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Conflicts of Interest, Community-based Research, and Trustworthy Science Communication

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ABSTRACT: Disclosure of authorial conflicts of interest have become a cornerstone of scientific publication, championed as a sensible middle ground between extremes of categorical prohibition of for-profit research or acceptance of findings regardless of origins. Elliott argues that while some interests may be biasing, others are not; so we must assess how interests affect research credibility, and Elliott proposes criteria to refine disclosure policies. Here I evaluate Elliott’s proposed criteria as they apply to community-based research, drawing on the United Church of Christ’s study on toxic waste and race as a paradigm case of interested yet trustworthy research.

KEYWORDS: conflicts of interest, environmental justice, research ethics, social epistemology, trust

1. INTRODUCTION

It is tempting to say that good scientific research should speak for itself; yet human fallibility, differences in expertise, and cognitive division of labor can mean that even when and if science could speak for itself, we its recipient audience might not properly understand it, or at least its successful communication might be enhanced through reliable translations, interpretations, or indirect evidential indicators. This may be especially though not exclusively salient for non-expert recipients of conflicting scientific research claims, such that research credibility can be difficult for non-experts to assess directly. As Hardwig (1991) and other social epistemologists have observed, it may be positively irrational for non-experts to attempt direct assessment of conflicting expert claims, since even reflective non-expert recipients may lack key background knowledge and sufficiently developed epistemic sensitivities for direct evidential assessments. Yet the alternative is not necessarily to withhold belief, given the additional social-epistemic resources at hand. In 2001 his paper “Experts: Which Ones Should You Trust?,” for example, Alvin Goldman identifies several indirect indicators of credibility to which responsible non-experts can appeal, including conflicting and corroborating testimonies from fellow experts or meta-experts, formal dialectical performance in expert debates, track records, and conflicts of interest.

The present paper focuses on the last of these indirect indicators of research credibility. Conflicts of interest (COI) are common in modern scientific and medical research, particularly though not exclusively due to the centrality of corporate funding for academic and commercial science alike. Disclosure of authorial COIs has become a routine requirement for many peer-reviewed scholarly publications, championed as a sensible middle-ground between contrasted extremes of a thorough-going prohibition on for-profit research on the one hand and sweeping acceptance of research findings without consideration of their origins on the other. Disclosure might plausibly be defended on ethical and/or professional grounds; this paper investigates the
social-epistemic case for COI disclosures in science communication, so that COI information might reliably figure into indirect evaluations of research credibility. Some philosophers and other commentators treat financial COIs as clearly relevant to all research credibility. Others criticize COI disclosures as akin to ad hominem attack: inappropriately impugning researchers’ integrity when better markers of research credibility should be used instead. In his 2013 paper “Financial Conflicts of Interest and Criteria for Research Credibility,” Kevin Elliott cogently argues for the need to distinguish when financial interests are and are not relevant to research credibility. Elliott agrees with Goldman and others that researchers’ interests can be indirectly evidentially significant, while specifying the conditions in which this relationship holds.

Elliott’s attention is directed to “conditions under which financial COIs are most likely to corrupt the quality of scientific work” (2013, p. 16), particularly though not exclusively for industry-funded research: he notes that research funded by non-profit citizen groups, labor organizations, and governments might also satisfy his proposed conditions, thus undermining the credibility of such research too. Here I seek to extend Elliott’s interest-credibility relevance criteria to community-based research. Specifically I look to the United Church of Christ’s 1987 study “Toxic Wastes and Race in the United States,” a landmark for environmental justice and arguably a paradigm case of interested community-based research. I review the methods and findings of this study, subsequent criticisms and defenses, and conflicting research claims on race and toxic facility siting: in particular Anderson, Anderton, and Oakes’s 1994 study “Environmental Equity: The Demographics of Dumping,” published in Waste Age and funded by Waste Management, Inc. I suggest that weighing conflicts of interests toward the comparative credibility of these studies (one church-funded and community-based, the other corporate-funded and university-based) can function as a useful application of Elliott’s proposed criteria. Ultimately, I seek to explain how the UCC study and similar such community-based research may be understood as interested yet trustworthy research.

2. CONFLICT OF INTEREST CHARACTERIZATIONS

Three primary tasks for a critical analysis of conflicts of interest are to distinguish actual from apparent COIs, to distinguish morally suspect from morally neutral (or enhancing) COIs, and to distinguish COIs with negative rather than neutral or even positive implications for research credibility.

