CARRIERS OF COSMOLOGY

by Johan Galtung

Center of International Studies
Princeton University
Princeton, New Jersey 08544

November 1986
Cosmology has been defined as the code of a civilization, and a civilization has been defined as a macro-culture, as a culture spanning vast areas of space and large intervals in time. However, civilization is not only seen in terms of culture. Civilization also covers structure, and the factors singled out for attention as cosmology, or code, would be those that the culture and the structure of the civilization have in common. Structure, then, becomes materialized cosmology and culture becomes symbolized cosmology. There are countless materializations and symbolizations of cosmology, all of them manifestations, or implementations, or unfoldings to use a more illustrative term of the same basic theme: the code in the cosmology.

What this means is that an important stand has been taken from the very beginning: cosmology is in the structure, and the culture, of a given civilization. From this two important consequences follow, both of them obvious but they have to be elaborated.

First, a civilization can survive even if all its inhabitants have perished. Certain material arrangements such as the layout of a city will continue to carry the space configuration of that civilization as so clearly seen, for instance, in Pompeii even today. The music produced within that civilization will continue to carry the time configuration, even if there is nobody present in the world today identifying him/herself as a member of the civilization. Of course, social structures, also material because
human bodies enter them, will no longer be present but they are not the only examples of structures. Oral presentations of the tales and myths in general of the civilization can no longer be enjoyed as there are no human beings genuinely capable of doing so. But language as a carrier of civilization may still be there as hieroglyphs engraved on a stone; it does not have to be spoken to carry civilizational codes. In other words: so many of the civilizations "of the past" are still with us "in the present" as long as material and symbolic manifestations survive.

Second, cosmology enters the human mind through a process of learning, mainly subliminal. Cosmology is not inborn although it may be argued that for certain categories of people there will be an inclination more in the direction of some types of cosmologies than others—the word to be emphasized being inclination, as opposed to determination. In other words, there is no assumption that the human brain or any other part of human beings is already programmed in such a way that there is one natural, normal code or cosmology for human beings in general. Our experiences is that human beings are perfectly capable of learning any human language, acquiring any religion, feeling at home at any social structure—all of this depending on where they are born and how they are raised—in saying so also admitting that after a certain age the capability of relearning may decrease. Correspondingly the assumption here is that any cosmology can be acquired. And any cosmology can be lost, be delearnt; but hardly totally so.
However, there are two important modifications of the statement just made. Thus, there is no assumption to the effect that any combination of positions taken on the six cosmology dimensions constitutes a viable cosmology; a theme to be explored later. One reason for that, and this is the second point: there may in human beings, presumably in the human brain be some kind of deep programming, an even deeper code compatible with the code or the codes of civilizations, setting limits to what the human mind can accept as a viable civilization. Of course, this kind of thinking is very much inspired by Chomsky's path-breaking research on deep grammars of languages. Maybe there are also deep social grammars of civilizations somewhere hidden in the human mind? However, in line with the first point made in this paragraph there is no assumption that the human mind is the only factor constraining the type of combinations that could enter into a civilization.

The assumption, hence, is not that human beings are born completely tabula rasa, a totally clean slate on which anything can be engraved. There is some kind of deep programming, and the civilizational programming now to come, after birth, has to be compatible with that one. But the nature of this type of process is still for the future to understand, if ever.

The point to be explored here is how the code of a civilization is inculcated in a new inhabitant of that civilization to the point of defining basic patterns of that civilization as
normal and natural, as something not to be questioned, as the unspeakable, even the unthinkable, as that of which one is not conscious. To obtain a result of this magnitude that which impinges on the individual would have to satisfy a number of conditions. Four conditions are here stated as hypotheses that actually take on an axiomatic character:

AXIOM 1: The carriers of cosmology have to relate to basic human needs.
AXIOM 2: The carriers of cosmology have to be numerous.
AXIOM 3: The carriers of cosmology have to constitute a dense context in space and time.
AXIOM 4: The carriers of cosmology have to be isomorphic with each other to carry the same message.

