

Twenty-Two Answers and Two Postscripts: An Interview with Stanislaw Lem

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Istvan Csicsery-Ronay, Jr.

## Twenty-Two Answers and Two Postscripts: An Interview with Stanislaw Lem

*Translated by Marek Lugowski*

*The present interview was conducted in writing, following conversations that I had with Lem in Vienna in May of 1985 and a year-long correspondence that surrounded them. Our original plan had been to converse with the help of a Polish-English interpreter. But when I arrived in Vienna, no appropriate interpreter was available. Lem had no desire to speak for the record in English or, through a third-language interpreter, in German or French. With the help of Dr Franz Rottensteiner's able mediation from German, and Lem's own quite competent English, Lem and I did manage to discuss many of the things that later formed the basis of the interview. We agreed that the ideal format would be for me to submit my questions in English, to which he would reply in writing, in Polish. I think both of us preferred this format anyway, since it minimized the loss of information. The result was the 22 replies and 2 postscripts of the present interview, which I have annotated with Dr Rottensteiner's assistance.*

*ICR:* You are highly regarded as a writer of both fiction and “experimental” philosophy of science. You use fictional elements in your philosophical works, and philosophical-essayistic elements in your fictions. What distinguishes these two modes for you? Why don’t you “specialize” in one or the other?

*Lem:* All my books, both the belletristic and the discursive in nature, were written spontaneously—that is, choosing the mode of expression that seemed most appropriate to me because it made me write. Aside from essays, I also wrote three discursive books (*Summa Technologiae*, *Dialogues*, and *Science Fiction and Futurology*—I forgot about the fourth one, *The Philosophy of Chance*), and there is nothing fantastic about them. Because when beginning to write each of these books I had neither a plan nor any kind of knowledge of their content, they basically got written unaffected by any genological or taxonomic considerations; that is, I did not spend any time thinking about the questions of what genre they are meant to belong to. These books contain a lot of speculation and I am aware of it. This speculation could be termed *sui generis* fantasizing on the themes of future development (of technology or literature, for example), but I was merely expressing my convictions, not intentionally setting up hypotheses. In this sense, I functioned as an unwit-

ting futurologist—before the futurological goldrush itself took place—and an unwitting philosopher, too. I suppose that my inclination towards armchair philosophizing was induced by my acquaintance with certain people who edited a philosophical journal, for example Helen Eilstein and Leszek Kolakowski.<sup>1</sup> Be that as it may, I never had the urge to “speak my piece” to the world at large, as far as philosophy goes. Perhaps this disinclination comes from my conviction that the time of crafting seamless, unified philosophical systems is long past. This is so, I claim, because the results of the new “hard” sciences, led by physics, begin to exceed the abilities of *reasoning*—the various events and descriptions of states which fly in the face of visual perception as well as any other human sense or intuition, all that stuff conjured by the human mind. Yet the sober science marches on, registering the “smells” and “colors” of quarks, all the while discarding the help that we naturally owe to our bodily sensorium and lifelong personal experience. Thus, if the scientific results exceed the horizons of human intellectual comprehension, then human philosophy must be left behind, limiting itself to reflection on the way the world is thoroughly known to us as a niche for a certain thinking species or to considerations of the human position in this world, its correctness and dangers. But as science evolves ever faster, negating its prior solutions and pronouncements, it is futile to attempt to create a philosophical system “once and for all,” in harmony with the effects of empirical discovery.

Issues such as these are what I packed into my discursive works, because I was constantly fascinated and haunted by them, and yet I saw no way of including them in my belletristic endeavors. The fact that I did not choose one or the other (I alternated between writing discursively and writing belletristically) basically stems from my human nature: that of being like baking dough—my interests grew every which way at once. I would hate to have to give up using these various strategies of relating the themes of my life.

*ICR:* On several occasions you have written that modern writing adheres to, or is dependent on, literary paradigms derived from sacred-mythological culture predating the rise of empiricism. Have you developed any new narrative paradigms in your own work that are appropriate for contemporary scientific culture?

*Lem:* I always approached my belletristic creations pragmatically; that is, by trial and error. In a sense, I was like a person who tries to jump as far as possible without pausing to think about theories of jumping. This is why the question of whether I have created any new narrative paradigms, or cross-bred some existing ones and thus benefitted from hybrid forms, or whether I made some new headway for either Form or Content, or none at all—none of this has ever interested me. Neither do I consider myself to be the person most competent to answer *this* question of yours.

*ICR:* You have been claimed by the “metafictional” school of experimental writers in the West, yet you have often debunked and parodied the avant garde. You describe yourself as a realist. You are obviously not a classically

realistic writer, nor a magical realist like the Latin American novelists. What are the boundaries of Lem's realism?

*Lem*: Literary realism, for me, is literature's way of dealing with the real problems of a dual (at least) type. The first kind is the sort of problem that already exists or is coming into existence. The second kind is the sort that appears to be lying on the path of humanity's future. Any attempt to differentiate "possible problems" from "fictional," or "probable situations (albeit seeming outrageous today)" from "unlikely," is probably too polarizing to be successful. In this field, it's every man for himself, as long as the particular reasons for claiming the status of expert on dichotomies like the ones cited above are more or less respectable. Thus, anyone can be a self-made authority on this subject, and so I am one.

I must add, however, that only recently did I begin to believe that I must abide by this conception of literary realism I had formulated umpteen years ago. Nor did I apprehend it consciously at first. That is, I stuck to a sense of implied "realism," one implied through various hypotheses which only later became apparent to me.

This ought perhaps to be qualified by one more observation. The contemporary physicist would be surprised to learn that, in contrast to his or her 19th-century counterpart, he or she is not a "realist" but a "fantasist." After all, the physicist must in some sense continue to be a realist, still working within the empirical tradition shared with 19th-century science; he or she still converts guesses into testable hypotheses, to be crystallized into theories which are subject to falsification. Similarly—*mutatis mutandis*—my writing over the last 30 years has been subjected to tests imposed by the changing world. I dare claim that the thrust of the main changes (such as genetic engineering or computer science) would become apparent to me, roughly at the time when some very intelligent people simply laughed at my notions as fairy stories. Of course, I was quite a bit off when it came to details, but the strategic movements of civilizations I fathomed rather well. This sort of realism may be termed sound prognosticating. On the other hand, sheer fantasizing is characterized by its self-impossibility (for example, no one will ever manage to travel back into the past to beat up his or her grandfather; that, I think, is certain).

