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## Cybernetics and Ghosts

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It all began with the first storyteller of the tribe. Men were already exchanging articulate sounds, referring to the practical needs of their daily lives. Dialogue was already in existence, and so were the rules that it was forced to follow. This was the life of the tribe, a very complex set of rules on which every action and every situation had to be based. The number of words was limited, and, faced with the multiform world and its countless things, men defended themselves by inventing a finite number of sounds combined in various ways. Modes of behavior, customs, and gestures too were what they were and none other, constantly re-

peated while harvesting coconuts or scavenging for wild roots, while hunting lions or buffalo, marrying in order to create new bonds of relationship outside the clan, or at the first moments of life, or at death. And the more limited were the choices of phrase or behavior, the more complex the rules of language or custom were forced to become in order to master an ever-increasing variety of situations. The extreme poverty of ideas about the world then available to man was matched by a detailed, all-embracing code of rules.

The storyteller began to put forth words, not because he thought others might reply with other, predictable words, but to test the extent to which words could fit with one another, could give birth to one another, in order to extract an explanation of the world from the thread of every possible spoken narrative, and from the arabesque that nouns and verbs, subjects and predicates performed as they unfolded from one another. The figures available to the storyteller were very few: the jaguar, the coyote, the toucan, the piranha; or else father and son, brother-in-law and uncle, wife and mother and sister and mother-in-law. The actions these figures could perform were likewise rather limited: they could be born, die, copulate, sleep, fish, hunt, climb trees, dig burrows, eat and defecate, smoke vegetable fibers, make prohibitions, transgress them, steal or give away fruit or other things-things that were also classified in a limited catalogue. The storyteller explored the possibilities implied in his own language by combining and changing the permutations of the figures and the actions, and of the objects on which these actions could be brought to bear. What emerged were stories, straight-

forward constructions that always contained correspondences or contraries-the sky and the earth, fire and water, animals that flew and those that dug burrows-and each term had its array of attributes and a repertoire of its own. The telling of stories allowed certain relationships among the various elements and not others, and things could happen in a certain order and not in others: prohibition had to come before transgression, punishment after transgression, the gift of magic objects before the trial of courage. The immobile world that surrounded tribal man, strewn with signs of the fleeting correspondences between words and things, came to life in the voice of the storyteller, spun out into the flow of a spoken narrative within which each word acquired new values and transmitted them to the ideas and images they defined. Every animal, every object, every relationship took on beneficial or malign powers that came to be called magical powers but should, rather, have been called narrative powers, potentialities contained in the word, in its ability to link itself to other words on the plane of discourse.

Primitive oral narrative, like the folk tale that has been handed down almost to the present day, is modeled on fixed structures, on, we might almost say, prefabricated elements-elements, however, that allow of an enormous number of combinations. Vladimir Propp, in the course of his studies of Russian folk tales, came to the conclusion that all such tales were like variants of a single tale, and could be broken down into a limited number of narrative functions. Forty years later Claude Lévi-Strauss, working on the myths of the Indians of Brazil, saw these as a system of logical operations be-

tween permutable terms, so that they could be studied according to the mathematical processes of combinatorial analysis.

Even if the folk imagination is therefore not boundless like the ocean, there is no reason to think of it as being like a water tank of small capacity. On an equal level of civilization, the operations of narrative, like those of mathematics, cannot differ all that much from one people to another, but what can be constructed on the basis of these elementary processes can present unlimited combinations, permutations, and transformations.

Is this true only of oral narrative traditions? Or can it be maintained of literature in all its variety of forms and complexities? As early as the 1920s, the Russian Formalists began to make modern stories and novels the object of their analysis, breaking down their complex structures into functional segments. In France today the semiological school of Roland Barthes, having sharpened its knives on the structures of advertising or of women's fashion magazines, is at last turning its attention to literature; the eighth issue of the magazine *Communications* was devoted to the structural analysis of the short story. Naturally enough, the material that lends itself best to this kind of treatment is still to be found in the various forms of popular fiction. If the Russians studied the Sherlock Holmes stories, today it is James Bond who provides the structuralists with their most apt exemplars.

