

# *On Exactitude in Science*

Discussion points from Wikipedia and other online sources

"On Exactitude in Science" or "On Rigor in Science" (the original Spanish-language title is "Del rigor en la ciencia") is a one-paragraph short story written in 1946 by Jorge Luis Borges, about the map–territory relation, written in the form of a literary forgery.

The Borges story, credited fictionally as a quotation from "Suárez Miranda, Viajes de varones prudentes, Libro IV, Cap. XLV, Lérida, 1658", imagines an empire where the science of cartography becomes so exact that only a map on the same scale as the empire itself will suffice. "[S]ucceeding Generations... came to judge a map of such Magnitude cumbersome... In the western Deserts, tattered Fragments of the Map are still to be found, Sheltering an occasional Beast or beggar..." [1] "On Exactitude in Science" describes the tragic uselessness of the perfectly accurate, one-to-one map.

The story elaborates on a concept in Lewis Carroll's *Sylvie and Bruno Concluded*: a fictional map that had "the scale of a mile to the mile." One of Carroll's characters notes some practical difficulties with this map and states that "we now use the country itself, as its own map, and I assure you it does nearly as well." [4]

"What a useful thing a pocket-map is!" I remarked.

"That's another thing we've learned from your Nation," said Mein Herr, "map-making. But we've carried it much further than you. What do you consider the largest map that would be really useful?"

"About six inches to the mile."

"Only six inches!" exclaimed Mein Herr. "We very soon got to six yards to the mile. Then we tried a hundred yards to the mile. And then came the grandest idea of all! We actually made a map of the country, on the scale of a mile to the mile!"

"Have you used it much?" I enquired.

"It has never been spread out, yet," said Mein Herr: "the farmers objected: they said it would cover the whole country, and shut out the sunlight! So we now use the country itself, as its own map, and I assure you it does nearly as well."

from Lewis Carroll, *Sylvie and Bruno Concluded*, Chapter XI, London, 1895

Umberto Eco expanded upon the theme, quoting Borges's paragraph as the epigraph for his short story "On the Impossibility of Drawing a Map of the Empire on a Scale of 1 to 1." It was collected in Eco's *How to Travel with a Salmon & Other Essays*. [5][4]

Jean Baudrillard describes this in this book "Simulacra and Simulations". Quoted from this book are the two paragraphs below..

If once we were able to view the Borges fable in which the cartographers of the Empire draw up a map so detailed that it ends up covering the territory exactly (the decline of the Empire witnesses the fraying of this map, little by little, and its fall into ruins, though some shreds are still discernible in the deserts — the metaphysical beauty of this ruined abstraction testifying to a pride equal to the Empire and rotting like a carcass, returning to the substance of the soil, a bit as the double ends by being confused with the real through aging) — as the most beautiful allegory of simulation, this fable has now come full circle for us, and possesses nothing but the discrete charm of second-order simulacra.

Today abstraction is no longer that of the map, the double, the mirror, or the concept. Simulation is no longer that of a territory, a referential being, or a substance. It is the generation by models of a real without origin or reality: a hyperreal. The territory no longer precedes the map, nor does it survive it. It is nevertheless the map that precedes the territory — precession of simulacra — that engenders the territory, and if one must return to the fable, today it is the territory whose shreds slowly rot across the extent of the map. It is the real, and not the map, whose vestiges persist here and there in the deserts that are no longer those of the Empire, but ours. The desert of the real itself.

## *The Map is not the Territory*

The map–territory relation describes the relationship between an object and a representation of that object, as in the relation between a geographical territory and a map of it. Polish-American scientist and philosopher Alfred Korzybski remarked that "the map is not the territory" and that "the word is not the thing", encapsulating his view that an abstraction derived from something, or a reaction to it, is not the thing itself. Korzybski held that many people do confuse maps with territories, that is, confuse models of reality with reality itself. The relationship has also been expressed in other terms, such as Alan Watts's "The menu is not the meal."