Some of my texts I would consider to be "metafictional," for their domain is not the world *directly*, but rather other texts. I would include in this category *Imaginary Magnitude*, *The Scene of the Crime* [Wizja Lokalna],<sup>2</sup> and *Perfect Vacuum*. All three refer to texts invented by me. These invented texts are not part of *Perfect Vacuum* and *Imaginary Magnitude* (after all, the works mentioned within them are nowhere to be found!), but *The Scene of the Crime* is a "novel-cum-correction" of an existing text, i.e., the 14th Voyage of Ijon Tichy, to be found in *The Star Diaries*. On the other hand, the *Diaries* themselves are not metafictional. The same goes for *Solaris* and other titles. (Other examples of metafiction are *Provocation*, "One Human Minute," and "The World as Holocaust."<sup>3</sup>) Readers with training in biological sciences may be the ones in the best position to enjoy my

books like *His Master's Voice*, but I would shy away from drawing conclusions from this.

I do not feel that I have succeeded in inventing paradigms “appropriate for scientific culture,” because I myself don’t really know how to define “scientific culture” *per genus proximum et differentiam specificam*.

*ICR*: The term scientific fantasy seems paradoxical to me. How can something be both scientific and fantastic? You are the most significant writer of scientific fantasy writing now, at least from a literary perspective, so you must have reflected on this. The scientific content of your work is clear, since it refers to known scientific history and theory. How would you define the fantastic element of your work. Can there be such a thing as a fantastic science or fantastic mathematics?

*Lem*: No; I never spent much time thinking carefully about the term “Scientific Fantasy,” because the various definitions and genological arguments meant to divide SF from Scientific Fantasy always seemed to me so much scholastic irrelevance, and of no benefit to either the authors or the readers. The fact that this topic may yield doctoral dissertations (or serious scholarly papers) is not to be doubted, but that which benefits graduate students and academics in general does not seem to me all that important when contrasted with the scale of human needs, labors, and dangers.

The issue of whether there can be a fantastic mathematics or a fantastic biology depends on our willingness to stretch the term “fantastic.” From the viewpoint of 19th-century physics, the “flavors” of elementary particles or the “magical number” of atomic physics or qualities such as “strangeness,” etc. are sheer fantasy. Nevertheless, *some* names for the newly discovered attributes must be given, even though we realize that the particles in question are not particles in the sense of our macro-world—i.e., they are not like stones or billiard balls. After all, isn’t a “virtual” particle—that is, one which definitely is not; what is, is the potentiality (probability) of its existence—something completely fantastic, according to the gospel of our human ways. It would appear that the fantastic transmutes itself into the real when we have no choice but to concede its existence, as was the case with the flavor of quarks.

*ICR*: After the mid-'60s, you seemed to turn to meditations on intellectual genius working at the limit of given possibilities of thought. I am thinking of the mathematician Hogarth in *His Master's Voice*, Testa in “The New Cosmogony,” Professor Dobbs in “Non Serviam,” Golem XIV, and so on. This parallels your move away from dramatic-novelistic fiction, in which your scientist-protagonist is searching for an answer, and towards the more ironic metafictions of *A Perfect Vacuum*, *Imaginary Magnitude*, *Provocation*, etc. As you leave Kelvin, Rohan, and Pirx behind, you create geniuses. Undoubtedly, there are purely literary reasons for this. But aren’t there personal ones also? Aren’t your geniuses attempts at autobiography? Doesn’t this interest in the psychology and sociology of intellectual genius reflect your own self-exploration?

*Lem*: An affirmative answer to this question is possible, although it would be merely speculative. It was not my premeditated intention to show off the geniuses of humankind. What happened was that because of the great weight of the problems that I took on in the texts you mention, it became necessary to stock the problem-solving with the best minds available to the society. Thus the choice of the problem at hand dictated the choice of protagonist, not the other way around. The protagonist genius had to be employed in the same sense in which a patient with a kidney ailment necessitates the presence of a urologist, not a cobbler or a dentist. Of course, the mental life of the protagonist was all me—where else could I have acquired the information to render it? I do know, however, that books can be smarter than their authors, and that my geniuses such as Hogarth were half-illusions. After all, I do not quote the mathematical works which made Hogarth famous. All such things are decorations, theatrical conjuring reality.

*ICR*: Many commentators have said that your ancestors are Cervantes, Swift, and Voltaire. But your work is also rooted in the Eastern European tradition of metaphysical fantasy. One can see the influence of Kafka, Čapek, Witkiewicz, Dostoyevsky. Does the Eastern European reader read a different *Lem* than the Western reader?

*Lem*: I know more or less how the critics read me, but I know nothing about how I am received by my readers, the ones who do not busy themselves with public critiquing. My roots are at least two-fold: in belletristic writing and in hard sciences and philosophy. To account for who influenced me, in terms of individual writers, is a feat beyond me. I don't know how much I owe to whom. To tell the truth, I never thought about it. I can say, however, that my attitude as a reader to various authors has changed a lot over time. There was a time when I admired Witkiewicz. Now, having picked up his *Pozegnanie jesieni* [Farewell to Autumn, 1927] once again, I am unable to read it through. Its philosophizing irks me now with its pretentiousness. Its baroque stylizing when describing the spiritual now turns me off. The whole now seems to me to be the work of a *child* prodigy, a snotty pupil who managed to get hold of some lessons before his time, and made mincemeat out of them. This isn't meant to be an objective depreciation of Witkiewicz. These are simply my current views on the subject.

I haven't read Kafka for a long time, because there is something in his works that I find repugnant. It's as if they contained more misfortune than is "proper" for a "decent" author. It's as if Kafka struggled with both some real forces and some that were but his own, personal, desperate neuroses; and I despise writer-psychopaths.

Of Dostoyevsky's works, only *Crime and Punishment* was compelling enough to make me come back to it. As for *The Brothers Karamazov* and *The Possessed*, I was unable to read them again. A single pass was entirely sufficient; why, I don't know.