But this is merely the first step in the grammar and syntax of narrative fiction. The combinatorial play of

narrative possibilities soon passes beyond the level of content to touch upon the relationship of the narrator to the material related and to the reader: and this brings us to the toughest set of problems facing contemporary fiction. It is no coincidence that the researches of the French structuralists go hand in hand (and sometimes coexist in the same person) with the creative work of the "Tel Quel" group. For the latter-and here I am paraphrasing statements by one of their authorized interpreters-writing consists no longer in narrating but in saying that one is narrating, and what one says becomes identified with the very act of saying. The psychological person is replaced by a linguistic or even a grammatical person, defined solely by his place in the discourse. These formal repercussions of a literature at the second or third degree, such as occurred in France with the *nouveau roman* of ten years ago, for which another of its exponents suggested the word "scripturalism," can be traced back to combinations of a certain number of logico-linguistic (or better, syntactical-rhetorical) operations, in such a way as to be reducible to formulas that are the more general as they become less complex.

I will not go into technical details on which I could only be an unauthorized and rather unreliable commentator. My intention here is merely to sum up the situation, to make connections between a number of books I have recently read, and to put these in the context of a few general reflections. In the particular way today's culture looks at the world, one tendency is emerging

from several directions at once. The world in its various aspects is increasingly looked upon as *discrete* rather than *continuous*. I am using the term "discrete" in the sense it bears in mathematics, a discrete quantity being one made up of separate parts. Thought, which until the other day appeared to us as something fluid, evoking linear images such as a flowing river or an unwinding thread, or else gaseous images such as a kind of vaporous cloud-to the point where it was sometimes called "spirit" (in the sense of "breath")-we now tend to think of as a series of discontinuous states, of combinations of impulses acting on a finite (though enormous) number of sensory and motor organs. Electronic brains, even if they are still far from producing all the functions of the human brain, are nonetheless capable of providing us with a convincing theoretical model for the most complex processes of our memory, our mental associations, our imagination, our conscience. Shannon, Weiner, von Neumann, and Turing have radically altered our image of our mental processes. In the place of the ever-changing cloud that we carried in our heads until the other day, the condensing and dispersal of which we attempted to understand by describing impalpable psychological states and shadowy landscapes of the soul – in the place of all this we now feel the rapid passage of signals on the intricate circuits that connect the relays, the diodes, the transistors with which our skulls are crammed. Just as no chess player will ever live long enough to exhaust all the combinations of possible moves for the thirty-two pieces on the chessboard, so we know (given the fact that our minds are chessboards with

hundreds of billions of pieces) that not even in a lifetime lasting as long as the universe would one ever manage to make all possible plays. But we also know that all these are implicit in the overall code of mental plays, according to the rules by which each of us, from one moment to the next, formulates his thoughts, swift or sluggish, cloudy or crystalline as they may be.

I might also say that what is finite and numerically calculable is superseding the indeterminateness of ideas that cannot be subjected to measurement and delimitation; but this formulation runs the risk of giving an oversimplified notion of how things stand. In fact, the very opposite is true: every analytical process, every division into parts, tends to provide an image of the world that is ever more complicated, just as Zeno of Elea, by refusing to accept space as continuous, ended up by separating Achilles from the tortoise by an infinite number of intermediate points. But mathematical complexity can be digested instantly by electronic brains. Their abacus of only two numerals permits them to make instantaneous calculations of a complexity unthinkable for human brains. They have only to count on two fingers to bring into play incredibly rapid matrices of astronomical sums. One of the most arduous intellectual efforts of the Middle Ages has only now become entirely real: I refer to the Catalan monk Raymond Lully and his *ars combinatoria*.

The process going on today is the triumph of discontinuity, divisibility, and combination over all that is flux, or a series of minute nuances following one upon the other. The nineteenth century, from Hegel to Dar-

win, saw the triumph of historical continuity and biological continuity as they healed all the fractures of dialectical antitheses and genetic mutations. Today this perspective is radically altered. In history we no longer follow the course of a spirit immanent in the events of the world, but the curves of statistical diagrams, and historical research is leaning more and more toward mathematics. And as for biology, Watson and Crick have shown us how the transmission of the characteristics of the species consists in the duplication of a certain number of spiral-shaped molecules formed from a certain number of acids and bases. In other words, the endless variety of living forms can be reduced to the combination of certain finite quantities. Here again, it is information theory that imposes its patterns. The processes that appeared most resistant to a formulation in terms of number, to a quantitative description, are not translated into mathematical patterns.

