Semantics requires knowledge of meaning: A reply to Rodrigues[1]

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1. Introduction: One needs fluent bilinguals to learn complex details about the structure of a language

Cilene Rodrigues (https://ling.auf.net/lingbuzz/004928) reacts to our statement (Everett & Gibson 2019) that the chapters on Pirahã in the book *Recursion Across Domains* do not display high scientific standards: *"As mentioned at the outset, Everett and Gibson characterize the chapters of Recursion Across Domains dedicated to Pirahã as failures to 'meet high scientific standards.' "* She then attempts to rebut our claims. But her response fails to address our concerns. Our two most serious criticisms are these:

(i) None of the chapter authors have even a rudimentary speaking knowledge of Pirahã. In fact, as we pointed out in our review, their transcriptions reveal that they cannot accurately hear the tones or even the segmental phonemes of the language.[2]

(ii) Rodrigues and her co-authors lacked access to speakers able to translate their questions into Pirahã or able to translate the answers from a Pirahã speaker into a language the linguists knew, such as Portuguese or English.

A consequence of (i) and (ii) is (iii):

(iii) The authors could not ask any follow-up questions of their Pirahã speakers or otherwise interrogate their language teachers.

In response to these criticisms, Rodrigues states: *"Our consultant for chapter 6 (our focus above) was Hiahoai [sic] Pirahã, an adult Pirahã man, a native speaker of Pirahã. For chapter 15, the main informant was Ioá [sic] Pirahã (although data on prepositional phrases was also collected from Hiahoai [sic] Pirahã). Ioá [sic] is a younger Pirahã man, and is also a native speaker of Pirahã."*

Everett knows both of these Pirahã speakers well (Hiahoái and Xioáa (not "Ioá" which is not a possible Pirahã word, because all Pirahã words begin with a consonant)), from his days of living and working on Pirahã land. Neither one speaks Portuguese beyond a rudimentary vocabulary, certainly not well enough to understand linguistics questions in the depth necessary for semantics research. (See Sakel (2012) for a discussion of Pirahã speakers' use of a few

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[1] We would like to thank Robert Levine and Geoffrey Pullum for very useful comments on an earlier draft of this response.

[2] For comparison with Rodrigues and colleagues, Everett's thesis (Everett, 1983) was written only after Everett became fully fluent in Pirahã, which was achieved by living with the Pirahã nearly full-time starting in 1977. In addition to writing about the grammar of Pirahã, Everett also analyzed the phonetics and phonology of the language (Everett 1979).

Portuguese words, while they still use Pirahã grammar. Sakel's research was conducted exactly where Rodrigues's helpers come from.) Their Portuguese is limited to simple exchanges on familiar topics. Thus Rodrigues and her colleagues could have done little more than write down speakers' productions without fully comprehending them. Moreover, Rodrigues' only Portuguese conduit to Pirahã, Verão (José August Diarroi-Pirahã), speaks little Pirahã and would have been unable to translate detailed follow-up questions or answers accurately. Verão's lack of fluency in Pirahã and Hiahoái's lack of knowledge of Portuguese are illustrated in the video linked here: https://www.youtube.com/watch?v=xeEAufXg8fc&feature=youtu.be. Although the purpose of the video seems to have been to discredit Everett (Verão was unhappy with Everett for failing to purchase a motorboat for him) it demonstrates instead that (i) Verão cannot translate even simple Portuguese requests - much simpler than technical linguistics queries - into Pirahã and that (ii) Hiahoái does not follow what is going on in simple Portuguese exchanges. And yet Hiahoái is the most fluent Portuguese speaker among all the Pirahãs in the section of the Maici River where Rodrigues et. al. recruited their language helpers.

For research on the syntax or semantics of any language, these are fatal flaws. It is simply impossible to analyze even basic syntactic phenomena, let alone complex phenomena like scope or control (the focus of Rodrigues' work).[3] But Rodrigues disagrees:

"Crucially, according to our consultant, Hiahoai [sic] Pirahã, the elided agent of the predicate kapiiga kagakai [sic] is obligatorily controlled by the subject ti [sic], as we would expect if these are cases of obligatory control. These data thus provide two sorts of evidence for structural embedding in Pirahã: obligatory control and SOV."

