Social Problems, 2020, 0, 1–17
doi: 10.1093/socpro/spaa012
Article

“We’d Rather Be Relevant than Theoretically Accurate”: The Translation and Commodification of Social Scientific Knowledge for Clinical Practice

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ABSTRACT

At the turn of the 21st century, one of the ways in which the U.S. medical profession attempted to address the rampant health and healthcare disparities facing their patient populations was to pay more attention to a patient’s *culture*. Proving to be easier said than done, the operationalization of the social scientific concept of culture for clinical practice has been fraught with implementation difficulties—from clinician buy-in to stereotyping. I draw upon ethnographic data to detail how an interdisciplinary group of social scientists and clinicians work to translate a theoretically-complex, reflexive, and social-justice-oriented conceptualization of culture into a clinical intervention tool. As opposed to previous accounts of interdisciplinary collaboration that describe social science being ignored, marginalized, or non-commodifiable, I show how this group makes the anthropological concept of culture both clinically and commercially relevant and the importance of clinicians-as-consumers in the translational process.

KEYWORDS: health care; translational medicine; clinical practice; social inequalities.

Despite boasting cutting-edge technologies and treatments, the United States healthcare system is plagued by the ongoing social problems of health and healthcare inequities. For decades, social scientists have documented the incidence and persistence of health and healthcare disparities that systematically disadvantage underrepresented groups (Betancourt 2002; Smedley, Stith, and Nelson 2003; Thomson, Mitchell, and Williams 2006). While the idea that scientific knowledge should be used to improve society has long underwritten the organization of academic knowledge production and evaluation (O’Connor 2001), it has recently been supplemented by the promise of interdisciplinary collaboration. With diverse disciplinary perspectives concentrated on a single social problem, the logic goes, the better the solution (Jacobs 2013; Jacobs and Frickel 2009). For example, if a clinician could

I wish to thank Lindsay DePalma, John Evans, Yao Tai Li, Haley McInnis, Jennifer Nations, Pablo Perez-Ahumada, Alexandra Vinson, and Stacy Williams, as well as the editors and anonymous reviewers for their constructive feedback. This research was supported by a grant from the UCSD Department of Sociology and would not have been possible without the generosity of the respondents. Please direct correspondence to the author at the Department of Sociology, Gladfelter Hall 713, Temple University, 1115 Polett Walk, Philadelphia, PA 19122; email lauren.olsen@temple.edu.

understand the biological *and* social conditions that shape a patient's health profile, then they will be more equipped to thoroughly diagnose and treat them.

The enduring practical challenge in this multidisciplinary effort has been the application of this research: how to translate this body of social scientific research on health and healthcare inequities into actionable plans for their reduction (Kirmayer 2012).[1] And, with regard to theory, despite humanistic and interpretive social science becoming increasingly called upon to contribute in applied ways, there is a remarkable lack of understanding about how scholars engage in translating these forms of knowledge in clinical practice (Albert, Paradis, and Kuper 2015; Camic, Lamont, and Gross 2011). To illustrate a case of how social scientists engage in translation work, I draw upon 300 hours of ethnographic data about social scientists working to translate their theoretically-complex, reflexive, and social-justice-oriented conceptualization of culture into a clinical intervention tool. Their proposed intervention is a translation of anthropological insights about culture into a set of questions for a diagnostic intake procedure, called the Cultural Understanding Tool (CUT).

As the title of this article suggests, I show that in this case of translation, the social scientists knowingly reduce the theoretical complexity of the way they operationalize culture and sacrifice the reflexivity and social justice orientation of their intervention tool, the CUT, in order to be clinically and commercially relevant. In addition to having implications for the amelioration of health and healthcare inequities in the United States, the empirical findings of this study are significant for theoretical debates about the translation and valuation of knowledge, both confirming and complicating what scholars have discussed about the plight of the humanistic and interpretive social sciences in a neoliberal era.[2]

The theoretical implications are two-fold. First, while there are numerous studies of biomedical, basic science research being translated for the clinic, there are none that focus on the translation of social science (Brosnan and Michael 2014; Centellas, Smardon, and Fitfield 2014; Cordner 2015; Hoffman 2015; Michael 2000; Wilson-Kovacs and Hauskeller 2012). In contrast to other studies on translational medicine which illuminate how the "bench" gets to the "bedside," I argue that an important dimension of the translation process occurs when the bedside pushes back on the bench. In other words, I highlight the outsized influence of clinician feedback in the translation process. Second, the outsized influence of clinicians confirms what many scholars have noted about the marginalization of the social sciences by biomedical collaborators (Balmer et al. 2015; Fitzgerald et al. 2014; Viseu 2015). However, counter to previous research which posits that social science is marginalized because it cannot be instrumentalized and commodified (Benneworth and Jongbloed 2010; Rabinow and Bennett 2012), I show that social scientists can commodify their knowledge-products. In so doing, I extend the literature on interdisciplinary collaborations by detailing how social scientists engage in commodification practices and the implications of the concessions they make to be relevant.

In what follows, I contextualize the case within the literatures on translational medicine and interdisciplinary collaboration briefly outlined above. Second, I describe the research site, my participation in it, and the analytical strategy informing this study. Third, I present results on how the social scientists moved from the bench to the bedside, altering the product and purpose of their clinical intervention tool to maximize its clinical and commercial relevance. I conclude with a discussion about the significance of these processes of translation and commodification beyond the sociology of medicine

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[1] For example, one of the biggest issues that translators confront is that when culture has been operationalized for clinical interventions, it has led to stereotyping of marginalized groups through the exoticization of "Other" cultures (Metzl and Hansen 2014; Shaw and Armin 2011).

[2] Neoliberal priorities and values link scientific research and application to concrete, commodifiable output goals (e.g., deliverables). The installment of economic expertise and knowledge has equipped federal granting agencies and universities alike with a technocratic apparatus to evaluate a research program's success or failure (Berman 2014; Fourcade 2009) and the devolution of funding from the state and university to the individual academic actor renders research and intervention agendas more necessarily strategic and calculating (Irani 2015).

and knowledge, as this case serves as an example of how social scientists apply their knowledge to address social problems.

