

Pirahã Exceptionality: a Reassessment

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Everett's claims

- Syntax
 - the absence of embedding

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 - the absence of embedding
- Lexicon/Semantics
 - the absence of numbers of any kind or a concept of counting and of any terms of quantification
 - the absence of color terms
 - the simplest pronoun inventory known
 - the absence of relative tenses

Everett's claims

- Culture
 - the absence of creation myths and fiction
 - the absence of drawing or other art
 - the fact that the Pirahã are monolingual after more than 200 years of regular contact with Brazilians
 - the absence of any individual or collective memory or more than two generations past
 - the simplest kinship system yet documented
 - one of the simplest material cultures documented

Immediacy of Experience Principle

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 - Immediacy: if it has been seen or recounted as seen by a person alive at the time of telling
- One event per utterance (CA 622)

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 - IEP fails as an observation relevant to the culture
 - IEP is irrelevant to grammar

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- UG (with capital letters) is a theory *about* human capacity of language, mentioned in Chomsky 1965.
- But then again, is UG *falsifiable*? (Sampson)

The absence of embedding

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- Motivation of IEP in relation to embedding rather vague
- “Embedding increases information flow beyond the threshold of [IEP]” (CA 631)

The absence of embedding

- Constraints on embedding: prenominal possession

(5) a. non-recursive prenominal possessor

xipoógi hoáoíi hi xaagá

Xipoógi shotgun 3 be

'That is Xipoógi's shotgun.' (HAL 205 (22))

b. recursion in prenominal possessor

*kó'oi hoagí kai gáihí 'íga

name son daughter that true

"That is Kó'oi's son's daughter." (CA 630 (35))

The absence of embedding

- All known forms of recursion are not available for each language

(3) a. John's car (English)

b. Hans-ens Auto (German)

(4) a. [John's car's] motor (English)

b. *[Hans-ens Auto]-s Motor (German)

- Also, there are other means of expressing the same relationship (IEP?)

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- Other ways of expressing the same information
- To falsify this claim, attention is focused on complements
- Complement clauses in Pirahã seem quite *ordinary* from a cross-linguistic perspective

The absence of embedding

(6) hi ob13- áaxái [kahaí kai- **sai**]

3 see/know-INTNS arrow make-NOMLZR

'He really knows how to make arrows.' [HAL 263 (232)]

(7) xoogiái hi xob-áaxaí [xapaitíisi xohoai- **sai**]

Xoogiái 3 see-well Pirahã language speak-NOMLZR

hiaiíhi xigiábi-koí

Pirahã people like- EMPH

'Xoogiái really knows how to speak Pirahã, like the Pirahã.'

[HAL 222, (94)]

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 - word order (object phrase should appear before V)
 - systematic lack of clitic agreement (usually optional)
 - although the order of complement and matrix can be reversed, the 'embedded' clause can't appear in DO position
- Nevins et al: Everett hasn't offered any coherent arguments against analysing these sentences as deranked embedded clauses

Paratactic conjoining in Pirahã

- conveys comparison
- both clauses seem equal

(10) Paratactic conjoining [HAL 223, (95)-(96)]

a. xisaitoógií hi kapiigakagakai-baí xoogiái hi koíhi xabaxáigio

Xisaitoógií 3 study-INTNSF Xoogiái 3 little only

'Xisaitoógi studied a lot. Xoogiái (studies) very little.'

b. batío paga póoko xoogiái hi mais paga bíi

Martinho pay little Xoogiái 3 more pay well

[lit. 'Martinho pays little. Xoogiái pays better. - authors]

'Xoogiái pays better than Martinho.'