There are two crucial problems here. First, it is unlikely that any Pirahã speaker would say that the reference in the null subject position is "obligatory". This word is not in their Portuguese vocabulary (it is a highly specialized academic term in this context) and it does not exist in Pirahã. At most, the Pirahã speakers would have indicated that one reading is preferred over another. And second, even if the two Pirahã speakers did manage to communicate to Rodrigues that the null subject was usually co-referent with the non-null subject, this does not establish that the referential restrictions are due to obligatory control. To analyze a particular structure as control, a linguist would need to carefully distinguish at least four types of structures to conclude that one of these – control – was in fact implicated in the data. This is discussed in section 2 in more detail.

Thus this statement by Rodrigues on what her language teachers indicated to her is misleading. It is unlikely that any monolingual speaker of any language could provide such precise information. This is why discourse studies, experiments, and soliciting feedback from multiple speakers (6 male and 6 female is fairly standard among some field researchers) is so crucial. The claim that a monolingual's speaker's preference can be so clearly determined by people who do not speak the language shows a profound lack of field research experience.

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[3] Phonetic accuracy is also vital to field research in semantics and syntax. Knowing when a pause is present or not present between two sentences, or whether a pause is meaningful, can be crucial. As discussed in our review, Rodrigues and colleagues showed low phonetic accuracy in their transcriptions, resulting in transcriptions that are inconsistent and inaccurate in both the prosody and segmental phonetics of Pirahã.

2. Demonstrating a structure is a control structure is complex

Rodrigues and her co-authors offer no criteria based on Pirahã grammar for distinguishing four related notions that are crucial to their analyses: pro-drop, obligatory control, non-obligatory control, and discourse-based zero-marking (Givón 2017; 1983). The authors claim that Pirahã exhibits evidence of recursion via the properties of obligatory control. But one cannot defend an analysis based on a syntactic phenomenon such as control without convincing arguments that the structure appealed to is in fact a control structure.

Of relevance to Rodrigues et al.'s analysis is Everett's (1983, 34ff) claim that there is no control in Pirahã. For example, on page 34 Everett cites this example (his number (77)):[4]

(1)   hi   hi   xobaíi -so   hi   bai   xaag   -ábai
        3   3   see   -temporal   3   fear   have   -frustrated termination
        "After he saw himself, he almost became afraid."

Everett comments (p. 34) about this example and others like it that: *"... Even though there are no examples of control across clause boundaries, I hope to find them..."*[5] The main point of these examples for Everett (1983) (which remains true now) is that that there appear to be no *obligatorily* covert subjects in Pirahã. As we stated in our review, if the instances that Rodrigues et al. bring up were cases of control, then an overt subject should be impossible in such environments. But in all cases that they provide, overt subjects are possible (see examples in the appendix below, as well as in our original review). These instances are therefore unlikely to be cases of control.[6]

There are other empirical and theoretical problems with the analysis of 'obligatory control' that Rodrigues appeals to in order to argue for recursion. For example, Rodrigues (p. 5 of her response) claims that: *"Everett and Gibson do not actually explain how the alternative in (i) could explain the data discussed in our paper, summarized above, nor does the literature cited (Givón 1983 and Everett 1983) clarify what alternative they have in mind."*

It is true that we did not do this analysis for her. We simply referenced other analytic possibilities that would need to be ruled out before concluding that a structure was one or the other. We elaborate some of these analyses below.

