## THE AGE OF SYSTEMS

I argued earlier that the epoch of instrumentality, or the technological epoch, came to an end within the last twenty years. You can see the germ of this change much earlier, of course. It's present, for example, in Alan Turing's vision of a Universal Machine. But what I'm talking about only becomes visible in a full-blown way in an event like the Gulf War, a computer war which showed people at the same time their utter powerlessness and their intense addiction to the screen on which they watched it.

When I speak of the end of an epoch, of course, I'm not speaking about the end of its historical continuation. Epochs always overlap. So when Turing gave the name "machine" to the mathematical function that he had elegantly analyzed, he built a bridge between the new reality and the era that was actually ending and made it seem as if something explosively new was just a further stage, or perhaps the ultimate stage, in the evolution of technological society. Lots of great thinkers have fallen into that trap. In the Middle Ages, at the beginning of the technological era, Hugh of St. Victor and Theophilus Presbyter were the first to think of the implements proper to the various arts as something separable from the hands of the artisans who used them. But they did not realize the full novelty of what they were doing in creating, for the first time, a general idea of tools as means of production.

The epoch that Hugh began has now ended, because the computer cannot be conceptualized as a tool in the sense that has

prevailed for the last 800 years. In order to use a tool, I have to able to conceive of myself as standing apart from the tool, which I can then take or leave, use or not use. Even something as up-to-date as the automobile is still a device in which I can seat myself, turn the ignition, and start. It might be objected that the car won't run without a road system, but I have driven the beast in the desert and know what a jeep is. Obviously the Model T sold by Henry Ford was a lot closer to a hammer than the modern Japanese product sold in the United States, which is already very much software within the hardware of roads, courts, police, and hospital trauma units; but, nevertheless, I am still able in front of the car to imagine a distance, a distality between me and the device. This becomes pure illusion when I create a macro in WordPerfect to organize my footnotes. As an operator, I become part of the system. I can no longer conceive of my relation to the grey box in the same way in which Theophilus Presbyter thought of a chisel.

So I want to distinguish first of all between society seen in the light, and in the shadow, of tools which remain separate from the one who uses them and the society of systems into which we have now slipped. One way of getting at the change we have undergone is by looking at what has happened to language. There has been an enormous increase in the last fifteen years in the availability of expert judgements on the effects of drinking beer or smoking or whatever it may be. People are inundated with instructions and help programs. And these instructions are not transmitted in the form of sentences, but through icons. I'm not speaking of holy images, of course, but of these innumerable minting stocks of public intercourse, which increasingly replace language. I'm speaking about the use of images in making arguments. Let me take an example: the population curve. Population is an icon of something moving, something which we know by now isn't stable, something which we have learned only too painfully is somewhat beyond our control. The devices available to control it are so horrible that they are tabooed from ordinary conversation. It's something about which experts can tell us. Even to say the word means submission to the expert who has gathered the statistics.

An icon, no matter whether it represents the population curve or some other administrative reality, is in a frame, which I haven't chosen but somebody else has chosen for me. This is not true of sentences. My sentences can potentially break the frame that you may want to impose on them. I have this extraordinarily beautiful freedom which is implicit in language, and which requires of my interlocutor the patience to allow his words to be turned around in my mouth. The icon fixes what it suggests. It produces a visual paralysis, which is interiorized. In Spanish "populating" was something that was formerly done in bed, and in older English one still populated a territory. But what is shown in the population curve has no connection with carnal intercourse. The word is a prison cell, or straightjacket, constructed by unquestionable experts; and what we call education, particularly higher education — as I have been able to observe in ten frightening years at Penn State University — forces people into this straightjacket. They become decent intellectuals who won't touch terms for which there is also a visual expression. The visual, the iconic representation determines the word, to the point that the word can't be used without evoking the icon. My friend Uwe Pörksen in a new book calls these icons "visiotypes." A visiotype is the elementary form of this way of dealing with each other. Unlike a word it is unfit for predication, as I will try to explain. In English one can speak of a copula, which is the verb which joins the subject and the predicate, or object, of a sentence. The word has a wonderful hint of carnality, as if the subject and object of a sentence were mingled in the same way as a man and a woman in love. Visiotypes have no such relations with any predicate. They are fixed, static entities that stand outside the relativity of words. To speak in strict linguistic terms, they are connotative stereotypes. In this sense they are like those ele-Z mental sound bites which Pörksen wrote about in his earlier book on plastic words.2 These are highly respected terms, few in number, the same in every modern language, which have innumerable connotations but no power to denote anything clear or specific. I prefer to call them amoeba words. They correspond to visiotypes and provide their only possible verbal equivalents. Ordinary words don't apply to visiotypes, and trying to apply them only creates confusion. They are not