Born and raised on quite different terrain, structural linguistics tends to appear in terms of a play of contraries every bit as simple as information theory. And linguists, too, have begun to talk in terms of codes and messages, to attempt to establish the entropy of language on all levels, including that of literature.

Mankind is beginning to understand how to dismantle and reassemble the most complex and unpredictable of all its machines: language. Today's world is far richer in words and concepts and signs than the world that surrounded primitive man, and the uses of the various levels of language are a great deal more complex. Using transformational mathematical patterns, the

American school led by Chomsky is exploring the deep structure of language, lying at the roots of the logical processes that may constitute no longer a historical characteristic of man, but a biological one. And extreme simplification of logical formulas, on the other hand, is used by the French school of structural semantics headed by A. J. Greimas. This school analyzes the narrative quality of all discourse, which may be reduced to a ratio between what they call *actants*.

After a gap of almost thirty years, a "Neo-Formalist" school has been reborn in the Soviet Union, employing the results of cybernetic research and structural semiology for the analysis of literature. Headed by a mathematician, Kholmogorov, this school carries out studies of a **highly** academic scientific nature based on the calculation of probabilities and the quantity of information contained in poems.

A further encounter between mathematics and literature is taking place in France, under the banner of hoaxing and practical joking. This is the Ouvroir de Litterature Potentielle (Oulipo), founded by Raymond Queneau and a number of his mathematician friends. This almost clandestine group of ten people is an offshoot of the Collège de Pataphysique, the literary society founded in memory of Alfred Jarry as a kind of academy of intellectual scorn. Meanwhile, the researches of Oulipo into the mathematical structure of the sestina in the work of the Provençal troubadours and of Dante are no less austere than the studies of the Soviet cyberneticists. It should not be forgotten that Queneau is the author of a book called *Cent Mille Millions de poèmes*,

which purports to be not so much a book as the rudimentary model of a machine for making sonnets, each one different from the last.

Having laid down these procedures and entrusted a computer with the task of carrying out these operations, will we have a machine capable of replacing the poet and the author? Just as we already have machines that can read, machines that perform a linguistic analysis of literary texts, machines that make translations and summaries, will we also have machines capable of conceiving and composing poems and novels?

The interesting thing is not so much the question whether this problem is soluble in practice—because in any case it would not be worth the trouble of constructing such a complicated machine—as the theoretical possibility of it, which would give rise to a series of unusual conjectures. And I am not now thinking of a machine capable merely of "assembly-line" literary production, which would already be mechanical in itself. I am thinking of a writing machine that would bring to the page all those things that we are accustomed to consider as the most jealously guarded attributes of our psychological life, of our daily experience, our unpredictable changes of mood and inner relations, despairs and moments of illumination. What are these if not so many linguistic "fields," for which we might well succeed in establishing the vocabulary, grammar, syntax, and properties of permutation?

What would be the style of a literary automaton? I believe that its true vocation would be for classicism.

The test of a poetic-electronic machine would be its ability to produce traditional works, poems with closed metrical forms, novels that follow all the rules. In this sense the use so far made of machines by the literary avant-garde is still too human. Especially in Italy, the machine used in these experiments is an instrument of chance, of the destructuralization of form, of protest against every habitual logical connection. I would therefore say that it is still an entirely lyrical instrument, serving a typical human need: the production of disorder. The true literature machine will be one that itself feels the need to produce disorder, as a reaction against its preceding production of order: a machine that will produce avant-garde work to free its circuits when they are choked by too long a production of classicism. In fact, given that developments in cybernetics lean toward machines capable of learning, of changing their own programs, of developing their own sensibilities and their own needs, nothing prevents us from foreseeing a literature-machine that at a certain point feels unsatisfied with its own traditionalism and starts to propose new ways of writing, turning its own codes completely upside down. To gratify critics who look for similarities between things literary and things historical, sociological, or economic, the machine could correlate its own changes of style to the variations in certain statistical indices of production, or income, or military expenditure, or the distribution of decision-making powers. That indeed will be the literature that corresponds perfectly to a theoretical hypothesis: it will, at last, be *the literature*.