For more than four decades, Givón and many others have observed that zero anaphora is the most common discourse-tracking device in natural languages and that it has many forms, all difficult to tease apart without knowledge of how discourse functions in a language. For example, Givón (2017, 1ff) exemplifies various uses of zero anaphora, as in the following section:

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[4] Although it is critical to their analysis, Rodrigues et al. seem unaware of this claim.
[5] The original from Everett (1983) is provided here:
(77)   hi   hi   xobaíi -so   hi   bai   xaag   -ábai
        3   3   ver   -temporal   3   medo   ter   -término frustrado
        'Depois que ele se viu, ele quase ficou com medo.'
        ... Mesmo que não haja exemplos de controle direto através dos limites de cláusulas, espero achá-los...
[6] Ultimately, it was observations as in (1) and the lack of control elsewhere in the grammar that eventually led to Everett's conclusion (2005) that recursion does not exist in Pirahã syntax.

The systematic use of zero anaphora as a grammatical device is better viewed in the context of two universal communicative principles, the first pertaining primarily to the anaphoric context of referential predictability, the second to the cataphoric context of referential importance:

> *Anaphoric: 'Predictable information need not be mentioned'.*
> *Cataphoric: 'Unimportant information can be left unmentioned'.*

The anaphoric use of zero will be discussed extensively in this and subsequent chapters. The cataphoric use of zero is most conspicuous in two grammatical constructions, zero-agent passive and zero-patient antipassive, to be discussed later on (ch. 11). That is:

> (1) a. Passive: Two months later, she was fired [by Ø]
>   b. Antipassive: He eats [Ø] regularly

Givón adds (2017, 1ff): *"the use of these grammatical devices can only be understood in the context of the overall organization of information processing in discourse."* This is true whether we are talking about the formal device of control or any other device for reducing the phonological prominence of a constituent for discourse reasons. Rodrigues and her authors did not explore the possibility that omitted subjects in Pirahã might be a function of discourse, rather than sentence-level syntax. Yet none of the chapters on Pirahã in *Recursion Across Domains* addresses this fundamental issue.

For obligatory control to be invoked to explain a particular syntactic phenomenon in a given language, a good deal of semantic and syntactic analysis must be presented first in order to be convinced that the absence of an overt subject is for one reason, e.g., control, vs. another. Pollard & Sag (1991, 103ff) provide an excellent summary of some of the empirical and theoretical issues that must be addressed in order to analyze control. They state the crux of the problem for any analysis of control: *"a principled explanation for the grammar of ... controlled complements can be derived from the interaction of semantically based principles of controller assignment and the principles that determine the distribution of anaphors and pronominals (binding theory)."* (p. 63). Rodrigues and her co-authors consider no such principles in Pirahã grammar, merely asserting their analysis.

Consider the contrast in Brazilian Portuguese between pro-drop and other cases of covert subjects. In Portuguese, zero subjects are found in at least four types of examples, e.g. (2) - (6):

(2)   João   disse   que   ia.
        John   said   that   was going

Example (2) illustrates a Portuguese example of pro-drop (not control). But in the English translation, no zero subject is possible (because it is not a control environment for English, and because English lacks pro-drop):

(3)   John said that *(he) was going.

On the other hand, the Portuguese example in (4) demonstrates obligatory complement control, not pro-drop:

(4)   João   preferia   reunir   às   1800   horas.
        John   preferred   to meet   at   6pm
        "John preferred to meet at 6pm."

        This is an example of obligatory control in Portuguese (and English) of the type that Rodrigues et. al. claim to have found in Pirahã. The subject of *reunir* must be (or include) *João.* In obligatory control, an empty category in an embedded clause *must* take an argument of the matrix clause as its antecedent. Moreover, in English and many other languages, the embedded verb will depend on the matrix verb for its temporal interpretation (or some other aspect of its interpretation). In general, obligatory control is not found with fully inflected verbs. Yet in all of the structures Rodrigues labels "control" in Pirahã, the verbs are fully inflected. Rodrigues and her co-authors fail to comment on this. On the other hand, both pro-drop and discourse-tracking zero anaphora typically allow for the verb with a null argument to be fully inflected. In (2), the subject of *ia* (*is going*) is most likely *João* (for discourse reasons), but it need not be. For example, (2) would be perfectly fine as an answer to *"Is Maria going to the party?"* where the understood subject is *Maria*, not *João*. Thus in Portuguese there are clear criteria for distinguishing pro-drop from control: null subjects occur with fully inflected verbs, whereas control occurs in most cases in the literature with non-finite forms.
        In example (5) we see an example of non-obligatory control in Brazilian Portuguese:

(5)   Pedro queria que conversassem em outra lingua.
        "Pedro wanted (them) to converse in another language."