within the realm of personal knowledge. They include me, but I cannot include them in what I actually know.

We spoke earlier about the appearance of virtual spaces in the midst of the everyday. And I suggested, for the fun of it, that this was presaged, in the kiosks along Paris boulevards, by the appearance of stereoscopes, where you could look at the merchandise available in the brothels, gazing at it in a virtual space generated by two cameras, set apart by four times the distance between the two eyes. It heightened the reality of the pictured flesh, while making both the foreground and the background hazy, calling you to come and taste for yourself what would inevitably disappoint you. I borrowed this example from Jonathon Crary's good analysis of the introduction of visualized virtual spaces in everyday life. Crary says that sometime in the late 1970s the number of these virtual spaces exploded. I would add that each time you look at a visiotype, you contaminate yourself with the virtuality it carries within it. And I would also say that if I look at body history and particularly at the visualization of the contents of the pregnant uterus, I can locate the widespread appearance of these spaces thirty or forty years earlier.

I used the word "contaminate" here intentionally. One of the reasons we are having this conversation is because we want to walk in this world with the least possible contamination of our flesh, and our eyes and our language, and to be aware of how difficult this is to do. Language, above all, is threatened by the virtuality of this increasingly dominant visual manipulation of my thoughts — both my silent inner language and the public language in which I converse with others. I have to struggle to defend my senses from being pulled into a world of visiotypes. Otherwise, under the influence of a carefully programmed bombardment by visiotypes, I will begin to conceive of myself as homo transportandus, or homo educandus — a man standing in need of transportation or education.

Let me make a little parenthesis here concerning the history of technology. It is a commonplace now among historians of technology that people derive both their self-image and their conception of society from their tools. As far back as the Middle Ages, the idea of "the tools of the trade" was a precondition for the organization of guilds

in this proto-industrial age. Think of the influence of the idea of "the means of production" via Marx in the period between 1850 and the Second World War. Or of the importance that the watch or the mechanical music box had in the late Baroque. Think of the transition from the clock on the tower, or the standing clock with its pendulum, to the watch that you could carry in your pocket. The obvious influence of these devices on ways of thinking leads easily to the idea that tools come first and changes in how we conceive of ourselves and our social organizations follow. But the general idea of tools had to be there before any particular action of tools could be recognized or accepted. So it's worth considering the possibility that the relation between techniques and concepts might be the contrary of what is now supposed by historians of technology. The attempt to model stereovision precedes photography by twenty years. Photography actualized the idea and put the stereoscope on your great-grandmother's desk for her enjoyment, but it did not begin it.

Don't think that I'm speaking about something terribly distant or academic. I found that in 1926 the American Educational Association insisted that an American school could not be considered up to standards if it didn't have at least as many stereoscopes as the number of students in its largest class and, at least, 700 sets of stereo stories on Greek gods and on chemistry, so that all children, even the poorest ones, would view reality through this window. But why am I telling you about it? Because I believe that the desire to achieve something very frequently precedes, often only by a generation or two, the creation of the tool that makes it possible.

