

FURTHER CONVERSATION: A FORUM FOR INTERDISCIPLINARIANS

In the introduction to the 2015 volume of this journal the editors emphasized challenges of communication as a central component of what we must deal with as interdisciplinary scholars. Commenting on the scope of those challenges, Simeon Dreyfuss and Gretchen Schulz (2015) asserted that the articles in that volume showed the interdisciplinary community was “up to the challenges—up to recognizing them, first of all, and up to doing, or at least seeing, what needs to be done to ensure better communication, and so better outcomes, in the realm in which we interdisciplinarians work” (p. 7). Communication is often about dialogue, most especially, as we know, when scholars from different disciplinary backgrounds are trying to understand what one another really mean. With this 2016 volume of *Issues in Interdisciplinary Studies* we establish an occasional forum, “Further Conversations,” in which that dialogue might be pursued in print, in a conversation that follows up on an article published earlier in the journal.

In this case, we are offering a comment from Rick Szostak, former editor of this journal and Past-President of the Association for Interdisciplinary Studies, on an article from the 2015 volume of *Issues* by philosopher Zachary Piso along with a response from Piso. In his article, “Integration, Language, and Practice: Wittgenstein and Interdisciplinary Communication,” Piso drew on the work of Ludwig Wittgenstein to examine what is right and what is limiting in using linguistic metaphors such as bilingualism to describe interdisciplinary integration. He recommended “four therapies to treat confusions that may arise when we uncritically reflect on the relationship between language and the world” (p. 14). One of the limitations he examined in which he found both gains and losses is “the conviction that conceptual schemes can be broken down into their fundamental parts” (p. 27). He specifically examined Szostak’s remarks on this matter in a chapter of the book *Enhancing Communication and Collaboration in Interdisciplinary*

Research (O'Rourke, Crowley, Eigenbrode, & Wulfhorst, 2014). Without further ado here is the conversation that followed the publication of Piso's 2015 article.

WHAT IS LOST?

by

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Piso (2015), drawing on Wittgenstein, suggests that my recommended strategy of breaking complex concepts into basic concepts (Szostak, 2014) must always miss things. He is almost certainly correct. But that strategy is potentially so useful in facilitating interdisciplinary communication – for basic concepts generate shared understandings across individuals and groups to a far greater degree than complex concepts – that it is worthwhile to interrogate what is lost in translation. Notably, both Piso and Wittgenstein appreciate that much is also gained by breaking complex concepts into constituent parts.

Interactions

Most obviously, when we break a complex term such as “globalization” – a key example used by me and Piso – into its political, economic, and cultural components, we miss the way that these might interact. These interactions deserve to be stressed in any exercise in applying the strategy. Such an approach should be congenial to interdisciplinarians, for interdisciplinary analysis generally explores how the phenomena investigated by one discipline interact with those studied by another.

Rhetoric

Wittgenstein's key insight was that language is a “game” in which words carry meanings that can never be captured in a couple of sentences. I drew on this insight myself last year (Szostak, 2015) in developing an “extensional” approach to defining interdisciplinarity itself. Words play rhetorical roles as well as informational roles. The word “globalization” does not, then, just

embrace a set of economic, political, and cultural processes (as I had naively argued in 2014) but a set of more subtle messages such as “The world has changed” or “This is a problem.”

Scholarship often struggles with linguistic ambiguity. We spend so much time trying to define terminology precisely because scholarly understanding can only advance if scholars understand what one another are talking about. One key difference between natural science and human science is that natural scientists generally have broadly shared understandings of their key concepts, but human scientists often do not. How best should we try to clarify a term such as “globalization” so that scholars talking about it can have shared understandings? I would suggest that scholarship proceeds through studying the influences of phenomena on each other (on their own or within systems). The scholarly components of “globalization” are thus in fact the political, economic, and cultural processes that I stressed in 2014. The rhetorical elements – whether globalization is good or bad, or whether it has changed in some important way – should be evaluated by scholars, not casually assumed through vagueness in definition.

Note that there is no obvious way to evaluate a statement such as “Globalization is bad” without looking separately at political, economic, and cultural processes. There is simply no obvious metric by which these three quite different processes can be compared – and different people can reasonably disagree about the relative importance of each. Public policy prescriptions will likely lack focus if globalization is treated as a vague aggregate: American movies may be damaging French culture (for the sake of argument) but imposing tariffs on car imports will hardly alleviate the problem.

Interdisciplinary analysis is pursued in order to generate more comprehensive understandings. Extreme postmodernists suggest that scholarship is itself a game, with no objective means of determining that one argument is superior to another. One should then simply argue for policies that one finds congenial. I argued in 2007 that interdisciplinarity can and should accept a variety of postmodernist concerns, but needs to stop short of doubting that more comprehensive understandings are possible. An extreme postmodernist benefits from a vaguely defined “globalization” that already incorporates a set of congenial attitudes. An interdisciplinary scholar is doomed to the intellectual work of careful definition and careful study of the interactions among phenomena studied in different disciplines.

