THE L3 CONNECTION: HIGHLIGHTING THE VALUE OF THIRD LANGUAGE (L3) SYNTACTIC DATA FOR GENERAL LINGUISTIC AND PSYCHOLINGUISTIC QUESTIONS

Jason Rothman
University of Florida

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MY JOURNEY.............
Our Journey: TODAY’S TALK

- Who are L3 learners?
- Some things to agree on and/or agree to disagree on
- Turning the focus to transfer in L3 acquisition
- Models of L3 morphosyntactic transfer
- Articulating the Typological Primacy Model (TPM)
- Why does transfer happen the way it does, can we really model it predictively and what are the larger implications of studying this beyond L3 alone?
Everyone grows up hearing many different languages. Sometimes they are called ‘dialects’ or ‘stylistic variants’ or whatever, but they are really different languages. It is just that they are [sometimes] so close to each other that we don’t bother calling them different languages. So everyone grows up in a multilingual environment. Sometimes the multilingual environment involves systems that are so unlike that you call them different languages. But that is just a question of degree; it is not a question of yes or no.

(Chomsky, 2000:59)
WHO QUALIFIES AS AN L3ER?
WHAT IS AN L3 LEARNER? WHO QUALIFIES AND WHO DOES NOT?

(1 point for each if an L3 learner) (see Rothman, Cabrelli Amaro, de Bot in press)

-- Björn is from Sweden and his mother is as well, but his father is from England and he is a naturalistic bilingual (seemingly balanced) from childhood. Now, as an adult, he is learning German.

-- Cindy is from Los Angeles, both of her parents are from Mexico and only speak Spanish. Cindy’s first language is Spanish, but she started learning English at 5 when she went to school and is now dominant in English. At the age of 20, she starts to learn Japanese.

-- Carl is from Indiana. He took Spanish in school starting at 14 and was very successful, and now at age 30 he is learning Italian.

-- David lives in Canada and although his first language is English he has taken French since he was 8. At age 11, he is not totally fluent yet in French but has begun this year to take Spanish.

-- Boris, now 20, is of Russian descent but grew up in NYC in a Russian community. He is a HS of Russian, but highly dominant in English. He is now taking Russian in college.

-- Patxi is from Bilbao. He learned Spanish as a first language and was exposed to some Basque in the community and with friends at a very early age. At the age of six, he learned Basque in full immersion school. He is now 12 and has been taking English for some years.
--Martha is 20 and is from Portugal. Like all Portuguese people her age, she took English since she was in the second grade and turned out to be very successful. Now at age 22, she has moved to Brazil and is being confronted with what seems to her like a new language, although she already understands it.

--Shrey is from New Delhi. In his community everyone speaks Hindi and Kannada. He is taking English at school this year at the age of 9.

--Manny is from Jamaica. He speaks Jamaican English as his native language, but also speaks standard English equally well. He was not exposed to Patois as a child, but is now learning it in college.

--Patsy is from Chicago. Her native language is English, but she has lived in a highly Hispanic community all her life and learned Spanish from her friends and at church as a very young child. At the age of 13 she decided to take French as her foreign language requirement in school. Now in college, at 21, she is starting to take Arabic.

--Roger is from Victoria, BC Canada. He has been exposed to English and his tribe’s first nation (indigenous language) since birth. He is a passive bilingual with only functional verbal skills in English. At 10 he starts the process of learning French as required by Canadian law.
WHAT ARE YOUR SCORES, OUT OF 11?

What criteria did you use?

- Time/age?
- Proficiency in an L2/ 2L1?
- Type of bilingual
- Uncertainty about what counts as an L2/L3/Ln?
- Environment/Context?
- Mere number of previous languages?
- Uncertainty of what counts as a language/dialect?

Are any variables more important than others?

Does this depend on our questions or interests?

Are all L3 learners the same?
SOME THINGS TO AGREE (TO DISAGREE?)
ON......

There is no concrete, objective concept/definition of what an L3 learner is. At least not all studies apply the same definition.

