Suffering For Science
Rebecca Herzig

Published by Rutgers University Press

Herzig, Rebecca.
Suffering For Science: Reason and Sacrifice in Modern America.
Project MUSE. muse.jhu.edu/book/17241.

For additional information about this book
https://muse.jhu.edu/book/17241

For content related to this chapter
https://muse.jhu.edu/related_content?type=book&id=574390
By maintaining self-sacrifice as heroic yet inverting the assumption of privileged civility that conditioned the rise of voluntary suffering, Lewis’s *Arrowsmith* displays the fruition of late nineteenth-century sacrificial ideals. By the 1920s, the figure of the voluntarily suffering scientist was the subject of parodic exaggeration and even more overt critique. Popular articles with titles such as “Scientists at Play” and “The Fun of Being a Scientist” suggest that preoccupation with self-sacrifice had become as likely to be a source of amusement or embarrassment as of reverence and respect.¹ A survey of popular periodical literature through 1932 reveals a spike in articles invoking sacrifice or self-sacrifice in the 1910s and then a steep decline after 1923. Thus, even as Lewis’s acclaimed novel drew a wide readership, explicit references to self-sacrifice were on the wane.

The reasons for this movement were surely overdetermined. It may be that the fresh trauma of world war dimmed the nostalgic glow that had suffused the coupling of progress and suffering since the 1870s. Perhaps the increasingly widespread use of anesthetics amplified mechanistic understandings of pain, thereby challenging the moral significance of suffering. Perhaps continued activism against human and animal experimentation troubled enthusiastic tributes to the role of injury and death in science. Perhaps the carnival atmosphere surrounding the 1925 Scopes “monkey” trial hushed the use of inflated religious metaphor in scientific practice.²

Or, perhaps more accurately, we might say that the waning rhetoric of self-sacrifice in the mid-1920s indicates that the ethic had been thoroughly absorbed into everyday life. References to the “martyrs of science” continued to crop up from time to time throughout the twentieth century. Each research-related death of a prominent scientist—such as Rockefeller Institute researcher Hideyo Noguchi (who succumbed to yellow fever in 1928) or Marie Curie (whose death from leukemia in 1934 was widely attributed to her work with radium)—
generated a fresh opportunity to reinvent the tradition of voluntary suffering. But the declining persistence of explicit references to self-sacrifice may suggest assimilation rather than extinction of these values. Even as explicit religious and moral language fell out of fashion, understandings of the scientist as a willing sufferer, and of science as a field that demands unusual amounts of pain, continued to hold power.

As we have seen, this power was predicated on a paradoxical, exclusionary “self of no self.” Cook’s and Peary’s frozen noses and aching feet, for example, testified to a form of self-possession not allowed to Eskimo and Negro assistants. X-ray experimenters Kassabian, Glidden, and Leonard were hailed as willing martyrs to science, while laborers and animals subjected to equivalent amounts of X radiation were not. To consecrate oneself to truth in nineteenth-century America required a certain kind of socially constituted self. Without this willful self, one could hardly take up the peculiar privilege of voluntary suffering.

That self-sacrifice for science reflected and reproduced larger social divisions is just one lesson to be learned by connecting histories of proprietal selfhood to those of scientific practice. The more subtle and interesting observation is that even privileged subjects described themselves as bound to the demands of science. For these scientists, as for others formed by the legal and conceptual traditions of possessive individualism, freedom implied the liberty to determine one’s own subjection. Among individuals conceived as proprietors, action was necessarily governed by judgments of comparative value. To be a reasonable agent in the modern market system of post-Emancipation America—indeed, to be human—is to act as a self-interested possessor, to calculate one’s investments.

