

Some Unresolved Issues in an ELT New Media Age: Towards building an interlanguage semantics

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INTRODUCTION

ELT teachers, like all of us, are in the situation that is correctly called “DATA DELUGE” (Gleick, 2011; Nunberg, 2011). We are in a data-deluged digital world, a world of increasingly large data sets, and we need to learn to manage them. Our students? It is worse for them; they are buried in these new SMART hand-held mobile devices and who knows where that will lead²³⁷? I would like the reader to ponder this phrase:

VAST AMOUNTS OF DATA IN A DATA-DELUGED DIGITAL WORLD

Now, add consideration of interlanguage your learners are producing in bulk, and you come to my initial premise for this paper, simple in principle but one that can lead to great tension in practice:

In order for ELT teachers to make intelligent pedagogical decisions, IE, more targeted teaching practices, teachers MUST understand and manage the vast amount of interlanguage data (written and oral) that pour out of the learners in front of them. I would now like the reader to ponder this phrase:

VAST AMOUNTS OF INTERLANGUAGE DATA IN A DATA-DELUGED DIGITAL WORLD

If we think of interlanguage data as information, we can't help wondering: How will we cope with vast amounts of this type of interlanguage information, amongst a vast number of other information, in a new media age? In a context where media and technology develop daily? If we take the “Fundamental Difference Hypothesis” (Bley-Vroman, 1983) seriously, then NO NL NOR TL CATEGORIES CAN BE ASSUMED. We are thus into category proliferation, as well. This becomes exponentially true if we conceive of interlanguages as types of “intersystems” that are basic to all types of learning. Where do we begin?

First, here are the main themes I wish to put forward in this paper:

- - a. There are a series of unresolved sets of issues in ELT & SLA with many if not most of these issues perspicaciously previewed in the earliest literature.
- - b. None of these issues can be resolved without a serious interlanguage semantics, which we do not see at all.
- - c. Maybe, just maybe, new media and new predictive technologies can help resolve some of the difficulties we have getting at interlanguage semantics and interlanguage intention.

Though they are often more short-term product oriented, if we can, we should seriously consider joining forces with the many computational entrepreneurial efforts that often have resources which we lack, especially those trying to make sense of semantic problems in private computational endeavors²³⁸.

In trying to figure out what classical issues are still unresolved for today's world, my method is to start historically, attempting to dialogue with MY “FOUNDING TEXTS” (Selinker, 1992)²³⁹. This is not history per

²³⁷ There are some student behaviours that are beginning to drive teachers I know, a bit mad. On the day I was writing this, the NYT had a poignant lead article discussing “adjacent, but essentially alone” texting behaviour: “Keep Your Thumbs Still When I'm Talking to You”, http://www.nytimes.com/2011/04/17/fashion/17TEXT.html?_r=1
Also, “Cyberbullying and “Facebook anxiety” are both apparently very real:
<http://www.google.com/search?hl=en&q=cyberbullying&aq=f&aqi=g-e6g1g-c1&aql=&oq=http://www.google.com/search?hl=en&source=hp&q=facebook+anxiety&aq=0&aqi=g5g-v5&aql=t&oq=FACEBOOK+ANX>

²³⁸ This joining of forces with the entrepreneurial world makes even more sense in an age when governments insist on cutting funding across the board, even at times, demonizing teachers (think, Wisconsin), and, importantly, when some of the best researchers are in such private endeavors. I am gathering a list of private sponsorship of recent computational conferences, primarily where semantics is involved.

²³⁹ In Selinker (1992) I have presented this method of dialoguing with founding texts in detail, and provide a much more complete listing and discussion.

se but an attempt to understand foundation issues in a current context. I say “my” founding texts, since I believe that each person will have DIFFERENT FOUNDING TEXTS. My suggestion is that each person discover which texts are founding texts for him or her, and what there is in the essence of each that speaks to current concerns, as these concerns evolve. So, my point here is that it is a worthwhile exercise to try to figure out what YOUR personal founding texts are and what issues in them speak to you, those that are international and those that are particularly important here in Sarajevo.