There is too little research to draw any definitive conclusions.

Research thus far has been inadequate to answer all the possible questions that should be asked and eventually answered. But the field is young and we are trying :)

Cross-paradigmatic theory building, I would argue, is needed to first arrive at as many relevant questions as can be answered, then methodological and theoretical integration needs to occur to be able to answer these questions.
DISTINGUISHING L3/LN FROM L2/2L1

Failing to properly differentiate true L2 from L3/Ln can have an inadvertent damaging impact for important questions studied under the guise of a broadly defined SLA (see DeAngelis, 2007).

Additive effect of bilingualism on L3 learning (Cenoz, 2003), the superior metalinguistic skills/knowledge of bilinguals are variables.

Previous linguistic experience is also an important factor when examining linguistic processing given, among other confounds, the fact that all linguistic systems are simultaneously activated. Perhaps bilinguals develop greater inhibitory control (Bialystok, 2009).

From the perspective of multiple competence (Cook, 1991, 2003), keeping L2 distinct from L3 is paramount since it is assumed that L2 learners have different grammars even for their L1 as a result of the L2 acquisition process.

From a generative perspective, L3 learners have access to more grammatical options (the underlying feature representations of two languages).
(SOME) L3 QUESTIONS TO AGREE ON?

- What are the relevant factors to be looked at/considered in L3 acquisition?
- What are the variables/factors involved that explain the start, development, use and outcomes of multilingualism?
- How does the study of L3 transcend the study of just L3?
- How is multilingual acquisition different from monolingual and true bilingual acquisition or is it?
- Do the answers to these questions have to be specific to the paradigms that ask them?
TURNING TO L3 MORPHOSYNTAX MODELS AND TRANSFER
WHAT IS TRANSFER?

- Mostly related to theoretical assumptions regarding what constitutes linguistic mental representation.

- Transfer of rules (learned) vs. transfer of grammar (acquired): what is the difference?

- What do formal linguistic studies mean when we talk of transfer? Well, what do I mean anyway…. 
L3 ACQUISITION: FOCUS ON THE LEXICON

Lexicon: e.g. DeAngelis & Selinker (2001); Cenoz (2001); Jessner (2003); De Bot (2004); Singleton & O’Laoire (2004, 2006); Hammarberg (2001); Ecke (2001); Wei (2006)

Conflicting evidence as to whether typology, an L2 or a last language learned effect is more deterministic

What we know: previous knowledge, experience, and metalinguistic awareness aid/change the process
What variables motivate/activate/select “transfer” at the level of syntactic mental representation?

Flynn, Foley and Vinnitskya (2004)
Cumulative Enhancement Model

Bardel & Falk (2007); Falk & Bardel (2011)
L2 status factor model

Rothman (2010, 2011)
Typological Primacy Model

Hermas (in submission)
The L1 Factor
L3 INITIAL STATE/STAGES MODELS

- The Cumulative Enhancement Model (CEM) (Flynn, Foley & Vinnitskaya, 2004)

  - Existing language systems can facilitate L3/Ln acquisition or remain neutral. Negative, or non-facilitative transfer is predicted to never occur.

  - Flynn et al. (2004) offered the CEM based on their investigation of L3 oral production of restrictive relative clauses in L1 Kazakh / L2 Russian / L3 English speakers.

  - Their results demonstrated that experience in any previous language (the L1 and the L2) can be utilized in the acquisition of any subsequent language.
L3 INITIAL STATE/STAGES MODELS

- The L2 Status Factor (Bardel & Falk, 2007; Falk & Bardel, 2010, 2011)
  
  - Maintains that the L2 has a privileged standing for morphosyntactic transfer.
  
  - Bardel and Falk (2007) examine the placement of negation in two different groups, L1 V2/L2 non-V2 and L1 non-V2/L2 V2, learning either Swedish or Dutch as an L3.
  
  - Falk and Bardel (2011) offer evidence from L3 German placement of object pronouns from speakers of English and French as L1s and L2s.
  