I also cooled off in my admiration of Thomas Mann, with the possible exception *The Magic Mountain* and some other novels. Also, Čapek was a genius who often squandered his talent. His *Absolute at Large* goes to pieces in its latter half. I respect Joseph Conrad, preferring his short stories to *Lord*

*Jim* and *Nostromo*. I am, overall, not a studious reader of belletristic literature. I can't say why. I used to love Voltaire, Diderot, and Swift. Lately I tend to return to well-known poetry instead (Slowacki, Leśmian, R.M. Rilke).

*ICR*: On the same subject, we can narrow things even more, from Eastern Europe in general to Poland in particular. You have the reputation of being one of the most inventive Polish stylists. You are, I know, familiar with some of your translations into Russian, English, German, and French. Is there a specifically Polish dimension to your work that is lost when it is translated?

*Lem*: Certainly, in some of my texts there are messages peculiarly meaningful to Poles. It would be amazing if there were none. However, a work such as *Edukacja Cyfrania* [*The Schooling of Cyfran*],<sup>4</sup> containing such a message, has never been successfully translated. The building material for my writing is the Polish language, and I think that I have succeeded in exploiting many of its idiosyncracies (not shared by non-Slavic languages), not only but largely in neologisms carrying poignant and grotesque content. The translations of my works always depended on the inventiveness of my translators; and my best two are, I think, the late I. Zimmermann-Göllheim (German) and M. Kandel (English). Ms Zimmermann-Göllheim succeeded in translating remarkably literally, whereas Mr Kandel has given himself a lot of interpretative latitude, replacing that which he was unwilling or unable to retain with that which was equivalent in English on some higher semantic plane.

*ICR*: You are famous for your neologisms—which somehow, miraculously, lend themselves to translations. You have even included a Polish-Polish dictionary at the end of one of your books. Do your neologisms and linguistic play come before your ideas for action, setting up the boundaries of how you develop your stories? Or do the neologisms come to you when you need them?

*Lem*: Neologisms happen to come up only when they become absolutely indispensable to me during the course of writing. I am unable to think up one that would carry meaning if asked to work outside of context, *sui generis*. I really have no clue as to how this process works. Some neologisms were hell to conjure. For example, in my latest book, *Fiasco*, I couldn't hit upon a name for the walking machines, and for two years they were nameless. I tried to think up a derivative of Latin, and then English, but to no avail. I finally settled, in Polish, on "wielkochodły" (multistepers, macromobils).

*ICR*: Kafka's influence seems strong in your work. *Memoirs Found in a Bathtub*, *Solaris*, and "The Mask" especially lend themselves to being read as variations on Kafka's themes. Do you view yourself as an heir of Kafka's?

*Lem*: No, I do not consider myself the "heir" or "descendant" of Kafka. Kafka, like God, would have to have been invented if he weren't around. Certainly Kafka was a stage in my development, but as I have already said, I am neither awed by him nor, *a fortiori*, enamored of him.

*ICR*: And Čapek? You don't invoke his name often, but there are suggestive affinities. I'm thinking of the robot fables, and the Ijon Tichy-like situations of *The Absolute at Large* and *The War with the Newts*.

*Lem*: I read Čapek as a teenager. *The War with the Newts* is just as messed up in construction as *The Absolute at Large*. And though I think that Čapek conjured somewhat defective items, they were entirely original in thought and vision (his genius can be seen in the very design of *The Absolute at Large*). I like his *Apokrify* and many other stories (for example, *Tales from Two Pockets*). Above all, Čapek is a very *Czech* writer, moderate, humorous, and considerably laid-back or phlegmatic, just the qualities which, in this combination, Poles rather lack.

*ICR*: While we are on the subject of influence, let me ask you about Pascal. I feel the presence of Pascal in your work as much as that of Wiener, Shannon, and Turing. Jarzębski has described the sense of claustrophobia in your fiction as if the limitless space of the cosmos were merely a backdrop concealing a hidden reality. (E.g., personoids are "trapped" in the artificial space of the personetic computer programs in "Non Serviam"; earthly humanity remains in ignorance of the Senders in *His Master's Voice*, and of the Cosmic Game Players in "The New Cosmogony," and of the higher realms of intelligence in *Golem XIV*.) Your fascination with the *silentium universi* seems to recapitulate Pascal's fascination with the limitless universe and the problem of the hidden god that will not make itself manifest in its creation. Pascal is also one of the founders of the theory of probability that informs so much of your writing. In a sense, your works can be read as ambivalent satires on Pascal. Is this a coincidence of intellectual history, or did you read Pascal with a sense of recognition?

*Lem*: I read about Pascal, but I don't think I ever read him. I suppose that my heavy reading in the biological sciences takes its toll in the form of my ignorance of some excellent writers. As for claustrophobia, I don't feel any. I am aware that a certain Polish writer (Hanna Malewska), upon reading my *Memoirs Found in a Bathtub*, asked my friend and writer Jan Josef Szczepański whether I suffer from paranoia. I don't. I am psychologically normal, but I can conjure an aura of claustrophobia or agoraphobia, if needed, in my writing.

*ICR*: You've said that you have been deeply influenced by Dostoyevsky's Grand Inquisitor and Underground Man. Yet the ethical dilemmas you depict seem very different from those facing Dostoyevsky's protagonists. How do you assess Dostoyevsky's influence on your writing?

*Lem*: *Notes from Underground* is probably the work of Dostoyevsky's that has impinged intellectually the most on my perceptions. On the other hand, I was unable even to pay attention to a lot of his other writings, because of their feel, and so reading them was a torture (*A Raw Youth*, *The Brothers Karamazov*, *The Possessed*). However, the tale of the Grand Inquisitor and the aforementioned *Notes from Underground* will stay with me. As for Dostoyevsky as a person, to judge from his correspondence, diaries, and the

remembrances of his wife Anna, I can't stand him. He was a veritable brilliant Russian-Nationalist monster, *par excellence*.

*ICR*: In *Science Fiction and Futurology*, you wrote that no one has developed Stapledon's method of creating cultures. Many of my students, who read your novels immediately after reading Stapledon's *Last and First Men* and *Star Maker*, saw your work as a dialogue with Stapledon. They read your alien encounters as intense dramatic depictions of the same subject matter that Stapledon describes with epic expansiveness. Did Stapledon's imaginary cosmogony have an effect on your "dramas of cognizance"?

