

The Mosquito incident and the need-(not-)to-know*

Karl Svozil†

Institute for Theoretical Physics, TU Wien, Wiedner Hauptstrasse 8-10/136, 1040 Vienna, Austria

(Dated: September 20, 2022)

I am reporting here how professor Cristian Sorin Calude, henceforth called Cris, became involved in the “Mosquito incident”. More generally, the relationship between the single individual vis-à-vis the state or collective is reviewed, with special emphasis to need-(not-)to-know secrets.

At some point in history, Cris lived in ideological tyranny called “communism”. Economically, communism brought austerity, frustration and devastation. Because due to its collectivist economic principles that suppressed individualistic entrepreneurship this totalitarian form of government was unable to provide consumerism and the type of cargo cult which, due to human technologic and energetic advances resulting in huge productivity increases, flourished elsewhere. Communism wasted huge amounts of resources to produce very little goodies consumable by its unfortunate citizenry.

It is my sombre observation that history provides ample evidence that more common equality results in more common misery. Conversely, steepening inequalities—the rich get richer—result in improved living conditions of the poor. Such is the result of compound interest; and, besides catastrophes—some of them economical like communism—and war, there are hardly any means to bring down inequality [1]. The late Dirac’s observation on the futility of war [2] adds an impasse by pointing out that there is, in modern terminology, a dilemma between equality of opportunity and motivation for outcome: for, Dirac observed, there are two equally justified socio-political positions—the right of parents to pass on their achievements to their children, as well as the right of every child for equal chances of well-being—that shan’t be the topic negotiated by war among conflicting ideologies.

Because of the misery it had instigated, communism had to curb and control the flow of information and people. For it won’t be for long that, in a more liberal unrestricted environment, the most gifted and able persons escape to other places where living was easier—a kind of osmosis. Who can be blamed for that?

These, I kindly remind you, were the times of the “iron curtain” and the “Berlin wall”, times of heroes and villains—recall John F. Kennedy’s boyish-pathetic “ick bin ein Berliner!”, and his manly stance in breaking the Soviet blockade of West Berlin with a massive airlift. From the communistic inside it was rather obvious who was who; in particular who was the villain—no doubt about that. People suffered through this communist tyranny on a day-to-day basis; their misery was just too obvious and evident. But, of course, it was also

the time of Dwight D. Eisenhower’s epic “good luck with our military industrial complex” farewell speech.

Coming back to the story, in those times Cris corresponded with a colleague from one of the United States of America’s “outremer” colonies, aka “the West”. And, as noted by Cristian Terhes, a Romanian member of the European Parliament in an October 28, 2021 press conference about a heavily redacted contract between the European Commission and a big pharmaceutical company [3]: “the difference between tyranny and democracy is very simple: when the government knows everything about you, that’s tyranny. I know how it is to live in tyranny. When you know everything about your government, that’s democracy.” Accordingly, the Romanian government at the time wanted to know everything about the correspondence between Cris and the West; in particular not only the metadata, but also the content. In those days the easiest method for this to achieve was to physically open the correspondence. Knowing this, Cris, therefore, devised an ingenious way of reflection on this eavesdropping: he would write in his letter to a western colleague that it can be easily established if someone had opened and read the letter. For if, upon its delivery, no mosquito could be found inside of the envelope, this would clearly indicate that the letter had been opened, its content compromised, and then sealed and resubmitted before its final delivery.

An easy and at the same time effective way of certification—at first sight. And sure enough, when the colleague in “the West” opened the letter ... out fell a mosquito.

Only Cris had never deposited a mosquito in the letter in the first place!