Complementation in Lango

(11) Paratactic and non-paratactic infinitival complementation (Lango)

a. Án àpóyò àcégò dɔ́'gólá paratactic

I remembered-1sg closed-1sg.subj door

'I remembered it; I closed the door'

(I remembered to close the door)

b. Án àpóyò cèggò dɔ́'gólá non-paratactic (infinitive)

I remembered-1sg close-Inf door

'I remembered to close the door' (Noonan (1985, 78, (149)-(150))

Complementation in Pirahã

- Also, clausal complements often follow a main verb in languages that generally are OV:

(13) German

a. OV (nominal object)

Hans hat die Kinder gesehen.

Hans has the children seen.

b. VO (clausal object)

Hans sagte, [dass er die Kinder gesehen hat].

Hans said that he the children seen has

SOV with clausal DO in Pirahã

- Pirahã may allow SOV also when the object is a clause.
- Possibly controlled by heaviness.

(17) SOV with clausal direct object in Pirahã

hi ti xap-i- sai xog- i- hiab- a

3 1 go- EP-NOMLZR want-EP-NEG-REMOTE

'He doesn't want me to go.' [HAL 278, ex. (290)]

The -sai nominaliser

- Marked forms lack of tense and aspect
- Can be suffixed to argument taking verbs producing instrumental nominal:

(20) -sai instrument nominals

a. xiohói xiboít-i- sai

wind cut- EP-NOMLZR

'wind cutter (i.e. propeller)' [HAL 277 (284)]

b. xií kai-sai

thing make-NOMLZR

'thing maker (i.e. factory)' [HAL 277 (285)]

The verb *gái* 'say'

- In reported speech (marked with *gái* 'say') it is 'say' that carries *-sai*, and lacks tense and aspect inflection.
- The clause of reported speech contains the tense and aspect.

(22) kohoibiíhai hi **gái- sai** hi hi **xogi-hiab-iig- á** gáihí
Kohoibiíhai 3 say-NOMLZR 3 3 want-NEG-CONT-REMOTE that
'Kohoibiíhai said (that) he's not wanting that.' [HAL 259 (223)]

The verb gáí 'say'

- gáí-sai is used to introduce direct and indirect speech
- Distinguished by pronouns (like in english)

(24) hi gáí- sai xahóápátí ti xi aagá- hóág- a
3 say-NOMLZR Xahóápátí 1 hunger have- INGR-REMOTE

- (i) 'Xahóápátí said, "I am hungry" ' or
(ii) 'Xahóápátí said (that) I am hungry.' (i.e. that the speaker reporting (24) is hungry)

[HAL 269 (256)]

The verb gáí 'say'

- What kind of syntax does the construction use, if no embedding is involved?
- Everett (CA) offers no proposal.
- Nevins et al: There has to be embedding. But of what type?

The verb gáí 'say'

(25)

- a. the clause of reported speech is a syntactic dependent of the verbum dicendi;
- b. the expression containing the verbum dicendi is a syntactic dependent of the clause of reported speech;
- c. the expression containing the verbum dicendi and the clause of reported speech are both syntactic dependents of another element

(26)

- a. John said that Mary is hungry.
- b. According to John, Mary is hungry.
- c. John's claim was that Mary is hungry.

The verb gáí 'say'

- Pirahã has null copulas (like for example Hebrew)

(26c) ti gáí-sai kó'óí hi kaháp -íí

I say-nominative [sic] name he leave -intention

(lit. "My saying Kó'óí intend-leaves")

Everett:

"I said that Ko'óí intends to leave."

Nevins et al:

"my claim is (that) Ko'óí intends to leave"

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- Blame it on the verb
- Indirect speech reports in Pirahã that use the verb *gái-* show a nominalized form of the verb simply because it is a way to express the meaning CP complement to *gái-* without actually merging a CP as a complement to the verb.

The verb *gái* 'say'

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- In his earlier work on Pirahã there are numerous counterexamples to this. ((31) in Nevins et al. 2007:26).
- *gái* appears to semantically support embedding but has a special syntactic property.
- Of the verbs allowing clausal complements, only *gái* has the special behaviour discussed.