Now, some of you may wonder why I so gaily announce prospects that in most men of letters arouse tearful laments punctuated by cries of execration. The reason is that I have always known, more or less obscurely, that things stood this way, not the way they were commonly said to stand. Various aesthetic theories maintained that poetry was a matter of inspiration descending from I know not what lofty place, or welling up from I know not what great depths, or else pure intuition, or an otherwise not identified moment in the life of the spirit, or the Voice of the Times with which the Spirit of the World chooses to speak to the poet, or a reflection of social structures that by means of some unknown optical phenomenon is projected on the page, or a direct grasp on the psychology of the depths that enables us to ladle out images of the unconscious, both individual and collective; or at any rate something intuitive, immediate, authentic, and all-embracing that springs up who knows how, something equivalent and homologous to something else, and symbolic of it. But in these theories there always remained a void that no one knew how to fill, a zone of darkness between cause and effect: how does one arrive at the written page? By what route is the soul or history or society or the subconscious transformed into a series of black lines on a white page? Even the most outstanding theories of aesthetics were silent on this point. I felt like someone who, due to some misunderstanding, finds himself among people who are discussing business that is no business

of his. Literature as I knew it was a constant series of attempts to make one word stay put after another by following certain definite rules; or, more often, rules that were neither definite nor definable, but that might be extracted from a series of examples, or rules made up for the occasion-that is to say, derived from the rules followed by other writers. And in these operations the person "I," whether explicit or implicit, splits into a number of different figures: into an "I" who is writing and an "I" who is written, into an empirical "I" who looks over the shoulder of the "I" who is writing and into a mythical "I" who serves as a model for the "I" who is written. The "I" of the author is dissolved in the writing. The so-called personality of the writer exists within the very act of writing: it is the product and the instrument of the writing process. A writing machine that has been fed an instruction appropriate to the case could also devise an exact and unmistakable "personality" of an author, or else it could be adjusted in such a way as to evolve or change "personality" with each work it composes. Writers, as they have always been up to now, are already writing machines; or at least they are when things are going well. What Romantic terminology called genius or talent or inspiration or intuition is nothing other than finding the right road empirically, following one's nose, taking short cuts, whereas the machine would follow a systematic and conscientious route while being extremely rapid and multiple at the same time.

Once we have dismantled and reassembled the process of literary composition, the decisive moment of literary life will be that of reading. In this sense, even

though entrusted to machines, literature will continue to be a "place" of privilege within the human consciousness, a way of exercising the potentialities contained in the system of signs belonging to all societies at all times. The work will continue to be born, to be judged, to be destroyed or constantly renewed on contact with the eye of the reader. What will vanish is the figure of the author, that personage to whom we persist in attributing functions that do not belong to him, the author as an exhibitor of his own soul in the permanent Exhibition of Souls, the author as the exploiter of sensory and interpretive organs more receptive than the average.... The author: that anachronistic personage, the bearer of messages, the director of consciences, the giver of lectures to cultural bodies. The rite we are celebrating at this moment would be absurd if we were unable to give it the sense of a funeral service, seeing the author off to the Nether Regions and celebrating the constant resurrection of the work of literature; if we were unable to introduce into this meeting of ours something of the gaiety of those funeral feasts at which the ancients re-established their contact with living things.

And so the author vanishes-that spoiled child of ignorance-to give place to a more thoughtful person, a person who will know that the author is a machine, and will know how this machine works.