In using such founding texts efficiently and wisely, especially if you are new to ELT and SLA, it is important that you approach this subject with a sense of where we have come from, since “reinventing the wheel” is a continual hazard of all academic life²⁴⁰. We next turn, therefore, to an interlanguage précis, from the point of view, of some of my own founding texts.

I. AN INTERLANGUAGE PRÉCIS:

Starting from the beginning, let us consider what interlanguage is and where the concepts underlying “The Interlanguage Hypothesis” have come from. Remember, we are looking to dialogue with “founding texts”, heading toward trying to delineate sets of unresolved issues.

Though there are very different views of interlanguage in various literatures (see the discussion on machine translation below), one useful way to look at interlanguage is that:

Interlanguages are non-native languages which are created whenever people attempt to create meaning in a second language and are spoken wherever there is language contact.

It has long been my view (Selinker, 1972) that people create these highly-structured interlanguages when trying to express meaning in “meaningful-performance situations” in a second language.

DICTIONARY DEFINITION OF ‘INTERLANGUAGE

...(in second-language acquisition) the linguistic system characterizing the output of a non-native speaker at any stage prior to full acquisition of the target language. (Unabridged Random House Dictionary of the English Language, 1987, p.995)

These interlanguages historically derive from attempts to continually understand and up-date two central processes in SLA:

- 1) transfer from the native language (“language transfer”), AND
- 2) learners “getting stuck” in interlanguage patterns, often far from target language norms (“fossilization”).

Though transfer was known in Biblical times (the “Shibboleth” story, Judges 12:4-6), the earliest modern reference is Whitney (1881), with discussion and assumptions by many linguists since that time until Harris in 1954 produced a full treatment, “TRANSFER GRAMMAR”, including the open methodological use of translation, a method we have abandoned to our detriment²⁴¹. Weinreich(1953) interpreted transfer in a unique and important way, in terms of “interlingual identifications”: speakers in attempting to learn to speak a second language “make the same what cannot be the same”. This is cognitively profound.

An INTERLINGUAL IDENTIFICATION EXAMPLE (Weinreich, 1953): if a Russian, as often happens, regularly says [tʰaip] for English [tʰaɪp], “type”, he has made FOR HIM a palatalized /t/ the same as an aspirated /t/, even though to any observer, they are NOT the same. This fact puzzled Weinreich since it violates classical Saussurean principles of “valeur” and “system”, and this paradox has never been resolved, remaining a profound mystery, except to note that there are many examples in the literature of such interlingual identifications, some very bizarre.

It was recognized early that such processes occur on all levels of language, but it was not until Lado (1957) that we had the first clear language transfer hypothesis, spurring much research:

... individuals tend to transfer the forms and meanings and the distribution of

²⁴⁰ In my experience, it turns out that “reinventing the wheel” is less a problem in the online entrepreneurial world than the academic world, since the bottom line is never far away, which can be a tough master for a small concern.

²⁴¹ Translation is a neglected part of SLA methodology, but clearly it is used regularly by learners. It has long been my view (Selinker, 1992) that we would have a different SLA if translation were a prime ontological and methodological factor – an area waiting still to be explored, with translation taking on a concomitant role to transfer

forms and meanings of their native language and culture to the foreign language and culture.”

That view, basically has now been corrected to where transfer occurs NOT directly to any foreign language/culture - impossible in principle - but to the individuals’ developing and more permanent interlanguage (by extension, to interdialect/ interculture, see below). Out of Harris, Weinreich, and Lado one of first detailed attempts to empirically present thousands of exemplars of word order language transfer appears in Selinker (1966 revised as Selinker, 1969)²⁴². Corder (1967), amongst many other seminal concepts, flushed out the fledging language transfer concept, showing us that “errors”, one type of interlanguage form, are a “window to the learner”.