In that way, the legit sending and receiving parties had, beyond doubt, ascertained that the Securitate—the popular term for the Romanian Departamentul Securitatii Statului (Department of State Security)—had opened, read, and understood the latter in its immediate meaning—and had put in a mosquito upon closing it. It is still a sarcastic pleasure to imagine those malign bureaucrats at Securitate—maybe feverishly and desperately—catching a mosquito, and inserting it into the letter, in their preparation for re-sending it to “the West”. Little did they know that Cris had arranged with his colleague this to be a token of authentication unbeknownst to them! As a mathematician you could also say that they made Securitate perform an involutory Cantor diagonalization on parts of the message—metacryptography of sorts.

As far as I know, this was not a single “mosquito incidence” but was applied to each letter of a series of letters, each one containing a properly apprehended mosquito upon delivery. Poor little buggers!

* This historic deliberation is a contribution to a collection entitled “*Liber Amicorum Cristian S. Calude 70*”, edited by Cezar Campeanu, Michael J. Dinneen and the author, on the occasion of Professor Calude’s 70th birthday, pages 73-80 (2022); available from <http://grail.smcs.queensu.ca/LACris70/LiberAmicorumCris70.pdf>

† svozil@tuwien.ac.at; <http://tph.tuwien.ac.at/~svozil>

Cris told me that this type of tampering with the powers that be was not entirely uncommon. Indeed, mathematicians tried various methods to trick the regime without being punished. In this case, Securitate didn't suspect any malicious play and nobody stopped the letters—probably because they thought the outcome might have been worse for them. After all, they lived in that same hermetic tyranny, which threatened all of them.

Other instances involved an internationally well-known political opponent of the regime who was the youngest doctor in mathematics in the country for some time before Cris got his Ph.D. a few months younger in 1976. Cris told me that this person played many intelligent tricks. For example, he knew and told lots of political jokes. One could go to jail for spreading, even for listening to some such jokes. He enjoyed telling them to the big political cats in the university. So these guys tried to avoid him, sometimes in hilarious attempts, because these were no-no situations: on the one hand, listening to them might have turned out to be dangerous; and yet, on the other hand, not listening was kind of embarrassing: well, you cannot even enjoy a joke, mate!

Cris told me that from this person he learned the following dictum: “only those who work make mistakes”. (My maybe incorrect reading of this is: those in power are those who work very hard and thereby make huge mistakes.) To understand its context, one needs to know that men in communism could be convicted to jail if they did not work. Such were these times!

As already pointed out earlier, my own judgements about these tyrannies coincided with those who had to bear and suffer through them; the misery and suppression was just too obvious and totally unsophisticated. And yet, I may have been able to afford more nuanced views about western governments. For instance, during my visits to the late Soviet Union in 1986 and 1987, it was obvious that state tyranny was prevalent—evil was easily identifiable, and was commonly acknowledged. For instance, the first thing the Soviet colleague taking care of me did was to direct me to a little wooded area on the banks of the Moskva river, very close to the Lomonosov Moscow State University, and asked me if I was a member of a communist party. Upon my negation and curiosity, he told me that he just had to make sure that I am no communist cadre sent to spy on him. Caution demanded that he had to be very careful and kept his distance otherwise. I guess the physicists there would have encapsulated me like a tumor, refusing to cooperate. I should point out that the Soviet Russian colleagues I met and cooperated turned out to be the most kind, friendly and cooperative persons I had met thus far. They considered a copy machine as the “most sexiest thing” in town. Maybe I did not get the joke.

Alas, those “in the West” may find it much more difficult to cope with their governments when it comes to the treatment of its citizens. There was no outright, easily acknowledged evil; and “the West” fed its citizens well by implementing a cargo cult-type consumerism. We indulged ourselves in conveniences, travel, and relative freedom of speech—as long as we were not influential and did not stir too much attention. I had even co-organized peace rallies in Vienna before I joined the Department of Energy's Lawrence Berkeley Labo-

ratory as a visiting scholar. But I wonder how much autonomy we really had in all of this. This relates to Zizek's article on Wikipedia mentioned later [4].