*Lem*: Most likely, my reading of Stapledon provided plenty of inspiration for my imagination, especially from the sociological point of view (the variety of cultures and the magnitude of their separateness). I think I can say that to me he is in that select group of authors known as true eye-openers. Still, purely belletristically, I can point to many flaws in his writing, as I have done in my *Science Fiction and Futurology*, especially in his *Odd John*.

*ICR*: In your polemic against Todorov, you brought up the example of Borges as a fantasist of the abstract. You wrote that Todorov's conception of the fantastic (as the description of phenomena that cannot be determined to be natural or supernatural) ignores fantastic modelling, or fantasy on the level of models. Given the fascination that Borges' work and your own hold, doesn't this fantasy on the level of models imply that our age is more obsessed with model-generating than any previous age? And isn't your conception of realism in fact the mimesis of model construction?

*Lem*: Of course, one could regard my many works as models of certain situations—alternatively, as situations that are models of the problems most interesting to me, situations that showcase these problems best. There are "models of nothing," built by pure mathematics. The notion of modelling is now very commonplace, thanks to computer science, because that which cannot be calculated directly can often be modelled (simulated) with computer—for example, the formation of galaxies. This modelling is now a necessity in many distinct and divergent fields, and in this sense our age is more obsessed with model-generating than times past were.

*ICR*: Much recent work in the speculative philosophy of science has connected the new scientific paradigms with Asian philosophy. I'm alluding to Prigogine, Fritjof Capra, and others. Even one of your own characters at the end of *His Master's Voice* offers a quasi-Hindu cosmology in which the universe is periodically destroyed and resurrected. Still, most of your work hinges on the effect of new knowledge on culturally established ethics and ethical self-conceptions—reflecting the "deconstructive" effect of scientific thought on humanistic ethics, the problem of good and evil, etc. Why have you not taken up the question of the duality of being and non-being, so attractive to many contemporary philosophers of science and so central to Asian philosophy?

*Lem*: My knowledge of the philosophy of the Far East is strictly second hand. That is, contrary to the case with Western philosophy, I have never

had a textbook on Far Eastern philosophy in my hand. Therefore, my knowledge in this area is fragmentary, uncertain, and thus rather haphazard. Being rather strongly tied to empiricism, I feel quite distant from the Far Eastern speculations. For instance, I value Schopenhauer a great deal, but I like his Eastern influences the least. As for contemporary philosophy of science, I consider Capra's ideas silly, whereas I love Prigogine's—his are priceless discoveries. On the other hand, Prigogine's popular fare does not impress me at all. I draw a very clear line between that which the scientist accomplishes in his or her field from that which the scientist says about it (even more so when he or she speaks on other issues!).

*ICR*: You once wrote to me that you believe a lot of what Golem says. His speculations on the “toposophy” of Superior Artificial Intelligences can be read as a materialistic version of theosophy—a theosophy without a teleology. The development of intelligence described by Golem seems to parallel the development of “spiritual consciousness” projected by Teilhard, the Austrian mystic Rudolph Steiner, and others in the modern Western mystical tradition. Despite your stated dislike of mysticism and of Hegel, aren’t you describing a dialectical progress of the Spirit of Intelligence in Golem’s vision?

*Lem*: It is not one and the same to me that someone should promise people that humans will fly because they’ll grow wings—like angels—or promise them, as Roger Bacon did, that they will fly because they will build appropriate machines. This is why I put some faith in the conceptualizations of Golem, as they can be extrapolated from real successes of computer science, cybernetics, and automata theory. On the other hand, the writings of Teilhard de Chardin are to me but an attempt at crossing theology with biology, harmful to both.

To me, Steiner is just a flake. I believe in a planet-mind, but I don’t believe in bending spoons and keys as acts of pure will—psychokinesis. And, in any case, the vision of Golem ought to be taken *cum grano salis*. He himself cautions that he *doesn’t know* but is merely supposing. I merely supposed about his suppositions.

*ICR*: You have said that philosophy’s weakness *vis-à-vis* science is that philosophy has no “other,” no test of failure, no inherent mode of self-correction. Doesn’t your work imply that science has a weakness *vis-à-vis* art? If not, why didn’t you become a scientist or an engineer?

*Lem*: The world-models supplied by philosophers are arbitrary, in the sense that they do not contain appeals to some decisive factor in favor of a given proposal. The models supplied by science test themselves against reality, else the shuttle *Discovery* couldn’t have been flying around the planet. The scientific models do, however, spill over the boundaries of everyday utility; but wherever they do, they lose currency and become old and void. The products of dated technology are anachronistic, but never become “incompatible with reality”; Stephenson’s locomotive and Ford’s original automobile could run today as easily as in their heyday. On the other hand, the image of a world based on the 19th century’s atomism is outdated,

discarded—indeed, incompatible with the truth. Only in this sense can science be said to “make mistakes,” and even so, science learns from its mistakes and moves on. A newer model is not the final one, either—that is, true once and for all.

The world-models supplied by literature need not undergo the above process, provided that the problems under discussion themselves do not go away. There is no way to support science with literature and vice-versa, even though both are intellectual pursuits and tell us something new about the world. A literature that rejects science *toto in corpore* borders on the autistic, the nihilistic. Still, science and literature have incompatible agendas. Science attempts to show that the world is such and such, that phenomena have such and such a structure, and any questions asked of science on these subjects elicit changing answers. Literature, on the other hand, may pose questions that have no answers. It may pose problems that are not understood or understandable. It may concern itself with that which *may* befall humans or humanity. The boundaries of literature run at the bounds of articulated speech (ethnic speech). The boundaries of science lie where no language, no code, no simulation, no modelling would suffice for the purpose of posing questions and answering them.

However, aside from living in everyday life and seriously doing science, people may and do like to *play*. Science may be a plaything and, in part, that is what my literature is.

*ICR*: Much of the wit and originality of your fiction lies in the way you create paradoxical relationships between literary and scientific models. Are there scientific models that are completely impossible to encode in the language of fiction? Are there scientific models that entertain you, but that you know you cannot turn into tales?