By contrast, the attempt to understand the phenomenon that apparently every learner experiences of (permanently) “getting stuck”, is more recent with scholars struggling for several decades to grasp it since it was named “fossilization” in the “Interlanguage” paper that codifies this and other interlanguage processes, developing a research agenda (Selinker, 1972, reframed as Selinker, 1992). Examples occur in Weinreich(1953) and Nemser(1971) but these scholars do not focus on the phenomenon of the cessation of interlanguage development, which occurs in spite of extensive exposure to target language input and massive opportunities for interactive production with such speakers. Without the concept of fossilization, I have long maintained (discussed in Long, 2003) that, there would be NO second language acquisition, that there would only be “language acquisition” with only one underlying cognitive architecture, not potentially two latent psychological mechanisms, as discussed in Selinker (1972)²⁴³. It is Han & Odlin (2006) and Han & Cadierno (2010) who bring fossilization up-to-date, showing that fossilization is differential or selective by context.

There is a long debate in second language acquisition about the place of universal grammar (Cf. eg. White, 2000), as to whether interlanguages are formed in terms of these principles, fully?, partially?, or not at all? But this tale is beyond our scope.

Related to this universal issue, is it indeed EVER the case that interlanguage equals the language of NSs? This was much discussed early on and still is not settled. There is an interesting number much discussed in the literature, sometimes called “the magical 5%” (passim), a suggestion presented in Selinker (1972) involving an estimate of the number of people whose interlanguage MIGHT equal that of native speakers (NSs) of the target language. Where this number comes from is a story, but one thing is clear and presented there:

“The vast majority” of second-language learners do NOT have an interlanguage that equals that of NSs of the target language.

The theoretical point is that, if such a subset as the 5% exists, they are on a different track than interlanguage learners and may be safely ignored when establishing the constructs underlying the “psychologically-relevant” data which control the formation and structure of the vast majority of interlanguages. Is this concept really true?

A most important characteristic of interlanguages, maybe their prime characteristic, is that they become independent of both native and target language. The empirical fact supporting this view, forcing us to recognize the existence of interlanguage, is that speakers attempting to produce a second language produce NEW FORMS that are neither in native nor target language. The [t^yaip] example above is a phonetic example of such a new form. A syntactic/phonological example involving primary stress is the situation of a Spaniard in London not being understood. He was overheard at a kiosk asking:

“How much cóst banana?”

NS: “Pardon?”

When he was not understood, the interlanguage Spanish-English speaker, appearing frustrated, uses his interlanguage resources and rephrases and says:

“How much dões cost banana?”

This is a particularly interesting example as the Spanish speaker has taken two English grammatical rules - - do-support and do-emphasis - - that NSs use all the time but he uses them in different idiosyncratic ways than NSs would and has thus created a new construction in his interlanguage English, “How much dões cost banana?”. Such examples have appeared a thousandfold in the literature. Everyone finds in their production data new forms, not in the native nor in the target language.

²⁴² I was Robert Lado’s student at Georgetown in the early 1960’s and this empirical work was produced under his supervision. I owe him much for his generosity and encouragement.

²⁴³ A complication is how fossilization and transfer might be linked. There has been at least one attempt to link these together as causative variables in terms of the “multiple effects” principle (cf. Selinker & Lakshmanan, 1992), but there is little empirical validation to date.

Interlanguage is not a monolith. There are various types of interlanguage though a complete typology is lacking, e.g. “learner languages” which usually occur in classrooms, often with rapid development are the type most language teachers are concerned with. There are so-called “fossilized interlanguages” where the vast majority of linguistic forms in the interlanguage continue for years with little or no change. All sorts of individual sets of variations exist in interlanguage and a needed research project is to produce an empirical typology. Note that various overlapping terms cover different members of the set²⁴⁴.

It gets more complicated when one considers “interdialect” with another of my founding texts: Trudgill (1988). Trudgill argues cogently for the existence of “interdialect” by citing “new forms” in second-dialect acquisition with many solid examples from Norwegian. I have seen this phenomenon with Americans in London who uniformly when first arriving, say “tube stop”, a form apparently not in American nor in British English (cf. “tube station”). The same cognitive phenomenon seems to happen when a person approaches a new culture, creating an “interculture” (Kramsch (1998) calls this a “C3”). This seems particularly apt for NYC (cf. Garcia & Fishman, 2001). Thus, it seems reasonable that in many types of learning, we can hypothesize that there exists cognitively the creation by learners of an intersystem. The creation of a new intersystem seems true – even for native speakers, apparently. Cummins (NYU, 2001 lecture) stated that academic language is “different and more complex” than conversational language and that there are “moving targets” for young students; the research literature shows that it takes “at least 5 years” to gain academic proficiency (cf. academic life as “a secondary culture”; Widdowson, 1983). One can compare the various case study linguistic examples of “Latino students in American schools” in Valdes (2000)²⁴⁵.