Now to return to my main theme: There are two entirely different, and, I think, irreconcilable interpretations of our present predicament. In my writings of the 1960s and 1970s, I spoke of the modernization, or professionalization, of the client. I tried to show how the client forms his self-perception by interiorizing, as one so easily says, the school system, for example. You classify yourself, and submit to classification by others, according to the point on the curve at which you dropped out. In the same way you internalize your need for health care by claiming your right to diagnosis, painkilling, preventive care, and medicalized death. Or, by swallowing the car you

paralyze your feet and have to jump into the driver's seat to go to a supermarket.

But sometime in the 1980s I began to think about these things differently. I realized that people were being absorbed or integrated into systems in a way that went beyond what I had at first thought. And I found the necessary rethinking very demanding. As long as I spoke of a successful university student as somebody who had swallowed the assumptions of the school system, I was still speaking of somebody who conceived himself as a producer and consumer of knowledge and, in some way, a citizen, somebody who could recognize his privilege as a citizen, and, by claiming a right to that privilege, provide grounds for its extension to everyone. As long as I thought about a person who had swallowed his need for analgesics, for freedom from abnormalities, for the prolongation of life, I was still thinking of someone who stood in front of large institutions with the idea, at least, that he could use them for the satisfaction of his own dreams or his own needs. But what of the person who has himself been swallowed by the world conceived as a system, a world represented or made present to his fantasy in a disconnected but seductive sequence of visiotypes? In this case the possibility of political engagement, and the language of needs, rights, and entitlements, which could be used during the 1960s and 1970s, ceases to be effective. All one can wish for now is to get rid of the glitches, as I think they are called in communication theory, or to adjust inputs and outputs more responsively. In the 1960s I could still speak plausibly about "the secularization of hope." The Good Society, the desirable future, lying behind the horizon, still invited aspiration. People still felt some power. Without the possibility of power it makes no sense to talk about responsibility, because, historically speaking, talk about moral responsibility extends only as far as my power, in some way, reaches. All the intense talk about responsibility in the 1960s was a reflection of people's belief, admittedly completely fantastic, in the power of institutions and of their possible participation within institutions. Powerful people could still enjoy a version of deeply secularized hope, a hope which took the form of belief in development, in betterment, in progress. In the new era, the characteristic person, and a type I

have frequently encountered in the last few years, is someone who has been gathered by one of the tentacles of the social system and swallowed. For him this possibility of sharing in the bringing about of something hoped for is gone. Having been swallowed by the system, he conceives himself as a subsystem, frequently as an immune system. Immune means provisionally self-balancing in spite of any change in environmental conditions. Fantastic talk about life as a subsystem with the ability to optimize its immediate environment — the Gaia hypothesis³ — takes on a gruesome meaning when it is used by someone who has been swallowed by the system to express his self-consciousness.

Let me make it simpler. You have children, and you told me once you have great difficulty imagining why they are so fond of branded clothes. Why wear a T-shirt decorated with an icon? To me this is a poetical way of speaking about a person swallowed by the system, someone who needs an icon, which I can touch when I want to obtain something, be it only attention from the other.

Now, at the centre of the context in which we speak stand those things I have to understand in order to practise, beyond Buber,<sup>4</sup> the I–Thou relationship — to face you and let myself be faced by your pupilla, your version of Ivan, which gives reality to me. I want to lay the intellectual foundation for an ascetical practice which will foster this relationship. And, there is definitely a difference between trying to face the romantic social do-gooder, the social democrat, or ecologist of the past in whom the ego does not yet reach for an icon and trying to face a really contemporary person, who pastes an icon on his breast and says, arbitrarily, "Hey, that's me."