*Lem*: I would imagine that there are plenty of intriguing scientific problems *par excellence* that may have trouble ending up in literature. Such troubles are well known to me. They have caused me, among other things, departures from the usual sorts of plot in favor of highly abbreviated fiction (*A Perfect Vacuum, Imaginary Magnitude*). I also wrote (in *Herr F.*, which exists only in German as a publication of Suhrkamp Bibliothek) about an unsuccessful attempt of mine to write a “contemporary *Faust*,” and I tried to explain there why this attempt did not work. (The protagonist was to be humanity, not an individual—that was the problem.)

In the US there is a periodical published by scientists and intended strictly for the cognoscenti, some specialists. It abounds with parodies, in-jokes (mostly nonsensical), and crazy ideas, entirely inaccessible to outsiders. I wouldn’t make literature out of such material, for although I do not especially brood about my intended audience, I do not go around writing for some hundred souls with the requisite knowledge of nucleonics or computer programming. Such a hermeneutics is not for me.

*ICR*: Some critics were disappointed when you abandoned the novelistic mode of the '60s and adopted the ludic pseudo-essay mode of the imaginary reviews and introductions. In some cases, it appeared the critics were longing for a return to a causality, while you were exploring undecideable games.

In your recent work, however, you seem to be returning to the narrative pattern of your earlier work. Is this how you conceive *The Scene of the Crime* and *Fiasco*?<sup>5</sup>

*Lem*: Yes, it is true that in *Peace on Earth*, *The Scene of the Crime*, and *Fiasco* I have returned to plot-oriented fiction. Most likely, this return of mine—which occurred after writing several pamphlets of the fictional review sort, though entirely serious, such as *Provocation*, “One Human Minute,” “The World as Holocaust,” “Weapon Systems of the 21st Century”<sup>6</sup>—was caused by the many contemporary global changes: the rising antagonism between East and West, the growing reality of the Star Wars (SDI) vision, and my personal dilemmas as a Pole. But who knows what the reasons and motives for this return are; the foregoing is just my hypothesis.

*ICR*: One of the most interesting aspects of your work is the apparent ambivalence you feel about technological evolution. Sometimes you imply that its future is inevitable and autonomous, but at other times you argue explicitly that some social control must be imposed to restore the sense of value. Simone Weil wrote that the peculiarity of 20th-century Western culture is that it is the first civilization to have lost the consciousness of value. You yourself wrote—in the *Summa*, in *Science Fiction and Futurology*, etc.—that our age has endangered itself by replacing value with comfort. How do you envision the restoration of value and social controls in the era of Star Wars?

*Lem*: In a non-antagonistic world, the conquest (“domestication,” neutralization) of technological evolution could happen, theoretically. But with the symmetrical lack of trust according to the principle *pacta sunt servanda*, each side maximizes its efforts to prevent being overtaken by the other. This state of affairs can indeed lead to a technological foxhole. This is the main point of my *Fiasco*. The factor that brings this specter about does not pertain to science itself; it arises courtesy of the global political situation: not just the East-West rivalry, but also the fundamentalism of Islamic extremists. Futurologists, such as those in the Rand Corporation, have in the past umpteen years conjured hundreds upon hundreds of political and economic scenarios of the future paths of the world, but the mad renaissance of Islam’s aggressiveness had not been foreseen by them in any of their scenarios!

A situation has arisen necessitating an ambivalent relationship between science and technology, as both jointly bring forth exquisite, mortally dangerous offerings. What I write is but a reflection of this situation. There is no universal cure for this ailment, at least I don’t see any. Aside from the continuing East-West conflict, how can one fail to notice movements like that of Islamic fundamentalism, in the face of which, democracy finds itself *a priori* at a disadvantage. This disadvantage does not manifest itself only in terrorism; it is brought about by the very existence of an elite of technologically rich nations. These nations are marvellous suppliers of bombs, arms, electronics, remote-control detonators, passenger airliners (for hijacking), and *news*—this status guarantees that they are susceptible to blackmail, and guarantees that they will never be ready to strike out in a blind massive retaliatory strike. In a word, this Islam which has given global culture so many

intellectual treasures is now turning out to be its parasite. This situation caused me to write *The Scene of the Crime*.

*ICR*: According to Aquinas, the other Summalogist, *Amor est magis cognitiva quam cognitio*. It is a striking characteristic of your work that you don't depict affectional relationships among your protagonists—at least since *Solaris* and *Return from the Stars*. Some theorists have made persuasive arguments that cognition is inextricably tied to certain kinds of affections—and that the Western tradition of purifying the intellect involves a refusal to give value to emotional relationships with the world. Actually, *Solaris* might be read as depicting exactly this state of affairs, since the Solarists, as soon as they encounter the alien planet, are suddenly brought face to face with the emotional lives they have repressed. You seem to have left this theme behind—so much so that your Golem dispassionately dismisses love. Is this lack of *amor* in your work a conscious strategy?

*Lem*: Love is a matter of individuals. It is the fulfillment of the human psyche's expectations. An individual is able to feel love towards only a small number of the closest persons, be it erotic love, parental, or other—for example, religiously inspired. In my private life, this emotion plays perhaps the main role. But one cannot really love humanity. It is impossible even to get to know all coexisting persons. So put, "love of humanity" is a pure abstraction, entirely impotent in the face of the world's dramatic problems. This is why making love the subject of a book is tantamount to closing one's eyes to the problems of the world, and because of this alone, it would hinge on being escapist. Of course, these are strictly my private convictions. I do not believe that love can save nations or entire societies. This may be why love has taken the backseat in my writing.

*ICR*: In some ways, you are one of the most modern writers. Your fiction is usually based on the contemporary scientific problems and paradigms. But in other ways, you seem to have more affinities with 19th-century writers, what with your citations from Swinburne, your invocations of Schopenhauer, your Nietzschean problems. Do you find you admire 19th-century fiction more than 20th-century fiction?