In other words, we shall be looking for a context surrounding an individual; massive in the sense that it penetrates the individual at very basic points, in numerous ways, so to speak wherever he moves and at all times, of day and night, all the time giving the same implicit message, the code. At no point do we have to assume that the code is spoken, in the shape of a Word. All we have to assume is the capacity of human beings to acquire the unspoken code precisely because of the massive nature of the context of carriers.

Let us now make this very concrete by listing under the obvious headings of structure and culture twelve factors, six for structure and six for culture, that together should satisfy
the first axioms by relating to something basically human, being numerous and dense in space and time. If, then, in addition we could show that they are isomorphic a theory of the carriers of cosmology should have been, if not established, at least presented. The twelve carriers to be explored are:

<table>
<thead>
<tr>
<th>Structural context</th>
<th>Cultural context</th>
</tr>
</thead>
<tbody>
<tr>
<td>material code</td>
<td>symbolic code</td>
</tr>
<tr>
<td>food</td>
<td>language</td>
</tr>
<tr>
<td>sex</td>
<td>religion</td>
</tr>
<tr>
<td>habitat</td>
<td>ideology</td>
</tr>
<tr>
<td>technology</td>
<td>science</td>
</tr>
<tr>
<td>social structure</td>
<td>education</td>
</tr>
<tr>
<td>sport, leisure</td>
<td>art</td>
</tr>
</tbody>
</table>

The logic behind the table is as follows. Reasoning from basic human needs in the first column for structural context we would immediately arrive at **food**, **sex** and **habitat**—meaning clothes, shelter and the general setting of the human dwelling, be that a single farm, a village, a town, a city, a metropolis, a magalopolis—as I components of the context. The code embedded in these components will have to be significant. But the same certainly applies to **technology** in general, all those labor-saving devices that at least in principle makes it possible to reduce the burden of heavy, dirty and degrading work on human beings. And it also applies to the most important **social structures** in which human beings are embedded which I take to be **family**, **school** and **work** relating to
the first and fourth phase in the human life cycle, childhood and retirement for family, the second phase or education for school and the third phase, work, for work (the CEWR pattern).

And then, at the end, not only as an afterthought on this list but also as a social afterthought, comes leisure in general and sport in particular, not directly related to basic human needs but filling in the gaps, the empty time slots and areas in space. A forest not yet "developed" is an area of recreation; a holiday is a time slot that can be used for leisure activities—the two together can be used for that particular type of sport known as "orientation".

Looking at the right hand column in Table 1 the first item on the list is that aspect of the cultural context that more than anything else is supposed to make human beings human as distinct from animals: language. It is symbolic, verbal, whether impinging on the new inhabitant in oral or written form. The supreme vehicle of communication, language is a sufficient although not necessary condition for human, meaning symbolic, interaction.

But the second and the third items on the list, sacred ideology, also called religion and secular ideology, go beyond this: they give meaning to existence. As such they extend the density of the network of carriers beyond the life span of individuals. They imbue the vast open intervals before his birth and after his death
with significance, and something of the same can be said about science, not being that different from religion and ideology.

*Education* is the process by means of which language, religion, ideology and science are inculcated in the individual. All four of them being essential for the functioning of a society, whether primitive, traditional, modern or neo-modern they are also fundamental for the effective functioning of the individual in that society. The hidden code in education, for that reason, becomes significant; not only the verbal message.

And then, as an after thought on the list and also as a social after-thought comes *art*: the embroidery, the decoration of society. Having said this the statement could also be modified, even withdrawn, as art is so intimately related to language, religion and so on. But there is also an element of luxury in art, just as there is an element of luxury in leisure. They are less basic. When people are pushed against the wall, very much in search of the means of satisfying their basic needs, then food on the one hand and language on the other will take the upper hand. Once hardship is overcome, however, embroidery starts—maybe even before that.

