When is language contact the best explanation for a linguistic change?

Sarah G. Thomason
University of Michigan

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Outline of the talk:

▸ Introduction: a few clear examples
▸ How to support a claim of contact-induced change
▸ What if you can't meet all these conditions?
▸ Is internal causation ever a reasonable default explanation?
▸ Sometimes it's best to give up
▸ Conclusion: on boundaries of historical explanation
Sometimes the cause of a change is obvious, e.g.

- **Internal:**
  - Loss of sentence-initial *whom* in English:
    
    Whom did you see? > Who did you see?
  
  - Rise of English *like* as a quotative/discourse particle, as in *She’s like, “I don’t know why you did that!”*
External:

- English *they* ← Norse
- Livlandish Latvian relative (inferential) mood, nominative object, and loss of grammatical gender ← Livonian
- Kupwar Urdu inclusive vs. exclusive ‘we’ and other structural changes ← Kupwar Dravidian language(s)
But if a change is deliberate, it may be harder to be certain about its source:

- Original effort to establish *hen* as a gender-neutral pronoun in Swedish (a deliberate change-to-be-maybe, maybe ← Finnish *hän*)

- Extensive vocabulary replacement ⇒ secret language
Sometimes there are both internal and external causes, e.g.

- Loss of noun cases and some other morphological categories in southern Scandinavian languages, first via sound changes that eroded word endings and later via intensive contact with Low German; less morphological simplification in northern Scandinavia, with less intensive contact, at least not with other Germanic languages (Kusters 2000, citing Haugen 1976)
Phonemicization of Old English voiced fricatives [v ð z] through a combination of internal changes (degemination, loss of final unstressed syllables) and external changes (borrowings from French with initial and final voiced fricatives)
So for many linguistic changes we can easily establish one or more causes.

**But sometimes causes are harder to find and/or harder to make a convincing case for.** We therefore need rigorous methods for establishing causes; and since contact-induced changes have traditionally been more controversial, it’s especially important to have rigorous methods for determining those.
Methodological requisites for establishing interference $A \rightarrow B$ (Thomason 2001:93-94):

Requisite #1:

Prove the existence of contact between $A$ & $B$.

This is easy if there are loanwords $A \rightarrow B$.

(But there might not be any, if $A$ speakers shifted to $B$; and if they ALL shifted, maybe there’s no discoverable source language $A$ at all.)
Often it’s easy to establish contact:

E.g. English & French – masses of loanwords, documented historical contact

E.g. Kupwar Urdu & Kupwar Dravidian languages (Kannaḍa, Telugu) – ongoing intensive contact

E.g. Southern Scandinavian Germanic & Low German – documented historical contact

E.g. Cushitic & Ethiopic Semitic: well-established contact and shift Cushitic → Semitic in Ethiopia
Requisite #2:

**Identify diverse shared features in A & B.**

These can be from any structural subsystem: lexicon, phonology, morphology, syntax, semantics, discourse

To make a convincing case for interference, the shared features should come from at least two different structural subsystems.
E.g., with lots of diverse shared features:

- Cushitic languages → Ethiopic Semitic languages: innovative labialized dorsals ($/k^w, x^w/$), a new future tense, the near-total loss of the dual number, new SOV basic word order, affix ordering changes, etc. (Leslau 1945, 1952)
Requisite #3:

Prove the presence of the shared features in pre-A.
(That is: prove that the features are not innovations in A.)

E.g. Inclusive vs. exclusive ‘we’ in Dravidian: typical of most Dravidian languages, reconstructable for Proto-Dravidian
Requisite #4: **Prove the absence of the shared features in pre-B.**

(That is: prove that B has *changed*.)

E.g. No inclusive/exclusive ‘we’ distinction in Proto-Indic (or PIE), so it’s innovative in Kupwar Urdu

(But there might not be any, if A speakers shifted to B; and if they ALL shifted, maybe there’s no discoverable source language A at all.)
E.g. We know that Ethiopic Semitic has changed under the influence of shifting Cushitic speakers because Proto-Semitic definitely did not have the features that Ethiopic Semitic shares with Cushitic.
And also:

**Look in B for internal sources of the shared features,**

because if there are plausible internal sources for all the shared features, then either the case for interference is weakened or we're looking at an instance of **multiple causation** (which is common).
And if the features are diverse, then interference may still be the best historical explanation for their appearance in B: all other things being equal, a single unified external explanation is better than a large number of separate internal explanations.
What if you can’t meet all these conditions?

Then you can’t prove that contact was the source of the shared features.

