



Published by the National Institute for Staff and Organizational Development (NISOD) • College of Education • The University of Texas at Austin

Dead Languages—Latin and Ancient Greek—Alive and Kicking in a Science Curriculum

As a graduate student, I had to make a presentation to fulfill one of the requirements of an ecology course. I decided to talk about ethnobotany because that was my interest area, and I was considering it for my dissertation topic. I prepared myself with an overhead projector, transparencies, notes, and *Ethnobotany, Evolution of a Discipline*, by R. Schultes and S. Von Reis. I went to the blackboard with chalk in hand. I began by saying that the word *ethnobotany* was first introduced by John Harshberger in 1895, and I wrote *ethnos* and *botane* (ancient Greek), that mean people and plants, on the board. I wrote so fast that it looked like ancient Greek was my mother tongue. When I turned around I saw smiling, disbelieving faces in the audience. I felt that I needed to explain that I had studied ancient Greek for five years while attending Liceo Classico in Italy.

So what is this fuss about languages such as Latin and ancient Greek? I teach courses in biology, anatomy, and physiology, among others, to college students. It seems that I cannot escape using these two “dead languages” on a regular basis; they are so alive to me that I could not deal easily with science without them. The vast majority of scientific terms have their roots in these languages.

However, this is not enough. New scientific words are built with words from dead languages. For example, telephone (*telos*=far and *phone*=voice) and automobile (*autos*=self and *mobilis*=move) are combinations of Greek and Latin; Internet (*inter*=between and net) is Latin and English. The possibilities are endless.

Dead languages talk to the scientific reader because they are self-explanatory; words themselves explain their own meaning—a very challenging concept for science students. What is simple to me becomes difficult for them because they have to learn new words with sounds that are not Anglophonic and then learn their meanings. Sometimes words have been adapted to English, and the end has been modified; but sometimes the word, particularly in anatomy, keeps the original graphic representation of the language—such as *glomerulus*, *villus*, or *cilium*. Sometimes words are used as plurals, and *villus* becomes *villi* and *cilium* becomes *cilia*, so students are even more confused. Students always ask if spelling counts when I grade their exams, and it does.

With a rebirth after World War II, the Italian cinema gained international attention with what was later called Neorealism. Film directors De Sica and Rossellini gave their signatures to movies with stories embedded in the war experience and aftermath—movies such as *Roma città aperta*, *Ladri di Biciclette*, and *Sciuscià*. While the first two titles make sense to me, *Sciuscià* is very intriguing —there is no such a word in the Italian vocabulary. So what does it mean? *Sciuscià* comes from the English words shoe shine and was used by people, mostly young kids, to approach the Allied Forces in Italy during WWII to get money or goods in exchange for this service. It was critical to learn a way of communicating quickly with people who spoke a different language.

The story repeats itself a few decades later in many major Italian cities. People from other countries, mostly illegal immigrants from Africa, were found at road intersections offering inexpensive goods to motorists stopped at traffic lights. They asked: “*vu cumprà?*” that in Italian means “*vuoi comprare?*” or in English “*Do you want to buy?*” What do we learn from these two events? The message is clear: survival is so critical and communication so crucial that we must adapt and learn new languages under special circumstances. Some may object that language is not essential, that sometimes silence is more efficient than words, or that animals can communicate with us in many different ways. As a rule of thumb, learning a new language is the key to survival in a foreign environment.

American Intelligence personnel failed miserably in anticipating the avalanche of recent terrorist attacks. How and why? Nobody was fluent in Arabic languages. After September 11, any college willing to be on the leading edge of competition introduced curricula with courses in Arabic languages and Islam.

Because science is a mandatory subject in education, perhaps we should introduce Latin and ancient Greek in a standard curriculum. Learning languages is beneficial at any level and not limited to appreciating new areas of knowledge. If one wants to appreciate opera, one should study Italian; to study art in Italy, Italian; to study Greek tragedies, Greek; and to study early scientific books (by Galileo, Newton, and others), Latin.

When I conducted field work in the Peruvian Amazon, my local liaison translated the information provided by the indigenous people speaking Quechua into Spanish (that I barely understood). I wished in those moments that I had a better knowledge of both these languages!

In an age of globalization (another word from the Latin *globus*=round), we must be committed to understanding cultures and saving languages. The Romans understood the importance of preserving cultures when they conquered Greece and imported Greek culture: *Graecia capta ferum victorem cepit and artes intulit agresti Latio*, Horatius, *Epistulae*, 2, 1, 156—Captive Greece took control of the ferocious winner and introduced the arts into rural Latium.

Claudio Mazzatenta, *Assistant Professor, Department of Biology and Medical Laboratory Technology*

For further information, contact the author at Bronx Community College, The City University of New York, University Avenue & West 181 Street, Bronx, NY 10453.
Email: claudio.mazzatenta@bcc.cuny.edu

This article was originally published in 2007.