt to get in synch with one another to increase overall system rationality. For this reason, Flusser's work, unlike much of the Frankfurt school and its followers, is able to deal with technology and media in a more supple fashion. Rather than viewing mass media as a source of indoctrination and mediation that eventually leads to alienation, Flusser is interested in the way in which media contribute to this dialogic practice, this

PHIL GOCHENOUR has taught as a visiting assistant professor of digital media studies at the University of Virginia. Currently he works as a consultant for web application development and is a partner in Totalmass, a start-up specializing in games and social networking applications for wireless devices.

formation of nets of relationships. While he is critical of television because of its lack of “reversibility,” media technologies such as the telephone and the Minitels, the early French attempt at creating an internet, must be examined for the role they play in creating the new city and the subjects that inhabit it.

And here we enter into the second area of significance for Flusser’s work. Though written when the internet and World Wide Web were still in their infancy, “*The City as Wave-Trough in the Image-Flood*” anticipates, and deals with, many of the issues that have arisen in relation to so-called virtual communities. Though considerable effort has been spent in the debates over whether the Well or LambdaMOO, for example, can be considered real communities, Flusser here puts these debates to rest by pointing out that all communities, all cities, are formed more by the relationships within them than the physical space they occupy. Thus, San Francisco is a city, but so is Friendster, and both are real because they are composed of relationships among individuals. And while many theorists, notably Sherry Turkle, have pondered the nature of the subject within these communities, Flusser again puts much of the debate to rest by suggesting that none of us has subjectivity until we enter into relations with others. When I join an email list or a discussion board, I don’t go there as a preformed subject, but rather an aspect of myself manifests as I enter into dialogue with others. I may don the mask of the trickster, the helper, the crank, but that mask will only develop shape and features as I interact with others; it does not come ready-made. With these realizations, Flusser suggests that we may finally be able to step out of a historical dialectic and engage in a process of play, rather than merely take up the roles that have been programmed for us.

With the translation of this short essay, then, I hope that Flusser’s work will make some significant impact on current discussions in the realm of digital media and technology, particularly in the area of virtual or, as I prefer, distributed communities and the subjects who inhabit them. It is indeed a great shame that Flusser was unable to see the city he described so presciently actually come into existence, that the net and the web that feature so prominently in his writings had not yet been fully formed out of servers and telephone lines.

When it comes to cities, we should learn to think topographically rather than geographically and see the city not as a geographical place, but rather as a *flection*¹ in a field. This is not a comfortable undertaking, as it involves one of those notorious paradigm shifts. When we were forced to see geography as the surface of a globe rather than as the description of a flat area,

1. *Krümmung* is a difficult word to translate. Flusser’s model of the city is based upon a system of forces, like gravity, and so here I have chosen *flection* to coincide with the idea developed below. The city, like the gravitational pull of a planet, has an obvious attractive quality that causes flection or deflection of objects along a path toward it.

we ran into problems: Do the occupants of the southern hemisphere stand on their heads? We must strain our imaginations even more now than they did back then. Admittedly, we have images of equations that make things easier. We are accustomed, for example, to see the solar system as a geographic place in which individual bodies orbit around a larger one. We see it as such because it has been shown to us in images, not because we have perceived it with our own eyes. However, today we also have other images at our disposal. Here is one that shows us the solar system as a network of wire netting, as a gravitational field, and in this netting there are sacklike wells² in which the wires are more tightly knotted together. In one of these wells we recognize our Earth once more because built into this sack there is a smaller body, namely, our moon. Both of these images of the solar system are models rather than maps. And certainly the second image is more useful for a trip to Mars than the first. In the second image one sees that one must first crawl up out of our well and then be careful not to fall into the sun's well in order to finally fall into the Mars well. The same is true of the image of the city. When we are talking about a "new urbanism," it is more useful to construct the image of the city as a field of flections.

The City as Ordering of Space

The typical image we construct of the city looks something like this: houses as economic private spaces that surround a marketplace, the political public sphere, and over there on a hill stands a temple, the theoretical sacred space. You can beat your head against the wall trying to decide how these spaces are coupled together. According to the ancients, Economy served Politics and both were in service to Theory because Theory led to wisdom and redemption. Philosophers and doctors should be kings of the city. According to the revolutionary artisans of the Renaissance, Economy and Theory should serve Politics because these led to freedom and the self-determination of humanity, thanks to work. The citizens should be kings of the city. Today, according to many, Politics and Theory are in service to the Economy because this leads to freedom of choice and happiness. The consumers should be kings of the city. These are three ways of reading the typical image of the city.

For the moment let us forget the floods of printed material and blood that have flowed, and continue to flow, from the critique of this image of the city. Let us look at the image. As a model it is no longer useful. The three spaces of the city intermingle with one another today like fuzzy sets.³ The

2. I have translated *Ausbuchtungen* as "well" because Flusser is making reference to what is usually referred to in English as a gravity well.

