

Studiu de caz

GCEA - Curs 12

20 Decembrie 2022

Principiul precauției și cercetările riscante

- Are cercetătorul datoria morală să se abțină, spre exemplu, de la a publica rezultate care pot să pună mijloace de distrugere masive în mâna unor actori, statali sau non-statali, rău intenționați?
- Iar în cazul în care acele rezultate sunt folosite destructiv, poartă cercetătorul o responsabilitate pentru efectele provocate?

E. Socaciu, C. Vică, E. Mihailov, T. Gibeau, V. Mureșan, & M. Constantinescu, *Etică și integritate academică*, București: Editura Universității din București, p. 105

Principiul precauției și cercetările riscante

- **Incertitudine:** în programele de cercetare ample este imposibil să anticipăm/urmărim toate rezultatele finale sau efectele acestora
- Uneori nu avem materialele (tehnologia) necesară pentru a realiza toate predicțiile/acuratețea acestora
- Efectele/rezultatele pe termen lung

Principiul precauției și cercetările riscante

- Ce ar trebui să facem?

Principiul precauției: o transpunere instituțională a prescripției hipocratice. (E. Socaciu, C. Vică, E. Mihailov, T. Gibeau, V. Mureșan, & M. Constantinescu, *Etică și integritate academică*, București: Editura Universității din București, p. 106)

„primum non nocere” (înainte de toate, nu face rău!)

Principiul precauției

Critici

- Drobul de sare – stoparea sau încetinirea procesului științific/tehnologic
- Mult prea general și vag
- Nu oferă informații clare despre CUM să procedăm într-un anumit moment
- În ciuda acestor critici, Principiul a început să fie adoptat.
- Care este părerea voastră cu privire la criticile acestui Principiu?

Farse academice

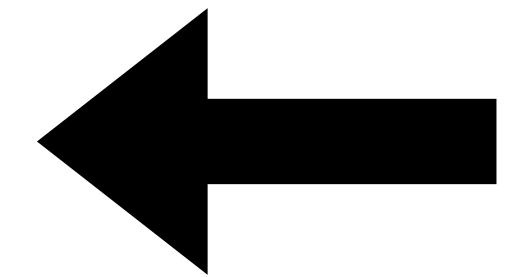
We're funny

- James Lindsay
- Helen Pluckrose
- Peter Boghossian
- **Au scris 20 de articole false (fake papers) în care au utilizat jargon academic pentru a argumenta în favoarea unor teze ridicole și le-au trimis spre publicare către articole de top**
- **Teme: gender studies, queer studies, fat studies**
- **7 din aceste articole au fost publicate**
- **7 erau în mijlocul procesului de review**
- **6 au fost respinse**

- Let's go back in time:
- 1990s - Alan Sokal (profesor de fizică - New York University)
- A trimis articolul către *Social Text*
- Articolul a fost publicat

that there exists an external world, whose properties are independent of any individual human being and indeed of humanity as a whole; that these properties are encoded in “eternal” physical laws; and that human beings can obtain reliable, albeit imperfect and tentative, knowledge of these laws by hewing to the “objective” procedures and epistemological strictures prescribed by the (so-called) scientific method.

Sokal went on to “disprove” his credo in fashionable jargon. “Feminist and poststructuralist critiques have demystified the substantive content of mainstream Western scientific practice, revealing the ideology of domination concealed behind the façade of ‘objectivity,’” he claimed. “It has thus become increasingly apparent that physical ‘reality,’ no less than social ‘reality,’ is at bottom a social and linguistic construct.”



Present time

Unul din articolele publicate...

“The paper that was published in *Gender, Place and Culture* seems downright silly. “Human Reaction to Rape Culture and Queer Performativity at Urban Dog Parks in Portland, Oregon” claims to be based on in situ observation of canine rape culture in a Portland dog park. “Do dogs suffer oppression based upon (perceived) gender?” the paper asks.”

