

# Sci-exit: The Exit of Scientists from Science



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In the wake of Brexit, the 2016 British referendum authorizing the British exit from the European Union, a host of copycat terms surfaced. Examples include Texit, for the exit or secession of the state of Texas from the United States,<sup>1</sup> and Calexit, the term for the secession movement in California.<sup>2</sup> Clever iterations on “Brexit” emerged across Europe. They include Frexit, the equivalent term for a hypothetical French withdrawal from the European Union; Byegium (Belgium); Departugal (Portugal); Italeave and Quitaly (Italy); Czechout (the Czech Republic); Finish (Finland); Donegary (Hungary); Nethermind (the Netherlands); Leavia (Latvia); Angeleave Merkel (Germany); Donemark (Denmark); Austria la Vista (Austria); and many others.<sup>3–5</sup>

## SCI-EXIT

“Brexit” can be viewed as a metaphor for withdrawal from the customary way of doing things. Exits can be healthy. America’s exit in 1776 from English domination is an example, at least from the American perspective. But exits can have disastrous consequences, as in the secession of the Confederacy during the American Civil War.

I propose a similar term – sci-exit – to describe how scientists sometimes desert the accepted procedures of science by ignoring empirical evidence. This can occur when they are faced with phenomena that, if true, would contradict belief systems that have become ideologically sacrosanct.

An example of sci-exit is a respected scientist who said, when faced with experimental evidence for parapsychological events, “This is the sort thing I would not believe, even if it really happened.”<sup>6,7</sup> Rather than squarely face the new evidence, the tendency is to disregard it and, what’s worse, disparage those who produced it. In other instances, scientists with elastic ethical codes are simply bought off

by moneyed interests bent on ignoring evidence.<sup>8</sup> Either way, these actions amount to a “leave” vote from science: a sci-exit.

The willingness to abandon science in order to protect one’s assumptions about how nature *should* behave is nothing new. This is especially frequent in research dealing with the origin and manifestations of consciousness.

Materialists assert that consciousness is produced by, and is confined to, the physical brain, and ceases to exist with physical death. Evidence to the contrary is often ignored and disparaged. This type of sci-exit was reported by Harvard psychologist William James, who is widely regarded as the father of Anglo-American psychology. James reported that a leading biologist once told him:

Even if such a thing (as the afterlife) were true, scientists ought to band together to keep it suppressed and concealed. It would undo the uniformity of Nature and all sorts of other things without which scientists cannot carry on their pursuits.<sup>9</sup>

## METHODS

What does sci-exit look like? It takes several forms.

**Ignoring evidence.** This is the most common form of sci-exit. It is especially frequent in consciousness research, as mentioned, including healing studies. I have never met a so-called skeptic who has even read the relevant studies in remote healing. When one well-known individual was asked in a public forum about particular studies in remote healing, he sputtered, “You don’t expect me to actually *read* that stuff, do you?” and walked off the stage.

**Selection bias.** Skeptics often single out one or two less-than-perfect studies, criticize them, and generalize to condemn an entire field of research.

**Denial of the scope of evidence.** In the field of distant intentionality, skeptics almost never mention the scores of studies in nonhumans – animals, microbes, plants, biochemical reactions – even though these are some of the most impressive studies in the field. Meta- and systematic

analyses that are supportive of these studies are generally ignored as if they don’t exist.<sup>10</sup>

**Cynicism:** A cynic is someone who believes that people are insincere and that human actions are motivated by self-interest rather than by honorable or unselfish reasons. This is how sci-exiters often view researchers whose findings they oppose: as individuals motivated by low, base reasons. They often charge the iconoclastic trailblazers with a desire to subvert, contaminate and degrade science. The accusations often look like this: “We live in a world that is increasingly menaced by superstition and irrational belief. The great advances in history rest on reason, analysis, and objectivity. As a scientist, it is my duty to defend this precious legacy, and to publicly denounce the rising tide of pseudoscience that threatens the foundations of our civilization. This task is not easy, but if scientists work together we can keep the barbarians outside the gates.” This typifies the statement of the biologist to William James, mentioned above.

**Appeals to the inviolable laws of nature.** Sci-exiters often accuse other scientists of promoting findings that contradict the laws of nature. This is particularly common in consciousness research dealing with the nonlocal manifestations of consciousness, such as telepathy, clairvoyance, remote viewing, distant healing, and out-of-body and near-death experiences.

The Scottish philosopher David Hume (1711–1776) is a go-to authority for these sci-exiters. Hume maintained that so-called miracles violate the laws of nature. Therefore, he said, no matter how strong the evidence for a particular miracle may be, it is always more rational to reject the miracle than to believe in it. And because it is more likely that people will be deceived or will lie than that the laws of nature will be violated, deception, lies, and fraud are the preferred explanations for so-called miracles – and for the nonlocal, consciousness-related happenings just mentioned.