*Lem*: The literature of the 20th century has lost its battle, or at least finds itself in retreat. I can see more and more books in bookstores, yet fewer and fewer ones that I would like to read. The tales of refugees from totalitarian countries reduce themselves to an exhaustive catalogue of social and psychological suffering that such systems treat their citizens to. These books cannot pick their readers up, and the lessons they teach are not pleasant. One could say that the job of literature is not primarily to entertain, move, and cheer us up, but as Conrad said, to "bring the visible world to justice." Well, in order to bring this world to justice, it is first necessary to understand it with one's intellect, to appreciate the wealth of its diversity. That, however, is now impossible, at least for any narrative convention involving plot, the sort that was crafted into perfection by 19th-century prose. (A fine exemplar, if not pinnacle, of this sort of prose is Tolstoy's *War and Peace*, for it contains both a sweeping historical view and a focus on individual people and

groups.) Since I consider *this* epic approach no longer feasible today, if only because a microcosm of a few individuals does nothing to reflect the larger macrocosm of our planet, I aim instead to create models of the major problems that lie ahead of us, problems that humanity will have to face right now and in the coming decades.

Perhaps the retreat from the epic form was unavoidable, but it need not have meant sliding into escapism. I don't believe that literature should not entertain and humor us, but the goal which it must never surrender is that of being a medium for the intellectual, the philosophical, and the reflective (about the human condition). This is why I hold in contempt the *nouveau roman* and other assorted exercises of the avant garde, including whatever tortures human speech is subjected to by the lot of current experimenters. The writing of little poems for beautifully decorated fat monthlies like *The Missouri Review*, where they appear on glossy paper, is infantile.<sup>8</sup> The fact that the mass production of these little poems never ceases is to me a symptom of the boundless naïveté of their authors and editors. At any rate, we happen to live in decadent, declining times, a fact that can be readily seen in contemporary music and art. It is impossible to envision either one in the 21st century, because "everything has been tried already." Not knowing what is ahead, I write in order to find out a little about it.

*P.S.* Quite a lot of these questions, like many of the ones I have been receiving for the past 30 years, are based on a tacit assumption that my knowledge and understanding of my texts' problematic, or how they come to be, or where they belong in the scheme of things, is better than the corresponding notions of my interlocutors; in fact, that it is definitive. In reality, while I do have some knowledge, it is not the sort of knowledge that a press correspondent possesses when relating the course of a game, but rather the knowledge of an observer at a printer, who sees the newspapers as they are being printed up. My answers may lead to entirely false conclusions: say, that before writing anything I spent time considering its problematic—say, that before writing *Solaris*, I intended to write about the futile attempts of human contact with an alien phenomenon, attempts that end in a spectacular crash of anthropocentrism after the depiction of many adventures and sufferings of the protagonists. Such was not the case: I didn't know anything at first, not even that I would put some eerie ocean on that planet. When I write, the process of writing has nothing in common with building a house, a bottom-up activity based on a top-down design (involving architects, investors, builders, and workers). Both the structure of the plot and the adventures of the characters come into being as I write. The initial state of the book is but a nebulous, extremely loose bunch of ideas. The final state—after the writing is done—is still a nebulous, rather loose bunch of ideas, albeit markedly less nebulous and less loose. Nevertheless, this uncertainty never totally shrinks away. For example, even then, I have no clue as to the worth of the new work. I do not know how it will be read and understood by its various readers, whether they will be bored or thrilled. Usually, all my books are first read by my wife, and very often I have gone along with her (highly critical) remarks. It has also often happened that I would not agree with her: for

example, when she considered my descriptions of the library in *Solaris* as spurious. In other works, occasionally I had an inner certitude that the text had to remain in its initial form. I cannot explain that feeling and whence it comes.

What may be even more surprising (if not downright paradoxical-sounding), this was the way in which I wrote my discursive prose as well: no projects, no blueprints. If *a priori* plans were needed, it often turned out they weren't kept. It was as though I was carried away by the current of my thought as I was writing the text—the sort of thing that happens to white water rafters: keeping the course and not really managing to do so. Basically, I wrote by trial and error, and since I never cross out anything, instead throwing away in its entirety what does not please me, I see myself as a high-jumper, making attempts at a height, one after another, each a contained procedure, including the initial run. It is impossible to pause in the air over the crossbar in order to make an adjustment.

I usually write both “horizontally” and “vertically.” That is, the initial linear plot picks up new ideas, thus widening. Then I have to make over entire chapters, or more. Often, when I am having trouble striking the right tone or keeping the style I want, I start “randomly,” aware that in the final tally I can get rid of the beginning altogether or replace it with some other. I did that with *The Scene of the Crime*, where the first chapter had over ten variants. I threw them all out and wrote “In Switzerland” as its first chapter—admittedly, when the book wasn’t completed yet, but when I had already grasped all of it. The same applies to the serious/grotesque modal axis (and similar choices). A modality such as that comes to be during the process of writing, and I have often switched after making an initial choice, like a composer switching to a different key.

Eventually, I learned a lot from myself. For example, I have on occasion inadvertently included a reflexive microcosm within a work. In *The Investigation*, the strange phenomena behind the wall of Gregory’s house are reflexive microcosms of the entire plot. Similarly, *Solaris* contains many such items (and they often contradict one another)—e.g., the library scene I mentioned before. Therefore, when it came to writing *Fiasco*, I deliberately inserted into the book a fantasy about an expedition for strange African ants (in the chapter called “Crystal Ball”), because its peculiar problem turns out to be insoluble—in a way similar to the climax of *Fiasco*.

As for the “fantastic/technological” or “scientific” ideas, the ones I regard as unrealizable have found their place in my grotesque, satiric, and humorous writings. On the other hand, novels such as *Solaris*, *Eden*, *The Invincible*, *Fiasco*, *Katar* [translated into English as *Chain of Chance*], and the “serious” ones contain none. I have avoided like the plague the problematic of “time travel,” “travel with infinite speed,” ESP, psychokinesis, *et cetera*, for the very simple reason that I don’t believe that they can come about. Similarly, “flying saucers” show up exclusively in my satire.