What I have said today about icons brings to an end my searching and sometimes painfully stuttering inquiry into the Western history of iconoscepsis, of doubt and hesitation before images into which my eyes might fall. In this history, the legitimization of *iconodulia*, devotion to sacred icons, is, for me, a major step forward. It allows me to search eternity and discover ultimate truth as a living body behind the threshold of the image. But *iconodulia* in no way excludes simultaneously the guarding of the eyes. The proscription of images in Judaism and Islam is intended, so far as I can understand,

to prevent the face becoming an image, so that I will not look at you like a photographer fixing an image but remain constantly vulnerable to what looking at you in the flesh will reveal to me about myself. It invites me to be ruthless in tearing away the illusions, consolations, and fancies that make it possible to live with myself at this moment and to seek myself instead in what I find through your eyes.

One of the most serious steps away from the certainty that imagery, particularly imagery of the human face, is a major threat to our mutual presence, and to the possibility that you will find yourself in facing me, is taken with the mechanization of the image in photography. Widespread photography makes people forget how much images interfere with that ultimately indescribable gaze which reaches out on several levels simultaneously and, for the believer, into the beyond as well. Now the gaze can be conceived as that of the camcorder. The satellite view of the world can be taken as a real view, as if that were a possible human standpoint. People can become habituated to seeing in front of their eyes things which, by their very nature, are not in the order of the visible, trivially, because they are so small, smaller even than the wavelength of red light, or perhaps because, as long as they are living, they are below the skin, like the movements of my heart. They can learn to recognize figments, like the visual representation of quantities, or the so-called genome with its implication of command and control. And, by this habituation, we lose the everyday habit of placing our gaze on that which falls under our eyes. Iconoscepsis combined with the desert mentality of Jews and Moslems — "Thou shalt not make thyself an image" — therefore remain necessary complements to the extraordinary challenge which comes from the expansion of love made possible through the Incarnation, and through my belief in the Incarnation, because the recognition of this possibility is mortally threatened by kids learning in school to understand and use their eyes as camcorders.

We are moving into what I would call an a-mortal society. To illustrate, I would open a computer and show you what a crash means, the crash of a state. Or I would lead you into an intensive care unit where the brainwave monitor is on above the patient and is being watched for the moment when it goes flat. Or I would show

you the billboard that impressed me and several of my friends along the road between Claremont and Los Angeles which shows brainwaves and then a flat line and then, in big letters, the name of an insurance company. None of this has anything to do with death. Dying is an intransitive word. It's something which I can do, like walk or think or talk. I can't be "died." I can be killed. If a few seconds or minutes are left, even then I can fully engage in saying goodbye.

The art of dying is different in each society. This morning, literally this morning, just before you came in here, a Mexican woman was here speaking about her poor sister who can't die because three of her nine kids don't want to let her go, even though she's in pain. And she recalled her father's death — how she had told him, "Daddy, you can go in peace. I will take care of mother." She then told her two brothers, "Don't get mixed up in this." And the man died, she told me, in a beautiful way, with a radiant face. So I said, "Yes, let's take him as our model." Now this might happen even under systems assumptions. Anything can happen. Nevertheless a society — and it's questionable whether I should even call it a "society" — a social system built on the assumption of feedbacks, of programs, and of lack of distality between its immune subsystems and its entire functioning eliminates mortality. Mortality is not the same thing as an immune system with a limited probability of survival, or an immune system not yet crashed. A person who has tried to establish the habit of virtuous action, so that living the right way becomes second nature, incorporates in his action the knowledge of death. It may be the step over the threshold into the world of the ancestors, or the reign of Christ on the prairies beyond. Phillipe Ariès in his book on ways of dying gives a beautiful account of different practices in different parts of the world.6 A person who constantly manages himself as a system is totally impotent in front of the fact that he knows, just as well as formerly, that life will come to an end.

