Culture and International Collaborative Research: Some Considerations

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Introduction

Today nearly all of us are involved in research on issues of great social, political, or economic concern – issues that we often call "the grand challenges." A great deal of this is "translational research" focused not just on discovery, but on application. And to an increasing extent, this research is cross-national and cross-cultural in nature.

In this process, one of the greatest of the "grand challenges," we are learning, is ourselves. How people of different backgrounds learn to work effectively together—to manage difference productively—is undoubtedly the prime human resource challenge of the this century.

Culture is the surrounding medium which makes both interaction and application possible in international research. But it is also what stands in our way.

Anthropologists will tell you that interaction *within* any culture is a kind of mutually organized performance requiring a high degree of skill. Social encounters *across* cultures often resemble plays in which at least one actor does not know his lines.

So for the next few minutes, I want to talk to you about culture as it relates to collaborative research: what culture is, how it operates, and how we can turn it from an obstacle into an advantage.

Culture's Importance

Culture is NOT nationality, race, or ethnicity. Culture is basically a management system, a shared understanding of how the world works. Culture is "the way we do things around here."

We don't have culture, we have "cultures." Many of them, all different. Some of them very different indeed. If we never came into contact with one another, none of this would matter. If our contacts with one another were solely based on choice and personal inclination, none of it would matter very much.

But in reality, most of us don't have choices about whether or not to interact cross-culturally. Globalization, as we're quickly finding out, doesn't mean homogenization. Quite the reverse. It means that we now have to deal with difference directly, instead of at a distance. In short, we no longer have the option.

Most of us have or will have either bosses or employees of a different cultural background -- or both. We will buy things from culturally different people, and we will sell things to these people. And we will, of course, compete with these people. But all of these different kinds of people can also be our source of inspiration and innovation, just as we – whoever we are – can be for them.

But in order to do this, we need to be paying attention to culture. Ahmad Sadri put this succinctly some years ago. "*Never before,"* he said*, "have so many lived so closely to so many of whom they have so little knowledge."*

The philosopher Reinhold Niebuhr, speaking of American power in the twentieth century, pointed out to us that such ignorance has clear and immediate consequences:

> *"The same strength,"* he said*, "which has extended our power beyond a continent has also . . . brought us into a vast web of history in which other wills, running in oblique or contrasting directions to our own, inevitably hinder or contradict what we most fervently desire. We cannot simply have our way, not even when we believe our way to have the "happiness of mankind" as its promise."*

But we all know, I am sure, that in the very near future, the best universities in the world will be those which have established strong structural relationships with other top universities elsewhere in the world, in order to carry out the translational research I mentioned at the outset. And what will determine the

success or failure of these endeavors will be the skill with which we manage cultural differences effectively.

So let's look briefly at what culture is, and then at what it does to us and for us as we attempt to work together.

Components of culture

Culture has three main components, two of which are relatively easy to identify and deal with. One component of culture consists of the things we make – cultural *artifacts*. A second component of culture consists of overt *behavior* – the things we do. Everyone can see both of these things. But we don't necessarily know what they mean, in another culture.

That's because of culture's third component, the ideas we carry around in our head. This *cultural knowledge* – ideas of who we are, where we came from, what we're doing on earth and where we are ultimately headed – is what helps to generate the things we make and the things we do and say. But it's rather like an iceberg – you only see the tip of it. The vast bulk of it is hidden under the water. And it's capable of sinking your ship, if you're not careful.

Science, of course, is a kind of culture, but a somewhat deceptive one. We know that one plus one is going to equal two, everyone and always. But we don't always know what the significance of "two" is. Anthropologists tell the story of someone sitting at a bar in a strange town in a strange country, and noticing someone else across the bar winking at him. You can count the winks, the anthropologists say, but are you sure you know what the winks mean?

The real problem with culture, of course, is that there's so much of it. Individuals have their own "culture" – the one they were socialized into as children, plus, in some cases, the one they were acculturated into when they came to the US, the UK, or China to work. Although people everywhere must contend with many of the same issues in life—for instance, life, liberty, and the pursuit of happiness—they may define and pursue these things quite differently. When two individuals from two different cultural systems come together, there is likely to be some initial confusion about what's going on.

But it gets even more complicated. These individuals also have a disciplinary culture – they have been trained to think, and behave, like engineers, or doctors, or biologists.

Going further, many of these people have a professional culture, based upon some particular theme or issue that constitutes their main area of work. ""He's a quant," they'll say on Wall Street.." He's a soybean guy," they'll say at Purdue. And, of course, we all know about the "IT guys."

Because most of these people – and we are talking about scientists now – work in and for an institution, they also share an institutional culture. And we all know that although in many respects we consider ourselves "free agents" we are also members of our institutional cultures, for better or for worse. The way they do things around Harvard, it goes without saying, will be quite different from the way they do things at Purdue.

