A NUCLEAR PHYSICIST'S FORAY INTO THE REALM OF FICTION: LEO SZILARD'S *THE VOICE OF THE DOLPHINS*

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> "Maybe... you will be remembered by these light-hearted fancies long after your contributions to science will have joined the melting pot of anonymity."
>
> Michael Polanyi

It is probably not too difficult to imagine the excitement that a Hungarian student of American utopian fiction felt when he rediscovered a collection of short stories in the utopian mode, published exactly thirty years ago, here in the U. S., written by one of the most famous Hungarian-born Americans. The title of this, by now almost forgotten, book is *The Voice of the Dolphins* and the name of its author is Leo Szilard.[1]

That this name is remembered by achievements accomplished outside the field of literature by no means lessened the rediscoverer's delight. On the contrary, the fact that Leo Szilard was one of the leading nuclear physicists of his time, rather than a professional writer, makes the results of his experiments with literature, those seven short stories in *The Voice of the Dolphins,* appear all the more interesting.

The explanation of this additional interest is simple enough. This modern age of ours, increasingly divided by the conflicting interests and world pictures of what another physicist-writer called the "two cultures", i.e. those of the sciences and those of the humanities,[2] has been a period all too well known for its scarcity of such versatile geniuses as an Albert Schweitzer, a Bertrand Russell — or a Leo Szilard.

Moreover, not only did Szilard punch holes into the iron curtain segregating the arts from the sciences, but his intellectual activities also transcended the water-tight compartments *within* these two domains. In the realm of the "hard sciences", beside his historic contribution to nuclear physics, Szilard was present at the birth of at least two more twentieth century disciplines: cybernetics and molecular biology — not to mention the almost casual research work he did in the fields of medical radiology and geriatrics. In the other major arena of human thought, i.e. in the humanities, together with the "soft sciences", Szilard engaged himself in politology and politics — the father of the A-bomb tried to father the peace movement of scientists[3] — and, of course, in writing literature.

It is through the critical appreciation of this last terrain of his activities that this paper endeavors to enhance our understanding of Szilard's personality and significance. Beside this general purpose, it is also my intention here to demonstrate that these short stories deserve the attention they have so far been denied and that purely on account of their intrinsic aesthetical merits.[4]

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Before undertaking such an evaluation, however, let us first examine what kind of writing, what genre of fiction, it is that the book to be examined represents.

There appear to be two features shared by at least five out of the six short stories in *The Voice of the Dolphins* on the basis of which such a generic identification can be made. The most striking common characteristic of these stories is their time-setting. All but one of them — the single exception being "Kathy and the Bear" — take place at some more or less distant future time. The other, concomitant, feature — stemming partly from the author's background — is the importance of science and scientists in the imaginary future (and, obliquely, Szilard's own, present) societies described in all but the last story.

The fact that the major concern of these writings is the role that science and scientists might play in the future of the human race could easily suggest that *The Voice of the Dolphins* is a collection of science fiction stories. And there would, after all, be nothing embarrassing about seeing Szilard in the company of a Verne, a Heinlein or an Asimov. The problem with such a facile classification is that however respectable a genre science fiction might be, it has at least two essential features that are marginal to, if not completely missing from, Szilard's short stories. One such trait of science-fiction *per se* is that the fictional worlds it creates are highly technicized universes, worlds characterized by an all-pervasive presence of technological gadgetry, whose detailed description is meant to be one of the greatest appeals of this popular genre.[5] The other main attraction of classic science fiction is that it lets loose an upsurge of the mixture of xenophobia and xenophilia that we feel when exposed to encounters of the 2+nth kind. Science fiction, in this respect, cashes in on the same kind of "alien-complex" that gothic stories exploit when they put the reader in contact with the otherworldly, the weird, the supernatural.[6]

These six stories by Szilard, however, depend on a totally different feature, i.e. on the originality of the author's perspective and/or ideas, for their effect. Only one of them — "The Mark Gable Foundation" — makes use of a (bio)technological process (the long-term hibernation of human beings) not yet feasible at the time of the story's conception, and just two of them — "Calling All Stars" and "Report on Grand Central Terminal" — feature some kind of alien civilization. Add to this that in all of these three cases, the quasi-science-fiction elements are, in themselves, rigidly conventional and utterly uninteresting: the familiar motif of hibernation had been around at least since Edward Bellamy's 1888 *Looking Backward,* whereas the community of superminds as depicted in "Calling All Stars" had, to my knowledge, first been conceived of in Olaf Stapledon's 1930 evolutionary utopia *Last and First Men.*

As for the alien visitors to Earth in "Report on Grand Central Terminal", they appear to be — to the extent that Szilard goes into the trouble of introducing them at all — pretty much the same complacently gullible lot that Szilard saw us Earthlings to be.

