

Fraternal twins

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The native speaker of Spanish who undertakes the study of English faces the difficult task of mastering a vast lexicon that is full of connotational subtleties and a system of orthography and phonology that is no system at all. Although the study of English is made somewhat less difficult by the high proportion of common English words that are derived from Latin and that have cognates in Spanish, much of this advantage is negated by the occurrence of “false friends”, superficially identical but semantically different.

The topic of the present paper is Spanish-English word pairs that are identical in origin (most of those in medicine being derived from Latin or latinized Greek) and in meaning, but that differ slightly in form. These can be divided into three classes:

1) those in which the difference is strictly one of orthographic convention, such as *exactitud* – *exactitude* and *proyecto* – *project*;

2) those in which lexical elements from classical languages have been differently rendered, according to more or less standard conventions of the two languages (*desfibrilación* – *defibrillation*, *población* – *population*); and

3) those involving more radical and arbitrary differences in the way in which classical material has been modified, often through addition or deletion of a word element: *alucinación* – *hallucination*, *desintoxicación* – *detoxification*, *esqueletización* – *skeletonization*, *hibridación* – *hybridization*.

I have chosen to call all three classes of these slightly deviant word pairs “fraternal twins.” (In the same vein, we might use the expression “identical twins” for pairs such as *honorable* – *honorable* and *original* – *original*.) Although fraternal twins are much less likely than false

friends to mislead the reader, they present special dangers to the translator, who may mistakenly retain the English spelling in part or in full, thus introducing an incorrect variant form into the Spanish version.

Differences of the first type listed above arise from systematic and more or less predictable differences in orthography: *ankylosis* – *anquilosis*, *bilirubin* – *bilirrubina*, *cystectomy* – *cistectomía* and *quistectomía*, *eczema* – *eccema*, *inion* – *inión*, *pneumonia* – *neumonía*. Problems begin when the ways in which the two languages modify Latin lexical material diverge from predictable patterns.

Each language contains some words derived from Latin that, to speakers of the other language, must appear erratic or corrupt. Thus English *abridge* and *powder* may seem like barbarisms to the speaker of Spanish when compared with *abrevio* (<*abbrevio*) and *polvo* (<*pulvis*), but the speaker of English may consider *hambre* and *ofrezco* to be gross distortions when compared with English *famine* (<*fames*, *faminis*) and *offer* (<*offero*).

Even here, although the changes are not entirely consistent, patterns can be discerned. The differences in these patterns arise partly from the different histories of the two languages with respect to Latin. Spanish is, in a sense, “modern Latin”—a product of more than two thousand years of continuous occupation of the Iberian peninsula by speakers of a continuously evolving language. The Spanish lexicon is not derived directly from classical Latin but rather from dialects based on Vulgar Latin, the common speech of the later Roman empire, as influenced by geographic and social factors and by other languages (Celtic, Teutonic, Arabic).

The role of Latin in the history of English is quite different. Historians of English record at least five distinct periods of contact between the two languages. At the time of the Roman occupation of Britain (1st century BC), English existed only in embryonic form in certain Teutonic dialects of northern continental Europe. But the Latin of Julius Caesar nevertheless left a few traces in the British Isles, mostly as place names, which eventually entered Old English and which persist in modern English. A second stage of Latin

influence occurred when a few terms pertaining to Christian worship were introduced into Old English (Anglo-Saxon) by missionaries.

A much more important accession of Latin material into English occurred after the Norman Conquest (AD 1066), when for more than a century Great Britain was under French rule. During that period, Norman French was the language of the royal court and the nobility as well as of the wealthy and the educated, and thousands of words that survive in modern English were first introduced then. After this interval of Norman influence, English resumed its development in a form known as Middle English, still predominantly a Teutonic language but now saturated with Romance loanwords and lexical fragments.