This is a thinly veiled form of character assassination – the assertion that only weak-minded individuals or sinister schemers would harbor such beliefs in the first place. The false nature of this charge is occasionally admitted by skeptics themselves. An example is psychologist Ray Hyman, the famous foe of parapsychology research. He admitted, “On the whole, parapsychologists are nice, honest people, while the critics are cynical, nasty people. ... The level of the debate during the past 130 years has been

an embarrassment for anyone who would like to believe that scholars and scientists adhere to standards of rationality and fair play.”<sup>11</sup>

**Accusations of fraud.** An example is the article “The Remote Prayer Delusion” in the *Journal of Medical Ethics*. The author states, “Remote supportive prayer (RSP) cannot directly influence the patient. Despite this lack of a connective mechanism a number of clinical studies have attempted to test the efficacy of RSP as a medical treatment. . . RSP. . . is apparently impossible. . . (RSP studies) may be fraudulent. . . a spoof. . . unethical. . . a delusion.”<sup>12</sup>

**False accusations.** Putting words in mouths that never said them is another way of muddying the waters of science. An example is when skeptics attribute claims of causation to consciousness researchers, when only correlation has been claimed.

An example is a 1999 study by cardiologist William Harris and colleagues at the Mid America Heart Institute in Kansas City, Missouri. The experiment was titled “A randomized, controlled trial of the effects of remote, intercessory prayer on outcomes in patients admitted to the coronary care unit,” and was published in the *Archives of Internal Medicine*.<sup>13</sup> In the storm of criticism that followed, critics confused correlation with causation and attributed claims to the researchers they never made. In defense, Harris and his colleagues attempted to clarify the minimal nature of what they had actually observed: “We have not proven that God answers prayers or even that God exists. . . . All we have observed is that when individuals outside the hospital speak (or think) the first names of hospitalized patients with an attitude of prayer, the latter appear to have a ‘better’ CCU experience.”

The researchers in this study claimed correlation, not causation. Such is the case in many areas of consciousness research. This important distinction seems to elude many critics. Further examples of the careful claims of consciousness researchers: In 2003 in *Neuroscience Letters*, Wackerman and colleagues reported on “*correlations* between brain electrical activities of two spatially separated human subjects.”<sup>14</sup> In 2005, Achterberg and colleagues reported “evidence for *correlations* between distant intentionality and brain function in recipients: a functional magnetic resonance imaging analysis.”<sup>15</sup> In 2004, Standish and colleagues reported a functional magnetic imaging analysis of “*correlations* between distant intentionality and brain function in recipients.”<sup>16</sup> (Emphasis added.)

## BITTERNESS

Why are the debates over iconoclastic findings in science so bitter and hard-fought? One’s attitude toward anomalous findings in science is strongly influenced by one’s worldview, and one’s worldview

strongly reflects one’s self-view or personal position in the overall scheme of things. Therefore an attack on one’s worldview is often perceived as a personal attack. This can move an individual to employ any method of neutralizing a threatening discovery, even if this means violating scientific standards. Preserve the ego, no matter what!

Bitterness toward opposing views can be extreme. Author Damien Broderick, in his book *Outside the Gates of Science*, quotes materialist philosopher Daniel Dennett as saying he will commit suicide if paranormal phenomena are proved to be real.<sup>17</sup> Here sci-exit has morphed into body sacrifice.

## SKEPTICISM

Sci-exiting is not the same as skepticism. “Skeptic” is derived from the Greek *skeptikos*, meaning thoughtful or inquiring. A skeptic, my dictionary says, is one who “habitually doubts, questions, or suspends judgment upon matters generally accepted.”

Sci-exiters typically do not suspend judgment in favor of careful consideration, but rush to negative judgment about controversial issues, trampling the scientific tradition in the process. This led Elias Zerhouni, former director of the US National Institutes of Health, to remark, “Often in science the reaction to a new finding is directly proportional to the strength of the dogma it overturns. People are still in denial of the theory of relativity, too.”<sup>18</sup>

Zerhouni was echoing Swiss psychiatrist C. G. Jung, who observed, “I shall not commit the fashionable stupidity of regarding everything I cannot explain as fraud.”<sup>19</sup>

The legendary science fiction writer Arthur C. Clarke agreed: “When a distinguished but elderly scientist states that something is possible, he is almost certainly right. When he states that something is impossible, he is very probably wrong.”<sup>20</sup> And, “It is really quite amazing by what margins competent but conservative scientists and engineers can miss the mark, when they start with the preconceived idea that what they are investigating is impossible. When this happens, the most well-informed men become blinded by their prejudices and are unable to see what lies directly ahead of them.”<sup>21</sup>

William James was on the same page: “I believe there is no source of deception in the investigation of nature which can compare with a fixed belief that certain kinds of phenomena are impossible.”<sup>22</sup>

So too was humorist Mark Twain: “You cannot depend on your eyes when your imagination is out of focus.”<sup>23</sup>

## SCI-EXIT IN PRACTICE

Although science is one of our best ways of guarding against self-delusion in the secular world, it is not always effective. We humans have ingenious ways of sabotaging the precautions that have been integrated into the scientific tradition, including twisting evidence in pathological directions.