APPLICATION OF KNOWLEDGE FOR CLINICAL PRACTICE

Translational medicine is a set of practices encompassing the application of knowledge for the improvement of health and healthcare (Wilson-Kovacs and Hauskeller 2012). Traditionally, it entails the packaging of "bench" research insights from the natural and basic sciences into clinically relevant interventions at the "bedside" (Michael 2000; Michael, Wainwright, and Williams 2005). These interventions may be pitched at providing benefits in preventative, diagnostic, and therapeutic dimensions of health and healthcare (Brosnan and Michael 2014). In addition to the application of scientific knowledge to improve healthcare, translational medicine *also* encompasses more capitalistic pursuits—as researchers move their work from the bench to the bedside, they often acquire a patent along the way (Hoffman 2015). As Hoffman (2015:3) explains, the economic "reorientation has created formal and informal pressures on academics to produce knowledge products that have industrial relevance." Therefore, translational medicine is premised on knowledge attaining both clinical and commercial relevance.

Scholars studying translational medicine have approached this set of practices by analyzing the *process* and *promise* of translational medicine. Regarding the process, Salazar et al. (2012) outline a synthetic model of translation, where disciplinary boundaries blur and an integrated knowledge-product is formed. In contrast, Centellas et al. (2014:313) describe a calibration model, where disciplinary boundaries remain firm, but the translation process moves forward because of the "ongoing, day-to-day negotiation and alignment of personal identities, disciplinary commitments, and research group customs that occur during face-to-face group deliberations around everyday research concerns." In drawing our attention to the process by which groups create translational products, these studies of translational medicine focus on researchers from similar backgrounds where clinical and commercial utility appears to be implied (e.g., biology, chemistry, physics, engineering, and mathematics). As such, the bulk of what we know about the process of translation is premised on collaborators who have equal power within a culture of mutual respect; otherwise, the actors involved would not defer to the authority of the other researchers and clinicians on the project.

In moving from the process of creating a translational knowledge-product to marketing it, Brosnan and Michael (2014) explore the promise contained in translational medicine by focusing on the way in which expectations are enabled, structured, and communicated. The promise of a knowledge-product hinges on its appeal to clinical and commercial relevance. Brosnan and Michael (2014) argue that the expectation that interdisciplinary research will yield successful interventions, or what they call the "promise of porosity," inheres in the translator who straddles the "laboratory-clinic divide" (Michael, Wainwright, and Williams 2005:386). Or, as Cordner (2015:922) elaborates, while "high-quality translations preserve meaning across fields with little observable fingerprint from the translator," translators often transmit the promise via "strategic science translation," whereby translators either are selective with the evidence they choose, emphasize one argument over another, or deliberately put forth inaccurate information.

While we know that strategic packaging of the promise of the knowledge-product is a part of the translational process, we do not know what or who impacts these selections. Moreover, in these accounts of applying biomedical bench insights to the clinical bedside, it is unclear whether and how the projected consumers might play a role in the process. Therefore, the literature on translational medicine invites empirical investigations about when translational work is done in interdisciplinary settings premised on less equitable distributions of power, like social science and medicine, as well as examining the role of consumers in the translational process.

PROCESSES OF KNOWLEDGE DEVALUATION

Turning to the literature on interdisciplinary collaborations between the social and biomedical sciences, we can find suggestions for how social science translational projects might fare. This literature has depicted a relationship between the social and biomedical sciences that is fraught—where the social sciences are marginalized. In their work with molecular biologists, for example, Rabinow and Bennett (2012) found that despite their conversational expertise and eagerness to learn more about molecular biology, "no reciprocity emerged, nor was it encouraged" from their colleagues. Fitzgerald and colleagues (2014:716) noted that they practiced "reticent politesse" with their biomedical collaborators, refraining to speak out and living with the feelings of discomfort and uncertainty in order to help the collaboration occur more successfully, which was similar to experiences articulated by Viseu (2015) in a nanotechnology lab and by Albert et al. (2015) for social sciences faculty members who remain working within departments of medicine.

Governing the roles and relationships between collaborators and knowledges are the "affective, political, symbolic, and power dimensions of different contexts working together" (Balmer et al. 2015:9). Scholars depict the marginalization of the social sciences in interdisciplinary collaborations with biomedical disciplines as resulting from structural or cultural factors. Structurally, the low quantity of social scientists in interdisciplinary settings, the mandated mode of collaboration of policies like the ELSI Program,[3] and the hierarchy of epistemic power in an institutional setting all combine to place the social scientists at a relative disadvantage in interdisciplinary collaborations with biomedical colleagues. For example, as the lone social scientist in a nanotechnology lab, Viseu (2015) described her participation as tokenized and constrained. And, in their description of the ELSI program, Balmer et al. (2015) argue that the configuration of the program includes humanistic and interpretive social scientific knowledge and experts as afterthoughts because it keeps "science" and "society" as separate entities. As such, social scientists often play the role of providing a "neuro reality check" in stem cell research (Choudhury and Slaby 2011), rather than influencing the research agenda every step of the way.

Culturally, the way in which the social sciences are conceived—as non-commodifiable, less objective, and less accountable—further decreases their likelihood of being on equal epistemological footing with biomedical knowledge. Whether devalued for being unable to produce workers who will contribute to the technoscientific economy (Slaughter and Leslie 1997) or unable to convert their knowledge-products to capital (Rabinow and Bennett 2012), the social sciences' "social benefits and services are more diffuse and less easily enumerated and capitalized" (Benneworth and Jongbloed 2010:567). In addition, scholars note the "gendered division of labor" wherein the social scientists are seen as the caregiver for the project and people—administratively, publicly, and inter-personally—because they are considered a more emotional soft science in contrast to a rational hard science (Balmer et al. 2015:11; Viseu 2015).

