On ineffable predicates: Bilingual Greek-English code-switching under ellipsis

Jason Merchant, University of Chicago
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Abstract

In Greek-English code-switching contexts, Greek verb phrases can antecede English verb phrase ellipsis, even when the latter would not be well-formed. These facts, together with others from the previous literature, are compatible with a theory of ellipsis that posits an identity relation stated over abstract syntactic structures: mere semantic identity is too generous and fails to block sentences which are judged unacceptable.1

The nature of the identity (or antecedence, or parallelism, or recoverability2) condition on ellipsis has always been at the center of a great deal of work on ellipsis, as the answer has the potential to inform our theories of syntax and semantics (see van Craenenbroeck and Merchant 2013 and Merchant 2009 for recent overviews of the literature). Several strands of work have identified a number of areas in which it seems reasonable to require that there be some kind of syntactic identity imposed between the antecedent and the elided material: see especially Chung 2013 and Merchant 2013 for discussions from Chamorro and English (and Kehler 2002 and Lasnik 2003 for important earlier contributions). In this paper, I build on some new observational data from code-switching in two Greek-English early, balanced bilingual children and show not only that the data are compatible with these syntactic identity accounts and problematic for purely semantic identity accounts that eschew abstract syntactic structures, but that the data also support a view of the syntax-morphology interface that permits feature bundles to be active syntactically without being.

1Special thanks to my family, without whose spontaneous utterances this paper would have no data to analyze, and to Anikó Lipták for organizing the Leiden workshop on ellipsis in October 2013, where parts of this material were presented, and to the audiences there and in Chicago for comments and suggestions.

2Although these four terms can be taken as interchangeable here, and probably should be so construed in much of the work on ellipsis of the past forty years, different strands of work have tended to use one or the other without acknowledging the other terms and without any consideration whether they do in fact cover the same ground.
realizable by the morphological component: there are predicates which are ineffable—they cannot be pronounced.

One source of insight into the identity condition on ellipsis comes from the phenomenon of code-switching in bilinguals. Some form of bilingualism seems likely to characterize the state of most human societies throughout history, from the Greek rule of the Egypt of the Rosetta stone and earlier (Adams et al. 2002) to modern urban communities; it is estimated that the majority of humans today are multilingual for some purposes (Grosjean 1982; Edwards 2004). Multilingual speakers are capable of mixing their languages or code-switching. Code-switching (or code-mixing; see Muysken 2000), the midstream changing of language code from one to another within a single utterance, is widespread, rule-governed, and an important source of information into the nature of grammatical knowledge (in addition to its well-studied functions as an index of perceived, constructed, and performed social and individual identity and identification). Work on the morphosyntactic properties of code-switching can roughly be categorized into two groups: analyses that posit constraints or rules that are specific to the phenomenon of code-switching itself, and those that claim that there is no such set of rules specific to code-switching per se, but rather that the attested patterns are simply those that emerge from the union of the constraints and patterns that each language’s grammar imposes or consists of to begin with (see MacSwan 2004 for an overview and discussion). In this context, data from ellipsis across languages provides a valuable source of insight for the analyst, since such code-mixed and code-switched ellipses give rise not only to structures that would otherwise be anomalous in the grammar of only one or the other of the codes used, but even to structures that are judged unacceptable even in code-mixed variants.

An example of the former kind of structure is furnished by code-switching between Spanish and English: a switch can occur after a light verb hacer ‘do’ in Spanish into English, as observed by Pfaff 1979:301:

(1) ¿Por qué te hicieron beat up?
    for what you.acc did.3p beat up
    ‘Why did they beat you up?’

A structural equivalent to (1) is not possible in a monolingual utterance of Spanish, however (where hacer + infinitive has only a causative reading, not a simple transitive one), as Pfaff 1976:254 points out.3

(2) *¿Por qué te hicieron catiar?
    for what you.acc did.3p beat.up
    (‘Why did they beat you up?’)

