



Bringing historical linguistics into the second language classroom

James Stratton specialist in historical linguistics and second language acquisition, explains how knowledge of language history can be beneficial to learners when learning historically related languages

Ancestors, cognates and sound changes

English and German are both Germanic languages, which means they both trace back to a common ancestor called Germanic.

Some 2,000 years ago, English and German started out as the same language, which means they began with the same core

vocabulary. Linguists call these vocabulary items 'cognates'.

However, over time, languages and dialects change, such that today, many of the English-German cognates may look and sound very different even though they started out as the same. Even advanced students of German are often surprised to learn that German Zimmer ('room') is cognate with English 'timber' and German sterben

('to die') is cognate with English 'starve'. These words look and sound different today because of various historical changes (sound and semantic changes) that have taken place throughout the respective histories of the English and German languages. The English word 'starve', for instance, used to be a generic verb for 'to die' (Old English steorfan). This generic meaning of 'to die' is still the meaning of

sterben in German. However, throughout the history of the English language, *steorfan* narrowed its meaning to refer to a specific type of death, namely death by hunger, hence 'starve'.

One of the most fundamental ways that languages can develop is through sound change. For instance, the pronunciation of words can change over time. An example of a sound change that affected English that did not affect German was Ingvaenic Palatalisation. The name might seem intimidating, but it just refers to a sound change that affected the original 'k' sound in Germanic, becoming a 'ch' sound in English. This sound change did not happen everywhere, which is why we still have the 'k' sound in English, but it did happen before certain vowels in certain dialects of English. These vowels are known as front vowels (because they're produced with the tongue at the front of the mouth) and this sound change took place in most dialects of English that were spoken over a millennium ago, with the exception of northern dialects (called Northumbrian). This sound change in English explains why German Käse is 'cheese' in English – the original 'k' in Germanic became 'ch' in English. Another example is German Kirche, which corresponds to English 'church'. However, this change did not happen in northern British dialects of English (i.e. Northumbrian), which is why you can often find ecclesiastical place names in northern England with Kirk meaning 'church' (e.g. Kirkhamgate, meaning 'church-home-street').

An example of a sound change that affected German (or specifically the dialects that ultimately became what most speakers of English think of as

'German' today) was the Second Germanic Sound Shift. This sound shift refers to a series of sound changes affecting the 'p' and 't' sounds (also 'k', but this sound change is not relevant here). The 'p' sound had become a 'pf' sound in German – that is, 'p' and 'f' produced together in quick succession. This sound change took place at the beginning of a word and between vowels. It therefore explains why in English we say 'penny' but in German we say Pfennig. It also explains why in English we say 'apple' but in German we say Apfel. Similarly, the 't' sound became a 'ts' sound in German, but speakers of German write this sound using the letter z. This explains why in English we say 'ten' but in German it is zehn, where the z is pronounced as a 't' and 's' together.

If you are learning German as a speaker of English, knowledge of these sound changes may make it easier to learn cognates because you are creating connections between the language you are learning and information you already know. Knowledge of these sound changes may also give you a toolkit to predict the meaning of German cognates that you have not encountered before. For instance, now you know that the 'k' sound became a 'ch' sound in English before certain vowels like i and e, maybe you can predict the meaning of the German word Kinn. What about German Pfanne? Remember, the 'pf' sound was originally a 'p' sound, and still is a 'p' sound in English. This one might be a little trickier, because the final -e sound drops out in English. Remember that the 'ts' sound in German, written as a z, is a 't' in English.

So, what do you think Zinn means in English? Let me give you another example of a sound

change that affected English-German cognates. The 'th' sound became a 'd' sound in German, but not in English. This sound change explains the relationship between English 'thirst' and German Durst ('thirst'). Now you know this, what do you think the German word Dorn means? How about Ding? (You can find the answers at the end of this article, but I bet you are right.)

Association, memory and meaning

In a 2022 study published in *The Modern Language Journal*, I tested, under experimental conditions, whether knowledge of language history can be beneficial when learning historically related languages. The study compared two groups of German language learners enrolled at an American university. One group received explicit instruction on relevant historical changes that have affected the history of the English and German language, while the other group (the non-historical group) did not. The non-historical group was exposed to the same cognates that learners in the historical group were exposed to, but they spent their time engaging in and carrying out communicative-based activities that are thought to promote incidental or implicit learning; that is, learning cognate meaning from context. The approach that the non-historical group followed has become the most dominant and most widely practiced and advocated approach to second language acquisition in North America. The study found that knowledge of historical sound changes and changes in meaning has a significantly positive effect on cognate learning. Learners who received explicit instruction on relevant historical changes

significantly outperformed learners in the non-historical group.

In general, it is thought that for learning to take place, there has to be a transfer of information from short-term memory to long-term memory. One way to achieve this is through association building, i.e. creating a link between the new information (whatever it is you are trying to learn) and information that is already stored in long-term memory (something you already know). This is essentially what the historical instruction can do. If you are able to create a link between German *sterben* ('to die') and English 'starve', then you are less likely to forget the meaning of the word – because you are creating a link to a representation that already exists.

Creating these connections can also make historically-related languages seem less foreign. You are not just learning the random meaning associated to a word, but also relating to something you already know. For instance, take the German word for animal, which is *Tier*. You could just try to remember the meaning of the word or infer its meaning from context. However, if I told you that *Tier* is related to the English word 'deer' (which used to mean 'animal' in Old English, before its meaning narrowed over time to refer to a specific type of animal), the word *Tier* may seem less foreign. Take the German word *Weib*, which is a negative word for a woman. This is cognate with English 'wife'. *Weib* and 'wife' originally started out as a generic word for a 'woman' (Old English *wif*), but in the history of English 'wife' narrowed its meaning to refer to a specific type of woman, namely a married woman, whereas in

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German, its meaning took on a negative connotation.