Based upon this literature, we would expect the social scientists to face significant challenges in the translational process because they stand on less valued epistemic ground due to their inability to instrumentalize and commodify their knowledge. These structural and cultural imbalances of epistemic power still hold in U.S. academic medical centers; however, the degree to which the social sciences have become instrumentalized—and commodified—within the field of health care challenges some of our understandings about how the social scientific and biomedical disciplines relate.

DATA AND METHODS

This article is based on 300 hours of ethnographic research conducted in 2013 with a leading translational social science research center within a large East Coast academic medical center in the United States. The research center, which I call "The Center," was founded at the turn of the 21st century to

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[3] Founded in 1990, the Ethical, Legal, and Social Implications (ELSI) Program was a component of the Human Genome Project. Scholars such as Balmer et al. (2015), Rabinow and Bennett (2012), and Viseu (2015) who have participated in these ELSI Program projects have characterized geneticists' incorporation of social scientists and humanists as more symbolic than substantive.

connect social scientists working on improving cultural competence[4] with clinicians at various stages of training affiliated with the university and hospital administrators charged with overseeing hospital training and practice standards throughout the state. The Center had direct employees, affiliates at the university, and more distant affiliates across the country at other institutions. The shared goals among The Center's researchers were to promote cultural competence in clinical practice and to seek the implementation of their proprietary cultural competence approach, the Cultural Understanding Tool (CUT) in clinical practice at state and university healthcare organizations.

The Research Site

The Center had a physical location, where the core formally met in person once a week, where informal meetings and collaborations occurred daily, and where teleconferences with non-present affiliates took place twice weekly. There were eight core members of The Center, and 37 affiliates at the time of the study. Of the eight core members, three had MD-PhDs—where the PhD was in cultural anthropology—an additional three members had PhDs in a social science, and the remaining two members had MAs in a social science. The types of social science disciplines represented in the professional degrees were anthropology, public policy, sociology, and social work. One MD-PhD also had an MBA. The MD specialties were either in psychiatry or internal medicine, and all of the members with MD degrees spent at least two days a week in a clinical setting—some at their academic medical center hospital or outpatient clinics, others in private practice, and still others in a mixture of these environments. The affiliates, by and large, had a mixture of degrees of these types. The only central difference between the core and the affiliates was that some affiliates only had an MD degree, which was not the case with the core.

Translational research is often produced in spaces that are affiliated with academic, medicine, and state fields, such as large universities with centers of research, training, and practice, which are funded by private endowments and state and federal grants (Centellas et al. 2014). Most of The Center researchers received their income from state or federal grants, university-funded academic appointments, and reimbursements from their clinical practice. The Center had a formal hierarchy and division of projects; however, most of the core members held multiple appointments (e.g., as clinician, social scientist, policy maker, researcher, and/or instructor). The Center core was simultaneously active in many clinical trials, data analyses, academic responsibilities, professional presentations, and clinical commitments; the affiliates were involved on a more case-by-case basis, when their specific research interests or skill sets were needed or when they sought to be involved. The projects at The Center were ongoing, and there were many shared activities the core members and affiliates engaged in to sustain the projects: co-teaching resident courses; research project meetings, where proceedings from the project's trials or analyses were discussed by active members; career strategy meetings, where core members or affiliates alike drew upon the collective knowledge from colleagues about what project to prioritize and what to grant to apply for next; co-supervising students; and presentations of working papers for feedback from colleagues.

Most of The Center's core members and affiliates were geared toward advancing their Cultural Understanding Tool (CUT). The cultural competence approach promoted by The Center and embodied in the CUT address the provider-level, or the clinician-patient encounter, a common site for the proposed intervention (Srivastava 2007). The CUT was developed by The Center core members and some affiliates as an intake procedure. The final version of the CUT consists of 14 semi-structured, open-ended interview-style questions that are supposed to last between 35 and 55

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[4] With its conceptual underpinnings in cultural anthropology, cultural competence originated and continues to be a fundamentally interdisciplinary, translational, and social scientific project within U.S. healthcare. Created through the collaborative work between social scientists and medical professionals, cultural competence captures a variety of approaches to improving the doctor-patient encounter by placing significant weight on social scientific research findings that show patients from different backgrounds interact differently with the biomedical healthcare system (DelVecchio-Good et al. 2003; Good 1994; Kleinman, Eisenberg and Good 1978).

minutes. While the content of the CUT will be discussed in the Results section, an example of a type of question on the CUT is, "Are there any aspects of your background or identity that make a difference to your [PROBLEM]?"

An outline of the CUT was drafted two decades prior to its original iteration; the outline was conceptualized in the 1980s and the original iteration in which The Center researchers' ideals were operationalized was in the early 2010s. The final version of the CUT was developed two years after the original iteration, and when I began my study at The Center, they were revising the CUT from the first, original iteration to the second, final version, the latter of which was published as a professional resource for clinical practice. Between the first and second versions, The Center conducted a field trial with clinicians and patients across the United States and in three other countries to assess the clinical feasibility, acceptability, and utility (FACU) of the product. My position at The Center allowed me to witness how The Center discussed changes to the product and purpose of the CUT. To enter this setting, I designed a research project proposal, created an IRB application, and gained (limited) access to the research site. My participation in The Center was premised on my role as an unpaid research assistant, or intern. I came to the physical office at The Center, assisted in projects, and attended meetings. Most of my work, with the exception of discussions about my research interests, was premised on executing orders of The Center researchers.

As an intern, I participated in the activities described above; however, most of my work entailed taking notes, writing up and revising reports, engaging in directed readings on cultural anthropology, and in participating in coding qualitative data gathered about the FACU of the CUT. As a note taker, I was able to document how The Center researchers presented themselves both in the front and backstage. As a report drafter, I was able to see how The Center researchers wanted to be represented to clinicians and hospital administrators. As a coder, I was more of a nuisance, albeit not deliberately. I often had questions about some of the codes we were assigning to the clinician and patient feedback data; interestingly, while I was trusted enough to code the data, I was dismissed when I questioned the coding decisions made by The Center researcher leading the study. I was often silenced or outvoted, with my "newness" to the study cited as the reason.