3See Annamalai 1971 for an early contribution; and for recent discussion of the syntactic constraints on such switching, see MacSwan 2004, van Dulm 2007, González-Vilbazo 2005, and González-Vilbazo and López 2011, 2012.
The example in (1) also shows that grammatical dependencies, including those typically analyzed as involving movement, can span a code-switch boundary: in (1), the accusative pronoun te is the object of beat up, but appears proclitically on the finite Spanish verb.

The same pattern can be observed in Greek-English code-switching, where the verb kano 'make, do' can be used as an auxiliary to a bare verb form in English, as Seaman 1972:167-168 documents:

(3) ὅτι ὑμείς ὀρέο, ὅταν ἔχετε τape

\*whatever think.PRES.1p that is nice it do.PRES.1p tape

‘Whatever we think is nice, we tape record it.’ (Seaman 1972:237)

Unlike Spanish, there is no equivalent to these structures in monolingual Greek: kano can take only nominal objects in Greek (and Greek lacks infinitives).\footnote{Seaman shows that kano also occurs with English nouns, in a pattern reminiscent of the Greek. For examples like (3), it is most likely that tape is intended here as a verb, given the meaning; otherwise, it would mean something like ‘we turn it into a tape’, which the continuation (which Seaman translates as ‘... and what we don’t like, we erase’) makes unlikely. This confound is not seen in examples like (i), judged acceptable by a speaker today, and which is modeled on (ii), a sentence recorded in Seaman 1972:238:}

It has also long been known that bilinguals can use VP-ellipsis structures in English with an antecedent VP in the other language, as in the following Spanish-English code-switching examples:

(4) A: Estudie ahí! ‘Study there!’ (Pfaff 1979:313)

\*study.imp.2s there

  B: No, I can’t.

(5) A: Vamos a jugar! ‘Let’s play!’ (Wentz and McClure 1976:656)

  \*go.1p to play

  B: I don’t want to.

Such data would seem to indicate that the relation between the ellipsis and its antecedent must be one of semantic equivalence: if and only if the intended meaning of missing elements can be recovered from the context (here, the linguistic context, but also permitting nonlinguistic antecedents in some circumstances) can the verb phrase be omitted (or go

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(i) θα to kánume celebrate tin álì kiriakì.

  FUT it do.PRES.1p celebrate the other Sunday ‘We will celebrate it [=Easter] next Sunday.’

(ii) kánume celebrate to pástå

  do.PRES.1p celebrate the Easter ‘We celebrate Easter’

Note that examples such (i), which have a Greek clitic object associated with English verb, as well as the parallel case in (1), show that grammatical dependencies such as movement can span a code-switch boundary in the light verb construction. Such examples argue against the contention of Muysken 2000:ch. 7 that these structures involve paratactic adjunction of e.g. ‘celebrate’ to a main verb use of kano. González-Vilbazo and López 2012 show particularly clear examples of such extraction dependencies from an ‘integrated’ VP (which contrast in this regard with a unintegrated VP).
unpronounced). Since the Spanish utterances introduce such meanings into the context, the English ellipsis is licit.

But not everything is permitted when switching codes between an antecedent and an elided expression, even when the intended meaning is easily recoverable. González-Vilbazo and Ramos 2012 conducted an experiment which shows that while code-switching into the elided sentential portion of a constituent question is permitted—that is, that sluicing is found in utterances that feature code-switching—such code-switching is subject to an unexpected constraint. To understand the nature of this constraint, note that it is possible to finish a sentence after the wh-phrase in either language, and the case of the wh-phrase will be the one that the pronounced verb assigns: for example, if the verb is the German verb *drohen* ‘threaten’, which assigns the dative to its animate object, the wh-phrase will appear in the dative, as in (6a). If the verb is the Spanish verb *amenazar* ‘threaten’, which assigns the accusative, the wh-phrase will appear in the accusative, as in (6b).

(6) a. *Juan amenazó a alguien, aber ich weiss nicht, wen Juan gedroht hat.*
‘Juan threatened someone, but I don’t know who Juan threatened.’

b. Juan amenazó a alguien, *aber ich weiss nicht, wen Juan amenazó.*
‘Juan threatened someone, but I don’t know who Juan threatened.’