Above we looked briefly at what interlanguage is and where the concepts underlying the interlanguage hypothesis have come from. Remember, we are looking to dialogue with “founding texts”, heading toward trying to delineate sets of unresolved issues. Next we delineate such issues.

II. SOME UNRESOLVED ISSUES:

Following from the above, for me, here are 10 pressing, unresolved (and overlapping) sets of issues in ELT and SLA from an interlanguage perspective, issues which have been with us from our earliest days, reframed if possible for current concerns²⁴⁶:

AREA 1: How much, and what sort of data is required for “effective SLA” in terms of the learner’s “internal syllabus”? (Corder, 1967)

WHICH LEADS TO:

- - How should we conceive of the dimensions and pathways of a learner’s internal syllabus?
- - How should we relate these to the various syllabi of teachers and school systems?

AREA 2: Since input ≠ intake (Corder, 1967), how exactly does a learner edit input?

WHICH LEADS TO:

- - How do we, in a principled way, understand and treat learner output when it is “comprehensible” and when not? (Swain & Lapkin, 1995).
- - What exactly are the effects of input and interaction as learners attempt to convert input into intake (Gass & Madden, 1985; Mackey & Polio, 2010)?
- - What happens to output, when it develops towards some desired “target” V. when it remains partially or completely unaffected by language exposure (Han, 2003)?

²⁴⁴ The best known are “transitional competence” (Corder 1967) where development is emphasized V. “approximative system” (Nemser 1971) where fossilization (unnamed) appears to be more dominant.

²⁴⁵ My favourite example is from a task where a student named Elisa has “to write about her school or her family” and Valdes reports that the particular text the student writes: “... reflects Elisa’s spoken language and her confusion between spoken and written English. The use of a for I, for example in: a learn a lot of English AND a do (esperimin). The text presented “revealed that she produced a schwa-like sound for the pronoun I in speaking. She then transcribed this sound both as a and I (Valdes, 2000, 97). Note variable use here: we get a do (esperimin) and I like math. Valdes also shows expected “transfer of native language syntax”.

²⁴⁶ I would really like feedback at the above email on this point of reframing for current concerns.

AREA 3:

-- What happens initially in a second language (Corder, 1967)?

WHICH LEADS TO:

-- Is Weinreich's (1953) concept of "interlingual identifications", the fascinating and attested behaviour on the part of learners of "making the same what cannot be the same"?

-- Or, is Corder's idea of (to put it in more current terms) "matching" correct?
ie. that one looks for what one already has in the input correct?

-- Do universals of some sort kick in? (Adjemian, 1976 and all that UG SLA literature) OR is prior linguistic knowledge and information just too powerful, at least in some cases?

AREA 4:

-- When we do have attested influence from prior linguistic information, called "language transfer", how is it governed? (Lado, 1957)

WHICH LEADS TO:

-- Does the activation or blocking of transfer relate in any way to universal grammar principles of any kind? (Adjemian, 1976)

-- Where there are at least two interlanguages involved in a multilingual context (Cenoz, et al, 2010), what principles block transfer from NL and permit transfer to go through from Interlanguage₁ to Interlanguage₂ in the various and common multilingual settings²⁴⁷?

AREA 5: Is it true that variation is a main characteristic of SLA (Tarone, 1983; 2004) and how is that to be integrated into any SLA theory?

WHICH LEADS TO:

-- Do we in fact see more and different types of variation in SLA, if like NS variation, every level of language shows interlanguage variation?