Thompson defines a conflict of interest as “a set of conditions in which professional judgment concerning a primary interest (such as a patient’s welfare or the validity of research) tends to be unduly influenced by a secondary interest (such as financial gain)” (1993, p. 1). Thompson looks to an expert’s professional duties to identify the relevant primary interest, and clarifies that having a secondary interest is not itself always indefensible: the specific problem is particularly when such interests unduly influence our profession duties. For his part, Rodwin identifies two main types of medical COIs: “conflicts between a physician’s personal interests (often financial) and the interests of the patient” and “conflicts that divide a physician’s loyalty between two or more patients or between a patient and a third party” (1993, p. 9). Note that while Thompson’s definition involves a hierarchy of interests, Rodwin allows for symmetric COIs, as for instance when a physician’s loyalty is divides between two patients.

More recently, Resnik proposes the following interrelated characterizations of genuine and apparent COIs, for both individual researchers and research institutions:
A researcher has a conflict of interest if and only if he or she has personal, financial, professional, or political interests that have a significant chance of compromising the judgment of the average scientist in the conduct of research.

A researcher has an apparent conflict of interest if and only if he or she has personal, financial, professional, or political interests that appear to the average outside observer to have a significant chance of compromising the judgment of the average scientist in the conduct of research.

A research institution has a conflict of interest if and only if it has financial or political interests that have a significant chance of compromising the decision making of the average research institution in the conduct of research.

A research institution has an apparent conflict of interest if and only if it has financial or political interests that appear to the average outside observer to have a significant chance of compromising the decision making of the average research institution in the conduct of research. (Resnik, 2007, pp. 111-114)

McGarity and Wagner identify two factors most likely predictive of “science-bending”: “the advocate must believe that the costs to it of any adverse scientific findings will be higher than the costs spent undermining the research” and “the advocate must have sufficient resources to mount the desired attacks” (2012, p. 27).

Tsai (2011) and Williams-Jones (2011), among others, urge that while financial COIs are important, non-monetary conflicts of interest should not be ignored either. As Tsai puts it, “There is no reason to suspect that the rational bettor who appreciates disclosure information on a study author’s financial conflicts would care any less about her or his intrinsic conflicts” (2011, p. 42). In a similar vein, Thompson observes, “Conflict-of-interest rules usually focus on financial gain, not because it is more pernicious than other secondary interests but because it is more objective and more fungible” (1993, p. 1). Their concern is that intrinsic conflicts may be neglected not because they are unimportant, but because of the operationalization demands of contemporary research ethics.

Brody recognizes that conflicts of interest are not automatically morally blameworthy: “Being in a position to be tempted to abandon one’s advocacy duty is not the same as actually having abandoned that duty” (2011, p. 24). So understood, an identified COI “functions as an ethical red flag, warning us to be on the lookout for possible ethical breaches” (Brody, 2011, p. 24). Brody does think that entering into COI temptations sometimes can be ethically problematic and not just potentially so. “What conditions would have to be met for such social arrangements to be judged morally blameworthy in themselves?” Brody asks, and proposes two conditions: “The arrangements carry a serious risk of threatening the public trust needed to carry out the physician’s social role,” and “The arrangements are avoidable—they are not necessary for the social role to be successfully fulfilled” (2011, p. 26).

Goldman argues that non-expert listeners are justified in giving less credence to expert testimony when faced with “evidence of distorting interests and biases that might lie behind a putative expert’s claims” (2001, p. 104). Goldman offers as an example a person frequently hired as an expert witness and so has an economic interest in consistently delivering firm testimony, such that the epistemic trustworthiness of this expert’s legal testimony should be discounted accordingly. Williams-Jones warns against what she characterizes as a “straightforward and overly simplistic correlation” (2011, p. 1) too often presumed between conflicts of interest and corrupt research. Here it might be worthwhile to consider the possibility that interests might sometimes be good: that is, good as potential positive indicators of trustworthiness. We might distinguish between interests that motivate an expert to do better, more reliable work and offer better, more conscientious and competent testimony, on the one hand, and on the other hand, interests likely to make an expert’s testimony less trustworthy. Are an expert’s interests such that she needs to win the disagreement, or rather, such that she
needs to get things right? The former would be a cause for concern, while the latter can make an expert more trustworthy. One’s good standing in a professional association may be contingent on consistently giving reliable testimony, for example, whereas securing additional work as a highly paid legal expert may be contingent on winning expert disputes. The trustworthiness of research challenging the link between cigarettes and emphysema may be appropriately undercut by researchers’ owning stock in tobacco industries. Having teenaged children could bolster the trustworthiness of one’s work on anti-smoking ad campaigns, by contrast, since this sort of interest indicates that such a person is significantly invested in the genuine and not just perceived success of the campaigns. Similarly, consider a coach or a teacher also working on creating effective anti-smoking ads: this person’s interest in making ads that actually work for a wide variety of children may thus increase her trustworthiness in this endeavour.