While my study departs from autoethnographic work on interdisciplinary collaboration because I focus on The Center members rather than myself, I experienced many of the feelings outlined in Balmer et al. (2015), Fitzgerald et al. (2014), and Viseu (2015) about feeling pressure to remain polite and helpful. The case of The Center and their CUT provides an opportunity to examine how a group of social scientists cultivates, corroborates, and presents social science to various clinicians and hospital administrators, how its personnel negotiate this translation process, and what concessions they make to be both clinically and commercially relevant.

Data Interpretation and Analysis

With The Center as a research site, two main types of observations inform this analysis: internal meetings and external presentations. First, internal meetings at The Center were critical to the advancement of the CUT, as they served not only as a place to brainstorm the research surrounding the knowledge-product, but also acted as a space where strategy surrounding the presentation of that knowledge-product could occur. That is, the meetings provided the people and place for the *process* of translation work to happen. FACU study data, particularly the clinician feedback, factored heavily into these discussions. Second, the presentations to clinicians and administrators at state and university hospitals captured the *promise* of the translation work, as well as the justifications of this translation, often occurring through members' describing the "use" or "relevance" of their Cultural Understanding Tool.

My interpretation of the data is contingent upon the co-constitutive nature of 1) my role as a student and The Center researchers as teachers, and 2) their wariness of me as a critic and my desire to not betray their confidentiality. My presence was premised on my ability to help them and learn from what they do; my primary identity was that of a student. Access to The Center was difficult to negotiate, as I had to sign a non-disclosure agreement and they informed me before arriving that they were setting up a google alert on my name to ensure that I did not violate these terms. To protect the identities of my respondents, I report a generalized account of the type of work The Center does to capture a process of knowledge translation and commodification.[5] I look for patterns or processes that may be derivative of the applied context—in order to contribute to the literatures on translational medicine and interdisciplinary collaboration.

I uploaded my ethnographic data in the form of transcribed audio from meetings and presentations, alongside field notes and drafts of the CUT and other knowledge-products into the data software NVivo for qualitative data analysis. I use pseudonyms whenever referring to individual respondents, institutions, or knowledge-products. After organizing the data to capture the process and promise of translation work, I engaged in an inductive and iterative analysis, whereby I derived a coding tree, capturing the use and relevance of social science for medical practice that included the intended beneficiary of CUT, the specificity of CUT's benefits, what CUT is *not*, the challenges of convincing stakeholders, and various stakeholders' perceptions of social science. From the analytical process, it became evident that "relevance" was frequently conceptualized in clinical and commodified terms and that the reported clinician feedback on FACU shaped the direction of changes from the original to the final version of the CUT.

RESULTS

The purpose of this section is to show how The Center researchers altered the Cultural Understanding Tool (CUT) to attain clinical and commercial relevance. I argue that they went from a theoretically-complex, reflexive, and social-justice-oriented original version of the CUT to a more reductive product that was aimed at helping clinicians and healthcare organizations meet their bottom line rather than provide equitable healthcare. In the three sections that follow, first I will detail how The Center researchers worked at the "bench" and originally conceived of the CUT's product and purpose. Second, I will describe the revisions that The Center researchers made in changing the CUT after considering feedback from the "bedside." And third, I will illustrate how The Center not only made their knowledge-product clinically relevant, but also folded profit-based motives into the promise of their translational product.

Beginning at the Bench

In this section, I detail the start of the translational process, wherein the social scientists at The Center are at the "bench" creating their knowledge-product. At this stage of the translational process, The Center researchers envision their ideal product and purpose, conceptualizing the Cultural Understanding Tool (CUT) as a theoretically-complex, reflexive, and social-justice-oriented product to help address the social problem of health and healthcare disparities at the clinical provider level. In this sense, the product and purpose were aligned: the questions on the CUT were designed to meet the goals of eliciting a patient's understanding of why they are sick in the first place, situating that understanding in a broader social context, and allowing the physician to discuss and reflect on their role—all with the intent of encouraging the compassionate, attentive, and equitable care of patients from diverse, and often marginalized, social backgrounds.

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[5] I am also unable to present the impressions of consumers and patients because I was not permitted to do so; a condition of my access was that I was to collect data only from The Center researchers. So, while I was able to observe presentations to clinicians and administrators, I am allowed to present only what The Center said. Similarly, with regard to patient data, the most I was able to glean about patients was from the patient feedback I coded on the FACU study; however, that data belonged to The Center and was protected by HIPAA.

Both the original and final versions of the CUT are constructed so that clinicians using the interview guide have access to the prompts (e.g., the questions) as well as the justification of the purpose of that question (e.g., the explanations). The top of the original CUT says that it:

> Has been designed for use at the beginning of the interview with all adult patients in all service settings to frame the interaction around the patient's own cultural interpretation of the problem and expectations for treatment. The questions can also be used at any time during the clinical assessment at the discretion of the clinician. The term "cultural" refers to a list of components that makes up an individual's background [i.e., language, ethnicity, etc.] as well as patient orientations and perspectives that sometimes conform to and sometimes differ from medical explanations. In this sense, culture refers to the values and beliefs that an individual derives from membership in different social groups. The [CUT] adopts a person-centered approach in asking how cultural background affects the individual rather than *merely asking about cultural background*. In this way, the patient is given an opportunity to explain the relationship of culture to the problem, *freeing the clinician from making assumptions about the patient.* (emphasis added)

Pivotal to understanding the original CUT is to begin with how The Center researchers defined culture. One of The Center's affiliate members, Dr. Reynolds, had defined culture as a "fluid, situated, and negotiable intersubjective system of meaning and practice relevant to specific social contexts." According to the director of The Center, Dr. Dinton, with this definition of culture, the CUT would ideally encourage the practice of "thick description" popularized by Clifford Geertz (1973). Under this idealized scenario, the clinician would be "open-minded and patient-centered" as they performed a "mini-ethnography" of the patient and their immediate and distant sociocultural context. With this understanding of culture and method, *every* patient should be administered the semi-structured interview encapsulated in the CUT upon visiting their clinician in their initial assessment. And, as the italicized data in the excerpt from the CUT above notes, the clinician is reminded that culture is not reducible to background and one should be wary with assumptions.