The absence of embedding

- “There is no movement of the questioned element.” (HAL 245)

(32) Wh-interrogatives

a. xabagi go gíiso xigí xog- i (híx)

Xabagi WH DEM ASSOC want-PROX (INTER)

'How much does Xabagi want?' [HAL 239 (149)]

b. gahió go gíiso xab-óp-ai

airplane WH DEM turn-go-ATELIC

'When will the airplane return?' [HAL 239 (150)]

The absence of embedding

- Everett uses as an argument for the non-existence of clausal embedding the observation that a "questioned element" may not move from (what we would call) an embedded clause

(33)a. hi ob-áaxái [kahaí kai- sai]

3 see/know-INTNS arrow make-NOMLZR

'He really knows how to make arrows.' [HAL 263 (232)]

b. *hi go 'igi -ai 'ob -áa'ái [___ kai -sai]

3 WH ASSOC do/be42 see/know-INTNS make-NOMLZR

'What thing [does he] know well to make?'

(lit. "What associated thing he knows well to make/ making?")

[i.e. 'What does he know how to make well.' - authors] [CA 629 (27)]

The absence of embedding

- “...if Pirahã is a language without overt *wh*-movement, we should hardly draw any conclusions about whether a particular phrase is an embedded clause or not on the basis of the failure of a *wh*-phrase to extract from it!”
(Nevins et al 2007:30)

The absence of embedding

- Can the wh-phrase may remain *in situ* within the putative complement clause selected by 'ob- 'see/know'
- But still take scope over the higher clause — yielding the intended meaning for (33b).
- The answer to this question appears to be yes:

(34)

[hi gó 'igi -ai kai -sai] hi 'ob -áa'ái

3 WH ASSOC do/be make-NMLZR 3 see/know-INTNS

'What thing [does he] know well to make?'

(lit. "What associated thing he knows well to make/ making?")

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The absence of embedding

- Here the interrogative expression *hi go 'igi-ai* 'what' remains within the clause whose verb is *kai-sai* 'making'.
- In this example, *go* 'what' is clearly the object of *kai-* 'make', but the meaning of the example as a whole is interrogative.
- Everett claims that *the kai-sai* clause must precede *'ob-áa'ái* here, a fact that might suggest a limitation on the otherwise common extraposition of *-sai* complements that we have seen throughout this section.
- Everett does not offer the relevant example, but we presume that what he has in mind is (35), with the judgment given:

The absence of embedding

(35)

*hi 'ob -áa'ái [hi gó 'igi -ai kai -sai]

3 see/know-INTNS 3 WH ASSOC do/be make-NOMINALIZER

[based on CA 629, (26), judgment as given in text]

- For Everett, the impossibility of (35) is presumably due to the fact that "there is no embedding" in Pirahã and that "the interrogative word must always be initial in the phrase".
- Nevins et al claim that neither claim is true. In fact, Pirahã in (34)-(35) is once again behaving in a manner familiar from other languages — in this case Bengali.

The absence of embedding

- Embedded clauses in Bengali may be either preverbal or postverbal, but if an embedded clause contains a wh-phrase that takes main-clause scope, the clause must be preverbal:

(36) Bengali counterparts to (34)-(35)

a. preverbal embedded clause

ora [ke aS-be] Sune-che [cf. (34)]

they who come-FUT3 hear PST3

matrix scope: 'who have they heard will come?'

[also: embedded scope: 'they have heard who will come']

b. postverbal embedded clause

ora Sune-che [ke aS-be] [cf. (35)]

*matrix scope: *'who have they heard will come?'