        Now consider yet another example from Portuguese, this time from discourse topic-tracking:

(6)   Pedro viu   sim.   Já   foi.
        Peter saw   yes.   Already left.
        "Yes, Peter saw (him/it/her). (He/she/it) already left."

        In such examples, both the subject of *foi* in the second clause, as well as the object of *viu* in the first clause are left unexpressed. Yet the covert arguments in this example can be fully explained neither by control nor pro-drop alone (see Huang 1984 and Givón 1983; 2017). The null object and subject in (6) would not normally be analyzed as merely pro-drop or control.
        Zwart (1990, p. 5, his example (16)-(18)) also offers several examples of different forms of zero-anaphora in Portuguese:

(7) *Os pais ousaram [eles ser-em muito severos]
        the parents dared they-NOM to-be-3PL very severe
(8) Eu exigi aos alunos [eles fazer-em um trabalho]
        I demanded to-the pupils they-NOM to-do-3PL a work
(9) Será difícil [eles aprovar-em a proposta]
        it-will-be difficult they-NOM to-approve-3PL the proposal

As Zwart goes on to say (p. 5), *"(16) (= our (7)) is a case of subject control, (17) one of object control, and (18) is a case of nonobligatory control. As is clear, only in subject control*

constructions a lexical subject leads to ungrammaticality." With regard to the latter, examples (12) and (13) below show overt subjects in examples very similar to what Rodrigues labels control, especially example (12). Rodrigues and her co-authors fail to address these distinct analytical possibilities, which would be crucial to establish their case for control and embedding. Crucially, they also fail to discuss the alternation between biclausal and monoclausal expressions of desire, illustrated in (10) and (11):

(10) Tíi   xítiixisi   *xoog* -abagaí.   Xi   koho -áipí.
      1   fish   want   -frustrated initiation fish   eat   -complete
      "I want fish. (I) eat it."

(11) Tíi   xítiixisi   koho -ai   *-soog*   -abagaí (or Ti kohoaisoogabagaí
                                                                        xítiixisi)
      1   fish   eat   do   desiderative   -frustrated initiation
      "I want to eat fish."

In (10) both verbs are inflected. According to Everett's (1983) analyses, (10) exemplifies two independent, juxtaposed clauses or sentences. On the other hand, Pirahã uses structure (11) when the desirer and the subject of the action desired are obligatorily the same individual. And yet this is not a control structure, but a single sentence with a single verb, formed by use of the affixal form of 'to want,' *-soog*, rather than the independent verbal form *xoog*-, (this is discussed in Everett (1983, 171ff)). This Pirahã construction appears to obviate the need for obligatory control and likely explains why Everett (1983) never found such structures.

The authors of the chapters in *Recursion across Domains* not only fail to discuss the fact that their 'control' structure involves two fully inflected verbs, but they also fail to discuss the potential role of monoclausal structures for subject continuity in Pirahã that express desire as a single clause with a single subject.

Additionally, Rodrigues and her co-authors fail to discuss more complex examples involving the verb meaning 'want' in which subjects are expressed both overtly and covertly, as in the example in (12) (from Everett's data book five, 1991, tape 1, page 3, nos. 25–26):

(12) Kaóí xógí -hiaba   *pro* xogi -hiabá   b   -í   -igi -ó
      name want -negative *pro* want negative   gr   downward   ound inside
      locative   infix
      -xio
      motion

      pro xogi-hiabá   xaí   Kaóí xaí   xipói   k   oa   -bái
            want   -negative that is name thus woman   she die   remain
      -pi
      sudden
      "Kaóí does want, does *not* want into the ground, does *not* want, that is, Kaóí kill the woman." (Free translation: "Kaóí does not want to kill the woman."