Elliott challenges the presumption that COIs always appropriately undermine research credibility. “As a starting point for further work on this issue” (2013, p. 16) he offers criteria “that are all present in previous cases where financial COIs have been particularly problematic”:

1. Scientific findings are ambiguous or require a good deal of interpretation or are difficult to establish in a straightforward manner.
2. Individuals or institutions have strong incentives to influence those scientific findings in ways that damage the credibility of the research.
3. Individuals or institutions that have incentives to influence those scientific findings also have adequate opportunities to influence them. (Elliott, 2013, p. 16)

As Elliott sees it, a major strength of framing interests in terms of these criteria is that it avoids unfairly impugning all industry-funded research. “As long as scientific mistakes harm research funders in the same ways that they affect the general public,” he reasons, “then there is little incentive to damage the credibility of research” (Elliott, 2013, p. 16). Another strength of these criteria is that industry funding is no more necessary than it is sufficient for COI-based criticisms of research. Financial conflicts of interest given governmental, non-profit, and/or organized-labor funding that meet Elliott’s three criteria also open themselves to a loss of credibility for their research findings. While he is realistic about the limited value of COI disclosures (cf. De Melo-Martin & Intemann, 2009), Elliott believes that his relevance criteria can help to guide COI disclosure policies and rational assessments of research credibility.

3. TOXIC WASTES AND RACIAL REVISITED

The United Church of Christ (UCC) has filled a key role in environmental justice (EJ) activism throughout the last thirty years; social justice and civil rights have long been and continue to be recognized as central to the church’s ministry (cf. UCC, 2014). “Toxic Wastes and Race in the United States” was ordered by the church’s Commission on Racial Justice to serve as credible evidence that EJ campaigns against toxic waste facility sites in African-American communities in Warren County NC and elsewhere could cite in making the case that some communities bear an unequal environmental health burden as compared to others. Authored by Chavis & Lee in 1987, the study was completed and published (though not submitted for scholarly peer-review) to widespread recognition.

Though additional studies came to similar findings on race and locally undesirable land use (LULU) siting in subsequent years, including UCC’s “Toxic Wastes and Race at Twenty”
CONFLICTS OF INTEREST AND COMMUNITY-BASED RESEARCH

(Bullard, Mohai, Saha, & Wright, 2007; cf. Goldman & Fitton, 1994) the first UCC study is widely cited in popular and scholarly analyses of environmental racism and environmental justice. Its primary finding is that race, even more than income or property value, is the best predictor of LULU proximity across the US. This is shown through comparison of demographic statistics of those zip codes in which one or more hazardous waste sites are located with the zip codes with no recognized hazardous waste sites. That racially minority groups (African Americans, Asian Americans, Pacific Islanders, Hispanic Americans, Native Americans) are overrepresented in those areas containing hazardous waste facilities in the US is demonstrated both at the national level and particular major urban areas: for example, “Blacks were overrepresented in the populations of metropolitan areas with the largest number of uncontrolled toxic waste sites” as in Memphis or in Chicago; and “Approximately half of Asian/Pacific Islanders and Native Americans live in communities with uncontrolled toxic waste sites” (Chavis & Lee, 1987, p. xiv).

Critics took issue with the UCC study methodology and reported findings. In their own study of toxic site demographics (cited hereafter as the UMass study), Anderson et al. differed from the UCC researchers in two significant ways: they compare census tracts rather than zip codes, and their comparison class includes only census tracts not containing hazardous waste facilities in standard metropolitan statistical areas (SMSA) that did contain hazardous waste facilities. LULU-free census tracts in rural areas, for example, are intentionally excluded from control-group demographic statistics. Their different methodological choices yielded different research findings regarding race and toxic waste. While the UCC study and UMass study both found that areas with toxic waste facilities had about 25 percent minority resident populations, the UCC comparison group minority resident population was significantly lower, while in the UMass study, comparison group minority resident population was not statistically significantly different from those areas with toxic waste facilities. On this basis, Anderson et al. rejected the hypothesis of racial inequity in toxic waste siting.