  - Bardel and Falk (in press) offer an explanation based on Paradis’ declarative vs. procedural knowledge divide of L1 and L2 as an explanation. L2 is elected for transfer because it is declarative, therefore, more easily accessible.
L3 INITIAL STATE MODELS


  - Typological similarity as determined by the parser across languages is ultimately the decisive factor conditioning initial stages L3 transfer.

  - The underlying syntax of either the L1 or the L2 is transferred completely.

  - This predicts the possibility of facilitative and NON-facilitative transfer, and this is predictable if the factors that underlie how the parser determines typological proximity are articulated and prove tenable.

- Studies consistent with the TPM include: Rothman and Cabrelli Amaro, 2007, 2010; Rothman, 2010, 2011; Rothman, Cabrelli Amaro and Campos, 2010), word order and relative clause attachment in L3 Brazilian Portuguese; Rothman, 2010; Montrul et al. 2011; 2012
AIM OF THE PRESENT RESEARCH

- How do we test between these models?
  - Is transfer only facilitative?: if so, then transfer should either be positive or remain neutral and not obtain.

  Is there an L2 status factor for syntax? If so, transfer should be shown to be both facilitative and non-facilitative, and crucially based on the L2.

  Is typology (psychotypology) a deterministic factor for syntactic transfer? If so, transfer should be shown to be both facilitative and non-facilitative but crucially not solely based on the L2, but on relative typological proximity.

  Is there an L1 factor for syntax? If so transfer should be shown to be both facilitative and non-facilitative, and crucially based on the L1.
HOW TO TEST THIS

Methodology is important:

Selection of language pairings, using a mirror image approach (see Rothman, 2010; Falk & Bardel, 2011, a.o).

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My Narrow Focus: Articulating the Typological Primacy Model
MY NARROW QUESTION

What variables motivate/activate/select “transfer” at the level of syntactic mental representation when there are choices?

I put forth that Typological Proximity is the most influential factor.
WHY?
IMPLICATIONS

- L3 research can make significant contributions to linguistic epistemology, especially adding to our understanding of the composition of the mental representation of language.

- Data from L3 studies highlight the core principle of linguistics and cognition more generally, which is economy.

- Why shouldn’t the mind unconsciously avoid redundancy in the learning/acquisition process?
CLARIFYING TWO POINTS

Typological Primacy Model: Initial State transfer for multilingualism occurs selectively, depending on the comparative perceived typology of the language pairings involved, or psycho-chotypological proximity. Syntactic properties of the closest (psycho)typological language, either the L1 or L2, constitute the initial state hypotheses in multilingualism, whether or not such transfer constitutes the most economical option.

(Rothman, 2011: 112)

Initial State Vs. Initial Stages?

What is the initial state in L3 really?

Perceived?
TOWARDS CLARIFICATION

- Does the TPM only work for obvious language combinations? **NO.**

- The linguistic parser determines very early on a “best guess” for transfer with the information at its disposal.

- In the spirit of FT/FA (Schwartz and Sprouse, 1996), transfer is complete (full) in one pass.

- One system (the L1 or L2) can be transferred and this should be done at the earliest possible moment.
WHY?

- I submit that the TPM is based on general economy and cognitive-processing factors; essentially, typologically motivated transfer is a reflex to avoid redundancy in linguistic acquisition and to maximize cognitive resources.

- At its core, the TPM predicts that transfer occurs in an unconscious “best guess” manner early on, which means that it is not dependent on similarity at the surface level, even if surface similarity coincides with underlying linguistic representational similarity.

- If on the right track, it can then be hypothesized that the TPM makes predictions always, but this must be based on an articulated proposal of how the internal parser determines typological proximity.
The parser might determine typological proximity on a continuum of at least four linguistic factors (c.f. García-Mayo & Rothman, 2012):

1. the lexicon
2. phonological/phonotactic cues
3. functional morphology (form; function; semantic features)
4. basic syntactic structure

I will claim here that these factors do not all have the same weight and as such this list should be read as implicationally hierarchal.

