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The Book Is the Alien: On Certain and Uncertain Readings of Lem's "Solaris" (Le livre est l'extraterrestre: à propos de lectures certaines et incertaines du "Solaris" de Lem)

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**The Book is the Alien:
On Certain and Uncertain Readings of Lem's *Solaris***

1. Contemporary science describes a world that is neither a rational cosmos, nor a roiling cosmos, but something in between: a source of paradox, allowing for complementary, but contradictory, interpretations of humanity's relationship with non-human reality. The "classical" myth of the rational cosmos had shared with the prescientific myths underlying humanistic culture the conception that the human and natural realms were in some ways co-ordinated. Both worked according to intelligible, self-consistent, determining laws. In the system of modern atomic physics, however, scientists have succeeded, according to Planck, in purging science of determinism and "all anthropomorphic elements" (Arendt: 269). But as Heisenberg observed, in such a deanthropomorphized universe human beings always "confront themselves alone" (*ibid.*, p. 277). Since every answer they attain in their investigations into nature is a specific answer to a specific question, the sum of these answers allows the application of otherwise quite incompatible types of natural laws to one and the same physical event. Science's answers reflect the questions scientists are impelled to ask of nature; and thus anthropomorphism is reintroduced at the level of hypothesis formation that preselects the data to be studied. Beyond this, it remains extremely problematic whether the seemingly unbridgeable gulf between the languages of human culture and quantum physics' purely probabilistic and mathematical expressions of the universe will produce "an appropriate widening of the conceptual framework" to resolve all the present paradoxes and disharmonies in a new "logical frame," as Niels Bohr hoped (see Arendt: 277)—and as radical holistic physicists like Fritjof Capra have proposed—or whether the gulf is inherent in the new physics. The conclusions of the 20th century's science have thus introduced an alienation from the cosmos more radical than any previously conceived in human culture. Whether this alienation is the beginning of a dialectical process of conceptual synthesis or an enormous stalemate, we cannot know. We cannot summarily reject either historical hypothesis.

SF characteristically transforms scientific and technological ideas into metaphors, by which those ideas are given cultural relevance. It works very much like historical fiction in this respect. It takes a body of extratextual propositions believed to be true, with no inherent ethical-cultural significance, and endows it with meaning by incorporating it in fictional stories about characters representing typical values of the author's culture. Although the historical facts limit what can happen in historical fiction (in the realistic mode, at least), these facts are embedded among purely fictional facts to imply a metaphorical meaning beyond historiography's customary function of describing "what really happened." In historical fiction, history is no longer true history, even if it is

in fact true. It is metaphorical, and hence "more than true"; it is culturally significant.

The same can be said, *mutatis mutandis*, about SF. Furthermore, in works of artistic interest, we also expect the fictional action and the process of reading to correspond analogically to the fiction's metaphorized scientific ideas. Reading the fiction should act as a metaphor for the process of cognition implied by the science. In general, it is futile to look for this sort of harmony of scientific ideas and aesthetic design in contemporary SF. Several commentators have noted that SF writers usually adhere to the paradigms of romance (cf. Rose: 7; Frye: 49). The paradigmatic forms of SF are usually more archaic, indeed prescientific, than much of so-called mainstream fiction.

One book is an exception, however: Stanislaw Lem's *Solaris*, one of the philosophically most sophisticated works of SF. Lem has often dismissed the suggestion that SF should be judged by criteria different from the rest of literature.¹ Yet most of *Solaris*' commentators have discussed the novel as a work of "meta-SF," a virtuoso example of generic criticism and the exploration of the possibilities inherent in the genre.² In these pages, I will consider *Solaris* somewhat differently, as an elaborate metaphor for the cultural and philosophical implications of scientific uncertainty for Western culture.

2. *Solaris* invites several parallel, and even contradictory, interpretations. It can be read as a Swiftian satire, a tragic love story, a Kafkaesque existentialist parable, a metafictional parody of hermeneutics, a Cervantean ironic romance, and a Kantian meditation on the nature of human consciousness. But none of these readings is completely satisfactory, and Lem intended it to be so. The simultaneously incompatible and mutually reinforcing readings make the process of interpreting the text a metaphor for the scientific problem of articulating a manifestly paradoxical natural universe.

This inbuilt indeterminacy notwithstanding, most of *Solaris*' commentators agree on a common reading of the novel's action and point. According to this reading, *Solaris* is about the problem of whether human beings will ever be able to make contact with a truly alien intelligence, and thus transcend the anthropomorphism and anthropocentrism apparently inherent in human cognition. In the novel, a century of attempts by the most advanced human scientists to understand the mysterious, sentient ocean-planet, Solaris, has produced only a chain-reaction of paradoxes. The instruments that the early Solarists take to the planet to measure certain phenomena return to them physically transformed by Solaris; the researchers thus cannot know what it is they have measured (*Solaris*, 2:27). The methodological paradoxes produced by the exploration of Solaris, which are extrapolations of classical scientific method, come to occupy most of the Solarists' time. The inscrutable and opaque planet gradually becomes a macrocosmic mirror of the human image. The Solarists' obsession with the mysteries of Solaris dissolves into the broader struggle to understand human reflection and identity. When it appears impossible that human scientists will ever break out of the enclosure of human consciousness, their space exploration appears to be a religious quest for "Contact," mystical union with a godlike intelligence that might reveal the purpose of the "mission of Mankind" in the universe, and redeem it from cosmic alienation.