(<https://www.theatlantic.com/ideas/archive/2018/10/new-sokal-hoax/572212/>)

- Dincolo de faptul evident că există probleme mari în procesul de publicare, aceste articole demonstrează că o serie de reviste prestigioase sunt dispuse să publice articole care discriminează, dacă aceasta are scopuri preogresiste.
- **Mai exact, a fost publicat un articol care milita pentru adoptarea unor măsuri extreme pentru a elimina ‘privilegiul’ pe care studenții albi îl au.**

Exhorting college professors to enact forms of “experiential reparations,” the paper suggests telling privileged students to stay silent, or even binding them to the floor in chains. If students protest, educators are told to

take considerable care not to validate privilege, sympathize with, or reinforce it and in so doing, recenter the needs of privileged groups at the expense of marginalized ones. The reactionary verbal protestations of those who oppose the progressive stack are verbal behaviors and defensive mechanisms that mask the fragility inherent to those inculcated in privilege.

După Pluckrose, Lindsay și Boghossian, farsa lor indică lipsa de standarde din aceste domenii și faptul că **orice poate trece drept cercetare serioasă pentru revistele în cauză, dacă „rezultatele” sunt ambalate în limbajul corect și susțin anumite teze valorice.**

Ei au fost însă criticați pentru lipsa de etică a farsei (violarea confidențialității prin publicarea unor rapoarte de evaluare, rea-voință și intenția denigratoare, încălcarea în mod voit a unor norme implicite privind încrederea reciprocă între autori și jurnalele științifice etc.)

Identificați și discutați argumente pro și contra moralității acestor farse.

Ready for this?

Try not to laugh

- “Un articol inexistent, scris de autori inexistenți și publicat într-o revistă inexistentă a fost citat de peste 1.100 ori!”
- “Numărul total al acestor expresii [citări] este cea mai obiectivă unitate de măsură a importanței articolului pentru cercetarea curentă”
- (<https://www.contributors.ro/un-articol-inexistent-scris-de-autori-inexistenti-si-publicat-intr-o-revista-inexistenta-a-fost-citat-de-pest-1-100-ori/>)

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| <input type="checkbox"/> | Alamasu, B., Van der Geer, J [Show all authors] | J SCI COMMUN | The role of bioenergy in the National Renewable... URL: https://www.leep.eu/as sets/rsc/bioenergy_in_NRE APs.pdf | | 2000 | 163 | | 51 | | 1 |
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[CITATION] The art of writing a scientific article