The parser only interprets linguistic information to construct underlying grammatical competence.
Typological similarity at the level of the lexicon is of primary importance (e.g. De Angelis & Selinker, 2001; Ó Laorie & Singleton, 2006 a & b; Singleton, 2006 inter alia).

What I would like to suggest here is that lexical similarity between the L3 and one of the two previous systems has effects beyond advantages for lexical acquisition.

It seems reasonable to put forth as a hypothesis that lexical similarity would be a driving force for transfer in other domains of grammar, specifically morphosyntax.

Keeping in mind that such crossover is maximally obvious in many cases, lexical similarity is usable early on.

If there is some to great crossover in the lexicon it might seem probabilistically likely that crossover would also exist in the other domains of grammar.

Such an account is perfectly in line with current Minimalist proposals of syntax given the role attributed to features encoded in the (functional) lexicon.
Let’s consider the case of a Spanish-English bilingual in either direction of chronological order of these languages acquiring Italian.

The parser should detect that much of the Romance lexicon overlaps. As such, the parser is able to make sense of the target L3 input much sooner than say an English-Japanese learner of L3 Italian might.

If these learners recognize, albeit unconsciously, that a large number of the verbs are shared lexically then why would the argument structure be any different?

If so, why would the syntax related to verbs be different at all, for example, word orders (e.g VS in accusatives), the features involved that require verb movement, and so on and so forth.

For the most part, such an unconscious strategy would not be incorrect and thus not only economical, but facilitative.

Lexical similarity would be a good, early indicator of which of the two systems would be more facilitative to transfer.
Like the case of the lexicon, phonetic and phonological information is readily and unambiguously available to the L3 in abundance from the very beginning of exposure.

In the absence of rich lexical crossover or in addition to it, phonological similarities across the L3 and the L1 and L2 could prove useful to hone the parser in on overall “perception” of typological similarities.
AN EXAMPLE

- Let’s ponder the case of Chinese-Japanese bilinguals acquiring Spanish as an L3, in which the parser might use several phonological similarities across all three languages. To highlight just one example, all three languages have a general prohibition on complex codas.

- However, from relatively little input, it seems reasonable that the parser could detect the much more pronounced proximity of the Spanish vowel system to Japanese or the fact that the [+coronal] feature, for example, is contrastive in Spanish and Japanese, yet not in Chinese.

- The point I wish to make is that such information might be usable, despite the fact that neither of the two languages can be said to be obviously typological similar in the most traditional sense.
SOME SUPPORT?

- Cross-sectional research by Cabrelli Amaro (in progress) testing L3 Portuguese phonology acquisition, in this case L2 Spanish, has shown that learners from the earliest of L3 exposure are able to reliably detect both difference and similarities in phonological properties at the segmental and super-segmental levels between the L3 and their other known languages.

- This is true even with participants who have only had less than two weeks of classroom exposure to the L3.

- Research like Cabrelli Amaro’s shows that phonological differences and similarities are perceived very early on by L3 learners.
MORPHOLOGY

- The third cue I would like to suggest is usable by the parser in the absence of or in addition to lexical and phonological similarities, is functional morphology (its morphophonological forms and the syntactic and semantic features it represents).

- For example, the fact that Spanish, Portuguese and Italian have verbal person agreement and tense, aspect and mood morphemes as well as nominal morphemes for gender and number that not only have similar morphophonological forms but represent the same formal features likely lead the parser towards transfer when any of these languages are in an L3 pairing.

- But the relationship need not be as transparent as described above, imagine English Spanish bilinguals, order of L1-L2 acquisition notwithstanding, learning L3 Chinese.
Morphologically speaking, English probably provides more evidence for transfer selection than Spanish given its general weak morphological paradigms as compared to Spanish’s relative morphological richness.

Detecting the richness or weakness of the L3’s morphological system requires more exposure to the L3 than do lexical and phonological similarities. That said, this too seems like something that could be detected relatively early on in the L3 process.
SYNTAX

- Finally, similarities in syntactic structure could be used to determine relative typological proximity in addition to the other factors.