These calculations, we have also seen, generate ongoing uncertainty. The issue at stake for the scientists discussed in this book was not merely the discrepant value of the various goods surrendered or obtained but whether sacrifice was properly considered an act of exchange at all. For some, self-sacrifice for science fit handily into a larger picture of compensatory exchange, a vision in which (as Emerson argued) “nothing is given, all things are sold.” X-ray experimenter Emil Grubbé exemplified the reciprocal vision of self-sacrifice when he declared that each secret obtained in “the vineyards of science” exacted a corresponding personal cost. The more valuable the advancement, he proposed, the higher the price paid by the individual scientist. Echoing the original social contract imagined by liberal philosophers, this understanding of sacrificial science presumed that the investigator pursued ends of obvious equivalence to his relinquishment. Indeed, the perceived value of the gain must be roughly equivalent to individual expenditure if the reasonable man were to partake in it. As Georg Simmel, one of the era’s most important theorists of sacrifice, argued in 1900, unless a balance appeared between the value of the good lost and of the good received, “no agent would consummate the exchange.” “No one in his right mind,” he repeated in 1907, “would forego value without receiving for it at
least an equal value.” Free agents could hardly do otherwise than to judiciously gauge their self-interest without calling into question the very meanings of freedom and agency.

Yet for others, such deliberate, self-interested reciprocity opposed the elevating purpose of voluntary suffering. To seek knowledge of obvious equivalence to suffering would invalidate the “sacrificial” aspect of the activity. The subjects of this book often aligned themselves with this more asymmetrical view of the relation between scientist and science. For them, calculations of personal compensation contradicted the unbridled, excessive devotion that distinguished the true scientist. Rowland, Remsen, and Hall insisted that purity occasioned an inexhaustible longing for a perpetually receding truth. MacMillan proposed that explorers surrendered their noses and toes for a spot of ice “barren and desolate beyond all imagination.” Dodd and the other “martyrs” persevered enthusiastically in their lethal experiments, even while acknowledging the ray’s destructiveness. Arrowsmith renounced family, wealth, and social status for a life of inquiry in the Vermont woods, triumphantly predicting that his efforts would fail. In these varied examples, an expressed disdain for calculations of utility was not a secondary or epiphenomenal feature of sacrifice for science: it was its defining attribute.

This is not to say that self-sacrifice implied simple waste for any of these real or fictitious scientists. Sacrifice entailed a rejection of practical utility but was not to be confused with hapless, degenerate squander (although Martin Arrowsmith veered dangerously close to this line). “Merely to give up a good,” asserted one university professor, “is to waste goodness, not to make a sacrifice.” Suffering pursued for its own pleasure, as in cases of masochism, signaled only perversion; suffering endured for lack of an alternative, as in conditions of slavery, signaled only the debasements of bondage. Nevertheless, even the most modest sacrifice had to exceed the measured circularity of the consensual exchange. To be viewed as a true gift, the offering must be at once purposeful (a gift extended for an end that “lies beyond the agent making the sacrifice”) and inescapable, resting somewhere in the realm of unreasonable, impassioned compulsion.

If valorization of the voluntarily suffering self has yet to end, it is in part because the uncertainties underlying this self—uncertainties inherent to the modern liberal subject—persist unabated. Given the constitutive ambiguities of proprietal selfhood, it is not surprising to find the language of compulsion and captivity used in contemporary descriptions of the relation between scientist and science. When, in 2003, Alan Lightman told readers of the New York Times that “the real reason a scientist does science” is because “the scientist must,” he echoed themes of willing bondage dating back the original theorists of social contract. When we read that “love” for investigating the unknown is at once “a gift filled with beauty and not given to everyone” and a “burden because the call
is unrelenting and can drown out the rest of life,” it is clear that the ambiguities and exclusions of the proprietal self are with us still.⁹

Indeed, as the imperatives of transnational capitalism summon this property in ever more intricate ways (rendering alienable not only our capacities for love and labor but now also genes and cell lines), we might predict a resurgence of longing for willing sacrifice—for impassioned subjection to “knowledge for its own sake.” Given yearnings for some nonalienated, if not sacred, sense of self, for more profound experiences of “belonging,” is it any wonder that the nation’s preeminent newspaper waxed nostalgic about the “good old days, when science students suffered”?¹⁰ As we continue to look to science for emancipation and to suffering for elevation, it may prove helpful to recall the suffering for science chronicled here, remembering the relational and contingent identity of the sacrificial self. Revisiting past definitions of reasonable suffering leads us to recognize not only how we, too, are still pious, but also how we, too, indulge the peculiar pleasures of pain.