### III

At this point I think I have done enough to explain why it is with a clear conscience and without regrets that I state that my place could perfectly well be occupied

by a mechanical device. But I am sure that many of you will remain rather unconvinced by my explanation, finding that my attitude of oft-repeated abnegation, of renunciation of the writer's prerogatives out of the love of truth, must surely be wrong; and that under all this something else must be lurking. I already feel that you are searching for less flattering motives for my attitude. I have nothing against this sort of inquiry. Behind every idealistic position that we adopt we can find the nittygritty of practical interest, or, even more often, of some basic psychological motivation. Let us see what my psychological reaction is when I learn that writing is purely and simply a process of combination among given elements. Well, then, what I instinctively feel is a sense of relief, of security. The same sort of relief and sense of security that I feel every time I discover that a mess of vague and indeterminate lines turns out to be a precise geometric form; or every time I succeed in discerning a series of facts, and choices to be made out of a finite number of possibilities, in the otherwise shapeless avalanche of events. Faced with the vertigo of what is countless, unclassifiable, in a state of flux, I feel reassured by what is finite, "discrete," and reduced to a system. Why is this? Does my attitude contain a hidden element of fear of the unknown, of the wish to set limits to my world and crawl back into my shell? Thus my stance, which was intended to be provocative and even profane, allows of the suspicion that, on the contrary, it is dictated by some kind of intellectual agoraphobia, almost a form of exorcism to defend me from the whirlwinds that literature so constantly has to face.

Let us attempt a thesis contrary to the one I have

developed so far (this is always the best way to avoid getting trapped in the spiral of one's own thoughts). Did we say that literature is entirely involved with language, is merely the permutation of a restricted number of elements and functions? But is the tension in literature not continually striving to escape from this finite number? Does it not continually attempt to say something it cannot say, something that it does not know, and that no one could-ever know? A thing cannot be known when the words and concepts used to say it and think it have not yet been used in that position, not yet arranged in that order, with that meaning. The struggle of literature is in fact a struggle to escape from the confines of language; it stretches out from the utmost limits of what can be said; what stirs literature is the call and attraction of what is not in the dictionary.

The storyteller of the tribe puts together phrases and images: the younger son gets lost in the forest, he sees a light in the distance, he walks and walks; the fable unwinds from sentence to sentence, and where is it leading? To the point at which something not yet said, something as yet only darkly felt by presentiment, suddenly appears and seizes us and tears us to pieces, like the fangs of a man-eating witch. Through the forest of fairy tale the vibrancy of myth passes like a shudder of wind.

Myth is the hidden part of every story, the buried part, the region that is still unexplored because there are as yet no words to enable us to get there. The narrator's voice in the daily tribal assemblies is not enough to relate the myth. One needs special times and places, exclusive meetings; the words alone are not enough, and we need a whole series of signs with many meanings, which is

to say a rite. Myth is nourished by silence as well as by words. A silent myth makes its presence felt in secular narrative and everyday words; it is a language vacuum that draws words up into its vortex and bestows a form on fable.

But what is a language vacuum if not a vestige of taboo, of a ban on mentioning something, on pronouncing certain names, of a prohibition either present or ancient? Literature follows paths that flank and cross the barriers of prohibition, that lead to saying what could not be said, to an invention that is always a reinvention of words and stories that have been banished from the individual or collective memory. Therefore myth acts on fable as a repetitive force, obliging it to go back on its tracks even when it has set off in directions that appear to lead somewhere completely different.

The unconscious is the ocean of the unsayable, of what has been expelled from the land of language, removed as a result of ancient prohibitions. The unconscious speaks-in dreams, in verbal slips, in sudden associations-with borrowed words, stolen symbols, linguistic contraband, until literature redeems these territories and annexes them to the language of the waking world.

The power of modern literature lies in its willingness to give a voice to what has remained unexpressed in the social or individual unconscious: this is the gauntlet it throws down time and again. The more enlightened our houses are, the more their walls ooze ghosts. Dreams of progress and reason are haunted by nightmares. Shakespeare warns us that the triumph of the Renaissance did not lay the ghosts of the medieval world who

appear on the ramparts at Dunsinane or Elsinore. At the height of the Enlightenment, Sade and the Gothic novel appear. At one stroke Edgar Allan Poe initiates the literature of aestheticism and the literature of the masses, naming and liberating the ghosts that Puritan America trails in its wake. Lautréamont explodes the syntax of the imagination, expanding the visionary world of the Gothic novel to the proportions of a Last judgment. In automatic associations of words and images the Surrealists discover an objective rationale totally opposed to that of our intellectual logic. Is this the triumph of the irrational? Or is it the refusal to believe that the irrational exists, that anything in the world can be considered extraneous to the reason of things, even if something eludes the reasons determined by our historical condition, and also eludes limited and defensive so-called rationalism?