The constraint on ellipsis which is unexpected from the point of view of a semantic identity theory is the fact that if the clause following the wh-phrase is elided, as it is in sluicing, then the wh-phrase can appear only in one form: the form that the verb in the language of the antecedent determines. In this case, only the accusative is possible:

(7) a. *Juan amenazó a alguien, aber ich weiss nicht, wen. Juan threatened ACC someone but I know not who.DAT*
‘Juan threatened someone, but I don’t know who.’

b. Juan amenazó a alguien, *aber ich weiss nicht, wen. Juan threatened ACC someone but I know not who.ACC*
‘Juan threatened someone, but I don’t know who.’

González-Vilbazo and Ramos 2012 analyze this fact as a straightforward consequence of a syntactic identity condition on ellipsis: the elided material must be syntactically identical to its antecedent. The missing material, in other words, must contain the same Spanish words that the antecedent contains, and cannot, under a potentially more permissive semantic identity condition on ellipsis, contain the semantically equivalent German words (which it would however be possible to pronounce deaccented, under the semantic relation that governs focus structures). The structure of (7b) is (8b) (where struck-through text indicates ellipsis); the fact that (7a) is unacceptable indicates that a structure such as (8a) is not licensed by the grammar:
(8) a. *Juan amenazó a alguien, aber ich weiss nicht, wen Juan
    Juan threatened ACC someone but I know not who.DAT Juan
    gedroht hat.
    threatened has
    ‘Juan threatened someone, but I don’t know who Juan threatened.’

b. Juan amenazó a alguien, aber ich weiss nicht, wen Juan amenazó.
    Juan threatened ACC someone but I know not who.ACC Juan threatened
    ‘Juan threatened someone, but I don’t know who Juan threatened.’

Nee 2012 gives a similar paradigm from sluicing in Spanish-Zapotec code-switching, from her investigation of this phenomenon with bilingual speakers in Teotitlán del Valle. Zapotec has predicates that alternate between syntactically transitive and intransitive uses, such as the verb for ‘speak’ or ‘speak to’: like English, Spanish would require a preposition to mark the expressed object of the relation, but in Zapotec this is a simple transitive, seen in (9).

(9) Juany gunien Maria. (Nee 2012:43 (112))
    Juan spoke.to Maria
    ‘Juan spoke to Maria.’

When such a verb is used in its intransitive form, its clause may antecede a sluiced clause embedded under a Spanish interrogative pronoun corresponding to the notional object, as seen in (10a) (see Merchant 2013 for discussion of the properties of such implicit arguments under ellipsis). If this sentence were the result of the ellipsis of a Spanish equivalent, we would expect such bare interrogative pronouns to be illicit, given that Spanish does not allow preposition-stranding (as shown in (10b)).

(10) a. Juany gunien, pero no sé quién. (Nee 2012:43 (115))
    Juan spoke but not know.Is who
    ‘Juan spoke, but I don’t know who to.’

b. *Juan habló con alguien, pero no sé quién habló con.
    Juan spoke with someone but not know.Is who he spoke with
    ‘Juan spoke with someone, but I don’t know who he spoke with.’

Nee concludes that the ellipsis found in (10a) must be targeting a clause in Zapotec, parallel to the Zapotec antecedent clause:

(11) Juany gunien, pero no sé quién Juany gunien.
    Juan spoke but not know.Is who Juan spoke.to
    ‘Juan spoke, but I don’t know who to.’

5See van Craenenbroeck 2010 for discussion of the significantly more complex picture than is presented here.
As Nee 2012 documents, the reverse situation is also consistent with González-Vilbazo and Ramos’s observations: as (12) shows, when the antecedent is in Spanish, the elided material must correspond to a licit Spanish extraction dependency, even if the dependency is headed by a Zapotec wh-phrase. This is true despite the fact that Zapotec has a simple transitive form that would license a non-preposition-marked interrogative pronoun, as we saw in (11).

(12) *Juan habló con alguien, per kednanadia tu habló con.
Juan spoke with someone but not.know.Is who spoke with
(Juan spoke with someone, but I don’t know who.)

