On the Nonexistence of Negative Quantifiers: The Case of Haitian Creole

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Natural languages have positive existential (*some*) and universal (*every*) quantifiers. But do they have **negative quantifiers?** Many researchers think they do, e.g. *no* is a negative universal. Is that true? (I think **not**)

Haitian Creole (HC) is a language where the point against the existence of negative quantifiers is (relatively) easy to make.

SVO;

- TAM particles;
- Postnominal definite articles.
- (1) Li ap li Bib la. he PROG read Bible the *'He is reading the Bible.'*

- (2) a. Li ri. he laugh.3s *'He laughs.*'
 - b. Li **pa** ri. he PA laugh.3s *'He does not laugh'.*
 - Hypothesis: the marker pa and sentential negation are one and the same thing. (to be verified)

- Pa appears higher than T (it is linearized before the TAM particles):
- (3) Jan pa t- av- ale nan mache.
 Jan PA ANT IRREAL go in market
 'Jan would not have gone to the market.' [DeGraff 1993, ex. 1]

Basics: Negation (3)

- Constituent negation does not seem to exist in HC (DeGraff 1993):
- (4) *Men yon moun pa sot!
 here's a fellow PA stupid
 'There goes a man who is not stupid!'
 - Compare with French:
- (5) a. Je ne me souviens pas d' un seul étudiant.
 I NE REFL remember PAS of one only student
 'I don't remember any student.'
 - b. Je (*ne) me souviens de pas un seul étudiant.
 - We will use this feature of HC as a **diagnostic** tool:
- (6) **Principle:** If **pa** is present, then it marks sentential negation.

(7) **N-word:** An expression α is an n-word iff:

α can provide a negative fragment answer; and
 α can be used in structures containing sentential negation or another α-expression yielding a reading equivalent to one logical negation.

[Giannakidou 2006]

Pèsonn, anyen, janm, etc. can be used as fragmentary answers:

- (8) —Kimoun ki wè ou? —Pèsonn. who that see you anybody —'Who saw you?' —'Nobody.'
- (9) —Kisa ou manje? —Anyen.
 what you eat? anything
 "What did you eat?" "Nothing."

[DeGraff 1993, ex. 18]

Basics: N-words (3)

- When two 'negative' words, e.g. pa and pèsonn, co-occur in the same clause, only one negation is interpreted:
- Pèsonn pa vini. anybody PA come *Nobody came.*' (¬∃)
 Does not mean: *'Somebody came*' (¬¬∃)
 Does not mean: *'Everybody came.*' (¬∃¬)
- (11) Li pa wè pèsonn.
 he PA see anybody
 'He didn't see anybody.' (¬∃)
 Does not mean: 'He saw someone.' (¬¬∃)
 Does not mean: 'He saw everyone.' (¬∃¬)
 - Notice that the single negation reading is obligatory.

Observe that any number of clausemate n-words still give rise to an obligatory single negation reading (SN):

- (12) Pèsonn pa wè anyen.
 anybody PA see anything
 'Nobody saw anything.' (¬∃∃)
 Does not mean: 'Everybody saw something.' (¬∃¬∃)
- (13) Pèsonn pa janm di pèsonn anyen.
 anybody PA ever say anybody anything
 'No one ever says anything to anyone.' (¬∃∃∃∃) [Déprez 1999]

- Notice also that pa is obligatory, whenever an n-word is present in the same clause:
- (14) a. Pèsonn *(pa) vini. *'Nobody came.*'
 - b. Li *(pa) wè anyen. 'He didn't see anyone.'



anyen 'anything',

okenn 'any',

pyès 'any',

■ janm/jamè/janmen 'ever',

more?

Show that negation needs an n-word.

Roadmap

1 N-words are NPI indefinites (not negative quantifiers);

2 There is **no overt negation** in HC.

The idea



Negation requires an n-word in its scope.

Part 1: N-words are NPI indefinites

The problem: The nature of n-words

- (15) a. Pèsonn pa vini. (=(14a))
 b. Li pa wè anyen. (=(14b))
 c. Pèsonn pa wè anyen. (=(12))
 (16) *Pèsonn vini. Does not mean: 'Somebody came.'
 - Just focusing on sentences like (15) and (16), we could conclude that n-words in HC are just existential indefinites, which need a negation to be licensed, i.e. they are NPIs.
 - I claim that this conclusion is actually correct.

Three hypotheses:

- A. N-words are indefinites and negation is covert.
- **B.** N-words are inherently negative and there is (obligatory) negative concord.
- C. N-words are ambiguous (either indefinites or negative quantifiers).





- 1 There are subject n-words: those don't appear to be in the scope of negation, as they **precede** *pa*;
- 2 DeGraff: N-words can be used as fragment answers!