These data illustrate yet another type of variation of covert and overt subjects. This set of clauses/sentences would be difficult to analyze as control without explaining why overt subjects

are found only in the first and last clauses. We have an overt subject in both the first and last sentences of this string, *Kaóí,* separated by two sentences with covert subjects containing the verb 'want,' followed lastly by what is (not) wanted, the semantic event object of the three preceding negative clauses/sentences. Both the first clause/sentence and the last one, *'Kaóí kill woman'*, have overt, co-referent subjects, the intervening material manifests covert subjects. But these covert subjects are with the verb 'want' that Rodrigues claims to trigger control, whereas the second overt subject is in the clause that Rodrigues predicts to be the obligatory control clause, which would prohibit an overt subject – the opposite of the pattern she predicts, unless she has an alternative analysis of examples like this. Other data in Everett's notebooks show a range of varied examples with subjects either covert or overt but never apparently required to be covert, since there are, alongside (12), examples with overt subjects in different locations (data book 1, 1991, p11, lines 107-109):

(13) *Hiaitíi* xigí   -o   híoóxi ai   xai   kapiiga. *hiaití* híoóxiai   xai
       Pirahã with   -locative   up:high go   then   paper Pirahã up:high.   then
       baí   xigí   -o   kapii kai,   kagakaí
       parent with - locative   paper do   study
       "The Pirahãs will go to heaven to read paper. The Pirahãs will go to heaven to read paper with their heavenly parent (they) will read paper."

This is a Pirahã retelling the idea that the Pirahãs will go to be in heaven with God. Notice that the subject, *Hiaitíi* 'Pirahã' is overt in the first two sentences but covert in the third, unlike in example (12) where overt subjects in the string of sentences appear before and after covert subjects. This is because, as Givón would describe it, Pirahã uses the common discourse-tracking strategy of zero anaphora wherein a number of subtle, stylistic factors can lead to varied use of covert vs. overt subjects. In other words, one plausible analysis of when subjects will be overt or covert in Pirahã is that these do not result from hard and fast grammatical rules, as control would have it, but discourse informational or discourse-structuring principles, as the functional linguistics community, represented by Givón's work, has often discussed. (Further examples of Pirahã discourse can be found here: https://osf.io/kt2e8/ .)

If Rodrigues et al. have a theory of distinguishing control and non-control structures in Pirahã, they need to explain whether examples like (12) and (13) manifest control or not, and why (and they would need to justify where they believe that the sentences boundaries fall). The fact that they did not discuss more complex, but common, examples of this type is most likely due to their limited, monolingual data base and lack of fluency in Pirahã, resulting in an inability to use elicited examples to form and test paradigms or to collect additional material from natural discourse.

To illustrate further that omitted subjects are common in Pirahã texts, we refer the reader to the MIT Corpus of Pirahã (https://osf.io/kt2e8/). Example (14) comes from the text titled 'The Panther' in the corpus. Note the absence of overt subjects in the second and third lines of vernacular in this text.

(14)   ?i kagi ab -á -i -p -í -sigí -ai
        it partner grab move -into -down sudden-assoc.-be
        gaí si -i ?ís -a -p -i -k
        there place-thus animal (an. prefix) -move -down -sudden -trans

-ob -á -o -b -i -í -haí

-see -move -onto up/away -intend -sudden –relative-certainty

'With respect to it, the jaguar pounced on the dog, I thought I saw it.'

It is worth asking whether Rodrigues et. al. believe that the covert subjects of these sentences are the result of pro-drop, obligatory control, or topic-tracking. In Everett's (1983, 53ff) analysis, this would be a by-product of topicalization – or some other form of discourse-governed zero-anaphora. Other lines in the text 'The Panther' found in the link also show missing subjects.