The UMass study does not strictly speaking contradict the UCC study; their contrary EJ findings stem from contrary methodological choices (cf. Steel & Whyte, 2011; Crawford, 1996). Yet critics of the UCC study did not merely make note of their different methodologies: rather, they rejected the UCC study methodology as inferior and thereby rejected its finding of racial environmental inequity as “overstated” (Kevin, 1997, p. 13). In his critical review of EJ research, Bowen classified the UMass study as high quality research, while the UCC study lacks formal scientific validity and gives “grave reasons to doubt the accuracy of its conclusions” (2002, p. 6). Bowen identifies the use of zip codes as “overly large” geographical areas as one such grave reason, and he cites the disparity with the UMass study as evidence that this methodological choice is a “seriously misleading error” (2002, p. 6). Bowen further defends the UMass study’s exclusion of rural census tracts and other non-SMSA census tracts from the control group on the grounds that the proper comparison class should be limited to “those geographical areas that could have been selected as feasible alternatives to the particular facilities in question” (2002, p. 6). Been (1992; 1995) argues similarly against zip codes as inappropriately large and defends excluding the aforementioned census tracts from control group membership. Kevin (1997) repeats the familiar argument that census tracts are methodological more appropriate that zip codes, since the latter are postal codes and thus geographically arbitrary, while the former are meant to capture neighbourhood-level demographic features. Kevin, however, does not mention nor defend the UMass study’s methodological decision to exclude rural and other non-SMSA census tracts from the relevant
comparison class. None of Kevin, Been, or Bowen discuss the UMass study’s industry funding and possible financial COIs in their analyses of these studies on the demographics of LULU siting.

4. APPLICATION OF ELLIOTT’S RELEVANCE CRITERIA

How might Elliott’s proposed criteria for distinguishing credibility-relevant financial COIs for research help shed light on the relative merits of the UCC and UMass studies? I find it useful to start with Elliott’s first criterion: he invites us to consider situations in which “[s]cientific findings are ambiguous or require a good deal of interpretation or are difficult to establish in a straightforward manner” (2013, p. 16). Neither UCC nor UMass study is particularly complicated or difficult; the ambiguity and need for interpretation are different than the impenetrability of Einstein’s general theory of relativity for non-expert readers. Zip codes, census tracts, and toxic waste facilities are relatively familiar, and their uses by Chavis & Lee and Anderson et al. are fairly easy to understand. Nevertheless it seems to me that both studies fulfill Elliott’s first criterion, because of the ambiguity of operationalized geographic proximity at work in both. The question of main interest is whether racially minority groups live disproportionately close to toxic waste facilities in the US; ideally, closeness would be measured by attending to health, financial, and other environmental considerations appropriate for different types of facilities. Yet neither the UCC study nor the UMass study proceeded in this fashion, and while their respective uses of zip codes and census tracts differed, both are susceptible to the criticism that a toxic waste facility might be located near a corner or a border of the area designated, thereby producing a misleading data point regarding geographic proximity (cf. Mohai, 1994; Steel & Whyte, 2011). The follow-up 2007 UCC study improved on this problem by looking at 2-km radius circles centered around toxic waste facilities, rather than zip codes (Bullard et al., 2007), but still does not attend to specific financial, health, and environmental considerations most relevant for different types of facilities. The lesson, then, is that readers of these studies must assess the relative merits of suboptimal methodological choices underlying both the UCC and UMass findings.

