

TOWER OF BABEL, OR WHY BOTHER ABOUT INTERNATIONAL STANDARDS?

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When Paul Schomer and Susan Blaeser invited me to present a paper in the special session *Demystifying Standards* at the 162nd Meeting of the Acoustical Society of America in San Diego, November 2011, I decided to take the title of the session rather literally. I asked myself, “What exactly is the mystery of standards?” Paul and Susan asked me to take a non-U.S. point of view on this question. As I started to draft the abstract of my paper, a number of thoughts ran through my mind. This article presents those fragmented thoughts and tries to tie them together.

Standardization helps to solve common problems

A first thought that occurred to me was that, to my knowledge, there are no voluntary consensus standards in my own field of research—psychology. That is, there are no standardized methods that a group of psychologists have developed together, and with which they agreed to comply. The closest thing to a standard in psychology is psychological tests, like the inkblot (Rorschach) test, which are used and interpreted by a standardized procedure. However, these psychological tests are typically developed by an individual inventor with a vision, who acquires a number of followers who share the inventor’s view.

Another example is personality tests. In this field, researchers, individually, have reached a common understanding on what the fundamental dimensions of a personality are, but all have developed their own method of measuring these dimensions.

It seems that tradition provides that academic psychologists are supposed to compete for top positions—who is the cleverest amongst us all?—and never collaborate to solve common problems (God forbid that someone steals my clever ideas.) On the other hand, solving common problems presupposes that we are able to agree on what they are. Perhaps there is some truth in the claim that “engineers like to solve problems, whereas psychologists only like to discuss them.”

Standardization is like speaking a common language

As I was writing the abstract of my paper, I realized that I was writing it in English. Well, this makes sense, because I was writing an abstract to an American conference. Nevertheless, I am Swedish. Would it not make more sense if

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I write in Swedish?

To illustrate my point, I presented the audience in the conference with a photograph of a chair (from IKEA), and asked the audience to name the object. Hardly surprising, the audience agreed that the photograph depicted a chair. I then asked the audience if I would be wrong if I decided to call the object “Tuoli,” “Sedia,” “Chaise,” “Silla,” or “Stol.” Again the audience agreed (this time) that I would be allowed to use any

of these words to name the object, because they are all the different names of the object in different languages.

Language serves as an excellent illustration of what standardization is all about. This leads me to the title of my paper: *Tower of Babel*. According to the legend of the tower of Babel in the first book of Genesis in the Bible, man decided to build a tower high enough to reach heaven. God found this to be a bad idea, and punished mankind by giving us different languages, so we would not be able to communicate and collaborate. This strikes me as the opposite of standardization.

The legend of the Tower of Babel teaches us that standardization provides us a common point of reference and means for communication. Standards facilitate the development of common objectives, common methods and a common understanding. To overcome the problem of speaking different languages, throughout history, people have decided on a common language for international exchange. For us, this is English, which provides me the opportunity to write this paper, and to convey my thoughts, to an international audience.

Standardization promotes (international) collaboration

I live in Sweden, a small country located in northern Europe. Despite the relatively large surface—approximately 1.8 times the size of the United Kingdom—Sweden has a population of only 9.4 million citizens (compared to 62 million in the UK). Such a small population is unable to sustain itself without international exchange.

Sweden has been involved in international trade since long before the days of the Vikings. The vast amount of Roman silver coins hidden in the Swedish soil speaks a clear message to the archeologists. The name Viking is synonymous with international trade, and basically means “to explore.” The Scandinavian Vikings traveled all over the world as they knew it—from Turkey (by the Mediterranean Sea), and across the Atlantic Ocean to North America—long before Columbus.

Sweden still depends on international trade today, and international standards are an important part of this exchange. Whereas the question in the USA is how to bring American standards to the international level, the process in Sweden is most often the reverse.

There is very little reason for a small country like Sweden to develop standards that are unique to us. When the members of Technical Committee 110—Acoustics and Noise—of the Swedish Standards Institute (SIS) consider proposing a new standard, we first ask if there is any possibility to propose this new idea to the International Organization for Standardization (ISO). If the proposal is successful and leads to an International Standard, we would later ask if we also would like

this new standard to be a Swedish Standard. Those of us in Technical Committee 110 of SIS who are project leaders are all conveners of a working group of Technical Committee 43 of ISO. There are no uniquely Swedish standardization projects in acoustics. That would only be a waste of time.

International Standards expand our horizons

Like English as an international business language, International Standards provide us a common frame of reference that facilitates exchange and collaboration beyond our national borders. Could you imagine humanity and a global economy without these common frames of reference? **AT**



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