In such cases, the entire PP must be extracted (since Spanish is not a P-stranding language); nevertheless, the word order found internal to the PP is the Zapotec one (NP P), not the Spanish (P NP), as seen in the pair in (13).

(13) a. Juan habló con alguien, per kednanadia tu cun habló.
Juan spoke with someone but not.know.Is who with spoke
‘Juan spoke with someone, but I don’t know who.’

b. *Juan habló con alguien, per kednanadia cun tu habló.
Juan spoke with someone but not.know.Is with who spoke
(Juan spoke with someone, but I don’t know with who.)

These facts give support to theories of ellipsis resolution that incorporate a syntactic matching condition of some sort, such as (14) (either operating alongside of a semantic condition, or in place of one, or complementing one in certain circumstances):

(14) A phrase E may be elided only if E has a salient antecedent A and the LF of A is isomorphic to the LF of E, modulo F-marked material.

Such a condition straightforwardly captures the data just presented. Consider the German-Spanish cases in (7) above, for example. If the roots involved in the words drohen and amenazar are different, then the LF structures will not be equivalent, and, by (14), ellipsis will not be licensed. And even if the roots themselves were to count as identical (a doubtful proposition), the German verb drohen requires verbal structure which is different from that of the Spanish verb amenazar, under the usual analyses that the extended verbal projections of dative-assigning verbs differ from that of accusative-assigning

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6See Merchant 2009 for a survey of these and other alternatives.
7Such a condition is well known to be reducible to more general conditions on felicitous focus-marking in discourse, along with an economy condition on accommodation of antecedents, if focus alternatives are themselves LF structures. Accommodation is necessary not just for certain mismatches, discussed in the literature, but also for dealing with exophoric ellipses (ellipses that lack an overt linguistic antecedent; in other words, which occur linguistic-discourse-initially, in Stainton 2006’s term). See Johnson 2013 for discussion.
8As González-Vilbazo and Ramos are careful to point out, their results are also consistent with much weaker claims, including requiring only the case assignment properties be uniform (cf. Chung 2013). The data in the present note do not necessitate a more fine-grained theory, however, and I will not attempt a comparison here.
verbs (whether because they differ in the \( v \) which they co-occur with, responsible for dative vs. accusative, or for some other reason, is immaterial to (14)). The data in (7) also tell against a theory that would incorporate translation from the language of the antecedent to the putative language of the elided material: if such translations were possible, we would expect, contrary to fact, the example in (7a) to be well-formed.

One possibility for accounting for these data without resorting to a syntactic recoverability constraint of the kind in (14) would be to posit a very strict semantic recoverability condition, one that would deny the possibility of recovering the exact meaning of the missing German material on the basis of the actual meaning of the Spanish antecedent. It may well be true that the truth conditions or other semantic or pragmatic aspects of the Spanish clause differ from those of the German equivalent (the struck-through material in (8a), for example). While showing this for truth conditional meaning may be difficult, it is surely the case that the two differ in their pragmatic functions (if only simply by making use of different language codes). But since such mixed-language antecedents allow for focal deaccenting, and since we can thus conclude that they participate in the usual mechanisms of accommodation that such phenomena require, it is unclear why ellipsis would not have access to those mechanisms in these cases as well. The usual answer to such concerns is to require that there be some material, local to the elided material (typically inside the structure over which its focus alternative set is computed) which is not focussed, and which guides the accommodation of a new antecedent by virtue of its being unfocussed. This material is known as the accommodation-seeking material, and one could claim that (7a) lacks any such material. Such an approach is very close to the spirit of (14) indeed. If no accommodation-seeking material is present, then no accommodation of a differing language antecedent can be made, and we predict that the only material that can be elided is that which matches in language that of its antecedent.

But in either case—whether the ellipsis is resolved by identity to other linguistic material exactly or to an accommodated version of such material—the question is whether such an account is general enough to capture all the attested possibilities for ellipsis whose antecedent is in a different language. Can all such cases be assimilated to code-switching at the ellipsis site into the language of the antecedent?