One might argue that ambiguity and need for interpretation can be mitigated by looking to criticisms and defenses offered of these studies’ methodologies. We are told that zip codes are too large to be demographically meaningful, for example we might also worry that single census tracts are too small, that (parts of) nearby census tracts might also bear negative health, financial, and environmental burdens of the LULU under consideration. Again, different types of toxic facilities are likely to have smaller, larger, and differently shaped impact zones, so real ambiguity remains regarding the relative shortcomings of zip codes and census tracts as proxy indicators. Let us consider also the UCC study’s inclusion of all zip codes not containing toxic sites in its relevant demographic comparison class, and the UMass study’s exclusion of places outside of metropolitan areas containing recognized toxic sites from its comparison class. The exclusion of many predominantly white rural and exurban communities meant that the UMass study found roughly comparable racial minority populations in metropolitan neighborhoods nearest and relatively farther from toxic waste facilities. Meanwhile, including predominantly white rural and exurban areas quite distant from any toxic waste facilities meant that the UCC study yielded significantly lower average racial minority population in LULU-free places than LULU-bound ones. Defenders of the UMass study argued that the relevant comparison class ought to be those areas in which toxic waste facilities could have been alternatively located;
defenders of the UCC study, by contrast, argued that the most important issue was the impacts of toxic sites felt by different communities, and therefore all communities ought to be counted in the research. On balance, there remains considerable room for ambiguity and need for some interpretation in evaluating the strengths of these methodological criticisms and defenses.

Let us skip ahead to Elliott’s third criterion, regarding the means and opportunities for individuals or institutions to influence scientific findings. No one doing research on race and toxic waste siting has exclusive or proprietary control over the research findings in this area. The 1987 UCC study drew upon existing zip code designations, as the 1994 UMass study drew upon existing census tract designations and SMSA designations; both studies deferred to what were recognized toxic waste facilities. For each, the opportunities to influence findings on race and toxic wastes were fairly limited, then, yet nonetheless existent. Specifically, both research teams enjoyed latitude in making the previously discussed methodological choices as they did. The UCC study was not subjected to scholarly peer review and thus its authors were not forced to convince reviewers of the reasonability of its use of zip codes and inclusion of all zip codes as a precondition of its publication. The UMass study was published in the journal *Waste Age*, and thus subject to some review. Yet reviewers may still allow authors considerable latitude in their methodological choices, provided such choices are clearly articulated and at least partially justified; a reviewer need not agree that she would have organized the research at hand just as the research team did, only that their methodological and organizational choices are broadly acceptable.

Let us now turn back to Elliott’s second criterion, regarding not just researchers’ means but their incentives to influence research findings “in ways that damage the credibility of the research” (2013, p. 16). I think this is the crux of the challenge of extending Elliott’s credibility-relevance criteria to community-based research such as the UCC study on toxic waste and race. How should we make sense of incentives here? At this point it might be helpful to draw upon a similar set of proposed criteria regarding COIs and research credibility articulated by Resnik and Elliott (2013). Where Elliott (2013) offers this second criterion about incentives and credibility damage, Resnik and Elliott (2013) offers three criteria: “whether the funders have a significant financial stake in the study outcomes, whether their financial interests coincide with the goal of producing credible research, and whether the funders have a history of influencing research” (quoted in Elliott, 2013, p. 16). We can extend these criteria fairly straightforwardly to the UMass study: conducted by academics, funded by industry, and published in a scholarly journal. Here, the funder (Waste Management, Inc.) has a significant financial stake in the study outcomes, as EJ activists’ claim of disproportionate negative environmental health impacts of waste sites on racial minorities in the US would create social, political, and ultimately financial problems for this company, if their claim is widely seen as empirically substantiated by credible research. Is this funder’s financial interest coincident with the goal of producing credible research, though? On its face, this situation seems quite unlike Elliott’s example of an industrial funder interested in producing a genuinely well-functioning product, since broadly speaking, people will not buy a malfunctioning product (2013, pp. 16-17). For Waste Management, Inc., and its fiduciary duties, what matters most is that landfills, sorting facilities, and other waste storage facilities be sited in locations as cheaply as possible with as little political resistance as possible. Individuals who work for the company may be personally committed to the importance of good research, but its overall financial interests are only indirectly implicated, given this company’s interest in not being widely perceived as undermining good research. (Unfortunately, I am as yet unable to assess the criterion regarding
histories of influencing research for Waste Management, Inc. or for the United Church of Christ.)

How might we extend the three incentives criteria proposed by Resnik and Elliott (2013) to the UCC study, then, which was funded not by an industrial organization but by a church? It would overly extend the core concept, I think, to insist that the United Church of Christ has “a significant financial stake” in EJ study outcomes. To be sure, the UCC has expenses, and must raise funds toward these expenses; it is possible that a highly publicized study useful toward its social-justice work might aid fundraising efforts. Yet as a recognized non-profit organization, the UCC’s financial interests must be secondary to its primary advocacy interests of civil rights and social justice (cf. UCC, 2014). All the same, critics like Bowen (2002) are not principally worried about financial conflicts of interests when they condemn the UCC study as advocacy rather than proper research. The potential COIs are neither precisely financial nor just personal, but political. The concern is that organizations such as the United Church of Christ do have incentives to influence research they fund in ways that undermine such research’s credibility, and in that sense, Elliott’s second relevance criteria is quite salient. Yet the explication of this criteria in the more detailed version provided by Resnik and Elliott (2013) does not capture the substance of the COI issue at play here.