This condition of a-mortality is reflected in the demand that doctors now become executioners. To establish such a service would be a remarkable certificate of national abulia! There are plenty of effective ways of taking leave in every woman's cleaning cabinet. There are more poisons around than ever before. Let the Hemlock Society take

care of instruction in self-use. I'm not speaking for suicide. I'm simply saying that the idea of institutionalizing it, and thinking people incompetent to do it, is a recognition of national incompetence, which is almost beyond imagination. The medical profession has become an iatrogenic body factory, financed by tax money, and its perversion is most clearly shown in this demand that doctors become procurers of death for their patients. There were healers in all societies with various special competences. In most societies there were a dozen different types of such specialists. Even here in this village, you have different old women and men for different things which one would call health care. The task was to enable a person to bear suffering, and to move, in some kind of peaceful way, towards death. In the Italian city of Bologna, for example, during the period of the plague, I have evidence that it was the candle makers and the sellers of incense that were the ones who provided what one needed to die appropriately.

The idea that doctors should kill their patients on request is monstrous but easily explained. At a certain moment, and usually with the support of our most venerable institutions, including religion, doctors, instead of taking care of patients, began to take care of human lives. In *Medical Nemesis* I tried to show how this had already begun to happen around the middle of the nineteenth century. Doctors were then represented as taking the hypodermic and intravenous syringe, which had just been invented, and using it to fight against death—in one image a skeletal death figure is shown being thrown out the door. From that moment on, doctors became life managers and, ultimately, producers of iatrogenic *somata* ["bodies"] and, of course, can now be called on as executioners.

I once wrote a letter — it will soon be published — to a nun whom I have known since her girlhood and who is now in her old age the superior of a beautiful contemplative community. In this letter I reflected on my friendship with a woman who confessed to me that she intended to end her life. She told me that she had prepared herself for the next winter, and even chosen the spot under a tree where she would like to go to die. She was alcoholic, but still very much alive and clear, and said to me, Ivan, you are a chemist. You should

know something about it. Tell me what poison to choose. She was a stubborn lady, I can tell you, not open to any arguments. And I know that she loved Johnny Walker's Black Label. So I wrote to my nun friend that I'm sorry that, at that moment, after bringing her to her home, I didn't go out, buy a bottle of Johnny Walker, and put it in front of her door in order to make her sure that what she had told me did not in any way interfere with our friendship, as she must have felt from the look on my face. I will in no way help in a suicide; but at least three times in my life I have had to tell someone, always different people — in my way of life, this happened — "I will not open the window for you, but I'll stay with you." And this position, of not helping, but standing by, because you respect freedom, is difficult for people in our nice society to accept. I have just recently had evidence of this difficulty in believing that somebody like myself would suspend judgement at the suicide of a friend. But to put the mark of betrayal on it seems to me outside of my competence.

Let me say a bit more finally about the iatrogenic body. One of the hallmarks of modernity is the progressive replacement of the idea of the good by the idea of values, as I've already said. The production and delivery of iatrogenic bodies to members of this society is part of this replacement of the sense of what is good and right and befits me and my interior balance of humours. The iatrogenic body is assessed by the reading of positive and negative values proceeding from an assumed zero point. It is evaluated. Look at the way patients in hospitals live their own charts. They are concerned about "Doctor, how is the pressure today?" not about how they feel today. Something very fundamental gets lost when I observe myself against values rather than feel myself as a bundle of miseries, in pain, half crippled, tired, but bearing all this. There are various accounts in various worlds of the past as to why and how I should bear it. In my world, it is bearing it as my cross. The cross doesn't cease to be something evil, even when I bear it. But as we said in our very first meeting, the cross is somehow paradoxically glorified by the belief that God has become man in order to bear it. This is not the glory of Constantine's in hoc signo vinces,9 by which the cross becomes an instrument of power, but the cross as a sign of shame and of defeat, which the Son of God took upon himself.

We have spoken about evil already, and I have argued that an entirely unsuspected dimension of evil appears with the possibility of sin, which is betrayal of new and free love. The destruction of the possibility of shouldering the body is such an evil for me. But this aspect of evil is hidden from those who think only in values. They do not see the side of sin. Thinking about the body as a system, or a subsystem, is a way of hiding sin.