3. "Fuzzy sets" is in English in the original.

public space pushes into the private thanks to cable⁴ (as in the case of television). Private space pushes into public thanks to machines (like cars). The city really no longer contains distinct private and public spaces, and the theoretical space is so thoroughly integrated into both that it is no longer recognizable because it has changed so much. *Theory* means contemplativeness, and it is sacred because it rises above the flow of commerce. From this we get the weekend, vacation, retirement, and unemployment. The theoretical space is no longer bound to the church and school but, on the contrary, is associated with the playing field, discotheque, and Club Med. These settlements are opened up to the formerly Economic and Political spaces. The image of the city with its three spaces is now useful only as a point of historical reference. We are lazy in thought and imagination and cling to old images. We become irritated when someone takes away our private space, our political engagement, and our belief in the Holy (and above all, our belief in scientific Theory) and suggests other images of the city as a substitute. This is the new urbanism, when we recognize neither our trusted home, nor our advanced political opinion, nor our schools of profundity and learning.

The City as Mask Rental Shop

We are those who are individuals who come together in the city. The old image of the city rests upon this image of humanity. This image of humanity has become unsuitable. Everything is divisible, and there can be no individual. Not only can atoms be split into particles but so can all mental objects; actions become “aktomes,” decisions become “dezidemes,” perceptions become stimulations, representations become pixels. The question of whether one eventually comes to an indivisible remainder is metaphysical. The human being can no longer be seen as an individual but rather as the opposite, as a dense scattering of parts; he is calculable. The notorious Self is seen as a knot in which different fields cross, as in the way the many physical fields cross with the ecological, psychic, and cultural. The notorious Self shows itself not as a kernel but as a shell. It holds the scattered parts together, contains them. It is a mask. From this it follows that the city can no longer be a place in which individuals come together but, on the contrary, is a groove in fields where masks are distributed. The self does not come to the city in order to come together with others but, on the contrary,

4. *Kabel* yields a bit of wordplay here because it can mean both “wire(s)” and “cable” in the sense of “cable TV.” I have chosen “cable” here to give the sense of multiple lines of transmission that bring the public sphere into the private.

just the opposite. It is first in the city that the self arises as the other of the others.

The model of the city as a place where masks are lent out allows for an image of the history of the city to be made. The first cities presented only a few masks at one's disposal, such as that of the magician, the warrior, and the homosexual, and all had to dance behind these masks. The last cities presented a multitude of masks at one's disposal and allowed one to be drawn into another during the dance, such as that of the taxpayer to that of the father. That is political (urban) progress. In any case, what was hidden behind the old masks is the same as that behind the new, namely, a swarm of disposable parts. At first glance this is a confusing image of the city. It looks like an Indian village, while that of the old city looks like Athens or Jerusalem. Still, the Indians will turn to dust if they don't dance, to pure quarks, stimuli, and aktomes. If asked, the Indians would probably have no objection to such a transformation. We, however, insist upon our identity (soul, spirit), even when we have misplaced or lost the medicine bag that refers to it.

The City as an Intersubjective Field of Relations

The new image of humanity as a knotting together of relationships doesn't go down easily, and neither does the image of the city that rests upon this anthropology. It looks roughly like this: We must imagine a net of relations among human beings, an "intersubjective field of relations." The threads of this net should be seen as channels through which information like representations, feelings, intentions, or knowledge flows. The threads knot themselves together provisionally and develop into what we call human subjects. The totality of the threads constitutes the concrete lifeworld, and the knots therein are abstract extrapolations. One recognizes this when they unknot themselves. They are hollow like onions. The Self (I) is an abstract, conceptual point around which concrete relations are wrapped. I am that to which you is said. An image of humanity of this type is obvious not only thanks to psychoanalysis and existential analysis but corresponds also to the concepts of other areas, for example, ecology (organisms are knottings together of ecosystems); molecular biology (phenotypes are knottings together of genetic information); or atomic physics (bodies are the knottings together of the four field strengths). If one holds fast to the image of an intersubjective field of relations—we is concrete, I and you are abstractions of this—then the new image of the city gains contours. It can be imagined roughly in this way: The relations among human beings are spun of differing densities on different places on the net. The denser they are, the more concrete they are. These dense places develop into wave-troughs in

the field that we must imagine as oscillating back and forth.⁵ At these dense points, the knots move closer to one another; they actualize in opposition to one another. In wave-troughs of this type, the inherent possibilities of relationships among humans become more present. The wave-troughs exert an attraction on the surrounding field (including the gravitational field); ever more intersubjective relationships are drawn into them. Every wave is a flash point for the actualization of intersubjective virtualities. Such wave-troughs are called cities.

To be sure, with this description the new image of the city as an attraction point for the realization of possibilities is still not fully developed. To this must be added that we must imagine that the net among human beings is entangled with other nets. For example, we must try to imagine the knots of intersubjectivity; thus the I is built into multiple nets, as the central nervous system is in the neurophysiological net, as creatures are in the ecological net, as material bodies are in the electromagnetic and gravitational fields. The hope of reducing all these relational fields to a single one, of being able to draw up a general field theory, is temporarily suspended. Because of this, the new image of the city does not present a very clear model but, on the contrary, appears more fractal. We will simply have to learn to live with this fractalized chaos.