By the time the narrator, the Solarist psychologist Kris Kelvin, arrives on Solaris Station, hovering a mile above the planet's surface, the theoretical paradoxes of Solaristics have taken on an unnerving solidity. The Solarist protagonists are "visited" by human simulacra, which appear to be incarnations of the scientists' repressed erotic and guilt fixations. We cannot know the purpose of these Visitors, as the Solarists euphemistically call them, or how they arrived on the space station. They merely appear when their hosts awaken after a dream-filled sleep. They may be gifts from the planet, or instruments of exploration, or merely augmentations of the scientists' unconscious thoughts. The Visitors disorient the scientists completely by displaying the quintessence of each man's subjectivity in the form of an inscrutable object. Each Solarist deals with his confusion in a different way. Kelvin's friend and teacher, Gibarian, unable to contemplate "murdering" the quasi-human beings, kills himself instead; the pedantic physicist Sartorius locks himself in his laboratory, emerging only after he has invented a device to annihilate the Visitors; the cyberneticist Snow³ takes to drink, irony, and self-pity—in fear and trembling. Only Kelvin proves open and "innocent" enough to attempt to accommodate the presence of his Visitor, a replica of his young wife Rheya, for whose suicide ten years earlier he has carried a deep sense of guilt.

At first, the Visitors are indestructible, and appear to be material copies of an ideal template. When they are ejected into space, new versions of them reappear on the station later. They know only what their hosts remember, and for obscure reasons they must stay within sight of those hosts. In time, however, they become increasingly autonomous, and seem to develop human consciousness. In the central love story between Kelvin and Rheya, Rheya appears to become even more human than the true human Solarists—by willingly accepting her death in order to free her lover from his grotesque attachment to her.

The transformation in the novel occurs with Kelvin's disillusionment: his recognition that Rheya is not a human being, and that his inappropriate loyalty to her, which was motivated by earthly guilt and love, has kept him from the work to which he had devoted his life: encountering the Other—the planet Solaris. Kelvin is compelled to recognize that in a world defined by the encounter of the human with a non-human intelligence, the most noble human values may be only quixotic illusions. His awareness of his diminution comes in stages, with great suffering. First, he must renounce his romantic faith. At the end of the novel, still mourning Rheya, he prepares to return to Earth "a sadder and wiser man"; "I shall never again give myself completely to anything or anybody...and this Kelvin will be no less worthy a man than the Kelvin of the past, who was prepared for anything in the name of the ambitious project called Contact. Nor will any man have the right to judge me" (14:206).

Like all the positive assertions made by the protagonists of the novel, this self-diminution quickly turns ambiguous. In order not to return to Earth without having ever physically touched-down on the planet, Kelvin descends to the surface before he leaves. There he plays the game of extending his hand to the ocean, which responds by enveloping it, without actually touching it. Although no physical contact is made, Kelvin is deeply affected, and feels "somehow changed."

I had never felt the gigantic presence so strongly, or its powerful changeless silence, or the secret forces that gave the waves their regular rise and fall. I sat unseeing and sank into a universe of inertia, glided down an invisible slope, and identified myself with the dumb, fluid colossus; it was as if I had forgiven it everything, without the slightest effort or thought. (14:210)

Kelvin does not leave after all. He allows himself to believe in "a chance, perhaps an infinitesimal one, perhaps only imaginary" (14:211), that some new manifestation of contact or shared creation will occur. We surmise his egoistic projections are spent: "I hoped for nothing, and yet lived in expectation. I did not know what achievements, what mockery, even what tortures awaited me. I knew nothing and persisted in the faith that the time of cruel miracles was not past" (14:211).

Most critics agree that in his concluding words Kelvin has attained a new state of alertness and awareness. His formerly aggressive drive for Contact has given way to a more serene receptivity. Stephen J. Potts (p. 51) believes that at this point Kelvin "has become... an empty slate ready to receive the universe on its own terms." For Mark Rose, Kelvin finally comes to the recognition that the Other does in fact exist separately from himself: "he knows that the ocean is real and he is willing to commit himself to whatever the future may bring" (p. 95). For Darko Suvin, "Kelvin wins through to a painfully gained, provisional and relative faith in an 'imperfect god'" (p. 220). Even David Ketterer, who argues persuasively for the hermetic closure of *Solaris*, writes that "Kelvin does learn something of man's limits: they are circumscribed by the reality of Solaris" (p. 197).

The gist of *Solaris* in this reading is that human consciousness could not proceed to a new cognition as long as it was trapped in its own human-centered, egocentric conception of reason. Only a cathartic encounter with an alien reality insistent and intrusive enough to violate the membrane of self-sufficient human self-awareness could dissolve the scientists' repressed emotional fixations and initiate a new receptivity to the universe outside the self—a knowledge that something Other not only exists, but can transform the self. This reading (which I have admittedly fleshed out a bit) involves not so much a paradox as a hidden contradiction. If we are to believe that Kelvin is actually purged of illusions at the end of the tale, we must accept the reality of Solaris as a determinate Other, whose "not-humanness" defines Kelvin for himself, and the reader. But how did Kelvin come by this new ability to see himself objectively, if human cognition is *a priori* anthropomorphic? To see himself determinately—that is, "to learn something of man's limits," as Ketterer writes—Kelvin must have been able to see himself as a "not-human," an ability that he could only have learned from contact with Solaris. The critics who hold that Kelvin arrives at a new state of humbled and purified cognition consequently also approve the quest for "Holy Contact," since only the acquisition of the Other's point of view could have both dispelled Kelvin's illusions *and* given him knowledge of himself. If this is true, then Kelvin has redeemed the romantic impulses of Solaristics by proving their truths. His identification with the alien might be read as the necessary inversion that concludes the successful religious quest, just as the discovery of the Grail was to end in translation and absorption into God.