-- In the acquisition of sociolinguistic variation by L2 learners, is there indeed "considerable acquisitional difficulty" in one type of variation as opposed to another (Howard 2004)?

-- If it is possible to successfully teach teachers how to do "language learner analysis" (Tarone & Swierzbis, 2009), how exactly do we relate that endeavor to the outcomes of learners?

AREA 6: In general, how should we understand getting stuck in an L2 (fossilization/ stabilization) often far from target norms and often with variable results amongst learners, even in the same context? (Selinker, 1972, 1992).

WHICH LEADS TO:

-- Why is it that such a large percentage of learners seem to get stuck in an L2, often far from target norms? Are factors like identity and social factors involved?

-- How should we understand the relationship between development and getting stuck in an L2?

-- Are there separate cognitive structures, some latent (Lenneberg 1967), perhaps that would account for differential and fossilized results in SLA? (Lenneberg, Selinker, 1972)

-- Is this process of fossilization and its various relationships like other forms of learning or is there something "special" about SLA?

AREA 7:

-- Where does a more recent focus on "multilingualism" (Cenoz, et al, 2010), "English as a Lingua Franca" (Seidlhofer, 2004; Jenkins, 2007) and "translanguaging" in immigrant communities (Garcia, 2008) fit in?

WHICH LEADS TO:

-- Does the newer emphasis on more than two languages change everything in terms of governing SLA metaphors, as Jenkins argues?

²⁴⁷ Setting forth the principles as to when NL transfer is blocked allowing interlanguage transfer to occur remains an unanswered challenge in colleagues who put forth a multilingual perspective. One principle might be "similarity of phonetic form" from interlanguage to desired target, though that will have to wait until another occasion.

AREA 8:

- - Thus, how can anyone have all that attested knowledge of any language, say English, in his or her head? (Culcover, 2004, 135)²⁴⁸.

WHICH LEADS TO:

- - Is that a reasonable way to think of storage in long term memory?
- - If we multiply that for a multilingual how do people keep it all sorted?
- - If they don't ... , well, apparently, they mostly don't.

AREA 9:

- - What would a clearly specified "theory of learning" for language learning look like?

How would we handle the SLA uniqueness (?) of practice NEVER making perfect?

WHICH LEADS TO, what is the place of:

- - A behavioral theory of learning based on ST-R relations? (Fries, 1945)
- - A more cognitive theory of learning based on rule learning? (White, 1985)
- - A more socially-situated one based on stored and edited experiences? (eg, Gee & Hayes, 2011)

If a mixed model is desired, with even behavioral theory having a place covering the learning of some interlanguage structures, would the opposition "context-dependent" V. "context-independent" make more sense in the learning of complex systems²⁴⁹?

AREA 10:

- - How does one treat in a pedagogically-relevant way SLA results and still unanswered questions (Corder, 1973 and passim in the literature), here particularly reframed as understanding and using learner data as information in pedagogical contexts?.

WHICH LEADS TO:

- - What are the principled criteria that allow one to use SLA research results in a language classroom?
- - How does one make sense to teachers of the shared space between research and teaching given the lack of time and energy teachers have given the difficult daily task of lg teaching: teaching 18+ hours a week, heterogeneous classrooms, pressures of hassled administrators, of angry parents ...?

Other issues abound of course, which we have no space to discuss²⁵⁰. In Section II., we have focussed on sets of unresolved issues, issues where over the decades we have made some profound, but piecemeal, progress on the above issues for sure, but resolved? Not a one! If we had, we would have the equivalent of a periodic table and we don't. It is my assumption that we are blocked from making progress in every area above by our lack of understanding of the making of meaning in interlanguage. Consider, VARIATION: How can we know that two forms that are variants in NL or TL categories are variants in interlanguage categorization? And, the reverse is certainly true, where you have interlanguage synonymy and TL variation. To alleviate that in each area, we need to move more seriously to: THE INTERLANGUAGE MAKING OF MEANING WITHIN COMPLEX SYSTEMS.

