

INTELLECTUAL BABEL:

Knowledge between Sciences and Letters

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ON THE 7TH OF MAY 1959, Charles P. Snow, a British chemist and literary figure, gave a lecture at venerable Halls of Cambridge in which he lamented the growing division and lack of communication between scientists and men of letters (Snow, 1959). The lecture provoked a vehement public response, far beyond the original intention of Snow to grouse about certain shortcomings of the British educational system. The topic, which came to be variously known as The Great Divide or The Two Cultures, generated a long lasting polemics; it led to sharp intellectual exchanges, disciplinary introspections, and

even to the setting up of a specialized institution.¹

Eventually, the cantankerous intellectuals divided themselves into two camps. Some accepted the Snow thesis, and even proposed possible solutions. Others were not very impressed. Stephen J. Gould, for instance, devoted a whole book to rebuke the great divide argument, eloquently turning it into a metaphor of centennial fox-hedgehog struggle (Gould, 2003). He maintained that Snow's declarations led to unnecessary confrontation and

¹ Lyman Briggs College of Michigan State University was set up to address the problem of the two cultures.

wall-building between the intellectual domains.



Regardless of the position that we may be enticed to take, certain mistrust between the men of the aforementioned intellectual pursuits ventured well into the 21st century and provided inspiration for an occasional squabble, dispute or prank. Two notable cases from opposing camps amused and polarized the educated public in the last decades.

In the first case, a physics professor from New York University, Alan Sokal submitted a hoax-article “Towards Transformative Hermeneutics of Quantum Gravity” (Sokal, 1996a) that, in the words of the author, was nothing more than a parody that “sounded good and [...] flattered the editors’ ideological preconceptions” (Sokal, 1996b, p. 62). The article was published in *Social Text*, a humanities journal that did not have a peer-review process in place at the time of publication. The success of the hoax, which bears the name of its overtly proud begetter, led to a bitter confrontation in a larger

conflict commonly known as The Science Wars.

In the war, however, luck is fickle. Just some years after things finally settled down, the humanities camp – inadvertently as it was – struck back. A set of theoretical physics articles published in reputable peer-reviewed journals turned out to be utterly meaningless. The articles were submitted by French twins Igor and Grishka Bogdanov and, according to an amusing article of John Baez, a prominent physicist, are “a mishmash of superficially plausible sentences containing the right buzzwords in approximately the right order” (Baez, 2010). The “reverse Sokal affair” demonstrated that neither the stern disciplines of the natural sciences, nor commonly accepted scientific procedures are safe from human blunder.



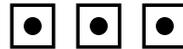
The Science wars burned out into a latent conflict, which, however, may flare up again at any moment. So, what are the stumbling blocks of a reconciliation process? Obviously, there is a set of

misconceptions in both camps about rival systems of knowledge, perpetuated by gross reluctance to listen. Then there are exaggerated accusations of determinism on one side and militant relativism on the other. And, finally, there is Bruno Latour patrolling a lab and pestering overworked men in white with incessant questioning.

“We believe in external reality with its immutable laws” aver scientific hardliners. But this is simply not true. The theory of relativity, for instance, subjected the world to a position of observer, which is not much different from the relativistic ideas of contemporary philosophical approaches. But the worst is yet to come. If we dove deeper into problems of strings, manifolds, sub-space time localizations, branes and brane worlds, then the complex divagations of post-modern philosophers would not seem to be so occult.

In fact, there are quite a few voices telling that the sciences and the humanities, despite bitter animosities, are utterly reconcilable. Among the prominent examples, Edward O. Wilson in his book *Consilience*

investigates links between subjects as different as Thales’s natural philosophy, ancient atomistic ideas, neurobiology, Condorcet and Einstein (Wilson, 1999). Although from a somewhat different perspective, Stephen J. Gould and John Brockman both argued that a divide between the sciences and the humanities is not as deep as it is commonly perceived (Brockman, 1995).