In addition to their theoretically-complex definition of culture and understanding of how to approach gathering this type of information about a patient, The Center researchers also had an idealized vision of how they would process this information. Dr. Fantezi, a core member of The Center who was the PI on the field trials of the original CUT, explained how he wished that they could engage in a more nuanced portrayal of a patient's culture by engaging in analyses of narrative emplotment.[6] Therefore, in addition to being committed to a theoretically-complex understanding of culture, The Center researchers also found reflexive practices to be a crucial component to the original CUT approach, both in the way the questions were designed on the interview guide as well as how the information gleaned from the questions was interpreted.

For example, Dr. Anderson stressed to me how every person, including clinicians, has a culture, and that the CUT was originally designed to possess this "post-modern accountability." This reflexivity is manifested in the CUT itself, for in the original draft, The Center researchers included a question that was worded as follows: "Now let's talk about the help you would be getting here. Is there anything about my own background that might make it difficult for me to understand or help you with your [PROBLEM]?" As the existence of this question indicates, reflexive practices were built into the original CUT; at minimum, this question would remind clinicians that they, too, had a culture to consider, and, depending on the patient's response and the clinician's approach, they could have a thoughtful discussion about the clinician's potential impact on that patient's care. The purpose

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[6] Described by Del-Vecchio-Good and colleagues (1994), narrative or therapeutic emplotment is a concept used to capture when a clinician places a patient within a narrative or listens to a patient's own rendering of a narrative, replete with temporal benchmarks and supporting characters on the route to recovery. The idea is that this narrative will contain many details and characters which will help bring a person's perspective to life, as opposed to a more survey- or checklist-style of approach to discerning a person's point of view or background.

of this question, according to The Center, is two-fold. First, the question is aimed to "elicit possible concerns about the clinician-patient relationship, including perceived racism or cultural differences that might undermine communication, goodwill, or care delivery." Second, the question could allow the clinician to "address possible barriers to care or concerns about the clinician-patient relationship raised previously."

It is important to point out that this reflexive step is thus foundational to the social justice orientation of the original CUT. It is by taking the time to pause and contemplate the clinician's role—whether in terms of their social identity (perhaps being from a more privileged background), or in terms of their professional identity (from a profession that has historically mistreated the patient's social group)—that the clinician can begin to think about how they could provide the patient with more equitable care. Therefore, in addition—and due—to the theoretical complexity and reflexivity, the CUT was originally designed to address social justice, in that The Center researchers were aware that the patient population of the United States was subject to social inequalities and that the medical profession was in a much different structural position in relation to their patients. And, in the original CUT, to reflect this commitment, there was a question that asked patients: "Has anything prevented you from getting the help you need—for example, cost or lack of insurance, getting time off work, or family responsibilities, concern about stigma or discrimination, or lack of services that understand your language or culture?"

This question was included, according to the its explanation on the CUT, so clinicians can "clarify the role of social barriers to help-seeking, access to care, and problems engaging in previous treatment." For example, one of The Center affiliates, Dr. Kantor, has explained elsewhere that "attention to culture without consideration of class, poverty, and professional bias is another example of Pyrrhic victory." These commitments—to understand culture and its relationship to health and healthcare as theoretically-complex, reflective, and oriented toward social justice—as I will shortly show, became compromised as The Center revised the original CUT into its final version. As the operationalization of their ideal product, the original version of the CUT had not yet been marketed to clinicians and hospitals; its mere existence demonstrates that social scientists *can* develop a product that is very true to their ideals, but those ideals start losing ground when they want to secure clinician buy-in. I argue that these defining commitments become marginalized, reduced, and transformed because The Center researchers were certain that these would not meet clinical and commercial constructions of relevance.

The Bedside Pushing Back

While in the previous section I articulated the manifestation of The Center's "bench" work in the original version and explanation of the CUT, in this section I aim to show the "bedside" pushing back. While the bedside—that is, the clinician feedback—is not as dismissive of the relevance of social science as previous studies of bench scientists have shown, the preferences of clinicians regarding the feasibility, acceptability, and clinical utility (FACU) shape the translation process. I will begin by showing how The Center altered the CUT and then explain how the clinician feedback factors into that revision part of the translation process.

While the original CUT was depicted as an exercise in Geertzian thick description, when The Center researchers revised the final CUT, they removed this over-arching methodological approach to culture. As Dr. Reynolds had articulated, the "ethnographic research that is central to anthropological studies of culture is viewed as anecdotal" by people without social science training. Similarly, the original CUT was premised on a definition of culture that was theoretically-complex, but after receiving feedback from clinicians from the FACU study, The Center researchers thought that "many clinicians believed that the prior definition of culture could be made more explicit." Undermining the complexity or the importance of complexity of culture, Dr. Anderson, also said: "A definition of culture is hard to pin down, it's akin to society, or the mind. We have used a definition of culture for maximum utility that makes sense in clinical settings."

To elaborate on this point about rendering more explicit, relevant conceptualizations of culture, in the original CUT, all patients (and clinicians) have culture—not just the racial or linguistic minorities. However, in the training materials for the final version of the CUT, The Center did *not* include vignettes describing a patient's race as white, nor did vignettes touch on the factor of clinician bias or culture. In fact, even though, as The Center Fellow Dr. Anderson noted, The Center researchers were aware that "it is hard to make vignettes without resorting to stereotypes," they still used them as a part of their training materials to teach clinicians how to use the CUT. The Center would distribute a series of vignettes for either hired actors or fellow clinicians to act out so a clinician could practice asking the CUT questions.