Before coming to Solaris Station, Kelvin's contribution to Solaristics had been the discovery of possible correlations between encephalographic patterns indicative of certain human emotions with formally similar patterns taken from Solaris (11:182-83). To put it another way, Kelvin had discovered what could be construed as "personal" and emotional activity in the planet. At the conclusion of the novel, the situation is reversed. He substitutes for the personification of the alien his own self-identification with the alien—i.e., alienation from the human. The quasi-religious quest for Contact, rather than being an illusion to keep humanity from despair, apparently paid off after all: miracles have occurred, even if they are cruel ones, and Man has placed one foot beyond his human limits, albeit into a mysterious and undefined dimension. It is an apocalypse, of sorts. Therefore, man's knowledge is not limited to himself and his creations.

But is this reading valid? Is Kelvin really as empty at the end of the novel as Potts claims, "ready to accept the universe on its own terms"? Does not the universe include Kelvin, and the human species, among its terms? Doesn't Kelvin's identification with the alien leave us once again with no way of determining where the human ends and the Other begins?

Only Patrick Parrinder has, to my knowledge, challenged the prevailing idea that Kelvin ultimately succeeds in breaking out of the anthropocentric hall of mirrors to the doorway of new cognition. For Parrinder, Kelvin's decision to stay by the alien planet parallels Gulliver's infatuation with the rational horses in his last journey. The novel's ending, Parrinder writes, shows

the fate of a man who has abandoned humanity for the alien, and so is tragic but also absurd, a symbolic gesture holding at bay the recognition of despair. Kelvin has followed through the logic of the scientist-explorer in the liberal-humanist tradition, until he is finally a victim of an isolating romantic obsession. (p. 54)

To carry Parrinder's reading a step further: Kelvin deserts humanity in order not to face the despair of knowing that his species is a singularity in the cosmos, and that reason, desire, love, and truth—even the ideas of self and other—are merely tautologies in the isolated, self-reinforcing system of the "human."

If, as Kelvin tells us, he is completely committed to awaiting new interactions with Solaris, are we to admire his renewed spirit of sacrifice and dedication in the cause of Contact, or to suspect it? How are we to judge what we read? To choose either interpretation, Kelvin as Grail Knight or as Gulliver, we must have a standard against which to compare each interpretation—and that is precisely what we cannot have in *Solaris*, just as the Solarists have no reality against which to compare humanity and the ocean-planet.

Solaris's alienness is so threatening to the Solarists' scientific egoism that none of their conscious hypotheses regarding the planet can be taken at face value. Still, there is evidence in the novel to support the idea that some mysterious and significant contact has been achieved between Kelvin and the planet. There are moments in the action not interpreted by the protagonists (particularly having to do with Rheya, and with Kelvin's dreams), and these bear hints of a special, non-rational relationship between Solaris and Kelvin that could easily go by the name of Contact. In the first place, Rheya appears to be the co-

operative creation of Kelvin and Solaris: if she is a projection, she is a projection of both, since her form is produced by Kelvin's unconscious memory and her substance is produced by the planet. We cannot know exactly what the Visitors' purpose is, but Rheya believes she may be "an instrument" (4:51) of some sort (perhaps analogous to the Solarists' instruments transformed by Solaris in the early stages of exploration). On the assumption that Solaris may have "read off" the Visitors from the dreams of the sleeping scientists after they had begun bombarding the planet with x-rays at night (6:82), the Solarists encode some of Kelvin's waking thoughts and broadcast these by day, to "inform" Solaris of how much suffering the Visitors are causing. The idea is farfetched, and it seems to be a way of distracting Kelvin's attention from Sartorius and Snow's attempt to invent a neutrino-annihilator to be used against the Visitors—a device Kelvin would like to sabotage, to prevent Rheya's destruction. As Kelvin's encephalographic patterns are broadcast, however, he becomes increasingly sensitive to direct intuitions of "an invisible presence which has taken possession of the Station" (12:186). Moreover, the annihilated Visitors do not reappear after the emissions have been completed, implying that the message must have "gone through."

Most suggestive of all is Kelvin's weird "dream" in Chapter 12 ("The Dreams"). The language of the dream passage is worth close attention, but here I can only note that the entire dream can be read as if it were being narrated by either Kelvin or Solaris, which is for a while humanly "informed" by Kelvin's thoughts. To make sense of this dream, for which Kelvin provides no commentary, we are invited to conclude that Kelvin and Solaris penetrate each other to create a being—"a woman?" (12:187), doubtless Rheya—and then to experience the excruciating suffering of a mysterious dissection. At the dream's conclusion, the narrator observes his/its suffering as "a mountain of grief visible in the dazzling light of another world" (*ibid.*). Whoever the observer here might be, this indeterminate process of incarnation implicates both Kelvin and Solaris—as if each were perceiving it through the other in some inarticulable way.

If these are moments of direct contact bypassing the mediations of egocentric rationality, then we can conclude that some exchange actually does occur between the human and the alien, the self and the Other. Snow speculates that through the Visitors Solaris may be learning about mortality, and the increasing human autonomy of the Visitors may serve just this purpose. ("It implores us to help it die with every one of its creations" [12:192], he tells Kelvin.) Since Solaris's power to stabilize matter extends from massless neutrinos to its own orbit around two suns, it is possible that the planet experiences the pain of death for the first time through the annihilation of the Visitors. (This speculation is justified also by the "piercing scream which came from no human throat" [12:190], probably the death-agony of Sartorius's Visitor, that awakens Kelvin one night.) Through Rheya specifically, Solaris may have learned the ethical and affective essence of the human, the ability to transform necessary death into liberating self-sacrifice for the sake of loved ones. Kelvin, in turn, appears to loosen his clutch on his narcissistic self-projections, and comes to identify himself with the planet and to "forgive" it, attaining an almost super-human patience.

