

CAS LX 540

Acquisition of Syntax

Episode 21

Language attrition, language mixing.

L2 attrition

- It is a very common phenomenon that, having learned an L2 and having become quite proficient, one will still “forget” how to use it after a period of non-use.
- While very common, it’s not very surprising —if it’s like calculus. If L2 is a skill like calculus, we’d expect this.

L1 attrition

- Much more surprising is the fact that sometimes under the influence of a dominant L2, **skill in the L1 seems to go.**
- Consider the UG/parameter model; a kid's LAD faced with PLD, automatically sets the parameters in his/her head to match those exhibited by the linguistic input. L1 is effortless, fast, uniformly successful... biologically driven, not learning in the normal sense of learning a skill.
- So how could it suffer *attrition*? What are you left with?

UG in L2A

- We've looked at the questions concerning whether when learning a second language, one can adapt the “parameter settings” in the new knowledge to the target settings (where they differ from the L1 settings), but this is even more dramatic—it would seem to actually be altering the *L1* settings.
- Do attrited speakers (language losers?) seem to have changed parameter settings?

Italian → English

- **Italian is a null subject language** that allows the subject to be dropped in most cases where in English we'd use a pronoun
 - (Possible to use a pronoun in Italian, but it conveys something pragmatic: contrastive focus or change in topic)
- **English is a non-null-subject language** that *does not* allow the subject to be dropped out, pronouns are required (even sometimes “meaningless” like *it* or *there*). Not required that a pronoun signal a change in topic.

Italian, null subjects

- Q: **Perchè Maria è uscite?**
'Why did M leave?'
- A1: **Lei ha deciso di fare una passeggiata.**
- A2: **Ha deciso di fare una passeggiata.**
'She decided to take a walk.'
- Monolingual Italian speaker would say A2, but English-immersed native Italian speaker will optionally produce (and accept) A1. (Sorace 2000)

Reverse errors unattested

- Q: **Perchè Maria è uscite?**
'Why did Maria leave?'
- A: ***Perchè ∅ è venuto a prederla.**
'Because (Gianni) came to pick her up.'
- That is, they don't *forget how to use null subjects* so much as they *broaden the contexts* in which they *can* use overt pronouns.

Postverbal subjects

- Q: **Chi ha starnutito?** ‘Who sneezed?’
- A1: **Gianni ha starnutito.**
- A2: **Ha starnutito Gianni.**
- Native speakers would say A2 due to the narrow focus; attrited speakers will produce/allow A1 as well.

Pronouns reverting to unmarked

- It seems that the acceptability of overt pronouns (in the LI “attriters”) broadens compared to their LI, the acceptability of null pronouns becomes more restricted.
- Pronouns in a null subject language are *marked* —they are restricted to particular discourse contexts ([+topic shift], according to Sorace).
- What seems to happen is that the pronouns revert to the unmarked case ([±topic shift] like in English).

Subjects retreating to the unmarked

- Same goes for postverbal subjects—it is a marked option for languages, and the LI seems to be retreating to the unmarked.
- Like with pronouns, it seems to be not a question of grammaticality but a question of felicity.

Pragmatic constraints are vulnerable

- Certain areas of the LI grammar are more susceptible to this kind of attrition than others.
- Sorace notes that the observed cases of attrition of this sort seem to be the ones involved with discourse and pragmatics, not with fundamental grammatical settings. (The attrited Italian is still a null-subject language, for example—null subjects are still possible and used only in places where null subjects should be allowed).

So...

- So, we're left with a not-entirely-inconsistent view of the world.
- Parameter settings in L1 appear to be safe, but the discourse-pragmatic constraints seem to be somehow susceptible to high exposure to conflicting constraints in other languages.

We never knew
anna koto nanka

- New topic: Language mixing, among fluent bilinguals.
- Much drawn from MacSwan (2000, *Bilingualism: Language and Cognition* 3:37-54)

Language mixing (Spanish-English)

- No, yo sí brincaba en el trampoline when I was a senior.
'No, I did jump on the trampoline when I was a senior.'
- La consulta era eight dollars.
'The office visit was eight dollars.'
- Well, I keep starting some. Como por un mes todos los días escribo y ya dejo.
'Well, I keep starting some. For about a month I write everything and then I stop.'

But it isn't random...

- *El viejo man
- *The old hombre
- *The viejo hombre
- *She sees lo.
- The old man
- El hombre viejo
- Certain mixes are not considered to be possible by fluent bilinguals.
- How can we characterize what mixes are possible vs. impossible?