- Although much of the subtleties and nuances of the target L3 syntactic system is certainly (probably) not available to L3 speakers at the initial stages, things like default word order, head directionality, and whether or not the L3 licenses null subjects should be perceptible even at the earliest of stages.

- If the L3 happens to be genetically related to one of the previously acquired languages then indeed more complex syntactic properties might be detected at early stages, such as, for example, the presence of clitic object pronouns in the case of Romance languages.
Recall that the TPM definitively rejects the idea that transfer happens in a property-by-property manner and as such it predicts non-facilitative transfer in the domain of syntax.

The proposal that some basic properties of L3 syntactic structure can serve as one of several linguistic cues from the L3 input that aids the parser in determining typological proximity for transfer early on is perfectly in line with this.

By stipulating that the syntactic information used early on are those syntactic properties that are detectable from the earliest of L3 exposure, one need not “wait” for significant exposure to the L3 for syntax proper to play a deterministic role in the unconscious assessment of typological proximity.

To be sure, syntactic structure is offered as the final of four possible linguistically based cues used unconsciously to determine typological proximity precisely because syntactic structure sits at a “deeper” level of linguistic competence than the other cues we have highlighted.
SUMMARIZING

- TPM predications are based on an articulated proposal of how the internal parser determines typological proximity in linguistic terms, independent of actual language relatedness. **Typology is not (necessarily) an intuitive notion and need not be when linguistically defined.**

- Failure to do so limits the scope of the TPM to be applicable only when typological proximity is unambiguously obvious.

- If indeed the transfer behavior the TPM attempts to model is essentially a reflex or strategy to avoid redundant acquisition, then it stands to reason that the parser is indefinitely scanning the input to make decisions about which system is the “best bet” to transfer whether or not there is an actual relationship between the target and one of the existing system.

- The parser obviously has no preference or motivation to select what seems obvious based on anecdotal observations of similarity, but rather is charged with determining what would be the most economic choice linguistically.
CONSEQUENCES

- To cite just one, if transfer happens they way the TPM suggests and thus “misanalysis” is possible, this alone CAN make L3 acquisition unique in terms of the formal learning task. It also makes it SPECIAL (I did my homework, Carol and Kees!).

- For example, learning L3 Spanish with L1 French-L2 Persian and/or L1 Persian-L2 French might induce an environment based on Subset-superset relationships for the syntax of subjects that is “complicated” as opposed to L2 learning of Spanish for L1 English or L1 Persian learners.
LOOSE ENDS

- This proposal places a large burden on knowing the structures of all three languages for the researcher to calculate “how” the parser determines typological proximity.

- Do all learners/parsers use the same “similarities”, and must they?

- What happens in pairings where it is fair to claim that there is relatively equal typological crossover?

- Of course, all of this embodies an empirical question; don’t believe me, together let’s test this proposal.
BEYOND THE NARROW QUESTION

- If the goal is to understand the process of adult additive multilingualism, this is merely a drop in the bucket.

- Future research that examines morphosyntax beyond the initial state is needed.

- Future research that looks into syntax at a deeper level is also needed; ie - does complexity of the domain play a role in subsequent development in L3.

- Future research that tests the same learners at the same levels and examines several domains of grammar within the same learners is also needed. This can get at my claim that transfer is of a complete system at one pass.
SOME OTHER QUESTIONS THAT L3 ACQUISITION CONTRIBUTES TO: PROVIDING NEW ANGLES

- Debates in A-of-A and critical period (see Iverson, 2009; 2010; Cabrelli Amaro and Rothman, 2010; Giancaspro and Halloran, 2012).
  Comparing and contrasting HS-L3ers to adult L2-L3ers.

- Debates on UG accessibility (Cabrelli-Amaro et al. 2008, 2009)
  Examining what is available at the initial stages of transfer by comparing L2 and L3 learners while keeping the L1 constant and ensuring that only the L2 could provide the features at stake for the property being tested in the L3.
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SELECTED REFERENCES


SELECTED REFERENCES (CONT.)