The large range of covert subjects in Pirahã, along with Everett's (1983) analysis that there is no control in Pirahã, should have led Rodrigues and her co-authors to argue more carefully, taking into account the significance of the varieties of zero-anaphora recognized in syntactic theory and found in Pirahã, walking the reader through each, case-by-case, to establish that their crucial examples cannot be either pro-drop or topic-tracking but must in fact be obligatory control. Because pro-drop and topic-tracking work across sentence boundaries, they would not provide arguments for embedding/recursion. It was vital for Rodrigues to tease these analyses apart. The Appendix to this reply lists a number of additional examples from Everett (1983) that raise questions or problems for Rodrigues's analysis.

3. Conclusions

To reiterate, Rodrigues and her co-authors have no production or comprehension command of spoken Pirahã and had no bilingual interlocutor to assist them. This means they had no access to any more than the most superficial impressions about sentence meanings. Additionally, they fail to consider theoretical and functional differences in zero-anaphora. All the structures that Rodrigues et al. appeal to in the original chapters, and that Rodrigues proposes in her reply to Everett & Gibson (2019) rely on meanings and analyses that could not have been obtained without access to the semantics of the language.

To claim to have conducted any sort of semantic analysis of a language or to have understood the relevant syntactic structures of a language without access to the meanings of the very structures implicated in one's analysis is not possible. Such a claim at best underestimates the demands of field research. Further, it displays a lack of respect for the native speakers of the language, trivializing the importance of the meanings and mastery of their speech. Learning a language and living in a community of speakers not only can demonstrate respect for the language community, but these are the very essence of the participant-observer methodology so crucial to anthropological linguistic field research, a vital foundation of theoretical linguistics.

We therefore are unable to rescind our statement that the standard of scientific accuracy in the papers on Pirahã in *Recursion Across Domains* is low.

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Appendix: Problematic examples from Everett (1983) for Rodrigues's "control" analysis

In this appendix, we include a few examples from Everett (1983) a work that Rodrigues is familiar with, that are problematic for her analysis. The example numbers are those from Everett (1983), online here: http://repositorio.unicamp.br/jspui/handle/REPOSIP/270505

In example 244, the sentence that expresses the content of what is not wanted precedes the sentence with the verb 'to want:'

```
(244) hi  aba -háí      -hiab   -a       xaoói
      3   parar-ingressivo-negativo-remoto  estrangeiro

      xogi  -hiab   -a       xihi    ogíoi
      querer-negativo-remoto  custar  grande

      "ele (o estrangeiro) não pára (porque) (eu) não
      quero o estrangeiro (porque ele é) caro"
```

"He (should) not stop. (Because) I do not want him. (Because) (his goods) cost big."

Upon hearing the sound of a boat coming up the Maici, a Pirahã man was telling Everett that he did not want this merchant to stop because his goods are expensive (i.e., he requires more Brazil nuts per item than other traders). The subject is covert in the 'want' clause and overt in the clause of what is not wanted, the reverse of what Rodrigues would expect. We can say with certainty, therefore that clauses that express the content of 'to want' are not always control environments. Rodrigues omits references to such examples. Note here that there are three clauses/sentences in succession and that only the first one has an overt subject, *hi*. The word xaoói 'foreigner' in the first line is separated from both clauses by a pause and is what Everett (1983, 7ff; 24ff; etc.) calls "clarification."

```
(245) hi  ti  ob -ai     -sog      -abagaí
      3   1   ver-atélico-desiderativo-iniciativa frustrada

      hi  baáb -áo    -p          -á
      3   doente-télico-imperfectivo-remoto

      "ele quer me ver (porque) ele está doente"
```