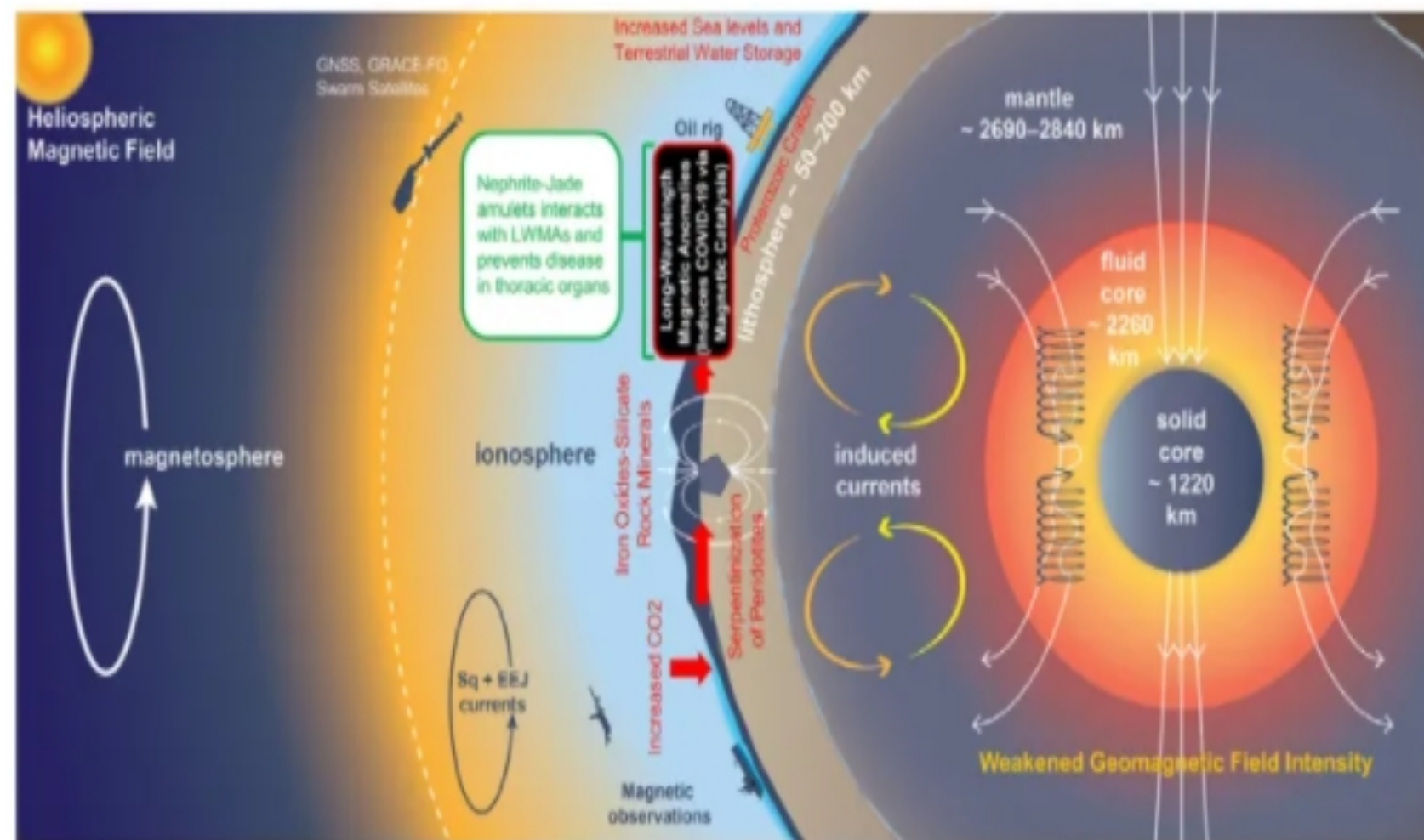
J Van der Geer, JAJ Hanraads, RA Lupton - J. Sci. Commun, 2000