Prior efforts

- Several proposals have been offered to account for what are good mixes and what aren't, but it appears to be a hard problem. Very famous attempt by Poplack (1980, 1981):
- **The equivalence constraint.** Codes will tend to be switched at points where the surface structure of the languages map onto each other.
- **The free morpheme constraint.** A switch may occur at any point in the discourse at which it is possible to make a surface constituent cut and still retain a free morpheme.

Poplack

- Looking at the constraints on code-switching of this sort can help us understand the *nature* of (at least fluent) bilingual language representation.
- One odd thing about Poplack's constraints is that it implies that part of UG is dedicated to *mixing*. The Free Morpheme Constraint and Equivalence Constraint are only constraints on mixing two grammars. Is UG built specifically for bilinguals?

Problems for Poplack's constraints?

- Equivalence and Free Morpheme Constraints: Accounts for *estoy **comiendo**, but leaves some things unexplained:
 - **The students** habian visto la pelicula italiana.
 - ***The student had** visto la pelicula italiana.
 - *Los estudiantes habian **seen the Italian movie**.
- Motrataroa de nin **rescatar**oa n Pocajontas
Ref-**treat**-vsf about this 3s-3os-**rescue**-vsf in P.
'It deals with the one who rescues P.'

Various approaches

- People have wrestled with the issues involved in mixing for some time.
- Many posit specific parts of grammar dedicated to mixing, though.
- And counterexamples abound, yet judgments are relatively firm.

Various approaches

- You can't switch closed-class/functional elements? (Joshi 1985)
 - Anyway, I figured **ke** if I worked hard enough... (Farsi-English)
- You can't switch between a head and something it governs? (Di Sciullo, Muyskey, and Singh 1986)
 - J'ai joué avec **il-ku:ra** 'I have played with the ball'
- Heads determine the syntactic properties of their complements? (Mahootian & Santorini 1996)
 - You'll buy **xune-ye jaedid** 'You'll buy a new house'
 - *El no **wants to go**.

Various approaches

- Functional heads must agree/check the language feature of its complement?
 - What is [+Chinese]? [-Greek]?
 - Se **hombre** kikoas se kalli
a **man** 3S-3Os-buy-fut a house
'A man will buy a house'
- Matrix language sets a frame, content words can be switched (Myers-Scotton 1993)?
 - But that's the equivalence constraint essentially, plus have to allow matrix language to be switched midstream, so hard to imagine what is ruled out.

MacSwan 1999

- Perhaps the most currently comprehensive and promising account, building on recent developments in syntactic theory.
- One of the basic premises is that language parameters are properties of lexical items (not of a language-wide grammar). E.g., verb-movement is due to a property of the tense morpheme in French, not shared by the tense morpheme in English.

MacSwan 1999

- The broad (“minimalist”) approach to grammar takes language to consist of two primary components.
- **Computational system** (builds trees), *language invariant*.
- **Lexicon**, *language particular*. Functional elements of the lexicon encode the parameters of variation.

MacSwan 1999

- MacSwan's proposal is that there are no constraints on code mixing over and above constraints found on monolingual sentences.
- (His only constraint which obliquely refers to code mixing is the one we turn to next, roughly that within a word, the language must be coherent.)
- We can determine what are possible mixes by looking at the properties of the (functional elements) of the lexicons of the two mixed languages.

MacSwan 1999

- The model of code mixing is then just like monolingual speech—the only difference being that the words and functional elements are not always drawn from the lexicon belonging to a single language.
- Where requirements *conflict* between languages is where mixing will be prohibited.

The role of phonology

- You can't switch within a word on the basis of phonology—different phonological rules for different languages conflict.
 - *Juan está eat-iendo.
 - *Juan eat-ó.
 - *Juan eat-ará.
 - *Juan com-ed.
- As for these, they're ok if they're borrowings, with a consistent phonology:
 - Juan está parqueando su coche.
 - Juan parqueó su coche.
- Ok, though, what counts as a “word”?

What counts as a word?

- *El no wants to go.
- *He doesn't quiere ir.
- *No nitekititoc
not Is-work-dur
(‘I’m not working’)
- Amo estoy trabajando
not be.3s work-dur
‘I’m not working’

Clitics, bound morphemes

- Some lexical items in some languages are *clitics*, they depend (usually phonologically) on neighboring words. Similar to the concept of *bound morpheme*.
- John's book.
- I shouldn't go.
- Clitics essentially *fuse* with their host.