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Popular perceptions, however, are not the root of the problem. Scientific wars are not fought by the public, but rather by adamant zealots of the two cultures, since the attacks usually come from scholars determined to prove a certain superiority of their position. A

detailed analysis evokes an allegory of religious wars. The two camps often believe in the same things, they are more similar to each other than to other parts of the population, and yet, presently, they would not admit their similarity under a threat of death. This conflict is rooted in past immemorial and one would doubtfully remember its true origins. Snow's revelations and the Science wars are just different facets of the centuries-old conflict on the best way of knowing and on the nature of knowledge itself. Yet, one of its causes, its holy land and the most vicious battleground is the question of method.

In sciences as well as in the humanities, rules of logic are paramount to sound conclusions. Logic, in turn, can be deductive and inductive. In deductive logic, provided premises are correct and rules are followed, conclusions are always correct. Inductive logic cannot afford itself such a luxury. Since its conclusions are based on separate instances, it is always probabilistic. In other words, there might always be an unknown instance that would invalidate conclusions. What unities the two types of

reasoning is an essential incompleteness of any inquiry, be it inductive or deductive. Hence, the long-lasting quest for perfect premises and representative samples.

The distinction between forms of reasoning reverberates through the history of Western science and philosophy. Plato vicariously denounced the world of senses as an abode of ignorance from the mouth of the much adorned guru Socrates (Allen, 2006). Objects are shadows, senses are unreliable, the world is just an illusion, and empirical observations are a lot of illiterate demos. Only ideas are real, and they reveal themselves to the worthy by means of reasoning and meditation.

Plato's own disciple Aristotle, however, was not impressed by the obscure metaphysical ideas of his teacher. "Amicus Plato, sed magis amica veritas,"² supposedly uttered the ungrateful pupil before denouncing the ideas of his master. He adjured that the truth be sought by empirical

² 'Plato is my friend, but truth is a better friend'

observation and induction (Mure, 2007).

Some thousands of years later, the debates were joined by René Descartes. This respected gentleman claimed that knowledge of external world is, regrettably, beyond the grasp of empirical studies. Having nonchalantly dismissed the foundations of the inductivist position, he proceeded to state that if we “review all the actions of the intellect by means of which we are able to arrive at knowledge of things with no fear of being mistaken, we recognize only two: intuition and deduction” (Descartes, 1988, p. 19).

A choir of voices, including such luminaries as David Hume and John Locke, objected to the ideas of Descartes with fever (Hume, 1955; Locke, 1997). Purported faults of Descartes' argument are too numerous to be listed here. The principal point of these responses was that without empirical observations, deductive meditations would be completely self-referential and tautological. Ideas of Descartes and his followers came to be known as rationalism, while those of his opponents as empiricism.

With the institutionalization of science, the quest for one true way of knowing took a different guise. Newly acquired prestige made science hopelessly in vogue. Every discipline aspired to be science and every intellectual – a scientist. Henri de Saint Simon and Auguste Comte, for instance, established an enduring tradition in social philosophy, known as positivism, according to which society is subject to a set of natural laws much like the natural world. Their opponents, including Karl Marx, Max Weber, and George Simmel, controverted by pointing out that the complexity of the social world is not reducible to that of nature (Ashley & Orenstein, 2005).



Ramification of scholarship led to the confrontation spilling into various disciplines. Positivism and Interpretivism, *Methodenstreit* between Austrian and Historical Schools, the issue of the two cultures, and the Science Wars – all refer back to the same dichotomy between the types of logical reasoning. Century after century, in one guise or

another, we relive the same bitter rivalry that has plagued knowledge profession for ages, and we are bound to see more of this rivalry in the future.



Throwing in a pinch of much dreaded continental philosophy, the traditional animosity between the two cultures seems to suggest a mix of existential angst and inferiority complex. On one hand, there seems to be a certain degree of insecurity, engendered by inherent deficiency of the respective knowledge pursuits. Legitimization is always done through a proxy – one camp claims technological progress, while the other, humanistic refinement. On the other hand, there is carefully concealed jealousy of achievements claimed by the significant other. In a sense, only through this rivalry and opposition can the two cultures maintain their respective identities and social cohesion. An essential element for overcoming the two cultures' divide is the act of abandoning the arrogant claim to total knowledge. It is necessary to understand that no knowledge based on rules of conventional

logic is essentially complete. Either we should come up with alternative logics that would mitigate this little nuisance, or learn how to live with conceptions of knowledge different from our own. ◻

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