If science fiction is thus a misnomer for Szilard's literary work, what else do we have to describe his writing with? Future fiction could be a usable label, but as this term is perhaps too much of a neologism, utopia, in the broadest sense of the word, may be the best descriptive category. Broadest, I say, because if utopia is understood

as a term referring to wishful thinking or blueprints for an earthly paradise, then only the title story of *The Voice of the Dolphins* would qualify as a full-fledged utopia. ("My Trial as a War Criminal" would be a borderline case.) If, however, utopia is used in a sense that embraces extrapolations of social tendencies that can also lead to disastrous, as opposed to desirable, consequences, that is if we include *dys*topias, as opposed to *eu*topias, into our definition of utopias, then five out of six of these stories will be accounted for by the proposed generic term.[7] The only non-utopian piece is "Kathy and the Bears", the last story, whose realistic setting and mildly humorous tone are probably meant to serve as soothing antidotes to the sometimes depressing effect of the fantasizing that goes on in the previous five.

Though accurate, the classification of those five stories in *The Voice of the Dolphins* as specimens of utopian or future fiction would in itself give the reader a one-sided picture of Szilard's book. The originality of these utopian schemes would probably have faded by now had it not been for the distinctly Szilardian narrative tone. This tone is characterized by a unique sense of humor, whose manifestations range from the smiling puzzlement with which the aging narrator views the idiosyncratic ways his little niece tries to come to grips with the ultimate questions of human existence in "Kathy and the Bear", to the unsparing irony exposing the arrogant stupidity of politicians in the title piece, or to the bitter, despairing satire provoked by the self destructive irrationality of humankind in "Report on Grand Central Terminal" or "Calling on All Stars".

The unifying effect of the utopian genre and the all-pervasive humor notwithstanding, a closer look at the individual stories will reveal that their aesthetic quality is somewhat uneven. The best are probably those shorter ones where Szilard did not have the time to be distracted from fully developing one of his brilliant ideas by the fireworks of another dozen. In the title story, Szilard was, regrettably, unable to resist this temptation. It was probably "The Voice of the Dolphins" whose careless execution provoked some contemporary commentators to dismiss the whole collection as one "not notable for narrative style", or, even worse, as a work "particularly dull in its fiction".[8]

Although this kind of sweeping dismissal is just about as fair as it would be to judge, say, Daniel Defoe's merits as a writer by his "The Shortest Way with the Dissenters", if restricted to the title story, the gist of such unfavorable criticism is unfortunately valid. "The Voice of the Dolphins" is, in essence, a political tract wrapped in the very thin sugar-coating of fantasy fiction. Its central idea — almost lost among dozens of practical political tips — is that the fate of the world is in the wrong hands: all professional politicians are malicious half-wits, whose job would be done a hundred times better by the international — mainly American and Russian — elite of scientists, or, to reverse president Truman's motto, scientists should be "on top, not only on tap" at the White House.

Even if one were willing to reconsider the Wellsian (and ultimately Platonic) idea that a voluntary nobility of the intellectually and morally superior should provide a dictatorial but rationally benevolent leadership for the dull majority,[9] one would still prefer to be spared the not too exciting frame story with which Szilard sets out to en-

tertain the reader and/or himself. This frame story involves a scientific institute set up in Vienna in order to work out ways of communicating with the superintelligent species of the dolphins. On the basis of this communication the institute gradually becomes a latter-day oracle of dolphin-Delphoi and the staff of scientists, having convinced the whole world that their source of political insight is that omniscient dolphin-community, eventually succeed in selling their advice to the leaders of the superpowers on how to get out of the "atomic stalemate" and achieve lasting peace for the world. Their mission happily accomplished, and letting their advisors the wise dolphins mysteriously perish in some kind of viral disease, the scientists return to their respective homes in California and the Crimea, leaving the world to puzzle over the authenticity of the whole dolphin-affair. We, the readers, are of course cleverer than that and in case we are not, Szilard drops us a few hints to suggest that the dolphin-story was but a clever ruse that enabled those scientists to market their commodity: world peace.

