

## Writing to be Falsified!

In 1939, Einstein stated on film that sustainable chain reactions were impossible because it took more energy to initiate a reaction than the reaction would yield, a position shared by Ernest Rutherford and based upon a failed line of research which used charged particles to initiate a reaction. Later that year, Leó Szilárd, a former student, asked Einstein to endorse the now-famous letter to Franklin Delano Roosevelt that stimulated the Manhattan Project, a seminal event in human history enabled by the work of Szilárd and Enrico Fermi which achieved sustained reactions using neutrons.

Falsification is the essence of the scientific method; alternative approaches and perspectives are the engine of advancement. No entrenched science, no insights even from the giants of any discipline should ever be so privileged so as to escape falsification or challenge. Einstein was dead wrong (and more than once). Szilárd was dead right. To his credit, Einstein changed his thinking about nuclear reactions, although he remained truculent on other matters. In this case, the student became the father of the man.

Today, the scientific and academic enterprise enjoys a new era in which Internet-based discussion groups, blogs, listservs, small e-journals, websites, email, and allied communications technology create a milieu for the low-stakes testing of ideas, insights, methodology, observations, and ruminations. Those informal

letter-based networks of sharing within the academy of yore which now constitute an important part of the historical record of science have been transformed into a stunningly broad, global, diverse, but often Balkanized network of academic networks. Unlike the official, high-stakes forums of journals, books, and conferences, these low-stakes forums are frequently informal, casual, and spontaneous. But, as with the old letter networks reveal, these low-stakes forums are critical to the advancement of every field, and, perhaps surprisingly to some, are in many ways as rigorous as the high-stakes forums. “Testing the waters” is an important and time-honored tradition.

However, the online genre does not enjoy the privilege of privacy, and control of audience, as it was conceived in the days of letter-networks. The accidental audience for these informal ruminations is almost always larger than the known number of participants. Search engine indexing ‘bots, website archives, and unsecured forums are the most benign of the reasons that privacy, audience, and control are transformed in this milieu. As a result, “low-stakes” takes on a different connotation. With the possible eyes of millions to see some partially formed thought, the author must make conscious choices about the level of scholarship to exhibit, how willing they are to risk appearing foolish, and how likely it is that their notion will be berated, misinterpreted, or misused. Those responding must also remember that they have the eyes of millions upon their backs. Privacy and control have been bent, spindled, mutilated in the context of the Internet and, in practice, *presumptions* of privacy are simply wrong.

Some academic networks, like Cybermind, prevent 'bots from indexing their content to limit the scope of the accidental audience but also freely allow members to use the content as basic data for research. Some networks that tightly control access, such as the Association of Internet Researchers (AoIR), paradoxically allow archives to be indexed and cached while asserting both a policy and presumption of privacy in concert with largely normative limitations on member uses of content and regulated with sometimes breathtakingly severe social sanctioning. In practice, networks like Cybermind seem to provide a more free-wheeling, protected, low-stakes milieu despite a liberal stance on content use by members, although this is certainly a matter of opinion. Paradoxical behavior, such as that noted above, do nothing to clear up the widespread confusion and misunderstanding about communications via Internet technologies, and actually illustrate the transitional nature of everything that is happening in this social space. While in many ways the world inside the Internet looks like a well-settled land these days, frontier justice too often seems like the law of the land.

Like any sociations in the real world, Internet social networks have their own "personalities" or "cultures" which include some concept of norms, and social controls. And, like real world sociations, Internet social networks can range from supportive to toxic in their tolerance for, and support of, diversity and deviance. In academic networks, tolerance, support, deviance, and diversity greatly influence the quantity and quality of low-stakes sharing, the distribution of participation

levels (“lurkers” vs. contributors), the frequency with which “flame wars” erupt, the tendency to use labeling as social control (e.g. “troll”), and even the very meaning of “low-stakes”. In the least supportive academic networks, the fear associated with being labeled a troll or fool results in a sterile, high-stakes environment not even regulated by the “objectivity” of a journal review panel.

There is a bifurcated mythology about academia that complicates matters being discussed in this essay: that of the Ivory Tower on one hand, and the noble scientist on the other. The myth of the noble scientist contains the notion that scholars, highly educated and intelligent, are better than the average person because they know better. One would presume this especially true of the social or psychological scholar whose business it is to know something about humanity’s cognitive and behavior demons. The myth of the Ivory Tower contains the notion of the scholar existing above worldly affairs, only interested in seeking truth and understanding wherever it may be. These myths are not mutually exclusive, and are often paired or integrated. And these myths are not just held by the folk; scholars themselves, more often than many would admit, buy into these myths as well.

In truth, neither of these myths is true but myths do not need to be true to have effect. Separating the real from the ideal is always a challenge in the social and psychological realms. The outbreak of frontier justice out there in academic networks is a clear demonstration of what is real. In truth (or in the humble

opinion of the author), the search for knowledge has always been something of a civilized bloodsport; a war of words and ideas rather than fists and bombs.

Falsification and challenge are key to the continued advancement of our knowledge and are played out daily in high-stakes battles for publication space, resources, tenure, recognition of accomplishments, etc. Rumor and innuendo can also run rampant through university hallways with a speed and ferocity that rivals that in a folk society or bazaar. Sometimes, these “civilized” battles have destroyed careers and lives.

In point of fact, scholars and the academic enterprise are all too human, embedded in every way into mundane world of normal human affairs. Having tea before a duel in the university quad does not alter the outcome.

I offer a liberal paraphrase (an act for which I will surely be excoriated) from Nancy Baym, a professor at the University of Kansas and former president of AoIR, who said, I can't imagine how any significant internet [sic] research could be done outside a University. While such a statement is open to many interpretations, we in fact live in a world shaped by many innovations and advancements that happened outside the university. Some of these advances happened within or because of the technology of the Internet, inspired or guided in productive, low-stakes forums. This statement also raises a question about who may contribute to the advancement of knowledge. Some apparently believe that it is solely the province of universities, despite the likes of Bill Gates, Sergey

Brin, and Jerry Yang in the modern era, or Einstein-the-postal-clerk, Michael Faraday, or Nikola Tesla in our not-to-distant past.

Somewhere between intellectual savagery and passivity is a sweet spot where all of us trying to understand life, the universe, and everything are humbled and awed by what we do not know, open to new possibilities, but also committed to falsifying and challenging vigorously. While we have no choice but to be human, we neither have to use our human-ness as an excuse for bad behavior nor blind ourselves with false myths. We may also ask ourselves what now does the university offer in a (sometimes frighteningly) connected world? Three hundred years ago, the university was the only game in town for high-density association with other scholars. Obviously, that is not true any more. Moreover, few would argue against the notion that the air inside the academy can get a bit stale sometimes. Low-stakes networks offer possibilities that letters never could, although with the near-certain probability of witnesses. One of these possibilities is the chance to encounter a brilliant idea untouched by a Ph.D., a tenure, or a peer-review.

I say, less myth and more truly civilized intellectual bloodsport.