So here we are, carried off into an ideological landscape quite different from the one we thought we had decided to live in, there with the relays of diodes of electronic computers. But are we really all that far away?

#### IV

The relationship between combinatorial play and the unconscious in artistic activity lies at the heart of one of the most convincing aesthetic theories currently in circulation, a formula that draws upon both psychoanalysis and the practical experience of art and letters. We all know that in matters of literature and the arts Freud was a man of traditional tastes, and that in his

writings connected with aesthetics he did not give us any pointers worthy of his genius. It was a Freudian art historian, Ernst Kris, who first put forward Freud's study of word-play as the key to a possible aesthetics of psychoanalysis. Another gifted art historian, Ernst Gombrich, developed this notion in his essay on Freud and the psychology of art.

The pleasure of puns and feeble jokes is obtained by following the possibilities of permutation and transformation implicit in language. We start from the particular pleasure given by any combinatorial play, and at a certain point, out of the countless combinations of words with similar sounds, one becomes charged with special significance, causing laughter. What has happened is that the juxtaposition of concepts that we have stumbled across by chance unexpectedly unleashes a pre-conscious idea, an idea, that is, half buried in or erased from our consciousness, or maybe only held at arm's length or pushed aside, but powerful enough to appear in the consciousness if suggested not by any intention on our part, but by an objective process.

The processes of poetry and art, says Gombrich, are analogous to those of a play on words. It is the childish pleasure of the combinatorial game that leads the painter to try out arrangements of lines and colors, the poet to experiment with juxtapositions of words. At a certain moment things click into place, and one of the combinations obtained-through the combinatorial mechanism itself, independently of any search for meaning or effect on any other level-becomes charged with an unexpected meaning or unforeseen effect which the conscious mind would not have arrived at deliberately:

an unconscious meaning, in fact, or at least the premonition of an unconscious meaning.

So we see that the two routes followed by my argument have here come together. Literature is a combinatorial game that pursues the possibilities implicit in its own material, independent of the personality of the poet, but it is a game that at a certain point is invested with an unexpected meaning, a meaning that is not patent on the linguistic plane on which we were working but has slipped in from another level, activating something that on that second level is of great concern to the author or his society. The literature machine can perform all the permutations possible on a given material, but the poetic result will be the particular effect of one of these permutations on a man endowed with a consciousness and an unconscious, that is, an empirical and historical man. It will be the shock that occurs only if the writing machine is surrounded by the hidden ghosts of the individual and of his society.

To return to the storyteller of the tribe, he continues imperturbably to make his permutations of jaguars and toucans until the moment comes when one of his innocent little tales explodes into a terrible revelation: a myth, which must be recited in secret, and in a secret place.

V

I am aware that this conclusion of mine contradicts the most authoritative theories about the relationship between myth and fable.

Until now it has generally been said that the fable is a "profane" story, something that comes after myth, a corruption or vulgarization or secularization of it, or that fable and myth coexist and counterbalance each other as different functions of a single culture. The logic of my argument, however-until some more convincing new demonstration comes along to blow it sky high-leads to the conclusion that the making of fables precedes the making of myths. Mythic significance is something one comes across only if one persists in playing around with narrative functions.

Myth tends to crystallize instantly, to fall into set patterns, to pass from the phase of myth-making into that of ritual, and hence out of the hands of the narrator into those of the tribal institutions responsible for the preservation and celebration of myths. The tribal system of signs is arranged in relation to myth; a certain number of signs become taboo, and the "secular" storyteller can make no direct use of them. He goes on circling around them, inventing new developments in composition, until in the course of this methodical and objective labor he suddenly gets another flash of enlightenment from the unconscious and the forbidden. And this forces the tribe to change its set of signs once more.

Within this general context, the function of literature varies according to the situation. For long periods of time literature appears to work in favor of consecration, the confirmation of values, the acceptance of authority. But at a certain moment, something in the mechanism is triggered, and literature gives birth to a movement in the opposite direction, refusing to see

things and say things the way they have been seen and said until now.