The foregoing account of the plot might leave the reader with the impression that the "The Voice of the Dolphins" has a more or less elaborate narrative structure: to dispel such a misconception, let me quickly point out that the narrative versus treatise ratio, in terms of respective pages, is something like one to ten.

What can still save the title story from oblivion is, beside Szilard's benevolent political intentions, the author's irresistible wit and the surprising accuracy of some of his prophecies. For the former, consider the following acrimonious remark allegedly made by one of the dolphins about the freedom of speech in America:

> Pi Omega Ro [the dolphin] asked whether it would be correct to assume that Americans were free to say what they think, because they did not think what they were not free to say.[10]

As for Szilard's uncanny political foresight, that can be best illustrated by the fact that he was able to predict, around 1960, that America would, sooner or later face serious problems in two middle-eastern countries: Iran and Iraq.

For all the humor and political acumen manifested in "The Voice of the Dolphins", this very long short story of a treatise is by no means Szilard the writer at his best. For that, we should turn to some of the briefer stories. Of these, for reasons of space, it is only "Report on Grand Central Terminal" that I will now consider in some detail.

In this story, the reader is given an account, in the form of a scientific report, of the findings of an expedition from outer space to our planet Earth. The alien space travellers, whose identity, appearance or means of transportation Szilard thankfully does not bother to describe, find but the burnt out hulks of our terrestrial civilization, which has apparently been destroyed by an all-out nuclear war. Some of the buildings in a large city remained intact, however. Among them is an enormous hall with the sign "Grand Central Terminal" on it. It is in this huge construction that the alien scientists find two smaller halls labelled "Men" and "Women", respectively. While it takes the investigators little time to figure out what purposes these small halls with their cubicles could have served, the function of the complicated gadgets keeping each door locked from the outside and the small disks with the word "Liberty" on them that are

contained in the gadgets is beyond these intelligent creatures. It is eventually a young scientist, a certain Xram (please note the anagram), who comes up with a daringly original hypothesis. This is how Xram's older colleague, the ostensible narrator, in his officiously clumsy style summarizes his associate's theory:

> He believes that these disks were given out to earth dwellers as rewards for services. He says that the earth-dwellers were *not* rational beings and that they would not have collaborated in co-operative enterprises without some special incentive.[11]

On the basis of these premises, Xram, this extra-terrestrial economist, can even offer an explanation of why the thermo-nuclear disaster that killed off the population of the Earth occurred:

> He has made some elaborate calculations which show that a system of production and distribution of goods based on a system of exchanging disks cannot be stable but is necessarily subject to fluctuations vaguely reminiscent of the manic depressive cycles of the insane. He goes as far as to say that in such a depressive phase war becomes psychologically possible even *within* the same species.[12]

The unimaginative narrator who patronizingly dismisses his young colleague's conclusions is thoroughly ridiculed by the author, which fact suggest that the theories expounded by Xram may come quite close to what Szilard himself believed to be the possible causes of war. Unless, of course, this is just another of his deadpan hoaxes.

But even if Szilard was a crypto-Xramist, the overall effect of the story is by no means marred by the author's possible political-economic views, thanks to the unity of the satirical tone (no serious proposals or lectures here) and the manageably limited number of themes (there are just about two more besides the correlation that holds between lavatories and money on the one hand and between money and war on the other).[13] This unity of tone and purpose in "Report on Grand Central Terminal" are the assets so regrettably missing from the title story. Furthermore, unlike the dolphin-ruse which is quickly abandoned in "The Voice of the Dolphins", the heuristic device of peering at the suicidal irrationality of humankind through the money-slots of some public facilities is exploited to its full mock-epistemological effect in "Report on Grand Central Terminal".