If we want to take the basic premise of ELT teaching sketched above seriously - viz. that teachers, in order to make intelligent pedagogical decisions, that is, more targeted teaching practices that will relate closer to the learner's "built-in syllabus" (Corder, 1967), teachers must understand the vast amount of interlanguage data (written and oral) that pours out of the learners in front of them. Interlanguage intention and meaning must become a central part of that, since meaning is a central element of most, if not all linguistic activity.

III. TOWARDS AN INTERLANGUAGE SEMANTICS

²⁴⁸ There is ample evidence that writing down the attested knowledge of any native language takes thousands of pages (e.g. Huddleston & Pullum, 2002).

²⁴⁹ I am very sympathetic to the attempts to treat SLA as a "complex system", rather a series of complex systems, and like this quote: "The processes for language acquisition, use, and change are not independent from one another but form aspects of the same complex adaptive system" (Ellis, 2008), though I am not sure of where "adaptive" fits in. The major problem dealing with complex systems - one that drives systems people and neurologists nuts - is the coordination of all this information, especially in a reasonable model of the brain.

²⁵⁰ Early on there were some attempts at dealing with age effects in the creation of interlanguage (Hakuta, 1975 and Selinker, Swain & Dumas, 1977) and this strand of research has proven robust. Also, there are all sorts of methodological issues we will have to also leave aside here.

We next move to the making of interlanguage meaning, trying to capture the notion of an “interlanguage semantics”, to draw upon learner intention being compatible, if we can, to intelligent automatic coding²⁵¹.

To date, what we have in SLA in the area of semantics is mostly lexically-oriented²⁵², but we must dig deeper. We must attempt, no matter how hard it is, to go into its most deep representations to find out **what is going on** with our learners as they try to express intention in meaningful performance situations. In order to understand the mechanisms that create knowledge of interlanguage and drive its restructuring (when it occurs), we must code and analyze “interlanguage in its own right”, here in the semantic domain as well. “Fundamental Differences” between the acquisition and structure of interlanguage V. native language needs a principled approach to such coding and analyzing! You get out of this comparative fallacy in principle, by NEVER assuming the correctness of target-language (or even native-language) categories to analyze interlanguage in its own terms? If we can move semantics of interlanguage into a sort of propositional logic, we find interesting work on machine translation. I am thinking now of the work by GOOGLE on machine translation which turns on their view of interlanguage and interlanguage semantics in a very different context:

http://de.wikipedia.org/wiki/Datei:Interlanguage_Semantics.svg

where, though detail is hard to access, what Google seems to do is turn text, especially English text, into PROPOSITIONS, and when a text is needed to be translated, then one does not go from language to language, but from text to propositional storage to next language, something to ponder as we move to trying to get at interlanguage semantics, to see if there are indeed more and less universal interlanguage propositions, independent of the various NSs.

The obvious problem with gaining access to an interlanguage semantics begins with the same difficulty as with any semantics: meanings, unlike sounds, are not physically manifest in sentences, either as manifested in sound or in graphic representation. One needs MENTAL DATA and cannot get away from that, requiring procedures to get at this mental data.

We start with the premises that:

- “meaning” is a central element of most, if not all linguistic activity.
- the “making of meaning” always occurs in a situation or in a context.
- a learner who wants to convert intentions into language uses his (often limited & idiosyncratic) linguistic resources in what is essentially a potential matching task.
- in order to be understood, he needs to turn those intentions into semantics and language to match the semantics he has with the semantics of the listeners of that speech or writing.

How are we going to restrict interlanguage semantics to some reasonable entity, to the meaning descriptions that learners create? In particular, we must include concepts of PRESUPPOSITION, ENTAILMENT, AND IMPLICATURES, as well as concepts of POLYSEMY, SYNONYMY AND CONTEXTUAL PARAPHRASE RELATIONS, IDIOMATICITY, AMBIGUITY and the like, concepts that in principle can become computational. A much later goal is to tie these concepts and relationships to interlanguage syntax, as it exists.