A large set of data from Greek-English code-switching would allow for such an analysis. Greek, like English, has a form of predicate ellipsis after the copular verb *ime* ‘be’: an understood NP, PP, or AP predicate can be elided in this position; this is illustrated for AP predicates in the examples in (15) (see Merchant 2014 for more discussion of the monolingual Greek facts: these predicate ellipses are not restricted to question/answer pairs, for example). The juncture between the verb and its complement is also a licit point at which code-switching can occur, as seen in (16).¹⁰

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⁹Naturally, accounts that use accommodation take some pains to limit its extent, typically by defining some limited domain inside which the accommodation-seeking material must exist, where accommodating-seeking material is not focus-marked: in the case at hand, the claim would be that the domain is the CP dominating *wem*, and that *wem* itself is focus-marked, and as such cannot trigger accommodation.

¹⁰Just like its monolingual Greek counterpart, (16) presupposes that the speaker is female; this poses a
These facts lead to the correct expectation that the English predicate ellipsis after be can be resolved to the Greek adjectival predicate:

(17) A: Ise eksandliméni?
    be.PRES.2sg exhausted.fem.sg
   ‘Are you exhausted?’
B: Ime (eksandliméni).
    be.PRES.1sg exhausted.fem.sg
   ‘I am (exhausted).’

The same pattern is found in code-switching from English into Greek, and in ellipsis with an English antecedent and Greek elided predicate:

(18) Ime exhausted.
    be.PRES.1sg
   ‘I am exhausted.’
(19) A: Are you exhausted?
B: Ime.
    be.PRES.1sg ‘I am.’

But other sets of data are not amenable to an account that relies solely on otherwise well-formed code-mixing. This can be seen by considering the following attested example from a Greek-English bilingual dialog between two adults:

(20) A: Píres tin tsánda mazí su? ‘Did you take the bag with you?’
    took.2s the bag with you
B: Yes, I did.

On purely internal structural grounds, it would appear that the elided verb phrase would have to consist of elements drawn from the lexicon of English, and equivalent to its unelided (and indeed felicitous) counterpart (21) (see Sag and Hankamer 1984 and Chung 2000 for discussion of the ‘sloppy identity’ of the pronouns in such examples).

potential puzzle for monolithic theories of gender agreement, which would require that there be two English pronouns I: one for males and one for females (mutatis mutandis for you). Theories that allow agreement ad sensum, on the other hand, handle this fact with no trouble. See Pfaff 1979:305 for a parallel example in Spanish.
(21) Yes, I did take the bag with me.

Furthermore, there is no variant of B’s response that would involve code-switching into Greek after the English auxiliary *did*: the closest one might come is (22a), involving the regular finite inflected verb form, or (22b), which shows the bare stem form of the verb (a form that does not occur as a free-standing word in the language). Both variants are are ill-formed. Greek, unlike Spanish and English, lacks an infinitival verb form. Unlike the cases familiar from the literature, or the facts in (17) or (19), no possibility for a code-switched matching structure exists:

(22)  a. *Yes, I did *pira tin tsánda mází mu.
      take.ACT.PERF.PAST.Is the bag with me

    b. *Yes, I did *pern tin tsánda mází mu.
      take[stem.form] the bag with me

But positing a VP consisting of English lexemes which is elided on the basis of a parallelism relation to a Greek antecedent runs afoul of the syntactic identity condition in (14) or any variant of it. (And such a putative English structure would also encounter difficulties from many semantic resolution algorithms, or at the very least require substantial non-trivial additional assumptions about cross-linguistic semantic equivalence.) Instead, what is needed is the following representation, in which the elided phrase is a vP (sister to Voice, where < > indicates ellipsis) containing the Greek lexemes √PERN (the stem underlying *pira ‘take’ and √TSANDA ‘bag’ and the definite article (for simplicity, I omit the adjunct PP and the trace of the subject in specvP).