There seems to be a prevailing dichotomy between governments and the collective on the one side vis-à-vis its individual constituents on the other side. It would be much too easy—and this has been brought forward by many historic thinkers such as Confuzius, Plato, and Rousseau—to assume that governments are “by the people and for the people”, and that its subjects should therefore obey its hopefully benign and merciful and wise rulers. Indeed, there exists a long tradition of perceiving rulers and government as potentially malign if not outright bad and dangerous.

Again and again, at issue is the concept of the individual human being vis-à-vis the collective, the state and its apparatus. We find an individual stance, a will, already in the epic of Gilgamesh [5]. Athenians in their short classical democratic period tried to curb government by introducing sortition—that is, elements of the random selection of offices, as manifested in the kleroterion, an early randomness generator [6]—as well as ostracism. The British “Magna Carta Libertatum” commonly called Magna Carta, the United States Constitution with all its Amendments, and the Federalist Papers, as well as Montesquieu's Separation of Powers were inspired by individual rights and freedom vis-à-vis the collective. Socrates may have thought of this too. In more recent times Popper [7] as well as Berlin [8], Shafarevich [9] and Ayn Rand preferred the primate of individualism with regard to its freedom of expression, self-determination, and autonomy.

And yet, how far should autonomy go? Is there a mandatory, citizen's inalienable rights to know; a desire to know the facts to evaluate a situation that cannot be transferred to others, even by legal procedures and “oversight” by state functionaries and representatives? How extended needs the freedom of information, the people's right to know, be? Is there any reason for compartmentalization and restriction by “need-to-know”? And are there “outer” restrictions to “need-to-know” that curb autonomy?

It is generally assumed that for obvious reasons certain truths—e.g., so-called “state secrets”—cannot be revealed to adversaries. Ernst Specker once quoted similarities with “Jesuit lies”; the sort of allowed “white lies” to (allegedly) prevent greater harm than the lie itself. If, for instance, you told an adversary your line of defense or attack, this would greatly increase his ability to overcome your plans and defeat you. Some of this is reflected in Popper's “paradox of tolerance”. Zizek partially agrees and puts forward some anecdotal evidence for nondisclosure also when it comes to politeness and tact that could seriously affect serious politics [4]; yet he also mentions that people's right to know includes revelations of the WikiLeaks story. He speaks of “moments of crisis for the hegemonic discourse—when one should take the risk of provoking the disintegration of appearances”, with all the repercussions this might entail. Ellsberg's publication of the Pentagon Papers and other secret material published by Snowden might fall in this category.

So what exactly needs to be kept secret and what has to be disclosed? This is not a question of black-and-white but

nuance. Imagine, for instance, it would be revealed that our planet is visited by various alien species and life forms, in particular ones resembling humans, as well as insectoids and reptilians, some of them telepathic; that these life-forms can move in crafts that are unimpeded by our military; that the only time we unintentionally shot down a craft of the “others” was on July 9, 1962, as operation Starfish Prime produced a massive electromagnetic pulse from a nuclear explosion at an altitude of 250 miles above the Pacific Ocean; that the “others” intentions are not always benign, as they abduct humans, mutilate cattle and cause nuclear weapon systems to engage and stop functioning; that even the head of the United Nations, Javier Pérez de Cuéllar, was “ordered” by them not to disclose their existence ... suppose all of this is true [10–15]—then what—“how about that” [16]?

Would it not be better to hide these inconvenient truths from the public, and maintain a facade like in the 1998 movie “The Truman Show” [17]? I would like to raise this question, as expressed in the Japanese-Polish movie “Avalon” [18]: “What is

the better game, one of which you think you can leave but can’t, or one that looks impossible to leave but an exit always exists?” How much need-to-know if that knowledge is harmful or disillusioning? And yet, as noted by Goethe, “No one is more a slave than he who thinks he is free without being so.”