AN EXAMPLE WHERE MEANING GOES BEYOND THE LEXICAL²⁵³ into a deeper semantics of presupposition, entailments, implicatures, and the like. This example actually led to misunderstanding in an

²⁵¹ My experience here is limited to consultation on several LARGE INTERLANGUAGE DATA BASES in China and Japan, where I have seen first hand that Automatic Coding of Interlanguage involves multiple problems of the type hinted here, often involving semantic puzzles that remain unresolved (Cf. the papers by Tenfjord, et al, 2007; Izumi, et al, 2007). Additionally, I have explored two other new media areas: “distance online interlanguage analysis”, trying to develop a DOILA tool (Browne, Kinahan, & Selinker, 2002) and speech recognition by computer (Selinker & Mascia, 2002)

²⁵² I do not wish to imply by anything I say here that I am intending a criticism of the current lexical semantics, ie. vocabulary acquisition that we have in SLA. My point is that the knowledge we gain from studies of the lexicon in SLA is far from the whole story, ie. we are dealing with necessary but not sufficient information.

²⁵³ This example is from data in my extensive diary studies as are other examples presented here, unless specifically referenced otherwise, are from my diary studies gained mostly in ordinary conversation; they are mostly digitalized and details are available upon request at email above.

ongoing conversation, the source of data where interlanguage semantics must be coded in a divergent manner from native languages to get at underlying idiosyncratic semantic representation.

Consider the context of the following sentence: in discussing some friends, a native Italian speaker says:

-- "but now they are broken"?

Native speakers in the conversation clearly do not understand and they starts to ask what they mean. Several exchanges follow and it took awhile til one of the Native Speakers said: "oh, you mean they are broke."

"Ah" went everyone else there.

Now, in terms of this interlanguage semantics, there is a divergent association where "broken" in being coded semantically and must associated with "a person being broke" but ONLY IN THE INTERLANGUAGE²⁵⁴.

This sort of idiosyncratic interlanguage association, the semantic linking of various forms of the word "BREAK" differently in the native language and interlanguage cannot be predicted. This divergence between interlanguage (association of all the forms of "break") and native language (no necessary association) shows what a difficult learning problem this is, because in terms of linguistic entailment, as Huddleston Pullam (2002) so clearly describe NATIVE ENGLISH SEMANTICS:

1. "Frank broke the vase". ENTAILS

2. "The vase broke". AND

3. "The vase is broken".

but the sentence "Frank broke the vase" in Native English DOES NOT ENTAIL:

4. "Frank knocked over the vase.". Thus, says Huddleston & Pullum (2002, ...) in their massive and impressive grammar of modern English. But they do not include any information on the many and various multilingual forms of English.

By our extension to [+human} here, in Native English

1. "Frank is broke" ENTAILS

5. "Frank has no money",

but the grammatical form "broken" in:

6. Now they are broken". DOES NOT ENTAIL in Native English:

7. "Frank has no money"

as it does in this interlanguage.

What is the divergent grammar? Clearly the subject of the verb must be human, but does that cover it all the time. The IL speaker is making a cognitive connection that native speakers do not, i.e. between "broke" meaning no money and "broken" the past participle of the verb "break"; this is the core of the interlanguage analysis.

coded "broke", not necessarily "break" differently.

With this sort of "idiosyncratic association", we are back to Corder' idea (1973) of interlanguage as an "idiosyncratic" system, in this case, a semantic IDIOSYNCRATIC ENTAILMENT, but such a particularity related to ONLY ONE FORM OF ONE VERB. But, to generalize, if we see it here from someone who knows English very well, we are ready to assume that this will happen whenever particular forms of a word take on specific idiomatic meanings but only with some of its grammatical forms, which is surely widespread, eg. if you say:

8. "I am having trouble with my transmission."

you are probably talking about your automobile though there is nothing in the semantics of the core simple form "transmit" to tell you that.

This is the kind of "semantic thing" - UNEXPECTED INTERLANGUAGE ENTAILMENTS - - - that abound in interlanguage, that lead to misunderstandings, and that must be accounted for in an interlanguage semantics, coming within range of computational coding, especially that deemed "predictive".

The oral version of this paper attempted to explore some of the unresolved areas outlined in II. above, starting with the idea that:

²⁵⁴ Note that in this context, in native language semantics, it is "broke" only, and in certain contexts, but not "break" or "broken", that appently gets coded for the "no money" entailment.