It would be tempting to compare the total despair pervading "Calling All Stars" to such great pessimistic works of Hungarian and world literature as Madách's *The Tragedy of Man,* the late Vörösmarty's poetry, the fourth voyage in *Gulliver's Travels* or some of Samuel Beckett's absurd dramas, just as it would be pleasant to revisit the charming passages of the idyllic "Kathy and the Bear". The confines of this paper, however, only allow me to reiterate one of the opening remarks of this paper: the collection of Szilard's short stories would be worthy of much more recognition in the native country of their writer than has been accorded to it so far. And what could be a more fitting tribute to their author's manyfold talents than the long overdue publication in Hungarian of all the six stories in *The Voice of the Dolphins?* The thirtieth anniversary of their original, English, publication could be a splendid occasion for such an enterprise.[14]

Notes

1. The credits for the original discovery in Hungary go to Professor C. Kretzoi, whose Hungarian translation of "Report on Grand Central Terminal" appeared in *Magyar Nemzet* in the early sixties. (Date unavailable in Bloomington, Indiana, venue of research.)
2. It was in the title of Sir Charles P. Snow's seminal 1959 Rede Lecture, *The Two Cultures and the Scientific Revolution,* that this coinage was first publicly used in reference to the apparently unbridgeable schism between the arts and the sciences.
3. This *bon mot* on Szilard's "double fatherhood" (i.e. that of the bomb and that of the scientific peace movement) is taken from a box accompanying Edward Shils' 1964 memoir of Szilard in *Encounter* (Shils, 35).
4. Beside a handful of contemporary book-reviews and the occasional reference to *The Voice of the Dolphins* in the Introduction to *Toward a Liveable World,* a collection of documents relating to the Szilard-lead "crusade" for nuclear arms control, I am unaware of the existence of any attempt at a serious critical assessment of his literary heritage either in English or in Hungarian. Even more regrettable is the fact that while *The Voice of the Dolphins* can be read in Italian, French, German, Spanish, Japanese, and Danish, there exists no full Hungarian translation.
5. There are much broader definitions of the genre which, overlooking the sci-tech aspect as a feature less than universal and therefore not essential to sci-fi, would make utopia into a sub-genre of science fiction (e.g. Suvin throughout). Although I do not share Kingsley Widmer's intense aversion from science-fiction in general, I am rather inclined to agree with his observation that "Suvin nowhere pauses to consider the arbitrariness of sci-fi conventions, including the dehumanizing manias such as technological fetishism, techno-jargonized language, abstracted psychology, and the pathology of cosmic space fixation in its flight from the earthly human" (Widmer, 5).
6. Although it is used in a slightly different context, Stanislav Lem's term "pleasant creeps" provides us with a good description of this effect (quoted by Widmer on Widmer, 143).
7. "The playful printed matter prefixed to the body of the book [i.e. to Thomas More's *Utopia*] the poet Laureate of the island, in a brief self-congratulatory poem... claimed that his country deserved to be called 'Eutopia' with an *eu,* which in Greek connoted a broad spectrum of positive attributes from good through ideal, prosperous, and perfect." (Manuel and Manuel, 1) Hence *dy*stopia, the opposite of eutopia, a world with every possible kind of unpleasant connotation: the bad place. The term, though may sound unfamiliar to the educated layman, is of considerable currency among students of the utopian genre.
8. These harsh reviews appeared in *Booklist* (57:696 July 15, 1961) and in *Kirkus* (29:123 February 1, 1961), respectively. It is interesting to note that the reviewer of the *Christian Science Monitor* found *The Voice of the Dolphins* "imaginative [and] witty" and the columnist of the *Springfield Republican* celebrated the book as "an extremely satisfying work of art" (*Book Review Digest,* 1961:1386).
9. The two classic examples of elitist utopias referred to here are, of course, Plato's *Republic* and Wells' *A Modern Utopia.* Biographical evidence suggests that Szilard was an admirer of Wells and of Plato (Introduction to Szilard 1986 by B. J. Bernstein, xxvi; Shils, 36; Wigner, 34).
10. Szilard 1961, 54.
11. Szilard 1961, 167.
12. Szilard 1961, 168.
13. There is no indication in any of the biographical documents that I have the opportunity to study (for which please consider the relevant titles in the "Bibliography") that Szilard, as a political thinker ever seriously entertained Marxist thoughts. He does not appear to have been a fellow traveller.
14. Although first published in English, the stories were originally written in German — a circumstance apparently overlooked by the contemporary reviewer of the *Springfield Republican,* who was quite impressed by the foreign-born scientist's mastery of English (5D May 14, 1961, quoted in *Book Review Digest* 1961, 1386).

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