For example, in a vignette from the final version of the CUT's training cases, they describe a hypothetical patient as follows:

> Ms. Rodriguez is a 32-year-old woman from Central America who has lived in the United States for 5 years. She speaks Spanish only. A primary care physician referred her for depression and bizarre ideation. Ms. Rodriguez believes she is rotten inside and this gives her a bad smell in her throat. She has consulted several doctors who do not find any physical cause. During childhood, she suffered serious physical abuse by her mother. After Ms. Rodriguez eloped with her first husband, her mother damned her, as she said "my mother might have killed me inside or I am suffering from witchcraft." She has tried *boticarios* (herbal pharmacies) with temporary relief. She has refused all prior psychiatric referrals because she says she is not "crazy." Her church is a source of support as well as her partner.

This vignette promotes a "remote exoticism" to culture which The Center researchers were wary to reproduce and which has been critiqued by anthropologists elsewhere (see Taylor 2003). Moreover, using a vignette that leans so heavily on exoticized stereotypes does little to advance the notion that culture is theoretically complex and that the medical profession, too, has a culture. This limited presentation of culture is consistent with the way in which the final CUT was revised, as The Center included "explicit instructions on when to use the [CUT], with what patients, in what settings, and whether it can be done in its entirety or partially." Gone is the notion that The Center had developed at the bench: that the CUT is to be used with every patient.

Regarding clinician reflexivity, Dr. Anderson explained some of the changes as pivotal for launching the CUT as a product. Following a presentation wherein The Center researchers discussed the implications of definitions of culture, one member, Dr. Eger, expressed how he felt unsure about how compatible narrow definitions of culture were with The Center's overarching goal of being sensitive to *all* patients. Dr. Anderson responded by saying that The Center "would rather be relevant than theoretically accurate." He continued, "in order to get the CUT or some form of cultural assessment off the ground, some of the post-modern accountability of the original CUT would have to be jettisoned, but that would be okay because it secures better buy-in." The post-modern accountability that was removed was the question about the clinician's *own* background. As Dr. Anderson described further, "many clinicians felt that patients would not respond to a direct question on how clinician's background may represent a barrier to care. It was felt that this question was too direct." They removed the question on clinician culture, and in its place put the question: "What kinds of help would be the most useful at this time, based on your preferences and those close to you?" This question, quite obviously, removes clinician reflexivity entirely.

In creating the final version of the CUT, The Center researchers also made concessions that weakened the product's social justice orientation. The question on the original CUT about structural barriers to care contained a long list of potential sources. In the final CUT, The Center removed that question and replaced it with: “Has anything prevented you from getting the help you need?” The removal of examples of structural barriers and potential sources of social inequality dampens the commitment to social justice, in that the final CUT no longer allows the clinician to explicitly signal to the patient that they pay attention to or care about the poverty or racism patients may be subject to in their lives within and beyond healthcare settings (see Metzl and Hansen 2014). The Center researchers discussed including a supplemental module to this portion but ultimately did not do so.

In addition to revising and removing some questions, which moved the CUT away from a theoretically-complex, reflective, and social-justice-oriented ideal, The Center also created a “recording sheet for the information obtained through the CUT that could be placed in the patient’s medical chart” to maximize its utility. They also emphasized utility and relevance by stating that the CUT “should be used in research and clinical settings as potentially useful tools to enhance clinical understanding and decision-making.” The language surrounding the relevance of the CUT centered on implemention science values of feasibility, acceptability, and clinical utility (FACU). And, when The Center researchers grappled with the question of how to “operationalize” culture, a crucial component of their strategy for popularizing their knowledge-product was hitching their cart to the implementation science horse. In a progress report they drafted to one of their funding bodies, The Center researchers said the final version of the CUT “standardizes the previous theoretical approach to increase its implementability in clinical practice.”

Throughout the discussions about these changes, The Center researchers saw clinicians—and not patients—as the most important reason for these compromises. The most significant matter is encapsulated in how Dr. Anderson, above, described the reason why they had removed the question that required clinicians to ask about their own background: revisions were based upon clinician rather than patient feedback, despite *both* being solicited during the field trials with the original CUT.[7] As another example, in preparing for a presentation to clinicians, Dr. Fantezi stressed the evidence-based nature of the data he would present about the final CUT: “e.g., feasibility (can clinicians do it?), acceptability (do clinicians like it), and utility (did it work?).” In their presentation following this strategy session, they told the audience: “Culture is sold in two ways: (1) There are more cultural competence models than people in this room, but very few have evidence-based results and outcomes. But the CUT does! (2) It doesn’t matter if you are talking about it at a federal-/state-/private-level, patient-centeredness matters. It resonates with clinicians.”

The interest to appeal to clinical relevance was part of a broader long-range strategy for keeping the CUT afloat. For example, at a research meeting where The Center researchers discussed future work, I observed how they strategized their grant applications. Dr. Anderson, began the conversation by asking, “would it be better to know what [Specific Agency] wants to fund and gear the meeting to that?” The Director, Dr. Dinton, then added that “we should work at learning their portfolio on this and look at where the CUT and [Specific Agency] intersect on issues.” Another member of The Center, Dr. Eger, also contributed, saying that it would “be smart to focus on their disparity initiative or look at how the CUT fits within a measure or tool already used by them.” In this section, I show that The Center oriented their CUT towards clinicians—what they would be able to do, what they would like, and whether they thought it would work—tying back to their long-range plan of popularizing the CUT along implementation science lines. In essence, I show how in this step of the translation process, the bedside pushes back on the bench. The Center bench, in this case, had developed their knowledge-product—the original CUT—yet upon receiving clinician feedback conceded some of their commitments to appeal to the bedside in the final stages of the translational process, as reflected in Table 1 below.

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[7] Even though I was not permitted to present patient data, the patients’ feedback was not given much weight by The Center and did not factor into their discussions about revisions to the CUT.