This is the main theme of a book called *Le due tensioni* (*The Two Tensions*), which comprises the previously unpublished notes of Elio Vittorini (Milan: Il Saggiatore, 1967). According to Vittorini, literature until now has been too much the "accomplice of nature," that is, of the mistaken notion of an immutable nature, a Mother Nature, whereas its true value emerges only when it becomes a critic of the world and our way of looking at the world. In one chapter that may well state his definitive position, Vittorini seems to be starting from scratch on a study of the place of literature in human history. As soon as writing and books are born, he says, the human race is divided into a civilized part the part of the race that long ago took the step into the Neolithic Age-and another part (called savage) that got stuck in the Paleolithic, and in which the Neolithics could not even recognize their ancestors: a part of humanity that thinks that things have always been the way they are, just as they think that masters and servants have always existed. Written literature is born already laden with the task of consecration, of supporting the established order of things. This is a load that it discards extremely slowly, in the course of millennia, becoming in the process a private thing, enabling poets and writers to express their own personal troubles and raise them to the level of consciousness. Literature gets to this point, I would add, by means of combinatorial games that at a certain moment become charged with preconscious subject matter, and at last find a voice for these. And it is by this road to freedom opened up by literature that

men achieved the critical spirit, and transmitted it to collective thought and culture.

## VI

Concerning this double aspect of literature, here, toward the end of my little talk, it is relevant to mention an essay by the German poet and critic Hans Magnus Enzensberger, "Topological Structures in Modern Literature, " which I read in the Buenos Aires magazine Sur (May-June 1966). He reviews the numerous instances of labyrinthine narratives from ancient times up to Borges and Robbe-Grillet, or of narratives one inside another like Chinese boxes, and he asks himself the meaning of modern literature's insistence on these themes. He evokes the image of a world in which it is easy to lose oneself, to get disoriented—a world in which the effort of regaining one's orientation acquires a particular value, almost that of a training for survival. "Every orientation, " he writes, "presupposes a disorientation. Only someone who has experienced bewilderment can free himself of it. But these games of orientation are in turn games of disorientation. Therein lies their fascination and their risk. The labyrinth is made so that whoever enters it will stray and get lost. But the labyrinth also poses the visitor a challenge: that he reconstruct the plan of it and dissolve its power. If he succeeds, he will have destroyed the labyrinth; for one who has passed through it, no labyrinth exists." And Enzensberger concludes: "The moment a topological structure appears as a metaphysical structure the game loses its dialectical balance, and

literature turns into a means of demonstrating that the world is essentially impenetrable, that any communication is impossible. The labyrinth thus ceases to be a challenge to human intelligence and establishes itself as a facsimile of the world and of society."

Enzensberger's thesis can be applied to everything in literature and culture that today-after von Neumann-we see as a combinatorial mathematical game. The game can work as a challenge to understand the world or as a dissuasion from understanding it. Literature can work in a critical vein or to confirm things as they are and as we know them to be. The boundary is not always clearly marked, and I would say that on this score the spirit in which one reads is decisive: it is up to the reader to see to it that literature exerts its critical force, and this can occur independently of the author's intentions.

I think this is the meaning one might give to my most recent story, which comes at the end of my book *t zero*. In this story we see Alexandre Dumas taking his novel *The Count of Monte Cristo* from a supernovel that contains all possible variants of the life story of Edmond Dantès. In their dungeon Edmond Dantès and the Abbot Faria go over the plans for their escape and wonder which of the possible variants is the right one. The Abbot Faria digs tunnels to escape from the castle, but he always goes wrong and ends up in ever-deeper cells. On the basis of Faria's mistakes Dantès tries to draw a map of the castle. While Faria, by the sheer number of his attempts, comes close to achieving the perfect escape, Dantès moves toward imagining the perfect prison-

the one from which no escape is possible. His reasons are explained in the passage I shall now quote:

If I succeed in mentally constructing a fortress from which it is impossible to escape, this imagined fortress either will be the same as the real one-and in this case it is certain we shall never escape from here, but at least we will achieve the serenity of knowing we are here because we could be nowhere else-or it will be a fortress from which escape is even more impossible than from here-which would be a sign that here an opportunity of escape exists: we have only to identify the point where the imagined fortress does not coincide with the real one and then find it.

And that is the most optimistic finale that I have managed to give to my story, to my book, and also to this essay.