(23)

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TP
  I T'
    did VoiceP
      Voice <vP>
        v VP
          √PERN DP
            D[def] √TSANDA
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Such a structure satisfies the identity condition on ellipsis in (14) if the antecedent VP in (20) contains a VP with the root $\sqrt{\text{PERN}}$, realized (under agreement with the second singular subject) as *pires*. Only in a theory of lexical realization that separates the root from its morphological realization, such as Distributed Morphology (see Arregi and Nevins 2012 and Bobaljik 2012 for recent expositions) is this kind of analysis possible. What must be the case is that the subject cannot provide two different heads in this structure with values for $\phi$-features: what goes wrong in (22a) is that the $\phi$-features on *pîra* (or, equivalently, on its associated $v$) remained unvalued (the higher presence of *did* blocks the application of Agree from the subject), or that the head that hosts these features ($T$, realized as *did*) cannot form a complex head with $v$ (on theories like that of Arregi and Nevins 2012). Under either analysis, the sentence in (22a) is correctly ruled out.

The structure in (22b) is also ruled out under the reasonable assumption that bare root (or stem, for that matter) forms suffer from some morphological insufficiency that blocks them from surfacing at PF. The exact nature of this insufficiency is not material here, but it is crucial that this be a fact about the morphological realization of such roots, not about their syntactic distribution. The root itself can be inserted: it will either have to combine with a head that has $\phi$-features or receive them itself, or—as here—fail to be subject to Vocabulary Insertion at all, due to the operation of ellipsis. The root $\sqrt{\text{PERN}}$ in (23) is unpronounceable by itself, and this renders the VP ineffable. That is, this analysis posits a code-switch in (23) that is unrealizable: it contains Greek roots that cannot be realized in this syntactic context (embedded under English *did*). The analysis takes no stand on the question whether the root $\sqrt{\text{PERN}}$ is equivalent to the English $\sqrt{\text{TAKE}}$: they could be, but the theory of ellipsis assumed here does not require that they be. Since the Greek antecedent VP is by hypothesis identical to the elided (Greek) VP in (23), any identity or parallelism condition will be satisfied, and the question whether $\sqrt{\text{PERN}} = \sqrt{\text{TAKE}}$ (or whether $[\sqrt{\text{PERN}}] = [\sqrt{\text{TAKE}}]$) is irrelevant.

If verbal forms such as Greek *pires* and English *take* were to be listed in the lexicon as fully inflected, and licensed in syntactic structure only as such, then cross-language ellipsis would be impossible to reconcile with an identity condition such as (14), since neither form could be generated. While one could consider a theory that posited only semantic identity, such theories have difficulty accounting for the contrast in (7), as we have seen.

Another possibility is that the antecedent is not the Greek VP itself, but rather an English version of it, perhaps generated through some process of accommodation (Wentz and McClure 1976 call this idea, which they rightly reject, the ‘Translation Theory’: on such a theory, speakers would translate the Greek antecedent into English to use in satisfying the conditions on ellipsis). The difficulties of pursuing such a possibility, however, are both the open nature of accommodation, which would have to reined in to account for the restrictions we saw above in German-Spanish and Spanish-Zapotec sluicing, and the lack of any

11 See the works cited for various approaches; possibly roots in Greek have no elsewhere form, following the analysis of paradigm gaps proposed in Arregi and Nevins to appear, or Greek lacks a default suffix, as posited to account for the infinitival form surfacing in Spanish-German light verb structures in González-Vilbazo and López 2011:842.
evidence that bilinguals perform translations at all.\footnote{Though translation equivalents may facilitate cross-language activation, as Costa et al. 1999 show.}

Similar considerations apply to examples like the following attested dialog:\footnote{This dialog took place between a 1st generation Greek mother (adult immigrant to the US) and her 9-year-old daughter, who is a balanced bilingual in Greek and English, and who was born and has lived mostly in the US, but with extended periods (2-3 months per year as well as one half year of school) in Greece. Both Greek and English are used extensively at home, as well as Greek-English code-switching. The observed dialog took place in Chicago.}

(24) a. *Mother: Pinás?*
   \begin{align*}
   \text{hunger.2s.PRES} \\
   \text{‘Are you hungry?’}
   \end{align*}