AN INTERLANGUAGE SEMANTICS REQUIRES AT LEAST 5 THINGS:

1. an understanding of “information packaging” and how this works in interlanguage.
2. an understanding of “conversational implicature”.
3. an understanding of the ability to perform referential tasks (adequately?).
4. an understanding of how “semantic networks” are created and persist in interlanguage.
5. paraphrase relations in the interlanguage, and how they are the same or different for more standard languages.

These are some of the most important bits of interlanguage semantic information that must be coded in order to build an interlanguage semantics, one that in principle can be coded in ways that can be accessed by SMART predictive technology.

TWO FURTHER EXAMPLES: I have in mind such interlanguage semantic information as:

- - the coding of the academic idiosyncratic use of the word “claim” in certain kinds of linguistic contexts, where the absence of presupposition is the presence of error.

- - the unexpected use of reflexives inside a clause.

amongst other types²⁵⁵. I attempted to sketch out key variables, as I understood them that day, concerned with the issue of the creation of an interlanguage semantics relatable to developing technologies, especially where machine learning and predictive technology is involved.

This latter information technology perspective is developing daily and on the web page listed below my name, I will try to keep up-to-date information on what is true and what is false, as I understand it and compile it²⁵⁶. It is incumbent upon us to try to make as clear as possible the details of the applied aspect of the basic premise above, especially their relation to, that for more targeted teaching practices that will relate closer to the learner’s “built-in syllabus” (Corder, 1967), teachers must understand and manage the vast amount of interlanguage data (written and oral) that pour out of the learners in front of them, and the amounts and types of information relating to interlanguage semantics, machine learning, and predictive technology such teachers need to master and for what purposes.

Below, I have added computational references which I hope will be helpful and would appreciate feedback, particularly the value of annotating those which intersect the unresolved areas presented in II. with computational semantic concerns.

²⁵⁵ Interlanguage coding of verbs like “claim” presents a case of “absence without presence” (Selinker,) due to “transfer of training”, where teaching PREVENTS a presupposition known to technical writers, even to many NNS proficient technical writers. However, most NNS students I have worked with in technical & academic writing use “claim” as a synonym for “show” or even “prove” and do NOT know that “claim”, in certain constructions, presuppose that you are about to deny, or at the least question, the proposition. A classical example would be the sentence:

“Chomsky claims that syntax must be autonomous of semantics.”

where I the writer imply that I doubt it, without directly saying so, but note that the peculiarity that this truth condition may only hold in second and third person. EG, above, I have used “claim” but with the first person subject and there was no presupposition I was about to deny my own claim: “This is the kind of thing - unexpected entailments - that we claim abound in interlanguage, that lead to misunderstandings, and that must be accounted for in an interlanguage semantics.”

Transfer-of-training comes in causally where grammar books, even enlightened ones such as Conrad & Biber (2009) miss this entailment and lump “claim” together with other verbs such as “argue, imply, postulate, indicate, propose, contend, maintain, suggest, hypothesize” under the vague heading of: “reporting verbs” with a “certainty level” of “less certain”, several of these verbs do not have this presupposition of denial.

Another intriguing type of construction where interlanguage is involved concerns sentences like: “You put myself in this terrible situation.”

where without knowledge of interlanguage intention, the interlanguage is inherently ambiguous. You have to know that this NNS uses the NS “island constraints” (Ross, 1968; Lakoff, 1971; amongst others) in the standard manner, NOT violating the standard syntactic rule but only when intending emphasis substituting “themselves” for “them”, using the reflexive pronoun emphatically, allowing “the pragmatic use of reflexive pronoun to take precedence over the syntactic rule forbidding reflexive pronouns in that slot in that construction.” (I thank John Lawler for discussing this issue with me.)

²⁵⁶ If you desire more current information than I have time to code, such as updated reference lists, please email me at the above email address.

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This is a unified bibliography for both this paper and for oral presentation and its handout, which I can send to readers. Also, I have annotated several entries as an aid for new readers.

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