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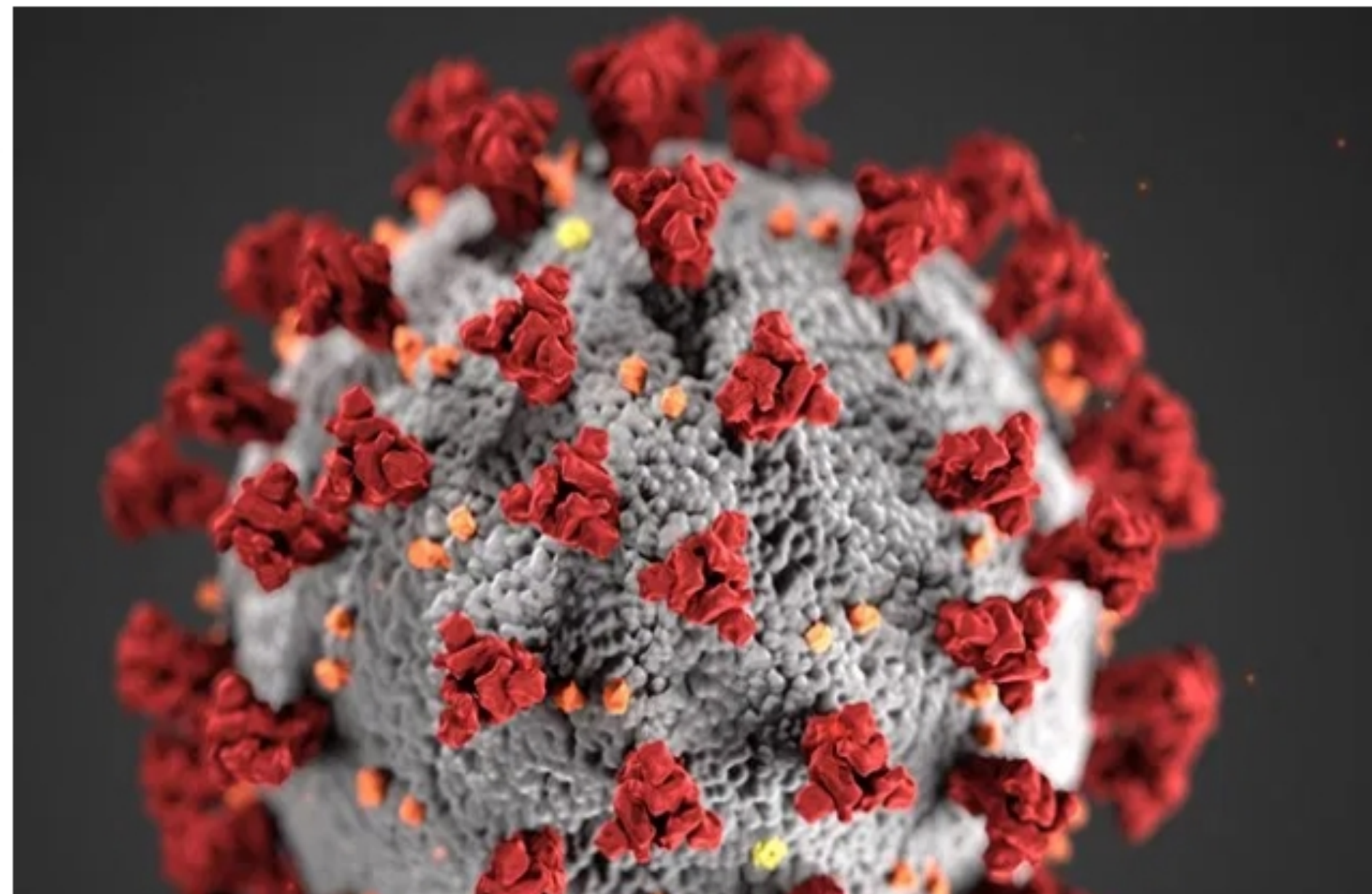
<https://retractionwatch.com/>