[ok embedded scope: 'they have heard who will come']

The absence of embedding

- No argument against embedding follows from the data of this section; and second, that once again Pirahã appears to show behavior familiar from other languages.
- No argument can be advanced for Pirahã exceptionality, and quite possibly an argument can be advanced for the *opposite* perspective
- Nevins et al argue that Pirahã appears to fit perfectly the well-known profile of a *wh-in-situ* language in several respects.
 - Most important evidence coming from the correlatives

The absence of embedding

- Though adjunct clauses are generally islands that prevent wh-movement extraction cross-linguistically (as seen in (38); Cattell (1978), Huang (1982), Longobardi (1985)), it is apparently possible for an in-situ wh-phrase in an adjunct to take scope out of the adjunct:

(38) Wh-movement from adjunct clause (English)

*Who, when the foreigner pays __, will you buy merchandise?

(39) Wh-in-situ within adjunct clauses (Pirahã)

a. xaoóí hi kaoí hiabaí-so gixai xoá-boí-haí

foreigner 3 who pay-TEMP 2 buy-come-RELATIVE CERT

'[When the foreigner pays whom] you will buy (merchandise)?'

b. kaoí hi gí hiabaí-so gíxai xoá-boí- haí

who 3 2 pay-TEMP 2 buy-come- RELATIVE CERT

'[When who pays you] you will buy (merchandise)?' [HAL 243, (167b-c)]

The absence of embedding

- “[relative clauses] are textbook examples of recursive embedding”
- Everett: Pirahã has no relative clauses proper, BUT it has a co-relative clause (correlatives)
- “It is not in doubt cross-linguistically that a correlative clause belongs to the same sentence as the phrase it semantically modifies.”

(43) Pirahã correlative (HAL 275-6)

a. [xoogíái hi go- ó hoasígikoí bíib- i híx]

Xoogíái 3 WH-OBL lead shot send-PROX COMPLMTZR/INTER

hoasígikoí koab- áo- b- i- i

lead shot run out-TELIC-PERF-PROX-COMPLETE CERT

'The lead shot which Xoogíái sent ran out.' [HAL 276 (282)]

The absence of embedding

43 b. ti baósaápisí og- abagaí gíxai [go- ó baósaápisí

1 hammock want-FRUST.INIT 2 WH-OBL hammock

big- áo- b- í- i xai sigíái]

show-TELIC-PERF-PROX-COMPLETE CERT be(?) same

'I want the same hammock which you just showed me.'

(44) ti baósa -ápisí 'ogabagaí. Chico hi goó bag -áoba

I cloth -arm want. name he what sell -completive [CA 630 (33)]

'I want the hammock which Chico sold me'

- "The two sentences are connected contextually, but this is not embedding. Each is an independent, well-formed sentence. The second sentence, on its own, would be a question, "What did Chico sell?" In this context, however, it is the co-relative."

Alleged gaps in the Pirahã lexicon

- Everett claims that Pirahã has no verb 'to think'
- 'to say' used instead (as in many other Amazonian languages)
- 'to see' used for expression of knowing something (cross-linguistically not unique, for example Ancient Greek)
- He doesn't claim that the Pirahã would be unable to discuss the content of thoughts
- There are other words referring to mental states (hoagá 'contrary to what you might expect' (IEP?))

The absence of numbers, counting and quantification

- Again a contrast between CA and Everett's earlier work.

(45) Pirahã quantificational vocabulary [DISS 352, translation Nevins et al]

xogió 'all'

xaíbái / báagiso 'many' (count nouns)

xapagí 'much' (non-count nouns)

xoíhi 'a little'

xaibóai 'half'

hói 'one'

hoi 'two'

xi ába 'nothing'

The absence of numbers, counting and quantification

(46) Pirahã 'most'

ti 'ogi- 'áaga -ó 'ítii'isi 'ogi-ó 'i kohoai-baaí,
I big- be (permanence)-direction fish big-direction she eat-intensive

koga hói hi hi -i kohoi -hiaba
nevertheless small amount intensive intensive -be eat -not

"We ate most of the fish." (lit. 'My bigness ate [at] a bigness of fish, nevertheless there was a smallness we did not eat.') " [CA 624, (11)]