Insights and Perspectives

Piso speaks of how a word such as “globalization” incorporates “ideological, methodological, and theoretical assumptions” and notes that interdisciplinary scholars will want to understand the disciplinary perspective that characterizes any particular use of the word. But interdisciplinary research proceeds by clearly distinguishing “disciplinary insights” from “disciplinary perspectives.” We need first to appreciate the insight and then ask how this was shaped by the perspective. This we cannot do if they are mashed together in one word. In any case, as Piso recognizes, it is hard to judge an insight if the terms it involves are not operationalizable.

Moreover, Piso appreciates that different people and disciplines may attach different “ideological, methodological, and theoretical assumptions” to the word “globalization” – or any other complex term. In other words, they may be playing different language games with the same word. Whereas it is fairly straightforward to identify the set of processes that globalization “represents” (the economic, political, and cultural processes referred to above) it is much harder to identify the set of perspectives it might “signify.” Piso’s concern is that we lose what words signify when we focus on what they represent. But if we cannot identify what they signify, and if we are forced to disambiguate in order to evaluate and communicate, and if good interdisciplinary practice requires that we always evaluate a particular insight with respect to its perspective, and if identifying perspective will require both a familiarity with disciplinary perspectives in general and analysis of the text in which a particular insight is embedded, then it is not clear that we lose anything important as scholars in the process of understanding globalization as simply a set of interacting economic, political, and cultural processes. If advising an interdisciplinary research team exploring globalization, we can give them representational clarity while urging them toward an exercise such as the Toolbox questionnaire (Looney et al., 2014) that would establish (and generally ameliorate) the different perspectives of different team members.

And that is in the short term. If, in the longer term, we can encourage scholars in disciplines to distinguish their insights from their perspectives more clearly by striving for more precise terminology, we enhance not just interdisciplinarity but scholarship more generally. We all have a choice about how we play language games and can choose to lessen the ambiguity in our utterances.

The Alternative

Piso suggests that we first have to achieve common ground with respect to the “purposes and projects” of different disciplines before we can integrate their insights – since the words they use signify their “purposes and projects.” I would suggest a shared “project” of striving for more comprehensive understandings for the “purpose” (primarily) of ameliorating public policy challenges. I am willing to integrate across any relevant insights, but suspect that on average the insights of scholars with a broadly similar purpose and project will prove more useful to my task than those of scholars whose insights are indistinguishable from their perspectives. Interdisciplinarity demands recognition of perspectives, not reification of these.

Concluding Remarks

Piso is right that something is lost (but also gained) when we disambiguate complex concepts into basic concepts. I thank him for his intervention, which has caused me to reflect in intriguing directions. One element that might be lost – the interactions among components – deserves to be maintained. The rhetorical and perspectival elements that are lost are arguably more of a hindrance than a help to interdisciplinary analysis. It is more like losing weight than losing a good friend. The scholarly language game is played best with as much precision as we can achieve. But we should not abandon useful interdisciplinary strategies because they achieve an imperfect precision.

Biographical Note: RICK SZOSTAK, PH.D., is Professor of Economics at the University of Alberta, and was President of the Association for Interdisciplinary Studies 2011-14. He is the author of a dozen books and over fifty articles, all interdisciplinary in nature. His research has focused for the last twenty years on facilitating interdisciplinary research and teaching. Key publications include *Classifying Science: Phenomena, Data, Theory, Method, Practice* (2004), *The Causes of Economic Growth: Interdisciplinary Perspectives* (2009), “The State of the Field: Interdisciplinary Research,” *Issues in Interdisciplinary Studies* (2013), *Interdisciplinary Knowledge Organization* (co-authored, 2016), and “About Interdisciplinarity,” a website hosted by the Association for Interdisciplinary Studies (since 2013). He co-edited *Case Studies in Interdisciplinary Research* (2012) and co-authored the third edition of *Interdisciplinary Research: Process and Theory* and the second edition of *Introduction to Interdisciplinary Studies* in 2016. He has also taught courses on how to perform interdisciplinary research, and served as a consultant to interdisciplinary research groups.

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LANGUAGE GAMES OF “LANGUAGE GAMES”

by

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In the spirit of humor, let me quote Wittgenstein one last time: “Someone says to me: ‘Show the children a game.’ I teach them gaming with dice, and the other says ‘I didn’t mean that sort of game.’ Must the exclusion of the game with dice have come before his mind when he gave me the order?” (1958, §70)

I very much appreciate Rick Szostak’s response to my 2015 article “Integration, Language, and Practice: Wittgenstein and Interdisciplinary Communication,” and, as he notes, believe that we agree quite a bit about the promise and peril of disambiguation. I worry, however, that he and I play very different language games with the concept of “language games.” My reply here is meant to share what I mean by that concept, and to clarify why this matters when we talk about sharing an understanding.