About the first issue (scope) (1)

- N-words can be linearized before pa, which seems to suggest that they are not in the scope of negation;
- Now, we seem to be assuming that sentential negation and pa are necessarily identical; we have not proven this (yet);
- But even if we assume that this is the case, reconstruction is an option;
- And it does happen in HC:
- (17) Tout ti moun yo pa vini.
 all children the PA come
 'Not all the children came.' (¬∀)

About the first issue (scope) (2)

- But, some say that subject NPIs do not reconstruct:
- (18) *Anyone didn't come to the party.
 - We do not know under what conditions certain subject quantifiers can be reconstructed and others cannot:
- (19) a. Tous les enfants ne sont pas venus. $(\checkmark \neg \forall)$

b. Chaque enfant n'est pas venu. (* $\neg \forall$)

c. Chak jou pa Dimanch. *lit.: 'Not everyday is Sunday.*' (√ ¬∀)

And in fact, the equivalent of (18) is grammatical in some languages, e.g. Hindi.

So the first issue is not serious.

(French)

(HC)

About the second issue (fragments) (1)

- The argument (found virtually everywhere in the literature) relies on the premise:
- (20) **Premise:** If a standalone word has a negative meaning, then it is **intrinsically negative.**
 - This logic is immediately flawed: negation could be silent. We'll come back to this.

About the second issue (fragments) (2)

- But first, let me show you that the proposal is inconsistent:
- The proponents of the negative quantifier approach say that n-words are intrinsically negative;
- But in full clauses in HC, n-words need a negation (marked by pa) (so the inconsistency of the traditional reasoning is even more visible in HC than in any other language);

(21) Pèsonn *(pa) vini.

(=(14a))

- And there is **obligatory concord** with this negation;
- All this makes for a very uneconomical system, built on a possibly false premise (20).

About the second issue (fragments) (3)

- In addition, the concord mechanism is standardly seen as agreement; in this case the bearer of an uninterpretable feature should be pèsonn;
- If it agrees, i.e. its negative 'feature' is checked, then we need a special absorption rule (Higginbotham & May 1981, Zanuttini 1991) to determine what its meaning is after agreement:

$$\forall x \neg, \forall y \neg, \forall z \neg \longrightarrow \forall x, y, z \neg$$



About the second issue (fragments) (4)

- Premise (20) does not hold up to closer scrutiny:
- The underlying logic is that fragment answers are structurally simple, and do not involve either ellipsis or silent material (what you see is what you get);
- In fact, this cannot be the case, because there is no constituent negation in HC, while pa is fine in fragment answers:
- (23) a. *Men yon moun pa sot!
 b. —Li bèl? —Pa ditou. he handsome? PA at-all 'Is he handsome? Not at all.'
 - Per (6), negation has to be sentential in fragment answers.

(=(4))

About the second issue (fragments) (5)

■ With n-words, we observe the same contrast:

- (24) a. *Li vini pou anyen. he come for anything Intended: *'He came for nothing.'*
 - b. *Li kontante li de anyen.
 he content REFL of anything Intended: 'He's happy not having anything.'
- (25) —Kisa ou manje? —Anyen.

This suggests that:

- 1 Fragment answers are not DPs (from the contrast);
- 2 N-words are not intrinsically negative (from (24));
- Conclusion: In fragment answers, negation (which is sentential) is distinct from n-words: therefore it has to be silent.

(=(9))

About the second issue (fragments) (6)

- Compatible with the claims (i.) that n-words are not intrinsically negative and (ii.) that they are NPIs is their acceptability as complements of the preposition san 'without' (and their unacceptability as complements of non 'negative' prepositions):
- (26) San anyen, nou pa-p ka fè anyen.
 without anything we PA-FUT able do anything
 'Without anything, we will not be able to do anything.'



- The availability of n-words in fragments does not show that they are intrinsically negative;
- N-words can be NPI indefinites;
- HC must have a silent (sentential) negation.







- Show more evidence that n-words can be indefinites;
- Show that they cannot be negative quantifiers.

Indefinite readings (1)

There are cases where n-words can clearly behave as indefinites:

- (27) San anyen...
- (28) a. Èske okenn moun rele m? *'Did anyone call me?'*
 - b. Èske ou te wè **anyen?** *'Did you see anything?'*
 - c. M ap mande si okenn moun ap vini. *'I wonder whether anyone will come.*'

[Déprez 1999]



Indefinite readings (2)

- N.B.: Not all n-words are good in questions, and there might be speaker variation w.r.t. (28);
- Moreover, n-words are not acceptable in all the environments in which any is good:
- (29) a. *Si ou touye **pèsonn**, ou pral nan prison. *'If you kill anyone, you will go to jail.'*
 - b. *Bouki pi wo pase **pèsonn.** 'Bouki is taller than anyone.'
 - c. Tout timoun ki wè *anyen/yon bagay dwe di'm. 'Every child who sees anything must tell me.' [DeGraff 1993]

But this is not a serious problem for the claim that n-words are NPIs; we know that NPIs vary in strength within and across languages. This means that the distribution of NPIs varies a lot.

More evidence that n-words are indefinites comes from modalized sentences.

- In (30), negation is interpreted in the matrix (above the modal), and the n-word appears to contribute an indefinite:
- (30) Li pa ka li anyen. he PA able read anything 'He can't read anything'. (¬◊∃)
 - Caveat: The same reading would obtain if n-words were wide scope universals. But they are not...