Gradually, however, in the 1960s, I started to synthesize the serious with the grotesque in the same works. *The Futurological Congress* is a depressing tale, but told funny—i.e., with black humor. An even more thorough mix is found in *The Scene of the Crime*, and there, striking the correct balance was a

big effort for me. And I consider the 21st Journey of Ijon Tichy (with the robot-monks) to be one of my most “teleologically” serious works, one that I personally attach great importance to. It is, in a way, a very farsighted “futurology of religious faith” set in a heyday of technologies that allow thinking creatures to accomplish absolutely everything that Nature can accomplish and, furthermore, everything that is potentially possible, but which Nature does not realize directly. (Nature does not directly realize typewriters.) I always wondered why the critics never paid much attention or gave much interpretation to *that* work.

I consider the exercise of taxonomizing (classifications, genealogies) in literature to be a harmful brand of scholastic activity (if it is meant to tell us how to pigeonhole a work), because the most interesting issues happen to be located on the borders of classes, especially the ones we consider sterile (like mules!). That is, it may appear that certain literary species are not to be crossbred, but I benefitted greatly from such crossbreeding. I hybridized cybernetics and quantum mechanics, impregnating them with fairy-tale schemas. I mixed kitchen scripts with rocket tales in Tichy’s adventures. (I have yet to come across an SF account of an astronaut with a stomach ache, or the specter of a stuffed up toilet—which as we know, was a major problem of the space shuttle.)

As I have written in my theoretical books, the conventionality of youth adventure stories (as in Verne) does not permit the gentle travellers to attend to their physiological needs. Such trifles are left out as non-existent. In realistic prose—as in Tolstoy, for example—while there may be no “toilet scenes,” we, the readers, understand perfectly well that the author *may leave out* such matters because Karenina and Vronsky were in apartments, and the fact that they went to the bathroom is of no consequence, and that fact alone suffices to account for Tolstoy’s silence on this matter. However, when men (or women) are sent into the Cosmos, or even to the Moon, they do not leave behind those parts of the anatomy used for passing stool and urine, as they do not leave behind the necessities of drinking, eating, and breathing. *A fortiori*, the unfortunate unsuitability of the human body-form for cosmic travel should at least be acknowledged in SF and such, if this stuff doesn’t want to be merely tales from *The 1001 Nights*. After all, the real astronauts had to grapple with shaving and menstruation on their way into orbit. SF in the US circa the 1950s was incredibly prudish. In the matters mentioned above, human physiology and sex, and also in regard to religious faith, it sported many taboos, and only when the world *outside SF* spilled over these barriers did SF run wild (for only a short while, fortunately), lurching into a “cosmic pornography” (Jose Farmer, for example)—from one extreme to another, but never in the middle.

The above considerations of “peepee and caca” are, of course, the bare minimum of realism. I know them well from personal experience, because when travelling in 1946 during the post-war resettlement from Lvov to Cracow—in rail boxcars—both ladies and gentlemen, although they were mightily embarrassed at first, had to take care of their bodily needs by extending their behinds through the doors held ajar, or to attempt the same right next to the temporarily halted train and be ready to board in a hurry in

case it moved on. Well, this necessity of “physiological exhibition” made the distance between the passengers vanish in a jiffy....

And, as far as limiting criteria of introducing in one’s serious writing pseudo-realistic, non-existent machines, technologies, and effects, I think that overall I am in this regard a cautious, restrained conservative. After all, in my writing of some quarter of a century ago, I spoke of the emergence of genetic engineering, continuous increase of computer power, and molecular computing as events far in the future, certainly the future that I would not live to see. Similarly, with my “embriон,” a fetus carried by two women in turn (see “Professor A. Donda” from *The Star Diaries*),<sup>9</sup> entailing the notion of fetal transfer; or with the freezing of sperm; or with making gene exchanges in the genotype (*Science Fiction and Futurology*)—all of these notions are now more or less state of the art. It is most peculiar that when the conclusion of *Peace on Earth* led me to the concept of computer programs acting as malignant viruses or cancers, and when I settled on that ending even though it seemed to me overly fantastic (that is, taken from thin air, as it were—not deserving of inclusion *even* in a satire), I happened to pick up a copy of *Newsweek* about the so-called Soft Wars or Core Wars, and then a large piece in *Scientific American* on the same topic. No reader of *Peace on Earth* will think, I suppose, that the author thought these things up before learning of their real status, that the author did not use technical literature but instead thought along the lines of an analogy between computer/program and phenotype/genotype. Yet when writing *Peace on Earth*, I did not even have the help of accurate information on AIDS: the emergence of a never heretofore encountered virus which exploits the dense population of our planet, promiscuity, and the many available communication links responsible for transporting local germs to lands far and wide.

I took *circumstance* and *change* to be the two factors charting the changing ways of the world. All the politicians and columnists taking up the issue of Star Wars do not seem to realize that ever since technological evolution began its acceleration, no particular stage of it (in energy management, in mining, in distribution of goods, in economics, in production for military and consumer purposes, in aeronautics) is subject to freezing, to permanence. Each such stage is necessarily a passing one, and changes trigger changes (it’s a bootstrapping process, feeding on itself). These considerations happen to apply across the board to all disciplines. The dying of forests, the acid rains, the polluting of water sources, pollution-triggered climate changes, etc., will only intensify, as will the mass starvations of the Third World, because no local relief action will overturn the general trend. It is this type of implication that is hidden below the humorous surface of *The Futurological Congress*, which now reads rather strangely for me, for it feels much less fantastic (and thus, less entertaining) than when I wrote it.

Similarly, many ideas contained in *Summa Technologiae* are about to be realized. Of course, this realization is not *exactly* the same as I foresaw it (it would be a miracle if everything I wrote came about exactly as I predicted). This is why that book, which in 1964 appeared chock full of fairy tales intermingled with scientific “realia,” may be considered dated in places: after all, it talks about what *shall be*, whereas in places it already *is*. Those passages

must now appear to have been written about the contemporary state of things, for no one pays attention to when it was written. (I wrote it in 1962-63, but it came out a year later, as Polish printers acted slow as molasses; today, things creep even slower, one has to wait 2-3 years for an edition.) I think that the idea of making a roster of my published ideas in order to compare them with the calendarium of actual scientific and technological progress would be an interesting exercise. In computer science, Dr Gerhard Vowe has attempted just that.<sup>10</sup>

The above remarks pertain to my informational sources, and to my "grammar of concept-formation." It is not a closed phenomenon, stacked with tidbits of information, but rather a potential for the interception of and further thinking about certain problems and notions. My "futurological news" cannot be thus readily scooped out of my head, for they are there (if they are there) in a latent, potential state. They are mere rumors. My conclusions are extracted from them only through the course of my work.