3. These are suggestive passages, and they resist interpretation as anything other than moments of non-rational, non-conscious exchange—true moments of contact so surpassing the common run of human communication that they could well be mistaken for religious inspiration. Still, the fundamental indeterminacy of *Solaris* will not let us accept any interpretation based only on what Kelvin, our sole informant, tells us. Once the question is raised whether we can “see” something that is not a projection of human consciousness, we cannot make a purely rational or objective determination one way or the other. Readers of *Solaris* are Solarists, too—the phenomena of the novel’s action reach us in the language of a Solarist and psychologist whose own reflections on how hypotheses are generated anticipate and subsume most of the hypotheses the reader might come up with independently. Just as the indeterminacy of *Solaris* deflects its explorers back into doubt about their methods of interpreting phenomena, the indeterminacy of the evidence in *Solaris* deflects us back into doubt about our own methods of reading.

Lem has constructed *Solaris* in such a way that every apparently significant element in the text corresponds to other significant elements, creating a hall of mirrors with no windows from which to observe some privileged non-corresponding structure of things. Rose and Ketterer have demonstrated in their readings of the novel that symbolic images reflect one another to a suffocating degree; in *Solaris*, Ketterer writes (evoking Heisenberg), “man confronts only analogues of his own image” (p. 201). Allusions to the literature of illusion extend this doubling from the internal action of the tale to the status of the book and reader in the world outside the text. For example, Lem requires us to accept Romanticism’s favorite devices of doubling and self-reflection simply to follow the manifestly realistic plot. Ghosts, mirrors, dreams, unconscious memories and impulses, a web of symbolic correspondences, eerily enclosed spaces and sublime voids all function as empirically concrete “objects” in a scientific mystery. Names appear to be allusive, and perhaps even allegorical: Kelvin, Rheya,⁴ Sartorius, Snaut, Andre Berton, Fechner, the designations of the spaceships (*Prometheus*, *Ulysses*, *Laocöon*, *Alaric*), even *Solaris* itself. But since we cannot be sure exactly how these allusions work or whether they all work the same way, or even whether they are arbitrary red-herrings just imitating allusions,⁵ the extratextual things to which they refer also lose their solidity, and are absorbed into the book’s world of indeterminate elements. We know only that they correspond. We do not know what these correspondences mean.

To create even broader ironies, Lem invokes a whole library of romance, satire, and myth: Don Quixote, Gulliver, Poe’s phantom lovers, the Grail Quest, the tale of Eros and Psyche, Echo and Narcissus, the Passion and the Creation. Since the manifest problem of the Solarists and readers is how to determine whether human consciousness can know anything other than itself, each of the myths and stories invoked in the book becomes a version of the same problem—and thus each is transformed into a version of *Solaris*. Again, we are shown Western culture’s problems and the creations responding to them reflecting one another. But what do these reflections signify? The infinite play of mutually reflecting projections, or the appropriation of transcendental knowledge?

The problem is raised vividly, never to be dispelled, when Kelvin comes

upon the dead Gibarian's Visitor, a gigantic African woman, who reclines soft and warm and alive next to Gibarian's corpse in the space station's freezer. Thrown into a panic, Kelvin wonders whether what he is seeing is reality or a hallucination. He tries to concoct a controlled experiment to test his sanity, but he knows that his conclusions can prove nothing. A deranged mind's illusions of certainty are indistinguishable from a sane mind's knowledge. Consciousness can never make an object out of itself for objective observation. Kelvin lands on an apparent solution: he sets up a complicated problem of calculation, which he then matches with the precalculated conclusions of an independently orbiting satellite-computer, on the assumption that he would not be able to match the computer's speed even in a hallucination. When the numbers mesh, he believes he has demonstrated the reality of the Visitors. It is a persuasive tactic, but once the seed of doubt has taken root it cannot be pulled up. Could not Kelvin have dreamed the satellite's results as well? Who can determine the limits of the mind's power of projection? Never in reading *Solaris* can we establish a hierarchy of phenomena or significations stable enough for us to interpret events unambiguously. We can never tell what is the "real" structure of events and what are the deviations. None of the protagonists' conscious assertions is above suspicion. The Solarists are desperate men. They are faced not only with an alien reality resistant to their reason, but also, in the Visitors, with their most familiar and unattractive selves out in the light of day.

In the final analysis, we have no way of determining whether *Solaris* is not the collective hallucination of the whole human species, like the "monsters of the id" in the film *Forbidden Planet*. Or, inversely, whether the human species is not the hallucination of the dreaming "ocean-yogi" *Solaris*, corresponding to the Hindu notion of *maya*. We cannot tell what is the referent and what is the referring term. Our inability to determine Kelvin's fate one way or another is part of the necessary irony of the epistemological problem created by Lem's alien. No definition of the Other (and, of course, of the self) is possible without reference to a standard that transcends both the self and the Other. But how can such a thing be conceived "scientifically"? In *Solaris*'s maze of correspondences, enclosures, and reflections, what we and the Solarists lack is something that would be non-corresponding, a "meta-alien" structure that would not mean anything: something as determinately different from the dialectical unity of self and Other as self and Other are from each other. But, of course, that is what neither science nor the reader can have.