Table 1. Changes in the Cultural Understanding Tool (CUT)

	Original CUT	*Final CUT*
Theoretical Complexity	• fluid, intersubjective • every person has a culture • "culture refers to the values and beliefs that an individual derives from membership in different social groups"	• fixed, exoticized • minoritized persons have a culture • "explicit instructions on when to use the [CUT], with what patients, in what settings, and whether it can be done in its entirety or partially"
Reflexivity	• medical profession is a culture • potential for clinician bias • "is there anything about my own background that might make it difficult for me to understand or help you with your [PROBLEM]?"	• patients have a culture • removal of clinician bias • "what kinds of help would be the most useful at this time, based on your preferences and those close to you?"
Social Justice Orientation	• structures of inequity examined • equity emphasized • "consideration of class, poverty, and professional bias is another example of Pyrrhic victory"	• removal of structures of inequity • profit emphasized • "you don't have to care about the theory but you will care about. . . having a thriving private practice"

The Bedside's Other Bedfellow

The final steps in the translational process entail showing the promise of both clinical and commercial relevance. It is in these steps that the knowledge-product, the CUT, is furthest removed from the ideals of the bench; it is also here that clinical and commercial relevance become difficult to disentangle. In addition to shoring up clinical relevance, The Center emphasized the bedside's other bedfellow, commercial relevance, stressing how the CUT could save clinicians and healthcare organizations money rather than meet social-justice goals.

To "secure better buy-in," The Center researchers with MD-PhDs strategically elevated their MD credentials and downplayed their PhD-level expertise in social science during their presentations to clinicians and hospital administrators. According to Dr. Fantezi, the objective of this strategy was to eliminate the so-called "theoretical baggage" of academic social science and to make their knowledge as useful to clinicians and healthcare organizations as possible, even if it meant that they sacrificed the commitment to theoretical complexity, reflexivity, and social justice. In an attempt to boost their professional legitimacy, Dr. Fantezi pitched the CUT to a group of clinicians by saying, "I'm not talking about touchy-feely social justice here, I'm saying that it [CUT] *works*. It works for building rapport and diagnostic and treatment outcomes. Our job is not to make you anthropologists or sociologists, but to help you be clinically relevant."

The treatment of "touchy-feely social justice" and the deemphasized association with the more theory-heavy social sciences enacted by The Center researchers point to the researchers' perceived valorization of clinical relevance and the precarious position of humanistic and interpretive social science in translational medicine. Social justice is conceptualized in contrast to something that "works" in this marketing pitch, showing that The Center felt that "social justice" was so negatively charged that they had to say their CUT was not affiliated with that type of orientation, even though that was indeed one of their original commitments. Disregarding the complexity of social scientific knowledge, The Center researchers shaped their Cultural Understanding Tool to the clinical and economic interests of their audiences.

The Center members also linked up their Cultural Understanding Tool to profit-oriented goals. By the time they were at the stage of the translation process where they were describing their final version, The Center researchers depicted the CUT as a social scientific tool for increasing clinical utility and profitability. And, it is important to note that the CUT is a knowledge-product that brings The Center some profit; The Center was paid for their research and work yielding the CUT, and they continue to seek new paid contracts to train clinicians and hospitals in implementing the knowledge-product. In marketing their knowledge-product, The Center members were deliberate in articulating how clinical relevance was not simply about diagnoses or treatments; relevance was associated most often with saving clinicians and healthcare organizations both time *and money* by allowing clinicians to be efficient and avoid costly mistakes.

The Center researchers argued that the CUT could illuminate patients' reasons for visits and their medical and emotional needs better than the standard intake procedure. They focused on how the CUT is a standardized document that is easy to use, including language about how the CUT improves efficiency, quality, and safety of hospitals. While they conceded that it "is an unfinished product, we have yet to do cost-effective analyses," they simultaneously insisted that "it can be a social history and a previous case history replacement." This notion that the CUT required minimal initial investment was also visible through The Center members' explicit billing of the CUT as something that does not require specific, long-held training, and that it can be used within the specialty regardless of sub-disciplinary affiliations.

One hook into the commercial relevance was for The Center to emphasize how the CUT was a way for clinicians to strengthen their personal connection to the patient. Counter to the advocated "detached concern" approach of the 1950s (Fox 1957), where emotional distance was seen as an asset in the medical encounter, in their presentations to clinicians and hospital administrators, The Center researchers described the heightened personal connection as a way of imbuing meaning into their otherwise overly rationalized work, a way of "enhancing satisfaction" for clinicians. Similarly, in discussing the last measure of acceptability, The Center researchers emphasized clinician acceptability, that is, the satisfaction derived from using the knowledge-product. In a different presentation environment, when advising residents about why they should use the CUT, Dr. Anderson proclaimed, "I don't have the expectation that anyone has had time to read anything. We'll do the leg work. You don't have to care about the theory, but you will care about retaining patients, having a thriving private practice. The CUT helps you do that." In this example, Dr. Anderson creates further distance from the bench and the original version of the CUT by downplaying the theory and emphasizing the profit-oriented component of the final CUT; he also engages in the type of "care" work that that Viseu (2015) and Balmer et al. (2015) describe in their accounts of interdisciplinary collaborations, offering to do the "leg work" for the trainees.

According to Dr. Eger, the acquisition of personal and interpersonal knowledge was a main selling point of the CUT. In the economized approach to implementing scientific knowledge-products, personal knowledge would grease the wheels of patient adherence. For example, in Dr. Fantezi's attempt to persuade clinicians of the clinical relevance of the CUT, he explained how problems in clinical practice that boil down to knowing what people want and need can be solved with the proper set of tools. He asked, "Why won't people take medication when presented with scientific evidence? The answer lies in their beliefs and expectations. The CUT will help clarify proper diagnoses, get patients to follow the treatment plan, and engage patients to help you retain a successful private practice." Here, as with the previous example, clinical utility is invoked in conjunction with a profit motive, like a "thriving" or "successful" private practice.

The distance between clinical and commercial relevance is short in this profit-oriented healthcare system. So-called "patient-centered" approaches become something economized: patients are seen as problems that need to be known, and once known, mastered. Patients were pitched as people who could be known more efficiently and more effectively, and the CUT became described as a product that could replace the standard history-taking and streamline medical practice, similar to the way that medical students are trained on so-called “patient empowerment” as detailed by Vinson (2016). In marketing the product, the goals of social scientific knowledge as *applied* to clinical practice became transformed into a profit-making end—just as The Center wishes to enroll more hospitals and clinicians with the use of their proprietary CUT, the CUT promises to help clinicians gain knowledge about patients that will improve their bottom line. Stripped of its orientation toward equality, at the end of the translational process, social scientific knowledge became commodified and transformed into a way to benefit clinicians and healthcare organizations.

