Finken Jr., Thomas Harold
EDITORIAL DYNA 171, Febrero 2012
Dyna, vol. 79, núm. 171, febrero, 2012
Universidad Nacional de Colombia
Medellín, Colombia

Available in: http://www.redalyc.org/articulo.oa?id=49623207001
Having worked for more than a year as the English language consultant to Dyna Journal has been both an honor and a mind-opening experience. The honor consists of being part of a team that, from the top-ranked university in Colombia, consistently obtains one of the highest impact factors among Latin American engineering journals. The mind-opening experience consists of being a first-hand witness to a global linguistic phenomenon, namely the growing influence of English in science. Let’s examine the background for why Dyna, university researchers, and engineering editors around the world have so diligently sought to unify their work under the aegis of a common tongue.

English has become, at least since the 50s, the unquestioned lingua franca for the reporting of scientific research. This has correspondingly made it the means of communication of choice for numerous global scientific communities, most notably those of physics and chemistry. It’s common knowledge that some 80–95% of research articles currently published in the pure sciences are published in English. The socio-historical explanation for the popularity of English is the same as that which could have been given when Greek and Latin were the international languages: It’s all about politics. Empires, such as those of the Greeks and Romans, made inroads for their own culture that revolutionized the world of their day. This cultural-linguistic influence was strengthened militarily, educationally, and commercially in foreign lands. The Renaissance renewed the influence of Greek and Latin, but it was the Industrial Age that pushed a new actor onto the global stage of scientific research: the English language. The British Empire had already become the largest empire in history by the time modern age was underway, an ascent it had started as far back as the mid-17th century—but it was the 20th century that was marked by its indelible linguistic fingerprint.

Now, in the year 2012, it’s time to reflect upon whether the reason why Dyna and other journals that publish in English is related to the phenomenon of imperialism. If publishing in English is indeed a continuation of imperialistic advance, then we would have to say that we’re on the wrong track. It’s certainly not the role of science to support the predominance of a singular culture, nation, or language. It would go against the purpose of research to support the establishing of a global empire. Therefore, there must be something deeper than language, politics, or industry which has driven the human race to this point in history, a point in which one language has become the voice of science. What is this deeper influence? Is it good or is it evil? Could it be democracy? Could it be capitalism?

Surprisingly, one answer can be found in the traditions of the Jews. According to the Bible, both engineering and a lingua franca go hand in hand. The story of the Tower of Babel, which is so short that a person can easily read it in less than 80 seconds, gives us the divinely-inspired history of the relationship between language and engineering in a way that no other historical document does. The story, as reported to us in Genesis 11:1-9 (NIV), says something quite different than what academians are accustomed to hear: It frames language and technology within a spiritual context. It shows us what God’s point of view on science and human communication is. Let’s look at it briefly, then we will conclude by drawing some simple conclusions.

Now the whole world had one language and a common speech. As people moved eastward, they found a plain in Shinar and settled there. They said to each other, “Come, let’s make bricks and bake them thoroughly.” They used brick instead of stone, and tar for mortar. Then they said, “Come, let us build ourselves a city, with a tower that reaches to the heavens, so that we may make a name for ourselves; otherwise we will be scattered over the face of the whole earth.” But the LORD came down to see the city and the tower the people were building. The LORD said, “If as one people speaking the same language they have begun to do this, then nothing they plan to do will be impossible for them. Come, let us go down and confuse their language so they will not understand each other.” So the LORD scattered them from there over all the earth, and they stopped building the city. That is why it was called Babel—because there the LORD confused the language of the whole world. From there the LORD scattered them over the face of the whole earth.
Now, returning to the topic, we ask ourselves: What does the story of Babel tell us about the role of language and the role of technology? What does the God of the Bible say about using a lingua franca to advance technology? Some general observations on the text include the following:

• The citizens of Babel spoke in one tongue, which was natural for them. God’s original design of the human race did not include multiple languages.

• The words recorded from the Babylonians were the words of materials and construction engineers: “Let’s make bricks” and “Let us build ourselves a city, with a tower that reaches to the heavens.” This indicates that the engineers were leaders in their society.

• The inhabitants of Babel were innovators; they used the latest technology to advance their cause: “They used brick instead of stone, and tar for mortar.” So bricks and tar were the newest materials of their day. These advances allowed them to build higher and stronger than their predecessors.

• They overcame the limitations of human life through ingenuity. Even God himself observed about them that “if they have begun to do this, then nothing they plan to do will be impossible for them.” This means that practically nothing is impossible for human beings if they harness the power of engineering appropriately.

• The only truly effective way to impede the progress of engineering is setting a linguistic barrier. Inversely, language communication must exist if engineers are to accomplish what they set out to do.

• The motivation of the inhabitants of Babel was not engineering for social good; it was not civil engineering. Their stated reason for constructing was “so that we may make a name for ourselves.” This saying discloses that they were seeking fame.

• If they had been successful in their tower-city project, they would have been famous, but they did obtain their desired fame due to divine intervention.

Notice that God’s solution to the pride of the Babylonians was to “confuse their language.” Most of us have already learned that trying to use a foreign language is a very humbling experience. Notice that the passage says nothing about God opposing technology—or engineering for that matter. God did not knock down the tower either, which would be an attack on the symbol of their ingenuity. No, what God opposed was the fact that the Babylonians had gotten proud of their abilities. Furthermore, they were utilizing their engineering skills to resist God’s will of “spreading out.” From the time of Noah, the intention of God was for human beings to “Be fruitful and increase in number and fill the earth” (Genesis 9:1). At the time that Noah came out of the ark, God said to the human race: “I now give you everything” (Genesis 9:3). These two passages of Scripture interpreted together can only mean that humans are meant to use their God-given authority to distribute power fairly throughout the earth, and not to develop a central authoritarian structure. At the time of Babel (the building of the Tower has been calculated to be 2247 BC according to the work of Archbishop Ussher), God resisted man’s objective of pinpointing political power in one place. The leader of that ancient society was Nimrod, but there are many like him today.

Our conclusion, as we motivate more engineers to use English as their means of disseminating research around the world, is this: Share research in a spirit of humility. Draw conclusions with the right attitude. Let’s see how we can improve humankind’s situation together. Let’s not try to build or to extend another human empire, but to allow for power to be “scattered” throughout the entire earth. Strength is found in diversity. May the entire planet benefit from the efforts of diligent engineers everywhere. If English is the most effective means for technology to spread, then may more journals publish in English. But if English is just the foreshadowing of another futuristic Tower of Babel, then may there be equal usage of all global languages in journals. We’re living in times of intense globalization, a force that can be used either to concentrate authority in one place or to disperse that power—multiplying the positive effects of science throughout the whole world. Remember, even God said of engineers: “nothing they plan to do will be impossible for them,” so no doubt is placed upon your abilities. Just make sure that your plans are for the good of others, and not based on pride. If the intentions of engineers are good, then surely those intentions will be blessed.