4. In the conclusion of his book *Fantastyka i futurologia* (Science Fiction and Futurology)⁶ Lem discusses the techniques he believes are appropriate methods for expressing authentically the semantic problems of scientific-technological culture in contemporary fiction. For Lem, modern literature evolves through the conflict between the ruling cultural codes of empiricism and the writer's need to have a coherent set of normative rules of social conduct upon which, or against which, to base artistic norms. Western culture's dominant empiricism is in fact a set of anti-codes. "For empiricism," Lem writes, "the only inviolable barrier is the totality of attributes of nature it calls the body of natural laws. Thus, observing the human world from an empirical standpoint necessarily leads to the complete relativization of cultural norms everywhere where they impose 'unfounded' imperatives and restraints" ("Metafantasia": 62).

Traditionally, art worked with structures derived from mythical-religious concepts that antedated scientific rationalism. These concepts reinforced certain social codes by presenting the culture and its axioms as sacred and unquestionable. The realm of human decisions was viewed as part of a cosmic order and was given value because of its cosmic resonances. Empiricism, according to Lem, was Western culture's "Trojan horse," because of its success in dissolving from within those cultural norms not based on utility and comfort. Artists in the modern age have been unable to find new axiogenic structures to replace the sacred-mythological ones that secular science eroded. Hybridization techniques abound but original, self-consistent ethical and aesthetic structures can not develop where norms are constantly subject to rational criticism and technological innovation.

Parody of myth is one obvious and already traditional solution; but it is purely critical, and entirely dependent on the myths it parodies. Lem believes that two radical methods of "cunning structuration" ("Metafantasia": 64) are particularly appropriate for 20th-century writers in the age of indeterminacy. The first is to give "the total structure of a work a multidimensional 'indeterminacy,'" a technique Lem associates with Kafka's *The Castle*. The writer seals up different modes of signification in the work's structure in such a way that the reader is given all the clues necessary to accept *that* the work signifies in a unified way, but not how to determine the significance of that unity, i.e., *what* the work means. "Kafka's *The Castle*," according to Lem,

can be read as a caricature of transcendence, a Heaven maliciously dragged down to Earth and mocked, or in precisely the opposite way, as the only image of transcendence available to a fallen humanity. . . . Works like this do not expose those main junctures that could reveal their unambiguous ontological meanings; and the constant uncertainty this produces is the structural equivalent of the existential secret. ("Metafantasia": 64)

The other approach Lem singles out is the manifest interpenetration of incongruous structures and paradigmatic forms—some harmonious, some dissonant, and some changing their relations in the course of the fiction's development. Like Kafka's technique, such writing denies the reader an absolute system of relations by which to interpret relative systems. Some of the structures might be so divergent that they distort and "damage" the information produced by the other structures; at other times, convergences might occur fortuitously. The most radical model of this technique, in Lem's view, is the French *nouveau roman*, and especially the work of Robbe-Grillet, where even chance enters as a constitutive structure to create a clash between the paradigmatic forms of order and chaos ("Metafantasia": 65).

Both of these techniques of "cunning structuration" are adequate to the philosophical problems raised by indeterminacy. For the writer who weakens the reader's sense of certainty by weakening the culturally privileged conventions of fiction also weakens the reader's sense of certainty about the world to which the fiction's language is believed to refer.

Because of this systematic refusal to speak plainly, the reader begins to feel unsure whether he or she really understands what the description is concretely about, and this gives rise to the semantic wavering that characterizes the reception of modern

poetry . . . These approaches have a common origin: as the level of the reception's indeterminacy rises, the reader's own personal determinations begin to waver. In practice, it is often impossible to determine whether a given narrative structure is only very indirect and elliptical, but essentially homogeneous, or one deliberately damaged by 'chance noise,' or even perforated, softened and bent by another, discordant structure. Furthermore, since one can also create multilayered structures, even the concrete quality of the described object or situation can be transformed beyond recognition and reshaped from one level of articulation to another. Thus, it is often impossible to determine categorically whether the basic structure of description is an image of order or of chaos. ("Metafantasia": 67).

Many of the problems of interpreting *Solaris* evaporate in the light of Lem's meditations on modernism, for Lem conflates these two ways of creating semantic indeterminacy in the design of his novel. The similarity of *Solaris* to *The Castle* is readily apparent: the planet is Kelvin's Castle. Whether it will yield its secret or not, Kelvin insists that it has a secret to yield, and that he has been "called" to plot its dimensions, like the land-surveyor K. Instead of opening the transcendental significance of the cosmos to him, *Solaris* remains opaque, "communicating" with him through inscrutable messengers, the Visitors. Once these obstructive messengers are cleared away, Kelvin believes he is, just as Potts puts it, an empty slate ready to be inscribed upon by the demiurgic Other. The alien intelligence provides humankind with a glimpse of its long-sought Archimedean point in the universe only to show how inaccessible it is. *Solaris* might be profitably read as a gloss on Kafka's remark that Man "found the Archimedean point, but he used it against himself; it seems he was permitted to find it only under this condition" (Arendt: 278). At the same time, since the Other is (by definition?) totally inscrutable, Kelvin, like K., accepts that his human cognition and his knowledge of his place in the universe are corrupt in their essence. Both Kelvin and K. follow the lead of Gulliver, who would rather be a horse.

Lem punctuates and deforms this Kafka-like ambiguity with a version of the other "system of indeterminacy" he associates with literary modernism, the mutual interference of narrative structures which outside the text appear as clear and distinct, even mutually contradictory. This method creates the inverse effect to the impenetrable mystery of "the structural equivalent of the existential secret." The reader is made to feel that the elements of narrative are all familiar, "taken from the repertoire of culturally known situations" invoking "the repertoire of possible issues appropriate for [them]" ("Metafantasia": 66); yet in their incongruous conflation, they seem "perforated, softened and bent" by one another (*ibid.*, p. 67). The hard opacity of the unyielding secret is complemented by the nauseating fluidity of the familiar when facing that opacity.