Clitics, bound morphemes

- Clitics generally cannot be stressed.
 - *John'S book
 - *I couldN'T go.
- Clitics generally form an inseparable unit with their host.
 - Shouldn't I go?
 - Should I not go?
 - *Should I n't go?

Spanish no

- It turns out that Spanish *no* appears to be a clitic (despite spelling conventions).
- ¿Qué no dijo Juan? ‘What didn’t J say?’
- *¿Qué sólo leyó Juan? (‘What did J only read?’)
- *¿Qué meramente leyó Juan? (‘What did J merely read?’)
- *Juan no ha **no** hecho la tarea. (‘J hasn’t *not* done the task.’)

Nahuatl **amo**

- In Nahuatl, *amo* ‘not’ does not appear to be a clitic. You can stress it.
- Amo nio **amo** niktati nowelti.
Not I-s-go **not** I-s-3Os-see my-sister
‘I’m not going to *not* see my sister.’

Spanish-Nahuatl mixing

- *No nitekititoc
not Is-work-dur ('I'm not working')
- Amo estoy trabajando
not be.3s work-dur 'I'm not working'
 - Now, we can begin to make sense of the difference in possible mixes at the point of negation between Spanish and Nahuatl.
- *No-nitekititoc
not Is-work-dur ('I'm not working')
- *El no-wants to go

MacSwan 1999

- MacSwan proposes essentially that *it is not possible to code-mix within a (word-like) phonological unit*. Essentially a restriction on what are “pronounceable” trees.
 - Idea: phonology operates as a set of ordered rules which are ordered differently in different languages—you can’t run both sets of rules at once, hence the result if you tried would be unpronounceable.
- Since Spanish *no* fuses with the following verb, it can’t be followed by a Nahuatl verb.
- Since Nahuatl *amo* does not fuse with the following verb, it is free to be followed by a Spanish verb.

English-Spanish

- This also explains Spanish-English (well, Spanish-*anything*)
- *El no wants to go
- What about English-Spanish?
- *He doesn't quiere ir.
- *He doesn't wants to go.

Agreement

- In languages that code agreement between subject and verb, it also appears that mixing is only possible where the agreement relationship is not disrupted.
- *He doesn't quiere ir.
- English negation: agreement appears on *do*.
- Spanish negation: agreement appears on the verb.
- You can't have *extra* agreement: one subject, one agreement. They need to *match*.

Agreement

- *Yo nikoas tlakemetl
I 1s-3Os-buy-fut garment-pl-nsf
(‘I will buy clothes’)
- *Tú tikoas tlakemetl
you 2s-3Os-buy-fut garment-pl-nsf
(‘You will buy clothes’)
- ÉI/Ella kikoas tlakemetl
He/She 3s-3Os-buy-fut garment-pl-nsf
(‘He/She will buy clothes’)

Agreement

- **Ni**-k-koa-s 'I will buy'
- **Ti**-k-koa-s 'You will buy'
- **Ø**-k(i)-koa-s 'He/she will buy'

- **Also relevant:** Spanish marks and agrees with *gender* but Nahuatl does not distinguish masculine from feminine.

- Spanish pronouns have gender specification. The Nahuatl verb does not. They can only be compatible (match) if there is no Nahuatl agreement morpheme.

Spanish-Catalan-Greek

- **Spanish** and **Catalan** both have two genders, **masculine** and **feminine**.
- **Greek** has three genders, **masculine**, **feminine**, **neuter**.
- **Predicts:** Mixing subjects and verbs between the three languages is only possible between the gender-compatible languages.

Spanish-Catalan-Greek

- Yo vull mengar el dinar (S-C)
- Jo queiro comer la cena (C-S)
- *Ego vull mengar el dinar (G-C)
- *Ego queiro comer la cena (G-S)
- ...

Mixing and L2A?

- Code mixing as discussed so far is generally a property of the speech of *fluent bilinguals* (often *native bilinguals*) and reflects properties of universal language knowledge.
- We can now return to our old question and ask: **Does the knowledge of second language learners also have the restrictions on code mixing?** To the extent that this is “part of UG”, is this aspect of UG active for L2’ers? For the future—I’m not aware of studies on L2A.
- MacSwan cites himself as arguing that late learned L2’s should be considered separately if at all in the investigation of code switching, so perhaps this means the data is messy.