Indefinite readings (4)

- (31) Li pa oblije li anyen.
 he PA obliged read anything
 'He doesn't have to read anything.' (¬□∃)
 - The following is contradictory, showing that the n-word does not take scope in the matrix:

(32) #(31), men li oblije li yon bagay. but he obliged read something *"#He doesn't have to read anything, but he has to read something."*Does not mean: *'There is no (specific) thing that he has read, but he has to read something.'*

There is **no movement of n-words** (contra the negative concord theories which hold that there is movement to NegP).

Indefinite readings (5)

More evidence that n-words are **NPI** indefinites comes from **inter-vention effects.**

- First, observe the intervention created by the adverb always on NPIs:
- (33) *He doesn't always understand anything.
 - Then, consider the following sentence:
- (34) Li pa toujou konprann kou a.
 he PA always understand class the 'He doesn't always understand the class.'

Novel observation

This low adverb creates an intervention effect on object n-words, e.g. anyen:

*LF: PA... TOUJOU...n-word

*Li pa toujou konprann anyen.
 Does not mean: 'He doesn't always understand something.'
 Does not mean: 'He always understands nothing.'
 Does not mean: 'There is nothing that he always understands.'

The unavailability of the third reading is a problem for any theory in which n-words are **negative quantifiers** that move to NegP.

- The claim that HC does not have negative quantifiers is straightforwardly corroborated by the unavailability of sentences like:
- (36) *Li vini pou anyen.

(=(24a))







- N-words must be NPI indefinites in HC;
- HC has no negative quantifiers.



2 No overt negation in HC

Part 2: No overt negation in HC

- We said that HC has a silent sentential negation that appears in fragments;
- But this seems to overgenerate!
- (37) —Kimoun ki wè ou? —Jan. The answer does **not** mean: *'Not Jan.*'
- (38) Li ri.

Does not mean: 'He does not laugh.'

► Hypothesis: Negation is **always silent** in HC, and this NEG **requires an n-word in its scope**; *pa* is itself an n-word.

The idea: A negative rule (Homer & Thommen 2013)



Negative rule:

No clause can contain NEG, the silent sentential negation, if it contains no n-word in the scope of NEG.

Evidence that *pa* is not intrinsically negative:

Novel observation

(39) Li pati san li *(pa) di orevwa. he leave without he PA say goodbye 'He left without saying goodbye.' Outstanding questions

- 1 Pa is possible in fragment answers (—Pa ditou), but it is incompatible with other n-words:
- (40) —Kimoun ki wè ou? —(*Pa) pèsonn (*pa).
 - 2 Also, In full clauses, it seems that *pa* is the only n-word that can satisfy this negative rule (**Pèsonn vini*). Why?

- This is puzzling, but...
- The incompatibility of pa with other n-words is reminiscent of other similar facts (subject n-words in Italian and Québec French);
- The second puzzle points to a solution which requires a better understanding of (i.) the structure of fragments, and of (ii.) the locality conditions that restrict the negative rule (to explain why pa has a special status).

A few puzzles (3)

Effects of locality in European French

- Although I don't have an account for those facts, I notice that in EF, which also has a negative rule (Homer & Thommen 2013), the n-word that satisfies the negative rule cannot be too far away from NEG:
- (41) Je ne peux NEG aider personne.
 - I NE can NEG help anyone
 - 'I can't help anyone.'

A few puzzles (4)

Effects of locality in European French

(42) a. *Je ne pense NEG que personne soit venu.
I NE think NEG that anybody is come Intended: 'I don't think that anybody came.'
b. *Je n' essaie NEG de jamais l' aider.
I NE try NEG to ever him help Intended: 'I don't try to ever help him.'

► Hypothesis: In HC, the negative rule must be satisfied very locally, and *pa* is the closest possible n-word to NEG.

An interesting consequence

- The fact that HC does not have constituent negation (remember that negation is always silent), together with the assumption that there is only one sentential negation per clause, explains why double negation readings (DN) are not available in HC:
- (43) Pèsonn NEG pa wè anyen. (=(12))
 'Nobody saw anything.' (¬∃∃)
 Does not mean: 'Everybody saw something.' (¬∃¬∃)
 - EF has (silent) constituent negations, and as a consequence, it has DN readings:
- (44) Personne n' aime NEG personne.
 anybody NE likes NEG anybody
 'Nobody likes anybody.' (¬∃∃)
 Or: 'Everybody likes someone.' (¬∃¬∃)

- N-words are NPI indefinites.
- No clause can contain NEG, the silent sentential negation, if it contains no n-word in the scope of NEG (negative rule).
- So n-words require a licensing environment and are required to satisfy the negative rule.
- Hypothesis: *pa* is itself an n-word: HC has no overt negation.

Implications for Haitian Creole

There is no negative concord;

■ There are no negative quantifiers.

Comparing HC and EF

	HC	EF
Height of <i>pa/pas</i>	Above T	Below T
Obligatory <i>pa/pas</i> in full clauses	Yes	No
Constituent negations	No	Yes
Availability of DN readings	No	Yes
Table: Key differences in the negative systems		

Thank you!