5. This sense of distortion through "softening" of order comes about spontaneously in the action of *Solaris*. The various self-consistent models that the protagonists—and readers—of the novel use to interpret the mysterious action lose their distinctions. These putatively sharply-defined systems for articulating reality are transformed into a single fluid process whose only articulation is its difference from the sentient planet.

In a world ruled by positive rationality (the implied epistemology of Western consciousness in *Solaris*), certain culturally privileged structures of cognition through which writers make sense of the natural and social worlds (such as physics, biology, psychoanalysis, psychochemistry, romantic love, religious faith, mythology, "fantomology,"⁷ to mention the most prominent ones in *Solaris*) appear to be all-explaining and mutually exclusive from within those structures. From the standpoint of contemporary culture as a whole, they appear to be parts that, when ideally combined, come closer to articulating the truth about reality than any single one of them. This view implies that human cognition operates by maintaining a great variety of possible techniques for world-describing (and the possibility of syntheses among these), some of which are certainly expected to assimilate whatever reality has in store. All such privileged models of explanation are based on the positive faith that truth exists "outside" consciousness and must be appropriated by it. When confronted by a concrete existing thing that resists all strategies of appropriation, the common character of these strategies comes out in relief: all are projections of human qualities, as if they could exist outside human limits.

Of course, Lem cannot create a truly alien creature to make us see this paradox from outside human consciousness. Though he takes great pains to evoke the sense of *Solaris*'s strangeness through vividly detailed, and yet barely intelligible, descriptions of the planet and its excrescences, we always see the planet through a human observer's language as it strives to assimilate an *a priori* non-assimilable object. Our only evidence that there is a truly alien intelligence is that all the intrahuman distinctions between modes of thought and types of discourse either disappear (as in Kelvin's strange love story) or, when they retain their distinctiveness, they become absurd anachronisms, personified by Sartorius's pedantic devotion to his positivistic ideals and personal discipline. In the face of that-which-does-not-correspond, the most diverse and contradictory ways of making sense become a single self-reflecting set of correspondences, an amorphous mythoscience thrashing in its inability to articulate the alien.

Lem constructs this ironic "alienation" of cognition by at every turn denying the Solarists and readers the opportunity to complete the structure of signification that they were invited to expect by the text's allusions. Lem, and *Solaris*, evoke certain structures particularly privileged in Western culture, only to distort them through other structures alien, and even inimical, to them. In other words, hypotheses are made possible and projected by modes of thought that contradict those hypotheses. In this way, the failure of the positive science of Solaristics (which already encompasses all the existing branches of science and has produced a multitude of new branches by the time Kelvin arrives on the station) to appropriate *Solaris* gradually leads the scientists to act as if the "Solaris project" were the projection of something more archaic (i.e., both older and more generative) than science. At one moment it is religious longing and messianism. Kelvin discovers this view fully elaborated in the writings of the Solarist Muntius, who had written that "Solaristics is the space era's equivalent of religion; faith disguised as science. . . . Exploration is a liturgy using the language of methodology; the drudgery of the Solarists is carried out only in the expectation of fulfillment, of an Annunciation, for there are not and cannot be any bridges between *Solaris* and the Earth" (11:180).

Solaristics as messianism and as science may, however, be only a projection of erotic repression and narcissism, which founders when the Solarists have to confront their Freudian ghosts, the repressed "others" inside themselves. Snow tells Kelvin:

We think of ourselves as Knights of the Holy Contact. This is another lie. We are only seeking Man. We have no need for other worlds. We need mirrors.... We are searching for an ideal image of our world.... At the same time there is something inside us which we don't like to face up to, from which we try to protect ourselves, but which nevertheless remains, since we don't leave the Earth in primal innocence. (6:81)

Like the Solarist commentators, we can go further. All these ideological and psychological projections may be the inevitable projection of the physical definition of the human body onto the universe. So the eccentric Solarist Grastrom speculates in discerning the anthropomorphisms "in the equations of the theory of relativity, the theorem of magnetic fields, and the various unified field theories" (11:178). The ideal systems of reason come gradually to be seen as versions of human limitation disguised as transcendence. Lem's Solarists, all men of science and hard common sense, are compelled to entertain an idea that necessarily casts grave doubts on the basis of their lives as scientists: that there is no clear line between reason and unreason, reality and illusion.

6. Because readers of *Solaris* approach it as fiction, and expect the science to be metaphorical, an educated reader cannot be as upset by the idea of science as a systematized form of despair as the Solarists are. The literary form offers a kind of comfort, deriving from the sense that the story's order is distinct from that of the ideas it "uses." And since these ideas are transformed by fiction into metaphors at the outset, the reader already starts out expecting some of the collapse of quasi-rationalistic systems into one another that the professional scientists of the tale experience in the action. As the possibility of a realistic interpretation of *Solaris* dissolves for the reader, and the scientists themselves seem to turn to religious and psychoanalytic explanations, the reader looks for clues of more traditional mythic structures. Lem provides such clues abundantly in various kinds of allusions: in names, situations, and explicit speculations. But these mythic structures, too, are subject to the novel's underlying indeterminacy. They also suffer the same mutual deformation and incongruous motivation as the quasi-rationalistic explanatory models.