The form in which many Latin-derived words appear in modern English reflects their passage through French. Thus from Late Latin *circare*, modern English has *search* via Old French *cerchier*; from *recipere*, *receive* via Old North French *receivre*; from *textus*, *tissue* via Old French *tissu*; and from *vidutus* (for classical *visus*), *view* via Medieval French *veue*.

A fourth phase of Latin influence was occurring simultaneously with the second and third. Before, during, and long after the Norman period, classical Latin continued to be used alongside the English vernacular in the liturgy of the Catholic Church and as the language of philosophy, science, and government. Hence many technical terms used in these disciplines migrated from Latin into English in their classical form—a process that occurred to a much lesser extent in the evolution of modern Spanish.

A fifth period of Latin influence, which still continues today, involves the production of new English words, particularly in science and technology, from Latin and latinized Greek word elements. It is with these that we are primarily concerned here.

As mentioned earlier, patterns distinctive of either Spanish or English can be described, but exceptions are numerous. English, under the influence of French, tends to use the passive participle of a Latin verb to form its English equivalent. Thus Latin *disseco* becomes *diseco* in Spanish but *dissect* (from the passive participle *dissectus*) in English, *separo* becomes *separo* in Spanish but *separate* (from *separatus*) in English,

and *comprimo* yields *comprimo* in Spanish but *compress* (from *compressus*) in English.

During the Late Latin period, the inchoative verb ending *-sco* (as in classical Latin *algesco* ‘to become cold’, from *algeo* ‘to be cold’, and *scisco* ‘to learn’, from *scio*, ‘to know’) was added to many verb stems. Verbs thus altered have made their way into both Spanish and English. For example, classical Latin *finio* became *finisco*, which turned into *fenezco* in Spanish and *finish* in English. *Guarnezco* and *garnish* are derived from a Germanic verb stem modified in the same way.

Examples of similar words in Spanish without correspondingly altered English cognates include *pator* > *padezco* and *permaneo* > *permanezco*. English words without correspondingly altered Spanish cognates include *famish* (*hambre*) from Vulgar Latin *affamo* and *replenish* (*relleno*) from forms of Old French *replenir*.

Most of the evolutionary changes that occur in a word as it passes from one language, or one era, to another are ultimately phonetic. Many of the changes that occurred in Latin words as they evolved into Spanish and English followed regular phonetic patterns: *alienus* > *ajeno*, *alien*; *desperatio* > *desesperación*, *desperation*; *nodosus* > *nudoso*, *nodose*; *periculum* > *peligro*, *peril*; *populatio* > *población*, *population*.

Among the most important types of phonetic change in linguistic evolution are insertion and deletion of sounds. Epenthesis (the insertion of an extraneous sound) often follows predictable patterns. Thus Spanish typically converts Latin *-min-* to *-br-*: *aeramen*, *-minis* > *alambre*; *femina* > *hembra*; *homo*, *-minis* > *hombre*; *nomen*, *-minis* > *nombre*. In a somewhat analogous fashion, English (usually following a French original) often inserts *b* between *m* and a following liquid: *camera* > *chamber*, *humilis* > *humble* (compare Spanish *humilde*), *marmor* > *marble*, *numerus* > *number*.

But some instances of epenthesis are isolated phenomena, as when Latin *cemeterium* yields Spanish *cementerio* but English *cemetery*, and *alucinor* becomes *hallucinate* in English (perhaps by confusion with *hallux*).

Syncopation, the deletion of one or more phonemes within a word, occurs in all languages, but varies with the phonology of the language and the phonetic structure of the word. Suppression of a consonant occurring between

vowels is characteristic of the Romance languages. Such changes have led to many modifications of Latin words as they appear in modern Spanish: *credo* > *creo*, *judex* > *juez*. Sometimes only one of two consonants is suppressed (*mensa* > *mesa*, *septem* > *siete*), and sometimes not only a consonant but a following vowel is lost (*magis* > *mas*, *musculus* > *muslo*). Examples of this phenomenon in classical Latin include *fi(gi)bula*, *lu(ci)na*, and *mo(vi)mentum*. The process is still active in Spanish, as in the standard pronunciations of *deja(d)o*, *labra(d)or*, and *pe(d)azo*.