*P.P.S.* I think it would be of benefit to present briefly my attitude towards criticism. For 20 years following the publication of my first book, I was treated in Poland as a writer of youth-oriented adventure stories, essentially a Grade B writer. Poland never really did "discover" me. The respect came with the echoes of my foreign successes. In fact, it wasn't what was written by the foreign critics that made the difference. Rather, it was the fact that I started accumulating all the translations: some 30-odd languages and millions of copies sold.

There were many causes for this state of affairs. The critics tend to be humanists (Polonists). The scientific paradigm is Chinese to them. Furthermore, SF in Poland (and beyond) has been regarded as a cheap genre. In fact, it came to the point that several years ago, when I was already established in the world and in Poland, one of our leading critics, a professor of Polish literature and a dean at the Jagellonian University (Jan Blόnski) confided to my wife that he could write something about me as a man, but about my books, nothing. He even apologized to me that he couldn't include my output in some colloquium he gave in France about Polish literature, *because* he was unable to identify my spot on the map of Polish literature, contemporary or past, among such-and-such an avant garde school or movement or what-not. Somehow I was "someplace else." On the other hand, Jerzy Jarzébski, a Gombrowicz scholar, did write a 200-page monograph about me (it is to appear in German next year, published by Insel Verlag of West Germany). And although he displayed a certain acumen in his analysis, he was unable to perceive my work from the "epistemological angle," for it is a side ingrained in biology, which is rather alien to him. *Nota bene*, Jarzébski, acquainted with my "empirical theory of literature," *The Philosophy of Chance*, and "Markiz w Grafie"<sup>11</sup> (in the last of which I applied game theory to a genological analysis of De Sade) did attempt to apply the method I proposed (the game theory's structure, the structure of dynamic conflicts, and not the static structures of the classic structuralism), even calling his book *Gra w Gombrowicza* ["The Gombrowicz Game"], but I can tell from the content that he has no idea of what game theory is all about, that the

notions of saddle-like payoff function and such, zero-sum and non-zero-sum games, etc. are completely foreign to him.

In the final tally, there never was inspiring criticism as far as I am concerned. There still isn't any. I have been given, however, much friendly advice to the effect that I should write (at last) a "normal contemporary novel," which could be profitably critiqued. This strikes me as analogous to advising a contemporary composer to compose "like Beethoven," because his or her own music is only so much noise.

Several of my belletristic titles did succeed in attracting accurate critics overseas (one of the first was T. Solotaroff a few years back), but since a great deal of my writing has never been translated into the languages accessible to the critics, the reviews have always struck me as tiny fragmentary snapshots of a larger panorama. Particularly the following (often entertaining) mistakes have been made by my foreign critics: (1) I have been accused of being familiar with the output of authors whom I have never read, as well as adherence to philosophical systems of which I have not the least idea. This alleged knowledge on my part was then taken as a starting point of the review. (2) Certain conclusions have been reached through the analysis of idioms and expressions which are artifacts of translations and never appeared in the Polish original. (3) I always seem to end up guilty of polemics, be it with religious faith, or with Bentham (with utilitarianism), or with causal determinism; or since there is a lot of space given to theology (and theodicy) in my work, then necessarily I must be religious; and if my novels happen to have many interpretations, then there must be one that is authoritative, correct, and final! (Better yet, I, the author, *know* perfectly well which is that correct interpretation, for it was my guiding principle during the course of writing: perhaps I did not succeed in rendering my intentions well, but I do know them well.)

This latter point is 100% wrong, at least in my case. I do not commence my belletristic endeavors with abstract philosophical contemplations. I write that and about that which surprises and intrigues me, and does so in the form of certain fuzzy ideas.

## NOTES

1. The philosophical journal Lem is referring to is *Studia Filozoficzne*.

2. *Wizja Lokalna* (*The Scene of the Crime*) is a long Ijon Tichy novel (313pp. in Polish), which appeared in 1982 from Lem's usual Polish publisher, Wydawnictwo Literackie. A Japanese translation appeared in 1983, and German editions in 1985 (the same translation was used in East and West Germany). No other translations are currently under contract.

3. "Provocation," a review of a non-existent book (a two-volume German treatise, *The Genocide*, by Horst Aspernicus) appeared in two issues (7 and 8, July and August 1980) of the Polish monthly *Odra*, and in 1981 as a German book from Suhrkamp in Frankfurt. A Russian translation will appear in a Russian exile magazine published by Rafail Nudelman in Israel. No other translations are under contract. "One Human Minute" and "The World as Holocaust" appeared first in 1983 in translation from Suhrkamp in Germany; along with "Weapons Systems of the 21st

Century," they form "Lem's Library of the 21st Century." All three are in a volume, *One Human Minute*, just published by Harcourt Brace Jovanovich.

4. "Edukacja Cyfrania" is a long *Cyberiad* story, first published in 1976 (by Widawnictwo Literackie) in the volume *Maska*; no full translations have appeared (although it is under contract in West Germany); partial translations have appeared in both East and West Germany.

5. *Fiasco* is as yet unpublished in Poland or anywhere else, but it is forthcoming in Sweden, France, both Germanies, Poland, and the US.

6. *Peace on Earth*, unpublished in Polish, was first published in 1985 in Swedish (*Fred på Jorden*, published by Brombergs), and is forthcoming in German, French, and Finnish; it is under contract to HBJ, and to Andre Deutsch in England.

7. See note 2.

8. Lem is in error here. *The Missouri Review* is not a monthly; it appears three times a year.

9. "Professor A. Donda" appeared in *Maska*; it is a "Reminiscence of Ijon Tichy" accidentally left out of the HBJ volume *Memoirs of a Space Traveler*.

10. See Hennings *et al.*, ed. *Informations- und Kommunikations Strukturen der Zukunft. Workshop mit Stanislaw Lem* (Wilhelm Fink Verlag, 1983).

11. "Markiz w Grafie," Lem's essay on De Sade, was translated into German as "Sade und die Spieltheorie" ("Sade and Game Theory"); there have been no other translations of it.