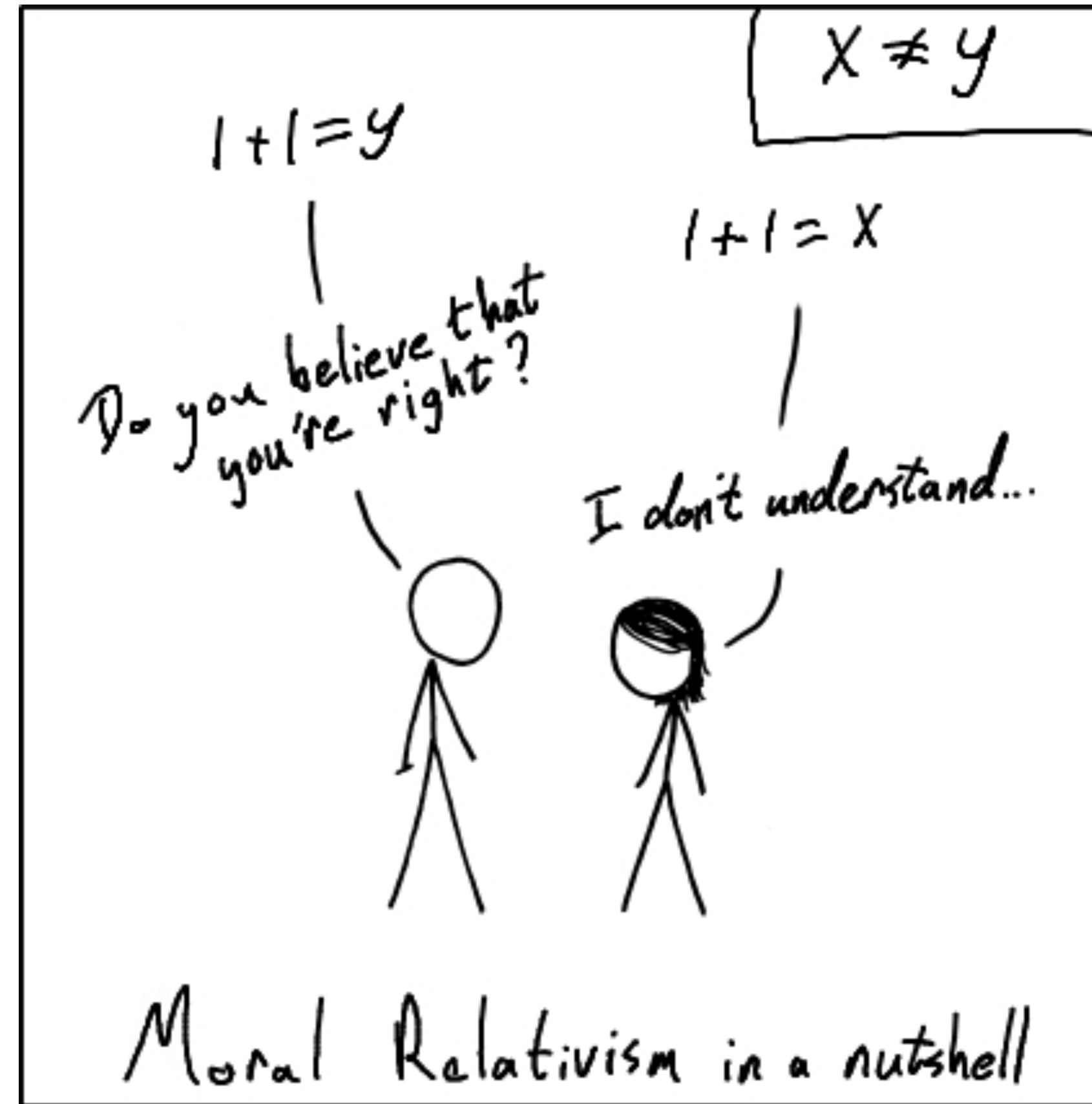
**Amulets may prevent COVID-19,
says a paper in Elsevier journal.
(They don't.)**

**Researchers publish the same
COVID-19 paper three times**



The paper's graphical abstract





<https://ori.hhs.gov/thelab>

Short Break :)

- There are two planets (A and B).
- On planet A everyone is taking care of everyone, they are constantly checking on others. The ones in need get pushed forward in line to get help quicker. They are ready to sacrifice themselves, even for strangers.
- On planet B everyone is concerned about themselves. They are mean to each other and usually they don't care about others. The ones in need are simply ignored (unless there is some benefit from helping them).
- On which planet do we live? On which planet do you want to live and why?