The absence of numbers, counting and quantification

- *ti 'ogi-áaga-ó*, despite its incomprehensible literal translation and gloss, is in fact composed of the first-person pronoun, as noted, and the expression *'ogíáagaó*, which is
- "the closest I have ever been able to get to a sentence that would substitute for a quantifier like 'each,' as in "Each man went to the field"
- in HAL, Everett describes *'ogíáagaó* as follows: "There is only one collective form in my data, *xogíáagaó* 'everyone'. (HAL 282)
- Despite of the etymology, the most obvious analysis would be a quantifier (compare English, Russian, Portuguese)
- Thus the meaning of (46) could be stated as:
 - "We were in the process of eating all the fish, but we didn't eat a (very very) small amount".

The absence of numbers, counting and quantification

- Everett presents also a non-etymological arguments for lack of “real” quantifiers
- Argumentation based on truth conditions:
 - Someone takes a piece of the anaconda skin, and this dialogue follows:
"The foreigner will likely buy *báaiso* anaconda skin."
"Yes, he bought *báaiso*."
- "Remember that part of the ordinary meaning of any idiom of quantification consists of susceptibility to restrictions; and that restrictions come and go with the pragmatic wind." Lewis (1986, 164), cited by von Fintel (1994, 28)

Absence of colour terms

(49) Color terms

biísi 'yellow', 'orange', 'red'	(contains root for 'blood')
xahoasai 'blue', 'green'	(contains root for 'immature')
kobiaí 'white', 'bright'	
kopaíai 'black'	
tixohói 'purple'	
tioái 'dark'	

- Why would colour terms have to be monomorphemic?
- What is the role of etymology/polysemy in the analysis

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- One of them involves *xaítiso*, glossed as 'also' in HAL.

The simplest pronoun system known

(50) ti xaítiso xis ohoa- i- hai

1 also food search-PROX-RELATIVE CERT

'I also will search for food.'

('We will search for food.') [HAL 281 (303)]

(51) Pronouns in Pirahã

Sheldon (1988, 16 fn. 1)

	sing	plur
1	ti	tixaítiso
2	gí	gíxaítiso
3	hi	hixaítiso

(52) Pronouns in Mandarin

	sing	plur
1	wo	women
2	ni	nimen
3	ta	tamen

The simplest pronoun system known

- If Pirahã turns out to lack a number distinction in pronouns, there is still no argument that we must attribute it to a principle such as IEP
- Other languages have similar pronoun systems, but cannot be said to hold to the IEP (for example Karitiana, which differs considerably in for example the variety of syntactic processes from Pirahã):

(53) Karitiana: no number distinction in nominals or 3rd person pronoun

ta-'it okoot naka-ja-t i

3anaf-son bite decl-caus-nfut he/they

'He made his son(s) bite' or

'They made their son(s) bite'

Absence of relative tenses

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Absence of relative tenses

- Pirahã lacks perfect tense
- “No explanation is offered why IEP should entail the absence of perfect tense.”
- Many languages (for example Russian) lack perfect tense.

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- Ritualized/formal story-telling is not as prominent as in other some other Brazilian indigenous groups
- Influenced by surrounding peoples

Monolinguality

- Gonçalves (2000):
 - Most men understand Portuguese
 - Not all are able to express themselves in the language
 - Women have little understanding and never use it as a form of expression
 - The men use a contact language with regional populations, mixing words from Pirahã, Portuguese and the Amazonian lingua general, which is a Tupi-based trade language known as nheengatu
- Everett himself admits to have used Portuguese with the Pirahã, and reports some borrowings from it.
- Also, the Pirahã gave him Nheengatu words as answers in his first field trip.

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- IEP, a rather shaky formulation to begin with, seems falsified by the evidence presented.
- Pirahã doesn't seem to lack recursion
- Pirahã lacks some distinctions, which are present in other languages
- Many of Everett's recent analyses seem rather questionable