In spoken English, unaccented vowels between consonants tend to be reduced to schwa, and when not needed for ease of articulation are often suppressed altogether, as in *awf(u)lly*, *diff(e)rence*, *hist(o)ry*, and *rest(au)rant*, which are almost universally reduced to two syllables each by native speakers of English. (Examples from Latin include classical *val(i)de*, Late Latin *reg(u)la* and *saec(u)lum*.)

This type of syncopation appears in some English medical terms but not in their Spanish counterparts: English *bacteremia* – Spanish *bacteriemia*, *compartment* – *compartimento*, *osmate* – *osmiato*. Yet it is Spanish and not English that regularly fuses adjacent vowels by synaloepha: *angitis* (English *angiitis*), *extrarticular* (*extra-articular*), *hiposmolar* (*hypo-osmolar*), *sacroiliitis* (*sacroiliitis*).

A special form of syncopation occurs when, in the formation of a compound technical term, a combining form is truncated, as in *iritis* for *iriditis*. An example of this phenomenon from classical Greek is the Hippocratic *haimorrhagia* instead of the expected *haimatorrhagia*. Some cropped combining forms have gained international acceptance (*chrom(at)osome* – *cromosoma*, *hem(at)olysis* – *hemólisis*), even including some that pose a risk of confusion between two similar stems (*pneum(at)othorax* – *neumotórax*, *pneum(on)oclonosis* – *neumoconiosis*). English is more radical than Spanish in preferring shortened combining forms, as in *anorchia* (Spanish *anorquidia*), *scinti(lli)graphy*, *appendectomy* (*apendicectomía*), *thoracentesis* (*toracocentesis*).

English also frequently uses the unaltered (nominative) form of a classical noun as a combining form. Classical languages supply a few

precedents for this practice, such as Latin *nomenclatura* instead of the expected *nomini-clatura* and Greek *phosphoros* instead of *photo-phoros*. Some modern terms so formed have achieved universal acceptance: *collagen*, *herpes-virus*, *sinusitis*, *tyrosine*. Examples of English medical terms in which the use of an unaltered noun as a combining form is not imitated by Spanish include *anusitis* (*anitis*), *mammoplasty* (*mamoplastia*), *plasmacyte* (*plasmocito*), *portacaval* (*portocavo*), and *semenuria* (*seminuria*).

A particularly common form of syncopation, known as haplology, consists in suppressing one of two syllables that are identical or nearly identical in sound. We find examples of this in Greek *am(phi)phoreus* and Latin *homi(ni)cidium*, *nutri(tri)x*, and *stip(ip)endium*. Some English words on this pattern have the blessing of a revised spelling, as in *humbly*, formerly *humblely*, but many other such simplified pronunciations occur in the common speech: *probly* for *probably*.

Internationally accepted instances of haplology in technical terms include *derma(to)tome* – *dermátomo* and *dermatoma*, *femini(ni)zation* – *feminización*, *form(ic)ic* – *fórmico*, *volu(mino)metric* – *volumétrico*. But medical English includes many instances of haplology without corresponding shortenings in Spanish: *append(ic)ectomy*, *dilat(at)ion*, *esopha(go)gram*, *hydrat(at)ion*, *urin(an)alysis*. Some examples of haplology encountered in English medical material—for example, *adapt(at)ion* and *cephal(al)gia*—are not accepted by all English language authorities.

In some instances Spanish adds a syllable not present in Latin, as in *impactación* from Latin *impactio* (compare English *impaction*) and *infartación*, a modern coinage based on the Latin passive participle *infarctus* (English *infarction*).

Unlike Spanish, English sometimes deletes the beginning of a word element at its point of junction with a prefix or combining form: *caroti(d-o)dynia*, *coccy(g-o)dynia*, *platelet-(a)pheresis*, *presby-(a)cusis*.