And finally, we have the national and international aspects of culture. By this I basically mean the body of emerging law, regulation, and custom which informs and in some cases constrains our research activities. If we're in manufacturing, for example, ISO norms become very important. If we're in the research business, on the other hand, phrases like 'deemed exports' and 'intellectual property' become quite important.

> *[The example of Purdue and Indian engineers. Math plus common sense, but it varies across countries. Indian and Purdue engineers.]*

Culture's Consequences

So culture, although it's a very helpful management system, can cause us some problems. One of these is the problem of naïve realism, the idea that the way we see the world is the way the world really is.

Another problem is that culture's inflexibility and a low tolerance for ambiguity in messaging. When we talk to each other across cultures, we frequently get it wrong.

[Chinese trained in Sweden, and Rick's "we can look into that" both interpreted the other as dismissive.]

[Cali: AA flight 965, Miami to Cali, Colombia, December 1995. 151 passengers dead, the largest number at the time since Pan Am/Lockerbie.]

This what what pilots call a "controlled flight into terrain" and an anthropologist colleague of mine analyzed the cockpit recordings, in his words, as *"an emerging sequence of social interactions into distinct domains of logic*" and found a subtle but distinct – and ultimately fatal – pattern of cross-cultural miscommunication, even though the pilot and the ground controller at Cali were speaking in English. He concluded, *"an ability to speak a language does not convey a familiarity with the cultural implication enmeshed within language systems."*

The Nature of Collaboration

Now let's look for a moment at scientific collaboration, across cultures, all of the cultures I've just referred to. "*Co-laborate*" means literally to work together, but in fact, there are many different forms of collaboration:

Some collaborations are:

- Individuals versus institutions
- Bench research versus application centered activity
- Short-term versus long term
- Dyadic versus elaborated networks
- Projects versus partnerships

Each of these arrangements, going up the scale, becomes more complex, and more influenced by cultural rules, norms and exectations.

It's been the development of institutional partnerships that has interested me in the past twenty years, as I worked with several different large research universities to forge structural relationships between them and partners overseas. It was always important, I learned, to make sure the institution itself

understood both its own cultural identify and the nature of the partnership it was seeking.

There are three basic forms of university partnership, and although they can be combined in some cases, they will tend to be predominantly one of these, for any given instance:

- Predominant capability
- Complementary
- Technical assistance

There are great differences, moreover, between a project, a program, and a partnership. Of these, the partnership is the most cross-cultural, and the hardest to develop and sustain.

Cultural Factors in Collaboration

This is because of the multiple, intersecting, and often internally contradictory "cultures" that I have described. These render true collaborative work difficult within a single institution, as most of us know, to say nothing of collaborative work with an institution ten thousand miles away. In the end, as we also know, collaboration occurs between people, not between institutions, and so we need to focus on how these individuals operate, in culture terms, and how well they know how to operate, so to speak, across cultures. To paraphrase Peter Drucker, the essence of collaboration is not techniques and procedures. Collaboration is a social function."

I won't go into all of the many facets of this, except to note a few cultural factors, that from my experience with forming partnerships, tend to shape success or failure.

These include:

- Ideas about, and attitudes toward protocol
- Attitudes toward information and sharing
- How relationships of trust and confidence are developed
- Notions of what constitutes good leadership

- Norms and expectations governing effective communication.

You can deal with these – and many of us do – by using interpreters and translators, but this is always risky. Remember how Ambrose Bierce defined an interpreter: *"One who says to the second person what it would have been to the interpreter's advantage for the first person to have said."*

Factors which favor cross-cultural collaboration

What are the factors favoring cross-cultural collaboration? Skill with cross-cultural communication – including how to use interpreters effectively – would be at the top of the list here. Most of us are not as good at communication across cultures as we often think we are, but all of us can learn to do this better.

In terms of other things that facilitate cross-cultural collaboration, the good news is that research tells us that many of the individual characteristics that favor cross-culturality are in fact found in most researchers as well. What are they?

- Openness to others, and openness t new information;
- Tolerance for ambiguity;
- Flexibility;
- Curiosity;
- The ability to ask good questions; and
- The ability to quickly discern pattern.

Conclusion

Because culture is transactional, an example of what Donald Schön calls 'reflective practice' where the meanings of things are built up through interactions, you've got to engage cross-culturally in order to take advantage of cultural synergy. In today's world, everyone knows something, but no-one knows everything. Cross-cultural collaboration, when it works, is synergistic, bringing into existence arrangements and understandings between partners that no one partner is likely to have developed on their own.

Although this will take time, you will learn, and they will learn. Mark Twain's comment applies well here: *"When I was seventeen"* he said*, " my father was a real idiot. But by the time I'd turned twenty-one, it was amazing how much the old man had learned."*

The people around you may very likely say the same thing about you, eventually. But probably not in English.

If intelligence can be defined as the ability to make finer and finer discriminations that matter, then working cross-culturally makes us smart. Smart people make fewer mistakes. They're generally happier, better at their jobs, more successful and more fun to be around.

They're just the sort of people, in other words, that you'd want for colleagues.