   Important here is that the Greek verb *pináo* is a simple intransitive verb, and is the unmarked way to express the property of being hungry (unlike its English equivalent verbal form, ‘to hunger’). But no code-mixed version of the daughter’s response is possible.\footnote{I have not observed discourses of the form reported in Wentz and McClure 1976:656, who give the following example that appears to require a kind of translation.}

(25) *Yes, I do *pináo.*
   \begin{align*}
   \text{hunger.1s.PRES}
   \end{align*}

   Even more challenging are the following examples, overheard in conversation:\footnote{The speakers of these sentences were the aforementioned mother and her 12-year-old son, an early balanced bilingual, born in Greece and living in Chicago, who has spent considerable time in Greece: every summer for 2-3 months, as well as six months in school as an 8-year-old. The recorded dialog took place in Greece.}

(26) [A son attempts to turn on the air-conditioning one morning]

a. *Mother: To proí ðe xriázete*
   \begin{align*}
   \text{the morning NEG need.NONACT.IMPERF.PRES.3sg} \\
   \text{klimatizmó.}
   \end{align*}
   \begin{align*}
   \text{air-conditioning.ACC}
   \end{align*}
   ‘In the morning there’s no need for air-conditioning.’

\begin{verbatim}
(i) A: Quién tiene hambre? ‘Who’s hungry?’
   \begin{align*}
   \text{who has hunger}
   \end{align*}
   B: I am.
\end{verbatim}

This example seems to me possibly to be amenable to analysis in terms of scripts, of the kind discussed for ellipsis in Merchant 2010. The inquiry into the hunger of the child is a prototypical one, and, like the abbreviated dialog found in e.g., restaurants, has a fixed set of stock responses. It seems possible that the child’s response in this dialog, ‘I am’, is not directly elliptical to the question, but rather is drawn from the standing script. Sergio Ramos informs me (p.c.) that he has conducted informant work with Spanish-English bilinguals on such examples and has failed to find speakers for whom responses as in (i)B are acceptable; instead, they pattern with response in (24b).
b. **Son:** Yes, it does!

c. **Mother:** Εξί δροσύλα.
   *It’s a little cool.*

d. **Son:** No, it doesn’t.

Two features of the Greek sentences are important here. The first involves the 3rd singular impersonal use of the verb *xriázome* ‘need’: it is a deponent verb that assigns the accusative case to its object. When used impersonally, as here, it has no overt subject and must be in the third person singular. (The bare adverbial *to proí* ‘the morning’ is in the accusative case of extent of time and may felicitously be omitted: it is not the subject.) This use of the verb thus corresponds to nothing in English: its syntax is that of a transitive verb for purposes of accusative case assignment; it obligatorily lacks a subject (Greek, as a pro-drop language, lacks pleonastic or expletive subjects); and morphologically it is nonactive (or mediopassive) in form. So the son’s response in (26b) contains an expletive subject, *it*, which corresponds to the null expletive subject of Greek, and appears to be licensed precisely by the impersonal Greek verb, as English lacks any such correspondent. But, just as we saw above for Greek-English VP-ellipsis, there is no code-switched variant possible corresponding to (26b):

(27) *Yes, it does xriázete klimatizmó.*
   
   *need.NONACT.IMPERF.PRES.3sg air-conditioning.ACC*

The second feature of this dialog is equally interesting: in addition to another expletive subject (here the weather *it*), we find the English auxiliary *does* appearing with a missing VP which corresponds to a form of the Greek idiom *éxi drosýa*, literally ‘it has coolness’. The actually used noun *drosýla* is the diminutive of the noun *drosýa*; this diminutivization of the idiom chunk does not affect the idiomaticity of the whole (the phrase *éxi drosýa* is what Nunberg et al. 1994 call an idiomatically combining expression, not an idiomatic phrase). The syntax is the standard syntax for the Greek impersonal use of the verb *éxo* ‘have’: it occurs with a null subject, in the third person, and with an accusative object, and is the most common existential predicate, typically translated into English with ‘there is/are’ (cf. French *il y a X*, Spanish *hay X*, both meaning ‘there is/are X’ and using forms of the verb ‘have’; also German *es gibt X*.ACC, lit. ‘it gives X’, for the same meaning). As with (26b), the son’s response in (26d) has no possible pronounced variant, either in English (whether corresponding to an English translation using ‘be (a little) cool’ or to a non-existent form of the Greek idiom in English) or in a code-switched English-Greek VP:

(28) a. *No, it doesn’t be a little cool.*

b. *No, it doesn’t have a little coolness.*

c. *No, there doesn’t be a little coolness.*

d. *No, there isn’t a little coolness.*
If, as we have seen, the syntax of the missing material must be identical to that of its antecedent, the actual structure of (26d) must be the following:

(29) TP
   \[it\] T'
   doesn’t VoiceP
   Voice <vP>
   v VP
   \[\sqrt{EX}\] DP
   \[\sqrt{DROSJA}\]

In this structure, the heads of the vP, namely v, \(\sqrt{EX}\), and \(\sqrt{DROSJA}\) (the latter supplemented by a diminutive affix I omit here), combine to give the idiomatic meaning. They can normally be realized as such by the Greek lexical items \textit{ex-} (which is then inflected) and \(\delta\rosja\). The variants in (28) suffer from a variety of defects. In (28a), the conditions on the use of auxiliary \textit{do} are not met (this is famously true of monolingual English predicate ellipsis as well: *It’s a little cool today, but it didn’t yesterday). In the case of (28b-d), the numeration, drawn from the English lexicon, fails to contain items that give rise to the intended meaning. And finally, (28e) is ruled out for the same reason that (23) above was: there is no way to value the inflectional feature on \(v/\sqrt{EX}\), or the inflectional head cannot be in two places at once.

We are left, therefore, with a predicate that is ineffable: there is no possible set of morphemes that could realize the vP in (29): it must be elided.

It is thus possible to reconcile the apparently strict matching requirement necessitated by the Spanish-German and Spanish-Zapotec cases with the surprising facts documented here from Greek-English code-switching under ellipsis. It is worth noting that the latter facts, of course, follow straightforwardly from semantic identity theories that posit no syntactic structure internal to the ellipsis: on such theories, there is merely a constructional pointer or other device at the ellipsis site whose value must be resolved by reference to the context: a predicate meaning must be found or generated that supplies the value of
the predicate. Whether this predicate meaning is from an English or a Greek utterance (or indeed is linguistically expressed at all) is not germane. Thus even apparently anomalous ellipses in English are well-formed not because they have an otherwise unpronounceable structure (they hide no structure at all, on this view) but because the kind of meaning they need to form part of a well-formed utterance is available. As appealing as this approach is, it cannot accommodate the strict matching data seen above. Nor does such a theory have hopeful prospects for explaining the ill-formedness of the responses in (30), which were judged as infelicitous responses to (26c) by the same speaker who produced (26d).

(30) a. #No, there isn’t.
    b. #No, it isn’t. (viz. kind of cool)

It is particularly important in this context to note that the nonelliptical version of (30b), given in (31), is judged a felicitous response, but it doesn’t involve ellipsis. The constraints at play here are not merely those that regulate well-formed discourses (due to information-structure constraints or the like): they are particular to ellipsis.

(31) No, it isn’t kind of cool.

In sum, the data presented here is compatible with the following claim:

(32) All cross-language ellipses involve code-switching at the ellipsis site (into the language of the antecedent).

The recoverability or identity condition on ellipsis has an irreducibly syntactic component, and therefore there are predicates in English—namely those from VPs whose antecedents are in Greek but which are not licit targets of non-elliptical code-switching—that are ineffable. Though not without parallels in the literature (on elliptical repair), it is nevertheless a discovery that would have been difficult to imagine making without evidence from code-switching; code-switching thus continues to prove, in the still apropos words of Woolford 1983:520, a “fertile ... source of evidence bearing on a wide range of questions in current grammatical theory.”

References


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