The whole Solarist enterprise seems trapped in a Myth of the Will—a myth designed to explain and support humanity's appropriation of the material universe. This myth appears gross and absurd when confronted by a manifestly more powerful alien being. Into this stalemate come the Visitors, whom Lem clearly identifies with Myths of Love. Although we never learn who Snow's and Sartorius's Visitors are, we can infer from Gibarian's African woman and from Rheyra, as well as from some of Snow's guarded comments, that all the Visitors are incarnations of repressed objects of erotic desire. The situation implies that the Solarists have drawn their power to explore and their love of adventure from this repression, and that the shock of seeing their shadow-selves so concretely in front of them saps their egoistic resolve. The ironic exception

is Sartorius. His sadistic hatred of the Visitors, and the unbending scientific egoism associated with it, is sufficient to sustain him until he succeeds in inventing the neutrino-annihilator that “kills” the simulacra. While Kelvin, and to a lesser degree Snow, come to accept the Visitors’ and Solaris’s right to be real, Sartorius’s whole existence is predicated on the destruction of everything that interferes with his positive ego-science.

Rheya in particular seems to carry the values of non-scientific mythic-religious mediation, albeit in a way that deforms distinct mythic structures of mediation by conflating them. Rheya gradually takes on the role for Kelvin of a personal mediator sent to him for inscrutable reasons by a deific intelligence. She offers him the opportunity to redeem the guilt and shame of his life with the original Rheya, an absolution of the Old Kelvin, a *vita nuova*. But the exact value of Rheya’s mythic-religious character in *Solaris* depends on how we interpret Kelvin’s decision to stay by the planet at the end of the novel.

Rheya begins as a mere embodiment of Kelvin’s erotic desire. She seems like an indestructible goddess attached to a mortal lover. Her physical structure appears to be so stable that she might never grow old. Her anomalous neutrino-based body, however, makes it doubtful that she could remain stable away from her heavenly abode near Solaris. These associations are not lost on Snow, who refers to Rheya once as a “fair Aphrodite, child of Ocean” (12:192), much to Kelvin’s annoyance—although he himself had earlier called Gibarian’s Visitor “a monstrous Aphrodite” (3:37). As Rheya becomes increasingly human in her feelings and quandaries, the character of her love appears to change also. It gradually becomes less arbitrary, clinging, and childlike, and increasingly faithful and altruistic. She becomes a doubly-inverted, paradoxical image of Christ, a materialistic version of the transcendental mediator. She is a human form of Solaris, and a Solarian form of the human. As she mysteriously evolves into a conscious, free agent, again and again acting against her physical limits (by drinking the liquid oxygen, keeping her distance from Kelvin, and lying about listening to Gibarian’s cassette [9:143]), she fulfills—Lem implies—essential cognitive, axiological, and ontological conditions of being human. She is conscious of her ignorance of her origins; she is willing to sacrifice her life for a loved one; and she is, in the end, able to die. The goddess freely chooses to accept death to liberate Kelvin from his guilt. Since Sartorius and Snow will not be swayed from their determination to annihilate the Visitors, they have the force of fate for Rheya. Her acceptance of death re-enacts the tragic grace of Christ’s passion on Solaris Station.

However, Rheya can only recapitulate the myth of Christ if the whole mythic structure of Christ’s mediation is complete in Kelvin’s life. Her death makes sense as a quasi-religious mediation only if Kelvin at the end has been emancipated from his egoism and the burden of his past sins into a condition of new hope. Rheya’s act would then imply a version of transcendental grace, validating the religion of Contact and affirming the “personal” relationship between the godlike Solaris and the human Kelvin. But if, with Parrinder, we view Kelvin as a man stuck in the hall of mirrors of narcissistic self-reflection, then the character of Rheya’s mediation changes from emancipatory to ironic. Instead of Christ, she becomes Echo, the loveliest and most concrete of Kelvin’s fated self-reflections. Although she is the only one of his echoes capable of

loving Narcissus, her love can do nothing to save him from drowning in the unfathomable ocean-pool whose surface reflects his face throughout the cosmos. These two mythic structures are inimical to each other. A myth cannot simultaneously validate transcendental grace and transcendental fatedness. And yet we cannot discard either structure in reading *Solaris*.

The paradoxes of interpretation stem not only from the way these incompatible myths associated with Rheya are shaded into one another. The reader is also deprived of ways to determine the ontological status of the myths and mythic beings. The realistic ontology of the tale seems fixed. We are never led to entertain magical or mythical explanations literally. The role of the mythic is never emphasized in *Solaris*. Its presence seems only to represent the natural tendency of people to create structures of explanation even when empirical and rationalistic conditions for one cannot be met. Myth then is an explanation of something that does not cease to be considered mysterious as a result of that explanation. Rheya's physical existence can be explained in materialistic terms: as a "form" taken from a "psychic tumor" in Kelvin's cerebrospinal fluid, as a neutrino-based anthropomimetic structure, as an "instrument" of Solaris. In a sense, then, her supernatural character is merely a particularly objective projection of unconscious human (and Solarian?) needs. The mythology she evokes is closer to Freud's and Feuerbach's than to Golgotha's and Attica's. But, as usual in *Solaris*, the materialistic explanation leads only to its own limits and to the necessity of inferring a form inconceivable in materialistic terms. The familiar form of the Visitors, Kelvin tells his colleagues, is only a camouflage: "the real structure, which determines the functions of the Visitors, remains concealed" (7:111). Solarists can determine that the planet is composed of atoms. How it can produce a human being formed from neutrinos is beyond the comprehension of Solaristics.