Having said this a certain parallelism between the two columns in Table 1, beyond the very basic nature of the first two items imparted to the individual at the very beginning of life, mainly from the mother and beyond the common luxury aspect of the last item on the two lists, should be noted. Thus, there is a relationship.
between sex and religion, or as Freud would have said, between Id and Super-ego. And there is a relationship between habitat in the broad sense given to that term here, almost identical with way, or style, of life as it is embedded in the material culture surrounding us on the one hand, and ideology on the other. The relationship between science and technology is obvious, also as a relationship between supply and demand. And the relationship between family, school and work on the one hand and education on the other is also obvious: these three structures constitute the setting within which education takes place. Education then becomes a broader concept than schooling which can be defined simply as only taking place at school.

Having noted this parallelism it goes almost without saying but nevertheless should be mentioned: the distinction between structure and culture is certainly not a sharp one. There is structure in culture and culture in structure. Language connects the parties in communication in a structure. Even if these parties are not concrete, live human beings, oral language connects waves in the air and written language parts of a stone, of a piece of parchment or paper. Similarly religion, ideology, science, education and art constitute communities which obviously have social structures.

And correspondingly: there is symbolic content in food, sex and habitat, in technology, social structure and leisure; and that symbolic content comes very close to what we are interested in:
the hidden code. So the point made is essentially that the material is also symbolic and the symbolic also material. The purely symbolic with no material base can certainly be imagined in our thoughts, appearing as concepts and propositions. But the moment they materialize as terms and sentences in natural or artificial languages there is also a material structure that goes with it like the page on which the reader's eye is now dwelling.

Nevertheless the division is convenient, if not taken too seriously. So let us explore the relation to the deeper Axiom 4, the axiom of isomorphism. Is there not only a hidden message, but the same hidden message? An exploration of this calls for a considerable amount of work having twelve carriers (or as sociologists would say, institutions), six dimensions of civilizations, and six civilizations. There are all together \((6+6) \times 6 \times 6\) jobs to be done, or a total of 432 explorations. A concrete inhabitant of one civilization will only be exposed to \((6+6) \times 6\) of these, meaning 72, but that is already quite a high number. If the same basic theme can be found in all of them, not only along one of the dimensions in that civilization then we might surmise that after some years of life in that context the message comes through, "through" in the sense that it reaches beneath the conscious layers of the mind, into subconsciousness or even unconsciousness and becomes sufficiently firmly engraved to constitute an identity.
To carry out all 432 jobs is certainly beyond the range and the reach of this book although some will be done in the twelve sections dealing with the twelve carriers. In most cases that will be done by contrasting occidental civilization in expansion with its negation, meaning by that all the others, not only occidental in contraction, but not wrapped into one since there is no such thing. Put differently: for a given carrier, and for one particular civilization (but also exploring its negations) there will be an effort to show how the basic civilizational themes are carried by the carrier, on all six dimensions.

But in this introductory chapter another approach will be taken. Instead of focussing on one carrier we shall focus on one dimension, and we have chosen *time* as that single dimension. We shall then pursue the theme of time through all twelve carriers, exploring to what extent the time code of occidental civilization in expansion can be found in all carriers, contrasting that exploration with the negation of that particular civilization. The assumption, then, is that occidental, expansionist time structure can be recognized as a process of building up to a *crisis*, climax, and then a plateau is reached with relaxation, *catharsis*, all the time with the Damocles Sword that it might all go terribly wrong and end with *apocalypse*. Time has a beginning and an end: in-between the two there is *drama*. Correspondingly, the negation of this would give a time code that is more relaxed, oscillating from eternity to eternity, with no clear beginning, no clear climax, no clear
ending. Do we find this across the board, so to speak, in the twelve carriers?

To start with food: let us contrast Western and Chinese cooking. What is now the classical French meal builds up through light hors d'oeuvres through a fish dish with a light white wine to a climax of a heavy meat dish with correspondingly heavy red wine, then relaxes with cheese and dessert, and finally with coffee and profiteroles. The basic point is not only the climax, but also the irreversibility: it would make no sense whatsoever, bordering on a crime if not against nature at least against civilization to consume this meal in the opposite order.