Both Spanish and English are somewhat inconsistent in suppressing entire morphemes. Thus the segment *-iz-* (from the Greek and Latin verb-forming suffix *-izo*) appears in Spanish *automatización* and English *acclimatization* but not in Spanish *aclimatación* and English *automation*. English is, however, more likely than Spanish to

delete a morpheme: *retrolental* – *retrolenticular*, *thrombopenia* – *trombocitopenia*.

Numerous striking differences between the two languages occur in the use of prefixes and affixes in the formation of technical terms. Prefixes vary in such word pairs as *anteflexion* – *anteroflexión*, *binovular* – *biovular*, *deviation* – *desviación*, and *imminent* – *inminente*; suffixes in *carpal* – *carpiano*, *coccygeal* – *cocciógeo*, *defective* – *defectuoso*, *masseteric* – *maseterino*, *sulfide* – *sulfuro*.

Spanish often uses an adjectival suffix based on the Latin present participle ending where English uses a different suffix: *bloqueante* – *blocker*; *necrosante* – *necrotizing*; *refringente* – *refractive*. Instead of using the suffix *-derma* to form the names of cutaneous disorders, Spanish prefers to use *-dermia*: *erythroderma* – *eritrodermia*, *pyoderma* – *piodermia*, *scleroderma* – *esclerodermia*.

Native speakers of Spanish may rightly regard Latin as a worn-out, obsolete precursor of their own language with no place in a modern speech system. In contrast, despite the huge number of English words derived from Latin, speakers of English tend to view Latin as a foreign language like French or Russian. The virtual absence of inflection in English fosters this sense of distance from Latin with its fully inflected nouns, verbs, and adjectives. Moreover, the association of Latin with classical culture lends it a cachet of esteem (as well as an aura of pedantry) and favors its use in words and phrases such as *apparatus*, *ex officio*, *per diem*, and *verbatim*.

English thus preserves the Latin form of many terms for which Spanish prefers modernized or hispanized forms: *addendum* – *adenda* (singular), *bacterium* – *bacteria* (singular), *lumen* (of a tubular organ) – *luz*, *serum* – *suero*, *sinus* – *seno*, *sulcus* – *surco*. Nouns derived from Greek usually appear in latinized form in medical English, but not in Spanish: *bronchus* – *bronquio*, *icterus* – *ictericia*, *stasis* – *estasis*.

Classical inflectional patterns preserved in English (*granulomata*) are typically replaced in Spanish by modernized versions (*granulomas*).

Abbreviations of pharmaceutical Latin (*b.i.d.* = *bis in die* “twice a day”; *p.c.* = *post cibum* or *cibos* “after meals”), which have disappeared from medical Spanish, retain their popularity in English medical usage.

It should be noted that the modern English-speaking physician is unlikely to have had any instruction whatsoever in Greek or Latin as speech systems, and that the pronunciation of Latin by speakers of English generally follows a hybrid phonology that is far from classical precedent. For example, *scabies* is pronounced to rhyme with *babies*, and *vice* (in *vice versa*) is pronounced exactly like the English word *vice*.

Finally, it is worthy of remark that medical English contains many words derived from Latin, such as *deletion*, *ejection*, *obstipation*, *perspiration*, and *protrusion*, for which cognate terms simply do not exist in Spanish. The incautious translator may therefore be tempted to invent an illegitimate Spanish form such as *delec(c)ión*, *eyección*, *obstipación*, *perspiración*, or *prot(r)usión* instead of selecting an appropriate equivalent from the Spanish medical lexicon.

If there is a lesson to be learned from all these remarks, it is that, although patterns and paradigms can be described for the ways in which medical Spanish and medical English have incorporated material from classical languages, exceptions are numerous. Only a thorough knowledge of the canons and limits of medical Spanish, and the exercise of unceasing vigilance, can protect the translator from occasionally applying the orthographic and etymologic conventions of English to Spanish—that is, from assuming the existence of identical twins where the actual history of the two languages has engendered only fraternal ones.

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