- This is why hypotheses of Semitic or Berber substratum influence on Celtic in the British Isles are problematic: several structural parallels, such as verb-initial word order (#2); but no loanwords, and no solid evidence of contact (#1).
In languages in the Pacific Northwest linguistic area of the US & Canada (#1), the most widespread shared structural features (#2) must be traced back to all three of the major proto-languages – Proto-Salishan, Proto-Wakashan, and Proto-Chimakuan (#4). It is therefore impossible to prove that *any* diffusion has spread these features throughout the area, although experts believe that there must have been some.
We can’t tell whether Chipaya (Bolivia) has changed structurally under Aymara influence: they have long been in intimate contact (#1); Chipaya has borrowed many words and a plural suffix from Aymara and shares numerous typological features with Aymara (#2); but Chipaya is an isolate, so we have no evidence that it has undergone any structural change at all (#4).
In spite of indeterminate cases like these, I will argue that in some instances a flawed external explanation for a linguistic change is the best historical explanation – and is preferable to no explanation at all.

But first let’s consider the vestiges of the traditional bias, in historical linguistics, in favor of internal causal explanations of changes.
Traditionally, historical linguists have given absolute priority to internal explanations.

Sometimes this bias is explicit, in statements like this: Only after exhausting all efforts to find an internal cause for a structural change should one consider possible external causes.

Intensive study of contact-induced change over the past several decades has eroded this bias significantly, so that it’s now appropriate to ask this question:
Is internal causation ever a reasonable default explanation for a change?

Never, if the requisites for establishing contact-induced change can be met:

- A well-grounded internal explanation should not take priority over an equally well-grounded external explanation.
- If we have both a solid internal cause and a solid external cause, the best historical explanation is multiple causation.
Consider hypotheses of ancient Dravidian influence on ancient Indic:

- Well-established ancient contact ((?))(#1)

- Shared features, e.g. retroflex consonants, agglutination in noun declension, quotative construction, second causative, etc. (#2)

- The shared features are old in Dravidian and innovative in Indic (#3, #4)

- Internal explanations are unconnected; external explanation is unitary
And yet the hypothesis of ancient Dravidian structural influence on Indic has remained controversial.

In part this is due to the paucity of old Dravidian loanwords in Indic; but that’s to be expected if, as is probable in this case, the structural interference came about through shift from Dravidian to Indic.
But there is one circumstance where the best historical explanation defaults to internal causation:

If there is evidence of **absence** of intensive contact, then structural interference is unlikely, and even a weak internal cause is preferable to a fanciful external cause.
E.g. There is still much debate about the reasons for the massive loss of Middle English case morphology – Norse (but not French) may well have played a role in the process – but language contact is unlikely to be the direct cause of the replacement of Modern English sentence-initial whom by who.
A weaker internal cause shouldn’t be automatically preferred to an external cause that can’t be fully supported.

Languages of the Pacific Northwest linguistic area probably did undergo contact-induced changes (maybe very ancient ones); otherwise, we’d have to appeal to accident to explain the shared features...or very very ancient inheritance from a common proto-language, with remarkable persistence of a whole range of universally marked features.
An innovative Russian case distinction:

\(\text{čaška čaj-}\text{u} \ ‘a/the cup of tea’ \ (\text{partitive})\)

vs.

\(\text{cena čaj-}\text{a} \ ‘\text{the price of tea}’ \ (\text{general} \ \text{GEN})\)

Where did this new partitive case come from? No such distinction inherited from Old Russian.
Maybe ← ? shifting Uralic speakers who mapped their partitive vs. genitive case distinction onto older Russian $u$-stem genitive -$u$ vs. $o$-stem genitive -$a$....but there’s a problem with requisite #1.
Shina (Indic/Dardic)

← Burushaski (isolate; NE Pakistan):

♦ Singulative construction with suffix ← Shina ‘one’
♦ Use of plural verb with INDEF/INTERROG pronoun
♦ Use of discourse marker = INF+ CASE to begin a sentence, where INF is that of the main verb of the preceding sentence
♦ etc., etc.
We can’t satisfy requisite #3; but #1, #2, & #4 are O.K. Awfully unlikely that internal causes in Shina produced all these parallels to Burushaski structures.
Consider attempts to justify a claim of substrate interference from unknown prehistoric languages into prehistoric Pre-Saami (Weinstock 2012, citing Aikio):

- At least several hundred “substrate items”:
- Words of unknown origin mainly in semantic fields liable to substrate influence (animals, topography, etc.)
- Words showing non-native structural features (phonotactics: C clusters, etc.)
- Some words with irregular correspondences, indicating separate borrowings
Aikio and Weinstock conclude that the Saami lexicon “shows consistent signs of heavy substrate influence.”

But there is NO direct evidence for pre-Saami substrate language(s), so no chance of satisfying requisite #3; I don’t know about requisite #4, but that one’s probably O.K. It’s also impossible to satisfy requisite #1, of course, but at least the proposed contact situation appears to be geographically and chronologically plausible.
Even so, an unattested, unknown pre-Saami substrate is a more appealing explanation for the features Aikio and Weinstock listed than internal causation, and better...maybe...than giving up on finding an explanation for the non-Uralic-like features in Saami.
Sometimes it’s best to give up

and admit that no historical explanation can be found for a given (set of) change(s) – or at least no convincing historical explanation.