Examples are numerous. They include the “tobacco scientists” who argued for decades that the science surrounding the harmful effects of smoking was incomplete, and therefore warnings about smoking were premature and unjustified. To substantiate their contentions, tobacco companies funded epidemiological and biological research that was designed in advance to support claims that second-hand smoke posed little or no harm.<sup>24</sup>

A similar example is chemical giant Monsanto, whose internal documents reveal that their scientists hardly tested the real-world toxicity of a major product, the herbicide glyphosphate; that the company systematically attacked scientists whose oppositional research on glyphosphate’s toxicity threatened their profits; and that the company ghost-wrote the studies of supposedly independent scientists.<sup>25</sup> As reported in the French publication *Le Monde*, “In order to save glyphosate, the Monsanto corporation has undertaken an effort to destroy the United Nations’ cancer agency by any means possible. *Le Monde* started the Monsanto papers, resulting in a dozen investigative articles exploring the many strategies used by Monsanto to interfere with science, influence the regulatory process and orchestrate PR campaigns to defend their products.”<sup>26</sup>

Currently the most dangerous sci-exiters in the US are the scientists who deny anthropogenic global warming, and who defend President Trump’s rhapsodic promotion of “beautiful, clean coal.”<sup>27</sup> A further obfuscation by the President is his claim that “the concept of global warming was created by and for the Chinese in

order to make U.S. manufacturing non-competitive.”<sup>28</sup> But following the devastating hurricanes on the US coast in the fall of 2018, the President denied his denial of climate change, and he backed off his claim that global warming is a hoax.<sup>29</sup> He now claims that global warming will somehow reverse itself and revert to normal as part of a natural cycle, which the overwhelming majority of climate scientists unequivocally deny.<sup>30</sup> Trump and his sci-exiting enablers have chosen not only to withdraw from the Paris Climate Agreement on global warming; they have also decided essentially to ignore recent warnings by the Intergovernmental Panel on Climate Change that we have twelve years to act on climate change before the world as we know it is lost.<sup>31,32</sup>

### IN DEFENSE OF CRAZINESS

Sci-exiters often criticize novel ideas in science as hare-brained notions that violate common sense and which do not deserve notice. In contrast, Nobel Prize-winning physicist Niels Bohr (1885–1962) believed that a certain amount of craziness is necessary in scientific advances. In a forum he once said to a young physicist, “We are all agreed that your theory is crazy. The question which divides us is whether it is crazy enough to have a chance of being correct. My feeling is that it is not crazy enough.”<sup>33</sup>

As philosopher-mathematician Alfred North Whitehead put it, “Almost all really new ideas have a certain aspect of foolishness when they are first produced.”<sup>34</sup>

And as Charles Richet, the 1933 Nobel laureate in Physiology and Medicine, said, “However strange may be the phenomenon of precognition, we must not let ourselves be diverted from the truth by the strangeness of the appearances. A fact is a fact, even though it may upset our conception of the universe; for our conception of the universe is terribly infantile.”<sup>35</sup>

Nobel Prize-winning physicist Richard Feynman (1918–1988) is widely admired for his dedication to science and the scientific method. His words are a rebuke to sci-exiters who bolt from a commitment to science when the going gets rough:

I’m going to describe to you how Nature is – and if you don’t like it, that’s going to get in the way of your understanding it. It’s a problem that

physicists have learned to deal with: They’ve learned to realize that whether they like a theory or they don’t like a theory is *not* the essential question. Rather, it is whether or not the theory gives predictions that agree with experiment. It is not a question of whether a theory is philosophically delightful, or easy to understand, or perfectly reasonable from the point of view of common sense. The theory of quantum electrodynamics describes Nature as absurd from the point of view of common sense. And it agrees fully with experiment” (emphasis in original).<sup>36</sup>

### LETHAL COSTS

The history of medicine contains many examples of therapies that were rejected because they did not make sense. A well-known example concerns James Lind, the ship’s surgeon aboard HMS *Salisbury*. In 1747 Lind demonstrated that scurvy could be prevented and cured by citrus fruit. His experiment was one of the first controlled clinical studies. But the therapy was hard to believe. Nutritional science was in its infancy, and the concept of vitamins and Vitamin C, ascorbic acid, was unheard of. The treatment was not officially adopted until 1795. The sci-exiters in the naval bureaucracy considered it irrational, in spite of scientific evidence it worked. Tens of thousands of sailors died in the interval.<sup>37</sup>