Association-building strategies are not new, and are grounded in work on human memory and learning. You probably use associative strategies all the time outside of the language classroom. Imagine there are ten keywords you need to remember for an exam, be it psychology or geography; or imagine you are trying to remember ten items you need to buy from the supermarket. By taking the first letter of each word and combining them to create a new word, you can create a mnemonic device like an acronym. Then when

you are in the exam or at the supermarket, you can just think of the acronym, and it should be easier to recall the ten keywords or shopping items.

Now let's take a different example. Imagine you are trying to learn the German adjective *lecker*, which means tasty. One strategy would be to think of someone licking something tasty. By creating this mental image, you are creating a phonetic link between *lecker* and 'lick' because both words begin with the 'l' sound and you are using your knowledge of English to make it easier to remember the meaning of the German word. Research from educational and cognitive psychology shows that association-building and narrative learning can have a significant effect on memory retention. For instance, if I give two groups of learners five minutes to try to remember as many words from a list of 100 as they can, and I ask one group to try to put the words into a narrative, then the narrative group will significantly outperform the non-narrative group. This is because learners in the narrative group are creating meaningful connections.

The somewhat novel contribution of my study is that it is not just fictitious narratives that can aid learning (e.g. generate a story to make it easier to remember these words), but historically true narratives, such as being cognisant of the etymological relationship between vocabulary words in your first language and the words in the historically-related language you are learning. The study also found that knowledge of historical sound changes can help learners correctly predict the meaning of cognates that they have not encountered before. For instance, some of the

learners who received historical instruction were able to predict the meaning of German Krücke ('crutch') by noticing that the 'k' sound occurred before a front vowel (i.e. 'e'), so the 'k' became 'ch' in English. In contrast, learners who did not receive the historical instruction were left to guess its meaning (i.e. 'crook').

Applications beyond English and German

Although my study focused on the relationship between English and German, the findings are applicable to all historically related languages. If you are a speaker of a different Germanic language (e.g. Norwegian), knowledge of the Second Germanic Sound Shift can still be useful. Recall that the 't' sound became a 'ts' sound (spelled z) in German. This sound shift affected German but not English. Similarly, Norwegian was not affected. So German Zahn is Norwegian tann ('tooth'). You just have to undo the Second Germanic Sound Shift. German Zahl is Norwegian tall ('number'), and German bezahlen is Norwegian å betale ('to pay').

If you are a speaker of a Germanic language and you are learning a non-Germanic language that is distantly related, then knowledge of the First Germanic Sound Shift can be useful. As I have mentioned, English is a Germanic language, but Germanic is a branch of a large language family called Indo-European, a language that was spoken approximately 6,000 to 8,000 years ago. Because language change is inevitable, Indo-European evolved. Speakers of Indo-European migrated to different places throughout Europe and Asia, and their particular versions of Indo-European started to change. These versions became

dialects and eventually different languages. Indo-European has given rise to around 400 different languages spoken today, from Romance languages (e.g. Spanish, French, Italian, Portuguese), Balto-Slavic languages (e.g. Russian, Czech), Celtic languages (e.g. Welsh, Gaelic), to Indic languages (e.g. Hindi, Gujarati, Marathi), and, of course, Germanic languages (e.g. English, German, Dutch, Danish, Swedish, Norwegian, Icelandic).

The First Germanic Sound Shift has the word 'Germanic' in it because it was a series of sound changes that only affected the Germanic languages. One sound change that happened as a result of this shift was that the original 'p' sound became a 'f' sound in Germanic. This is why the words for 'foot' in Germanic languages start with a 'f' sound (e.g. Fuß in German, Norwegian fot) but still with 'p' in non-Germanic branches of Indo-European: in Spanish it is pie, in French pied, and in Portuguese it is pé. It is from the non-Germanic Indo-European languages that English ultimately got words such as 'pedal' (something that is operated using your foot), 'pedicure' (foot treatment), 'pedestrian' (to walk you need feet), and 'podiatrist' (specialist in all things foot-related).

Let's take another example. The word for 'fish' in Germanic languages starts with a 'f' sound (German Fisch, Norwegian fisk) but the original 'p' sound is still retained in most non-Germanic Indo-European languages (e.g. Italian pesce, Spanish pez, Portuguese peixe, French poisson). The word for 'five' (German fünf, Norwegian fem) underwent some strange changes in Romance languages, but the 'p' is still retained in most other Indo-European languages. In Greek it is 'pente' (πέντε),

which is where we get 'pentagon' from (a five-side shape). In Hindi, it is 'paanch' (पाँच), which is where we get the drink 'punch' from (traditionally consisting of five ingredients).

In short, knowledge of language history can be beneficial when learning historically related languages. A speaker of any Indo-European language learning another Indo-European language can, through applied knowledge of language history, build associations that can significantly aid in the vocabulary learning process. I like to refer to the integration or use of knowledge of historical linguistics in the language classroom as "applied historical linguistics". Want to improve your language learning? The answer is clear: become an applied historical linguist! ¶

Meaning prediction answers

Kinn = 'chin'

Pfanne = 'pan'

Zinn = 'tin'

Dorn = 'thorn'

Ding = 'thing'

James Stratton is an Assistant Professor at the University of British Columbia and received his PhD in linguistics from Purdue University. He specialises in historical linguistics, sociolinguistics, and second language acquisition. He has published in journals such as *Journal of Historical Linguistics*, *Journal of Germanic Linguistics*, and *The Modern Language Journal*.

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Articles

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