7. In *Solaris*, Lem built into his design both of the literary "systems of indeterminacy" he discusses in his "Metafantasia"—hermetic ambiguity and mutual distortion of structures—to represent the cultural implications of the contemporary cognitive paradoxes. Each "system" is an actual, culturally-sanctioned ideological interpretation of those implications. Hermetic ambiguity implies that there are possible resolutions; but, in Kafka's words, they are "not for us." Opposed to this inverted transcendentalist model, the mutual deformation of narrative structures attempts to reflect the view that human consciousness and nature are immanently "impure," indefinite processes. Lem does not opt for one or the other of these radical solutions. He is essentially a realist. He adopts his clashing paradigms from the actual historical evolution of Western culture, which has proven to be a more exact prototype for his drama of cognizance than more subjective models might have been. It embodies, by definition, the strictest determinism (it has already happened) and the most complete openness (we can never be sure *what* happened, because it is not over). Just as Solaristics includes idealistic hypotheses that the planet is an "imperfect god" or "ocean-yogi," materialistic hypotheses that it is a "plasmic mechanism," and syntheses, like the "homeostatic ocean" theory, a true image of indeterminacy in reading includes both the quasi-transcendentalist and quasi-immanentist paradigms of uncertainty—each of which re-enacts prescientific

ideologies in the language of science. *Solaris* cannot be made intelligible from only one of these mutually contradictory perspectives. Both *Solaris* and *Solaris* are the product of integrating certain clues into structures that cannot remain stable and closed: since myth and science, metaphor and realistic mimesis, motivate one another, no privileged way of reading emerges. Whether Kelvin, the representative of human culture, is on the verge of "widening [a] conceptual framework" as Bohr hoped the science of the future would, or on the verge of an unbridgeable gulf between human culture and the universe, we cannot know. Lem leaves his readers at the station where he believes the 20th century's quantum-Solarists arrived just before them.

NOTES

1. Lem's collected critical works available in English are scheduled to be published in 1985 by Harcourt Brace Jovanovich, under the title *Microworlds*, edited by Franz Rottensteiner.

2. English-language commentaries on Lem include Rose (pp. 82-95), Suvin (in *Solaris*, pp. 212-23), Ketterer (pp. 182-202), and Potts.

3. To avoid confusion, I will use the English translators' versions, Snow and Rheya, for Lem's Polish originals, Snaut and Harey.

4. In the original Polish version, Lem names Kelvin's wife and Visitors "Harey." The English translators' decision to rename her "Rheya" strikes me as an inspired improvement over the original. The linking of this ambiguous mediator with the Earth goddess reinforces and intensifies the irony of Kelvin's decision not to return to the Earth.

5. The reader who tries to piece *Solaris* together from apparent allusions is in for a hard time. Does the novel's Fechner, the first explorer to die on Solaris and the possible source of the gigantic child witnessed by his colleague Berton, hint at the great German psychophysicist, Gustav Theodor Fechner, who was equally well known for his "hard" work in psychological quantification and his theosophical speculations on the angelic nature of planets? Is Andre Berton a distorted allusion to the manifester of Surrealism? Should Kelvin be associated with Lord Kelvin and the only absolute currently available to science? Is there significance in the names of the spaceships mentioned by Kelvin, and in their order of appearance: the glorious ascetic resolve of the *Prometheus* followed by the *Ulysses*' connotations of cunning and homesickness, which is then followed by the *Laocöon*'s passive suffering for misreading the gods, and finally the *Alaric*'s purely destructive power of conquest? These and many other names seem to call out for interpretation, but we cannot be sure that they are not arbitrary. (In correspondence, Lem claims that all the names in the novel came to him unconsciously, with the exception of Sartorius, who is named for a tiny muscle.)

6. The concluding chapter of the book has appeared in English as "Metafantasia: The Possibilities of Science Fiction" (see "Works Cited").

7. In his *Summa Technologiae*, Lem gives this name to the study of artificial realities "that are in no way distinguishable from normal reality by the intelligent beings that live in them, but which nonetheless obey rules deviating from that normal reality" (*Summa*, 4:171).

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RÉSUMÉ

Istvan Csicsery-Ronay. Le livre est l'extraterrestre: à propos de lectures certaines et incertaines du Solaris de Lem.—*Solaris invite à deux lectures au moins, contradictoires mais complémentaires: le récit du contact réalisé avec la planète-océan et la satire de l'illusion que l'Autre puisse jamais être vraiment connu. Toute tentative du lecteur de chercher une lecture unifiée est homologue à la quête donquichottesque exposée dans le récit lui-même, qui espère que la «Solaristique» parviendra à une connaissance scientifique unifiée de Solaris. Lem inscrit cette contradiction complémentaire dans son récit par la technique de l'«indétermination sémantique» qu'il décrit dans les conclusions de son ouvrage Fantastyka i futurologia: l'ambiguïté hermétique qu'on associe du Château de Kafka et l'interférence des structures narratives propre au «nouveau roman» français. (IC-R)*

Abstract.—*Stanislaw Lem's Solaris invites at least two contradictory, but complementary readings: as a romance of achieved Contact with the alien planet, and as a satire on the illusion that the Alien-Other can truly be known. The reader's attempt to find a unified interpretation of the novel corresponds to the Solarists' quixotic efforts to arrive at a unified scientific understanding of Solaris. Lem inscribes this complementary contradictoriness in the novel through the literary techniques of "semantic indeterminacy" he describes in the conclusion of his Fantastyka i futurologia: the hermetic ambiguity associated with Kafka's The Castle and the mutual interference of narrative structures associated with the French nouveau roman. (IC-R)*