Haruko Obokata

Or how circumstances can lead to a sad ending

- 2014: Haruko Obokata - researcher on stem cells - (Riken Institute - Japan) published two articles (as a main author) in *Nature*.
- Co-authors: **Yoshiki Sasai** (her doctoral thesis supervisor) and Teruhiko Wakayama (the head of the biology research team from the institute)
- Their results were amazing: using simple methods some cells can be transformed in pluripotent ones (stem cells have this property)






**The
Guardian**

- Any try to re-do the experiments failed (both by the authors and by different researchers) . At one point it was clear the results were faked. (Vică et al., 2018, p. 123; Rasko & Power, 2015; Normille & Vogel, 2014)
- Normille & Vogel (2014) mentioned that some previous articles that had the same ‘results’ were rejected from different journals - as *Science*, *Cell* and *Nature* (the journal that published the two already mentioned articles).
- At first the authors asked for some more time to be able to re-do the tests and experiments.
- After a while the two co-authors asked that the articles to be retracted.
- The main author still refused it.
- Finally, the articles were retracted

[Published: 29 January 2014](#)


RETRACTED ARTICLE: Bidirectional developmental potential in reprogrammed cells with acquired pluripotency

[Haruko Obokata](#) , [Yoshiki Sasai](#) , [Hitoshi Niwa](#), [Mitsutaka Kadota](#), [Munazah Andrabi](#), [Nozomu Takata](#), [Mikiko Tokoro](#), [Yukari Terashita](#), [Shigenobu Yonemura](#), [Charles A. Vacanti](#) & [Teruhiko Wakayama](#) 

[Nature](#) **505**, 676–680 (2014) | [Cite this article](#)

229k Accesses | **95** Citations | **1613** Altmetric | [Metrics](#)

 This article was [retracted](#) on 02 July 2014

 This article has been [updated](#)

- The institute went through a major process of 'cleaning'.
- Many employees lost their job (including all the management team).
- Haruko Obokata was kept at the Institute. She received few months to 'clean' her image and sort things out (provide a proof for her thesis).
- She failed to do so, thus at the end she left the Institute as well.

What happened?

Who is to blame?

- Why would *Nature* publish two articles that claim the same thing as some older articles that were rejected?
- Hans Scholer: “I wouldn't have even thought to look for it because Hitoshi [Niwa], Teruhiko [Wakayama], and Yoshiki [Sasai] were on the paper; there are some people you 100% trust.” (Normille & Vogel, 2014).
- So what about the peer review process we know about?

What happened?

Who is to blame?

- What about all the co-authors? Didn't they check the information they wrote?
- It seems the two already mentioned did. But the main author was 'helping' them in the key moments.
- Also, it seems that there were many passages that were copied from other papers. (That was the first thing that caught the attention of the readers: whole passages from the text books, that were not properly quoted.)

What happened?

Who is to blame?

- There is another person involved here, that was not mentioned yet.
- Charles Vacanti - UK professor

The End

Ok, it is a bad case.

- Haruko Obokata was found guilty of scientific misconduct.
- Their career is not spotless anymore.
- Some of them lost their jobs.
- **Yoshiki Sasai** (her thesis supervisor) committed suicide on August 5, 2014.

- Consoli, L. (2006). Scientific misconduct and science ethics: a case study based approach. *Science and Engineering Ethics* , 12 (3), 533-541.
- Mihailov, E., & Constantinescu, M. (2018). Cum analizăm o problemă etică? Cadre ale evaluării morale. În E. Socaciu, C. Vică, E. Mihailov, T. Gibeau, V. Mureșan, & M. Constantinescu, *Etică și integritate academică* (pp. 27-40). București: Editura Universității din București.
- Normille, D., & Vogel, G. (2014). STAP cells succumb to pressure. *Science* , 344 (6189), pp. 1215-1216.
- Rasko, J., & Power, C. (2015, Februarie 18). What pushes scientists to lie? The disturbing but familiar story of Haruko Obokata. *The Guardian* .
- Socaciu, E., Vică, C., Mihailov, E., Gibeau, T., Mureșan, V., & Constantinescu, M. (2018). *Etică și integritate academică*. București: Editura Universității din București.
- Vică, C., Socaciu, E., & Gibeau, T. (2018). Aplicații. În E. Socaciu, C. Vică, E. Mihailov, T. Gibeau, V. Mureșan, & M. Constantinescu, *Etică și integritate academică* (pp. 109-139). București: Editura Universității din București.