A striking aspect of this image of the city, when one has mobilized the necessary imagination for it, is its immateriality. In this image there are neither houses nor squares nor temples that are recognizable, rather only a network of wires, a confusion of cables. A walk through Cologne can make this image somewhat more material. Even Heine intended, so that holy beams should be reflected in his holy cathedral, that we must seek to go beyond, to see fields of relations reflected. What are noticeable at first are the market stalls, in which masks of identification are offered. One identifies oneself with and as clothing, as a pair of shoes, as a saucepan. One is what one always is when one first begins to dance in these clothes, in this cooking pot. Such market stalls are what constitutes all of Cologne. Everywhere such masks are offered. One dances in the mask of a television image (identifies oneself with and within it), in the mask of a Party member, an academic title, a family relationship, an artistic orientation, a philosophic intention.

5. "Diese dichten Stellen bilden Wellentäler im Feld, das man sich schwingend wird vorstellen müssen." Here Flusser's imagery suggests that intersubjective relations constitute a field of forces, and just as the gravity well of a planet attracts other bodies to it so too does the thick concentration of intersubjective relations attract other forces and bodies. To illuminate Flusser's imagery of wave-troughs further, we can imagine a line representing the oscillations in a potential field of relations. This line can be attracted to poles of particularly dense relations, which would cause the line to bow in that direction. The resulting wave-trough would be a measure of the attractive force of that pole.

Cologne reveals itself as a wave-trough in the field of relations among human beings, in which these relationships are collected into masks in order to actualize their inherent possibilities. The inhabitants of Cologne are densely scattered swarms of points that dance under *Kölnische* masks. The houses and squares of Cologne, the cathedral are seen as surface phenomena, as congealed, materialized masks, as a kind of archaeological kitchen trash.

The City as Project of Projections

Whither new urbanism? What's wrong with Cologne? That the masks offered there are not produced dialogically but otherwise and that they are put on, even when they can be chosen out of a multiplicity. New urbanism is the attempt at a city plan in which the masks surface dialogically out of the relations among human beings in order to be absorbed again. The new city would be a place in which we as an I and a you should identify reciprocally,⁶ in which identity and difference would give rise to one another.⁷ Such a city would require an optimal scattering of relationships among humans; neighbor and next door should arise from others. And it requires that the cables of relationships among human beings should be reversibly installed, not in bundles as in television, but on the contrary as true nets and thus responsible as in the telephone nets. These are technical questions and are to be solved by urban planners and architects. They demand not only the necessary competence but also theoretic, "infomatic" knowledge and devices, as with the reversible Minitels and artificial intelligence. As with every revolution, that of the urban is technically conditioned, but reaches into wider areas. It demands that we must surround ourselves existentially. We must stop wanting to recognize ourselves and others and instead seek to recognize others and to find ourselves in them again. We must break out of the capsule of the self and draw ourselves into concrete intersubjectivity. We must become projects out of subjects. The new city would be a projection of projects among human beings. That sounds utopic, which it certainly is, because the new city is not geographically locatable; on the contrary, it is everywhere where humans open up to one another. But precisely because it sounds utopic it is realistic. The emerging relational world-

6. I have translated *gegenseitig* as "reciprocally" to point out the similarity between Flusser's concept of subjectivity arising dialogically and the concepts of autopoiesis and structural coupling in systems theory. In the latter case, relations between a system and environment, or two systems, are reciprocal in that each affects and plays a role in the development of the other.

7. Here Flusser is strongly echoing the phrase of Gregory Bateson, "the difference that makes a difference." For Flusser as well as Bateson, and in systems theory in general, it is the drawing of a distinction that first creates system coherence and sets up the fields of relations within the system.

view and the anthropology that comes from it demands utopic thinking. We don't have any inherited models for it and must draw them up anew.

All of this was spoken of in images. It was about city image, world image, human image, masks of intercourse. That is unavoidable. We cannot further describe the world and ourselves within it. Discursive speech and writing is no longer appropriate; everything is calculated, and swarms of pointlike bits are indescribable. These can however be calculated and the algorithms encoded into images. Thus is the world, and we within it, become indescribable, but it is calculable and because of this is capable of being represented once again. To imagine it, we must mobilize a power of imagination that rests upon calculation. We possess the necessary devices. This essay should be seen as an attempt to encode synthetic images of algorithms into language. Contemporary relations among human beings will increasingly encode themselves into images of this type. Our perspectives, imaginings, emotions, intentions, knowledge, and decisions must increasingly assume the form of such images. In this way all creative disciplines—like science and politics—will become art forms. This essay is an inadequate attempt to advance politics (new urbanism) to an art form.