Example (245) shows a 'want clause' (with the desiderative suffixal form of the verb 'to want') preceding what is wanted, as in Rodrigues's examples, except that all arguments are overt. It is formally almost identical to Rodrigues's examples. However, the semantics are different, which can only be known via access to meanings. Whereas Rodrigues's purported control examples are of bi-sentential expression of desire, this sentence is an expression of cause. But the subject pronoun, *hi*, like all pronouns is optional here, as in all cases, modulo discourse

considerations. (Pirahã pronouns are peculiar in many ways and were in fact borrowed from the language Nheengatu (Thomason and Everett (2001)).

```
(286) hi  ti  xap-i        -sai          xog   -i
      3   1   ir -epentético-nominalizador querer-epentético


      -hiab     -a
      -negativo-remoto


      *(i)  "ele não gosta da minha ida" (cf. o inglês
             'he doesn't like my going')
       (ii) "ele não quer que eu vá"
```

This means *"he doesn't want me to go"*. But as in other examples, the content of the 'want clause' comes first, with all arguments overt, while the subject of the 'want clause' is covert. In other words, if there is heavy shift here, as Rodrigues would have it, the wrong clause has shifted. Moreover, the wrong clause has control. The simplest analysis is that this is not a control structure, but discourse-based zero-anaphora/pro-drop. But if that analysis works here, it works in all the others. Moreover, here it would be 'object obligatory control' because it is the object of the first verb that determines the reference of the covert subject of the following clause.

```
(291) kohoibiíhai   xibíib . -i       -haí
      nome próprio  mandar em-próximo-certeza relativa


      gíxai  xahoí-kasí  bag   -i         -sai
      2      arroz-nome  vender-epentético-nominalizador


      (i)  "kohoibiíhai manda/quer que você venda o arroz" ou
      (ii) "kohoibiíhai diz para você vender o arroz"
            (cf. o inglês 'k orders you to sell the rice' )
```

In this example, the 'want clause' (*xibíibi* is used for 'to order' and 'to want' or 'to demand') once again follows the 'wanted clause'. In English this would best be translated as an object-control verb. But it is not a control verb in Pirahã because the 'controllee' argument is overt. (*Gíxai* cannot be the direct object of the first clause because it would have to be to the left of the first verb. It is the subject of the rightmost clause. It is not "clarification" because no pause separates it from the second clause.) However, the fact that examples like (286) have overt arguments in what we would, under Rodrigues's analysis, have been expected to be the controllee position once again renders control unlikely. Just as before, what seems to be happening here is discourse-governed zero-anaphora vs. overt subject.

```
(263) ti  xog  -i    -baí        gíxai  kahaí  kai  -sai
      1   querer-próximo-intensivo  2     flecha fazer-nominalizador

      "eu gosto muito de sua fabricação de flechas
      (= do seu jeito de fazer flechas)"
```

This example means "I want you to make arrows" or "I like you to make arrows." (In Everett (1983) the suffix *-sai* was described as a nominalizer. However subsequent work (Stapert & Sakel 2010) has argued that this suffix marks old information, among other things, but is not a nominalizer.) But both subjects are overt. Again, in apparently the same structure, no control is found.

It is now perhaps worth commenting on Everett's (1983) survey of Pirahã elliptical structures. As Everett (1983, 31ff) says in concluding his section on ellipsis:

3.4. Conclusão

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Não existe nenhum marcador formal de elipse. Construções elípticas, de
acordo com as condições do ponto 3.2., são freqüentes em discursos. Como foi
mencionado, um estudo completo da elipse irá requerer uma análise da
conversação.  Alguns comentários a este respeito se encontram na seção 9.
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"There is no formal marker of ellipsis. Elliptical constructions, according to the conditions [given in] point 3.2. are frequent in discourse. As was mentioned, a complete study of ellipsis will require an analysis of conversation. A few comments on this are offered in section 9."

In other words, Everett (1983) alerts anyone wishing to work on covert subjects in Pirahã that the conditions are not straightforward and entail pragmatics as well as syntax and semantics. Rodrigues et. al. did not heed this advice.

Finally, in Section 13.1.1. of Everett (1983), on deletion, Everett lists many circumstances under which null arguments are found. None were investigated by Rodrigues and colleagues.