It is fair to say that community-based advocacy organizations like UCC do have a stake in the outcomes of studies they fund, but it is not (or at least not primarily) a financial stake. Specifically, given its stated ministerial missions of civil rights and social justice, UCC is quite interested in study outcomes that facilitate their missions. I use the word ‘interest’ intentionally here: as a community-based organization, UCC is established and persists through its work and values. Whether these constitutive interests conflict or coincide with quality, credible research is a further question. Were the Commission on Racial Justice for the United Church of Christ focused exclusively on advancing the social, political, environmental, and material wellbeing of African Americans, for example, we might initially worry that its interests would be better suited by study outcomes substantiating claims of anti-black environmental racism than, say, credible research that fails to establish such a connection. Yet I think this is too quick for two reasons. The first is that stated UCC advocacy interests are not limited to African Americans, and thus UCC is entirely within its ministerial mission to follow research findings of injustice in whatever particular ways the evidence best substantiates. The second point is that the depth and breadth of UCC social justice and civil rights advocacy work can actually call for credible empirical research, so as to organize and pursue its campaigns most effectively. For example, should geographic proximity to toxic waste facilities not prove to be a disproportionate burden for racial minority groups in the US, then all things being equal, UCC would do well to focus its civil rights and social justice work on other social-political areas in which credible research suggests the problems are greater.

Of course, all other things are rarely equal. It is possible that one issue is actually more practically significant, and yet an advocacy organization might have fairly compelling political and/or strategy-based reasons to focus its efforts elsewhere. Perhaps this organization’s leaders believe that a high-profile campaign on an eye-catching yet comparatively small problem will better serve its long-term mission, for example. Perhaps leadership has reason to think people will respond more urgently or more deeply to some injustices than to others, for example, and so the organization’s interests could be better served by some research findings than by others. This is where Elliott’s first criterion on the ambiguity and necessary interpretation of research once again becomes crucial.
5. INTERESTS AND TRUSTWORTHY RESEARCH

Do the different interestedness of Waste Management, Inc. and the United Church of Christ in the demographics of toxic waste siting, then, erode the trustworthiness of the research findings they respectively fund? One might presume that disinterestedness is a necessary condition for trustworthy science communication, or at least a powerful indirect evidential indicator for it. Yet I think it might be instructive to draw upon accounts of trust and trustworthiness for which interests play central, positive roles. For example, Baier (1986) describes trust as a three-place relation of entrusting, such that A trusts B with C. What makes trust so understood more than a prediction of behaviour is that the trusting person’s relies on the goodwill of the trusted person (B) toward her (A) and the object of her trust (C). Hardin agree with Baier that “to say we trust you means we believe you have the right intentions toward us and that you are competent to do what we trust you to do,” but he disagrees about what constitutes “the right intentions” (Hardin, 2006, p. 17). Hardin offers an encapsulated-interests model of trust, according to which I see you as trustworthy when I judge that you take my interests as my interests into account as you act. Just why you might encapsulate my interests may vary, Hardin says. We might be friends, so you value me and my well-being; or perhaps you value your reputation in dealing with others, so you need to guard that reputation by being trustworthy with me (Hardin, 2006, p. 19). On this account it is not necessary that you be motivated by goodwill toward me, nor sufficient that our interests happen to align accidentally. For Hardin trustworthiness and trust concern cooperation and reciprocity for mutual benefit; attending to trustors’ interests as their interests is a key part of what it means for the trusted person to be trustworthy for them.

Following Hardin, we might say that interested research may be trustworthy precisely for those whose interests are encapsulated by the research findings at hand. Meanwhile, such research may be reliable if not actively trustworthy for those sharing the interests undergirding this research even while the research activities are not guided by a concern for these parties’ interests as their interests. Further, interested research involves COI and a loss of credibility for those who neither positively share nor neutrally accept these particular guiding interests. So for example while both the UCC and UMass studies of racial demographics of toxic waste siting might plausibly be characterized as interested research, given their respective funding sources, a specific recipient of these studies’ findings might identify with UCC’s civil rights and social justice interests, but not with the financial interests of Waste Management, Inc., and thus might assess the relevance of these different interests to research trustworthiness accordingly.