Wittgenstein offers the idea of language games to clarify how it is that our words relate to the world. Thinking of language as a game that we play

is meant to discourage a set of philosophical commitments that find one of their most prominent articulations in Wittgenstein's early work, his *Tractatus* (1922). That set of commitments has come to be called the "picture theory of language" or the "picture theory of meaning" (Rorty, 1979). According to the picture theory of language, our language is fundamentally a set of terms that stand in one-to-one relation with the things in the world. Languages, by this view, are collections of names for things. I hope this picture theory of language does not seem too outlandish; it is certainly the way that I used to think of language relating to the world, and part of "Integration, Language, and Practice" (Piso, 2015) is intended to show how this picture theory of language undergirds much of the theory and practice of interdisciplinarity.

Yet the "language game" account of meaning in Wittgenstein's later work is offered as an alternative to the picture theory of language. When we think of language as a game that we play, then we should attend to the ordinary actions that follow from when a thing is said. These actions give us insight into the rules that govern the use of a concept. Now, we should be wary of thinking that we could ever enumerate *all* of the rules that govern a concept—we will struggle to give necessary and sufficient conditions for most things in life—but that shouldn't discourage us from understanding language use as something like a game that has rules. The trouble is that we use language all the time, and that most of the rules become habits that we hardly notice. I want to suggest that Szostak is focusing on a particular kind of rule but forgetting many other kinds.

The rules that Szostak would have us remember are the rules that we use in the operationalization of concepts. Basically, these are the rules that we use to decide whether to count a particular observation as an instance of the term or concept under investigation. So, using the globalization example, we might work toward common ground by familiarizing one another with the observations that count as globalization to the political scientist or the economist or the cultural anthropologist. What I want to stress is that operationalization does not come close to exhausting the meaning of a term. Nor should we think of "what is lost" as somehow less scientific, or less scholarly, or merely a matter of perspective. Rather, what is lost when we give an analysis of concepts in purely operational terms is all of the moves in the language game that relate these observations to action. Games always involve both sorts of rules—when we explain what we mean by "the baserunner is taking a substantial lead" we must share roughly what that lead looks like, but also that such an observation should prompt the hitter to prepare for a stolen base attempt, or the first baseman to cover the bag, or the pitcher to attempt a pick off. If someone claimed to know what the

concept of a baseball lead meant, but could merely redescribe the situation in observational terms, we should suspect lack of understanding of the language game for “baseball lead.” My language game for “language games” asks us to think of scientific practice as being like a game that has rules for judging a situation to be thus-and-so, but also rules for actively responding to such judgments. These two sorts of rules can be disambiguated in philosophical analysis, but in our lived linguistic practice, they hold together tightly as a system. What we can say of the system—that statements are meaningful, and that they count as knowledge—we cannot say of the parts.

Szostak takes himself to be drawing on the idea of language games when he recommends that scholars analyze concepts into terms that are operationalizable. What would we mean by “game” for that sort of practice to count? I’m reminded of the children’s game *Guess Who?* in which each player would call out features of the various characters until they deduced the real identity of their opponent’s mystery person. In a game like *Guess Who?* the important rules all have to do with naming different features and eventually the right person. We might have a pretty comprehensive command of the game provided that we can keep track of all of the instances of “blond” or “wears glasses” or “has a beard.” While this is a game, it is conspicuously close to the very picture theory of language that Wittgenstein meant to deflate when he recommended that we think of language use as being like games. I find myself wanting to say something like “I didn’t mean that sort of game!” And I’m simply not sure that Szostak’s contrast between “disciplinary perspectives” and “disciplinary insights” makes sense without the notion of “conceptual framework” that is at home in the picture theory of language but that I argue in my article is ultimately unintelligible. My point here and in the article is not that we cannot separate parts (“insights”) from systems (“perspectives”—though the ocular metaphor here can be misleading). My point is that, insofar as we borrow parts from their systems, we must negotiate new systems so that these parts function as guides for action. These new systems amount to our agreement to a creative and integrative form of life.

Why care about the language games that we play with “language games”? If we understand science as a matter of finding names for the things that scientists observe, we are liable to misunderstand what it means to “understand.” I agree with Szostak that interdisciplinary collaborations strive toward “more comprehensive understandings,” but I suspect that he and I disagree about what *that* means. For me, it cannot mean simply assembling descriptions of the phenomena to which our disciplinary concepts refer: for example, the political, economic, and cultural processes that comprise a complex concept

like globalization. Captured by the picture theory of language, that sort of assembly seems like it is achieving what we want to call comprehensiveness. But if we think of descriptions as moves within language games, then we very much need to negotiate the rules for the game before deciding what descriptions are relevant and what conditions we should set out to observe. Understanding public policy challenges requires that we appreciate the way that values infect our descriptions, and we make a mistake when we think that the scholar's role is to describe the world and let the policymaker decide what to do about it (Norton, 2005). Science is meaningful only because we are prepared to act on the basis of the assertions that investigations warrant (Dewey, 1938). We should not think that we understand a problem better because we have a dozen different disciplinary descriptions unless we have aligned our purposes and projects so that we know what these descriptions mean for collective action. My article "Integration, Language, and Practice" is meant to show why these pragmatic questions must be the basis for integrating our plurality of disciplinary approaches.

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