This sad situation may be temporary: often, further research offers hope for discovering causes of changes. An example is ongoing research on Tibeto-Burman contacts in China (from a 2008 symposium in Osaka, “Linguistic Substrata in the Tibeto-Burman Area”):
The requisites for establishing contact-induced change can’t all be satisfied (yet):

- **#1**: Contact proven? – Yes! Movements of people, assimilation of ethnic groups, cultural pressures

- **#2**: Shared structural features? – Yes: directional prefixes in W. Sichuan (Shirai), Himalayan tones (Evans), morphology in Qiang & Tibetan (Huang), etc.
#3 & #4: Are the shared structural features present in Pre-A? Are they absent in Pre-B? – **Unknown.** Depends on the subgrouping model for Tibeto-Burman (controversial), and on reconstruction of Proto-Tibeto-Burman (also controversial).
What about hypotheses about substrate explanations for innovations in Proto-Germanic?

Consider this quote from Polomé 1986 (cited by John Stewart, 2012):

“Without reverting to obsolete theories about substrate, one must recognize that the Indo-Europeanization of northern Europe did not occur in a vacuum, and that the populations established there must have influenced in some way the language of the newcomers...”
NOT necessarily.

Many, maybe most, language shifts by groups of people have zero structural influence on the target language (TL).

That’s the typical result if the shifting population is small relative to the (local) TL population.
E.g., Native American languages have had no structural influence at all on American English, and the shift process is now almost complete for almost all of them; lexical influence is confined to the most superficial semantic domains (especially place names).
In the case of Proto-Germanic, the available evidence, as reported by Stewart, seems to me to be too weak to support a viable hypothesis of substrate interference as a cause of PIE > Proto-Germanic changes.
Wiik’s phonological evidence for a Uralic substrate, aside from the problems Stewart mentioned, contains too many features that could easily be due to drift, and no morphosyntactic evidence at all; Vennemann’s Basque/Semitic/etc.? substrate hypothesis fails to satisfy requisite #1. Both hypotheses fall short on #2.
What about the large number of Germanic words that lack an IE etymology?

- The presence of loanwords, even quite a few loanwords, does not justify a claim that a language’s structure has undergone any significant foreign interference.

- (And conversely, the absence of loanwords does not justify an assumption that no structural interference has occurred.)
And the phenomenon of extensive lexical replacement and/or distortion is well established from a number of contact situations:
17th-century Delaware (Algonquian): secrecy during warfare

Mayrinax Atayal (men’s language only; Formosa; Austronesian): ritual purposes for hunting

...Mōkkī (Indic; Pakistan): secrecy from unfriendly neighbors

Lunfardo (Spanish/Italian; Argentina): for delineating a social in-group
So that’s another possible source – maybe a remote possibility, but who knows? – for lots of (alleged) non-IE words in Germanic.
There are also proposals of external causes that fail to meet most of the requisites for establishing contact-induced change.
Arguments of this form: feature X (e.g. inclusive vs. exclusive ‘we’) is so unlikely as an internal development that its emergence must be due to a vanished substrate language.

- Satisfies only #4; fails to satisfy #1, #2, & #3.

- There are counterexamples, e.g. some Shuswap (Salishan) dialects with innovative incl./excl. ‘we’ and no detectable substrate.
Try this thought experiment:

Take a real case, like a dialect of American Hungarian: dying, undergoing attrition and borrowing from English

- Many structural changes, mostly simplifications
- Now suppose that English vanishes entirely, leaving no written traces at all, and no relatives
1000 years later, compare the attested American Hungarian with reconstructed Proto-Hungarian: would anyone propose language contact as the source of the structural changes (to SVO, loss of preverbs, reduced phonemic inventory, changed phonotactics)? Surely not.
With a large number of less ‘natural’ changes, it’s more tempting to suggest a contact explanation.

But without a candidate for the source language, you can’t satisfy requisite #1.

So proposing a contact explanation just adds a second layer of mystery without clarifying anything...leaving us with just a suspicion and often no hope of finding evidence.
Conclusion: on boundaries of historical explanation

- Searching for causes of linguistic change: good
- Making causal claims with zero or weak evidence: not so good
Rigorous requirements for establishing contact-induced change help us find the borderline because they show us if/where our proposals are weak.
Sometimes, with both internal and external causes of change, a flawed case is better than no explanation at all.

So we need to be cautious but not absolutely rigid; and

we need to try hard to tell the difference between a flawed but promising explanation and a fatally flawed explanation.
Thanks!

(If you’d like a copy of these slides, email me at thomason@umich.edu and I’ll send them to you.)