Both UCC and UMass studies made debatable methodological choices in measuring the demographics of toxic waste siting in the US. Can we justifiably say that their respective COIs compromised researchers’ judgments in the conduct of this research, following Resnik (2007)? This is a hard claim to substantiate: we have no access to researchers’ processes of discovery, to their real motivating reasons to use zip codes or census tracts to assess geographic proximity or to include or exclude certain areas from their relevant comparison classes, and the publically provided reasons for these choices are neither conclusive nor obviously rationalizations. Rather than claiming that funders’ guiding interests skewed, damaged, or compromised their research findings, I suggest that funders’ guiding interests can help direct or define studies’ key research questions from the many legitimate yet distinct possibilities available. Research encapsulating funders’ interests, pace Hardin (2006), accounts for these interests as theirs; such research thus gives priority to funders’ subjectivity in defining research questions. This may not necessarily
compromise research findings, but as answers to specific research questions rather than others, these findings may be more relevant to some parties’ interests and values than to others.

Consider, for example, the UMass study’s exclusion of rural and exurban census tracts, and more generally all those census tracts not located within SMSAs containing toxic facilities, contrasted with the UCC study’s inclusion of these areas among the relevant comparison class of LULU-free communities. Their different choices yielded rather different comparison classes and, accordingly, underwrote the two studies’ disparate findings on the (over) representation of racial minority groups in LULU-bound areas. Defenders of the UMass study reasoned that only those areas in which toxic facilities could have been located should be included in the relevant comparison class. This choice makes good sense when the subjectivity of Waste Management, Inc. and other such companies is prioritized. The primary research question so framed concerns siting choices made by industrial and governmental decision-makers, and whether such choices can reasonably be impugned as racist. But things look rather different when the subjectivity to be prioritized is not that of those choosing toxic waste sites, but rather those living near them: now the primary research question so framed concerns environmental impacts felt by residents and whether such impacts are greater for some residents than others. This is the main question for the UCC study. In some ways, of course, these different research orientations reflect the old distinction between racism understood as hateful intentionality and racism understood as undue impact. Those prioritizing decision-makers’ subjectivities insist that no ill will has been shown; those prioritizing recipients’ subjectivities insist that they care less about decision-makers’ (im)pure hearts than about recipients’ environmental experiences. I have noted that interests in research, whether community-based or industry-funded, can have a meaningful impact on how research questions are framed and how findings are measured. When Elliott’s other two criteria are also satisfied, interested research may be more or less trustworthy for different recipients depending on whether or how much they share funders’ and researchers’ interests encapsulated by the research process.

6. CONCLUSION

“If people were perfect, then COIs would not be an ethical problem because people would always obey their ethical or legal duties and we could trust them,” Resnik (2007, p. 111) notes. “But people are not perfect; they may succumb to biases, temptations, prejudices, and they may make mistakes. Trustworthiness must be continually earned.” This relationship between trust and interests serves as a focal point of recent debates over COI in science communication. Elliott has offered clearer criteria by which to identify financial conflicts of interest most likely to be research corrupting rather than impugning all industry-funded research or totally ignoring funding sources as evidentially irrelevant. Some interests may rightly be feared to bias research results, others not. Elliott thus offers three criteria toward refinement and reform of conflict-of-interest disclosure. In this paper I have sought to extend Elliott’s criteria to community-based research, specifically to critical analysis of the 1987 UCC study on toxic waste and race. Elliott and others have justifiably focused on industry-funded research and financial COIs, yet let us not neglect the social-epistemic challenges that accompany interested community-based research. One lesson is that community-based funders can have a significant yet primarily nonfinancial stake in the research they underwrite; given satisfaction of Elliott’s other criteria, this can make community-based research interested but not necessarily less trustworthy. One difference between industry-funded and community-based research meeting Elliott’s criteria is
that many third parties are more likely to share social interests of community-based research than share the financial interests of industry-funded research, so interested community-based research is more widely (if not universally) trustworthy. Disclosure in science communication remains important for both types of interested research so that expert and non-expert audiences of varied interests can adjust their rational reliance and trust in research findings accordingly.

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REFERENCES