Maybe truth is a relative concept depending on context and means, an multi-layered and sometimes even amorphous entity. It varies with respect to the means and purposes available; almost appearing as an epistemic concept. I am well aware that such a stance disputes the “ontic” and “pathetic” conception of truth by, for instance, Hannah Arendt, as “conceptually, we may call truth what we cannot change” [19]. For we have no absolute means, no metaphysical Archimedean anchor, to establish this kind of “truth that we cannot change”. Let alone the situation that, in its extreme form, we have no autonomy to commit ourselves to such truth or facts. And we may not even be allowed, neither might we desire, to acknowledge that on a meta-level, so that we may not even want to know what we are not allowed to know. And yet it sometimes helps to keep in mind the unknown unknowns.

-
- [1] W. Scheidel, *The Great Leveler: Violence and the History of Inequality from the Stone Age to the Twenty-First Century*, The Princeton Economic History of the Western World (Princeton University Press, 2017).
 - [2] P. A. M. Dirac, The futility of war, in *The World-wide Implications of a Nuclear War. 1st Session*, The Science and Culture Series – Nuclear Strategy and Peace Technology, Vol. 1, edited by E. Etim and S. Stipcich (World Scientific, Singapore, 1992) pp. 173–175.
 - [3] The European Commission, [Advance purchase agreement \(“APA”\) for the development, production, priority-purchasing options and supply of a successful COVID-19 vaccine for EU member states](#), accessed on January 10th, 2022.
 - [4] S. Zizek, Good manners in the age of WikiLeaks, [London Review of Books](#) **33** (2011).
 - [5] A. George, *The Epic of Gilgamesh. The Babylonian Epic Poem and Other Texts in Akkadian and Sumerian* (Penguin Books Ltd, London, England, UK, 1999).
 - [6] S. Dow, Aristotle, the Kleroteria, and the courts, [Harvard Studies in Classical Philology](#) **50**, 1 (1939).
 - [7] K. R. Popper, *The Open Society and Its Enemies: The Spell of Plato*, 5th ed., Vol. 1 (Princeton University Press, 1971).
 - [8] I. Berlin, *Liberty*, 2nd ed. (Oxford University Press, Oxford, UK, 2002,2003) edited by Henry Hardy.
 - [9] I. Shafarevich, *The Socialist Phenomenon* (Harper & Row, New York, NY, USA, 1980) foreword by Aleksandr I. Solzhenitsyn.
 - [10] T. DeLonge and A. J. Hartley, *Sekret Machines Book 1: Chasing Shadows* (To The Stars, Inc., distributed by Simon & Schuster, Encinitas, CA, USA, 2016).
 - [11] T. DeLonge and P. Levenda, *Sekret Machines: Gods, Gods, Men & War*, Vol. 1 (To The Stars, Inc., distributed by Simon & Schuster, Encinitas, CA, USA, 2016).
 - [12] T. DeLonge and A. J. Hartley, *Sekret Machines Book 2: A Fire Within*, Gods, Men & War, Vol. 1 (To The Stars, Inc., distributed by Simon & Schuster, Encinitas, CA, USA, 2018).
 - [13] T. DeLonge and P. Levenda, *Sekret Machines: Men*, Gods, Men & War, Vol. 1 (To The Stars, Inc., distributed by Simon & Schuster, Encinitas, CA, USA, 2019).
 - [14] R. M. Dolan, *Alien Agendas: A Speculative Analysis of Those Visiting Earth* (Richard Dolan Press, Rochester, NY, USA, 2020).
 - [15] J. T. Lacatski, C. A. Kelleher, and G. Knapp, *Skinwalkers at the Pentagon. An Insiders’ Account of the Government’s Secret UFO Program* (Independently published, PO Box 50790, Henderson, NV 89016, USA, 2021).
 - [16] W. Jones and F. Martin, *Unidentified flying objects: The true story of flying saucers* (1956).
 - [17] P. Weir and F. Martin, *The truman show* (1998).
 - [18] K. Ito and M. Oshii, *Avalon* (2001).
 - [19] H. Arendt, Truth and politics, *The New Yorker* (1967), february 25, 1967 Issue.