DISCUSSION

As they moved their social scientific insights from the bench to the bedside, The Center researchers crafted the Cultural Understanding Tool (CUT) as beneficial to the diagnostic, therapeutic, and economic goals of the clinicians and healthcare organizations. In insisting on the usefulness of the CUT for clinician in the present economized healthcare era, The Center researchers sacrificed the complexity of their subject matter, the rejoinder for reflexivity, and the social-justice orientation of their knowledge-product. In addition to instrumentalizing humanistic and interpretive social science, they also commodified it, exhibited in the proprietary product of the CUT, as well as the descriptions of the CUT’s relevance for maximizing profit-oriented patient retention. Situated within an economized academic and healthcare field that prioritizes translational medicine, or the application of scientific research for clinical practice, The Center researchers placed a heightened focus on attaining and maintaining legitimacy in the healthcare field.

Therefore, this case of social scientists engaging in translational medicine illustrates a part of the translational process that previous studies have overlooked: when and how the bedside pushes back on the bench. And, in contrast to translational products from biomedical sciences that take patient feedback seriously, such as Stage 4 clinical trials, with the translation of social science, we see an outsized influence of clinician feedback in the shaping of the knowledge-product. While the structure of the academic medical center may alter the conditions for the incorporation of social science, at the very least, this study draws our attention to the way in which the bedside serves as a simultaneous opportunity and constraint for the social sciences in translational medicine processes. As applied biomedical actors, clinicians are exposed to social problems and humanity in a way that a bench-scientist is not. Thus, in contrast to accounts of interdisciplinary collaboration that take place in a research setting, where biomedical researchers might dismiss or devalue social science outright, in the clinical context, the clinicians are, indeed, interested in the social sciences, however they get to set the terms under which this knowledge is translated.

Accordingly, this study brings attention to the reasons why social scientists would sell out in light of the Pyrrhic victories they may obtain. I believe it is possible for The Center to hold both social justice and commercial purposes as valid; however, The Center conveyed only the commercial purpose to their clinical and administrator audiences. Many of The Center researchers felt that the CUT would ultimately benefit patients and they held out hope that they would able to “sneak” social science into clinical practice. By being relevant rather than theoretically accurate, they felt that they had a seat at the table, even if they did not have the opportunity to fully or honestly articulate their original, ideal position. Given this account of the translational process, this study is consonant with other work on the structural limitations of interdisciplinary work that show how social scientists are confined from the start (Albert et al. 2015; Balmer et al. 2015; Viseu 2015). In this case, The Center was allowed to pitch an interpersonal solution to what is ultimately a structural problem.

In addition to showing how the bedside pushes back on the bench in this asymmetrical translational process, I also add to the literature on interdisciplinary collaboration by showing that the social sciences can be instrumentalized and commodified. Counter to Rabinow and Bennett (2012) and Benneworth and Jongbloed (2010), it is clear the social sciences have been and can be commodified. Moreover, the CUT is not the only humanistic and interpretive social scientific knowledge-product that has been developed for medicine. For example, recent books, such as *Compassionomics: The Revolutionary Scientific Evidence that Caring Makes a Difference*, directly link the social sciences to improving the healthcare corporation's bottom line (Trzeciak and Mazzarelli 2019). Partners Healthcare in Massachussetts, in conjunction with Massachussetts General Hospital and Harvard University, has pioneered a translational knowledge-product predicated on the instruction of social sciences, called Empathetics, LLC. With a propriety set of training modules, medical schools and hospitals can pay to have their students and physicians learn E.M.P.A.T.H.Y.^{TM} because, as they state on their website: "Communicating empathically increases clinician job satisfaction and reduces burnout."

With this study, I introduce the challenges that accompany instances in which social sciences are brought to bear on practical problems and where we have an opportunity to be critical of our own kind: the social scientists that might pay too high a price for their translational success. The translational process entails care work that has been documented by other social scientists in biomedical settings, work that entails navigating the tension between being "embraced as a friendly 'caretaker'" and being "feared as a 'critic'" (Viseu 2015:647). As Rabinow and Bennett (2012:173) opined, "the price to be paid for the power and instrumental mastery of modern science was the abandonment of hermeneutical meaning, general cultural significance, enhanced practice, and political and ethical spirituality." Perhaps the constraints of clinical relevance could do more harm than good and make us consider the consequences of applied work. After all, The Center researchers are caught up in the same neoliberal academic knowledge production and application machine as are most other scholars.

This study has a few limitations. First, because the data come from a study of a single research group, further research is needed to comprehensively evaluate the extent to which social scientific research is becoming commodified to meet translational medicine objectives. Further research could compare multiple sites to explore what factors strengthen or weaken the bedside's ability to push back on the bench. Initiatives such as the Cultural Consultation Service at the Division of Social and Transcultural Psychiatry at McGill University, for example, could potentially serve as an alternative model to the one outlined here. Second, this study may be limited by being a case from the United States. Because the structural context of academic knowledge production in the United States creates the conditions in which profit-oriented knowledge-products are highly valued, we may expect to see a different set of translational behavior in polities where the academic field is incentivized differently. However, because much of this study finds that the salience of the hierarchy of epistemic valorization is so important for actors engaging in translational work, these findings may extend beyond the American case.

Finally, not being able to observe patients and consumers is a limitation in my data. I can neither comment on whether patients and consumers—beyond the clinician feedback—liked the original or the final CUT better, nor on whether The Center succeeded in "sneaking" their social science into clinical practice. Therefore, future scholarship could examine the extent to which the CUT revisions are, in Hoffman's (2015) conceptualization, substantive or artifactual. It is an empirical question whether The Center has truly changed the essence of the social science undergirding the CUT or whether its new packaging is simply rhetorical.

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