What shall guide us in this treacherous territory, where the temptations of materialism, greed, power, and ego often lead to an exit from science? Astronomer Carl Sagan (1934–1996) provided the necessary precaution against sci-exit in his Commencement Speech at UCLA in June 1991: “It is the responsibility of scientists never to suppress knowledge, no matter how awkward that knowledge is, no matter how it may bother those in power. We are not smart enough to decide which pieces of knowledge are permissible and which are not.”<sup>38</sup>

### A SEA CHANGE

The road to sci-exit is paved by greed, as in the case of Monsanto, and by the ideology of materialism, which forbids certain types of happenings and “engenders such fear and loathing in the hearts and minds of

most contemporary scientists,” says psychologist-consciousness researcher Emily Williams Kelly of the University of Virginia.<sup>39</sup> But this fear is not immutable. As futurist Willis W. Harman observed:

There is a new worldview emerging which is based neither on traditional religion or Newtonian physics. . . . There is a shift in authority from external to “inner knowing”. . . . It has basically turned away from the older scientific view that ultimate reality is “fundamental particles,” and trusts perceptions of the wholeness and spiritual aspect of organism, ecosystems, Gaia and Cosmos. It amounts to a reconciliation of scientific inquiry with the ‘perennial wisdom’ at the core of the world’s spiritual traditions. It continues to involve a confidence in scientific inquiry, but an inquiry whose metaphysical base has shifted from the reductionist, objectivist, positivist base of 19th and 20th century science to a more holistic and transcendental metaphysical foundation.<sup>40</sup>

In other words, science needs a heart. Otherwise it may not be fit to be applied to human beings. Who can doubt this? Are bulging arsenals of nuclear weapons appropriate solutions to human problems?

Consciousness researchers Imants Barušs, of King’s University College at Western University Canada, and Julia Mossbridge, of Northwestern University, agree with Harman. They state in their recent book *Transcendent Mind: Rethinking the Science of Consciousness*:<sup>41</sup>

We are in the midst of a sea change. Receding from view is materialism, whereby physical phenomena are assumed to be primary and consciousness is regarded as secondary. Approaching our sights is a complete reversal of perspective. According to this alternative view, consciousness is primary and the physical is secondary. In other words, materialism is receding and giving way to ideas about reality in which consciousness plays a key role.

### SILENCE AS SCI-EXIT

Most of the forms of sci-exit we’ve examined involve purposeful action. But one of the most widespread forms of exit from

science is simply silence, adopting a mute stance in the face of scientific findings.

Donald M. Berwick, MD, of the Institute for Healthcare Improvement in Cambridge, Mass., in his essay “Moral Choices for Physicians,” writes:<sup>42</sup>

The current generation of physicians is the most challenged by moral choices in perhaps a century. . . . The harm done to our planet by inattention to and denial of the facts of science is grievous too. . . . If poisoning the air, drying up the rivers, and drowning the cities – our own, and those of the poorest people on earth, and creating a tsunami of displaced people greater than the world has ever known before, is not a health problem, then what is? . . . It is chilling to see the great institutions of health-care, hospitals, physician groups, scientific bodies assume that the seat of bystander is available. That seat is gone. To try to avoid the political fray through silence is impossible, because silence is now political. Either engage, or assist harm. There is no third choice.

In today’s teetering world, silence *is* sci-exit. Mary Oliver, the American Pulitzer Prize-winning poet, understood the importance to everyone of a break-out from silence. In her poem *Sometimes*, she writes.<sup>43</sup>

Instructions for living a life:

Pay attention.

Be astonished.

Tell about it.

Sci-exit thrives on *not* telling about what matters. It operates by obfuscating fact in secrecy, shadow, and silence; employing ghost writers for scientific papers who have secret ties to corporate sponsors; punishing whistleblowers; demonizing a free, investigative press; character assassination of those whose discoveries challenge accepted ideology; spending huge sums of money in lobbying efforts, legally bribing congresspersons to look the other way.

I sometimes fantasize an imaginary scientific landscape without bolt holes and escape hatches, a science where “No Exit” signs are displayed everywhere, where

fence-sitting and silence are discouraged, and where Face Facts! is the honored credo. Of course that science does not exist and has never existed, because science is a human endeavor and has always included human foibles. Still, we must work toward that ideal goal, more intensely now than ever because the stakes have never been higher. Berwick again: “Either engage, or assist harm. There is no third choice.”

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