

## Licensing null pronouns: evidence from Creole languages<sup>1</sup>

Patricia Cabredo Hofherr, pcabredo@univ-paris8.fr

UMR 7023 *Structures formelles du langage* (CNRS & Univ. Paris-8)

### 1 Pro-drop: licensing vs. identification

- The analyses of pro-drop can be divided into two types depending on the role they attribute to agreement (see the discussion in Tóth (2000))

- (1)
  - a. **Content assignment** theories: the null pronoun has no traits and the content of the pronoun is assigned by the agreement.
  - b. **Content identification** theories: null pronouns have their own traits that have additional identification requirements satisfied by the agreement.
- (2) The person and number features originate
  - a. on the agreement → agreement **assigns** features to a featureless pronoun
  - b. on the null pronoun → agreement **identifies** the existing features of the pronoun

- Claim: both options are needed.

### 2 Pro-drop without agreement: range of null pronouns

- Null subjects in languages without agreement are not uniform.
- The lexically available range of null subjects in a language must play a role too.
- Mauritian, Capverdean, Haitian and Guadeloupéen do not have licensing agreement on the verb.

---

<sup>1</sup>I am grateful to Nora Boneh for help with the Modern Hebrew data, to Muhsina Alleesaib and Shrita Hassamal for their help with Mauritian, Maxime Deglas for his help with Guadeloupéen, the students of the FLA, Port-au-Prince, and Renaud Govain for their help with Haitian. The support of the projects *Towards a typology of human impersonal pronouns* (2012-2015) (ANR-DFG, Jena & Paris) and the *GDRi Créoles* is gratefully acknowledged.

- Mauritian, Capverdean, Haitian and Guadeloupéen differ in the distribution of null subjects.

	Mauritian	Capverdean	Haitian	Guadeloupéen
anaporic pro	–	– ((9))	–	–
expletive pro seem	+ ((3)a)	+ ((7)a)	+ ((10))	+
quasi-arg pro is cold	+ ((3)b)	+ ((7)b)	– ((11))	+
R-impersonal pro they say etc.	+ ((3)c/d)	+ ((7)c/d)	– ((13))	–

## 2.1 Mauricien

### (3) Mauricien

- Ø posib Pyer lakaz  
possible Pierre house  
'It's possible Peter's at home' (ex 5, Syea 1993, p.92)
- (li) fer so deor.  
(it) make hot outside  
It's hot outside. (ex 49a, Syea 2012, p.40)
- Ø finn kokin Pier so loto.  
EC PERF steal P POSS-3SG car  
EC has stolen Peter's car. (ex 1, Syea 1993, p.92)
- Ø vann pwason dan bazar.  
EC sell fish on market  
EC sell fish in the market.  
(ex 2, Syea 1993, p.92)

### (4) Maurician: expletives

- res** 2 zour avan nou vwayaz Antilles.  
remain 2 days before our journey Antilles  
Il reste deux jours avant notre voyage aux Antilles.
- Paret** ki Pierre pou al en vwayaz demin.  
seems that P. will go on journey tomorrow  
Il semble que Pierre va partir en voyage demain.
- pou resi fer sa reset la **bizin** met disik kann.  
to succeed make this recipe det need put sugar cane

Pour réussir cette recette il faut mettre du sucre de canne.

- (5) Maurician: subject with *possible*-type predicates and extraposition
- a. (**li**) inkroyab ki sa dimounn la esay travers Latlantik ar ram  
3sg unbelievable that this person det try cross Atlantic rowing  
Il est incroyable que cette personne essaye de traverser l'Atlantique à la rame. (Shrita Hassamal, p.c.)
  - b. (**li**) inposib ki Pierre kriminel la. (1er krim la li ti kot mwa.)  
3sg impossible that P. criminal det.  
Il est impossible que Pierre est le meurtrier. (A l'heure du crime il était chez moi.)
  - c. (**li**) posib ki Pierre pa kot li.  
3sg possible that P not where 3sg  
Il est possible que Pierre ne soit pas chez lui.
- (6) Maurician: Reference-impersonals (impersonal human subjects)
- a. fer rom ar disik kann  
make rum with sugar cane  
One makes sugar with cane sugar.  
On fait le rhum avec de la canne a sucre. (Shrita)
  - b. **Zot** inn kokin pierre so loto.  
3pl perf steal P. poss car  
Ils ont volé la voiture de Pierre.  
(Shrita)
  - c. **zot** dir ki sa patisier la prepar meyer tart-tatin dan sa lavil la  
3pl say that this baker det prepares best tarte-tatin in this town det  
On dit que ce patissier prépare la meilleure tarte tatin de la ville.
  - d. dan lete **nou** lev boner.  
in summer we get-up early  
En été, on se réveille tôt.
  - e. **zot** anv bon pwason lor marse.  
3pl sell good fish on market  
Ils vendent du bon poisson sur le marché. (Shrita)

## 2.2 Capverdean

- (7) a. Capverdean expletive  
 []/ \*el fika dos dias antes di nos viaji (expletive subject) (CVC)  
 []/ it remain two days before of our trip.  
 There remain two days before your trip. (Baptista, 1995, p. 9 ex 20a,b)  
 (Il reste deux jours...)
- b. Capverdean weather pro  
 []/ \*el sta faze friu (weather predicate, quasi-argument)  
 []/ it is making cold  
 It is cold. (Baptista, 1995, p. 9 ex 19a,b) (Il fait froid)
- c. Capverdean generalizing human pro  
 Na vernon, [] ta korda sedu. (R(eference)-impersonal)  
 in-the summer ASP wake early  
 In the summer one wakes up early. (Barbosa, 2011, p. 11, ex 24b)
- d. Capverdean  
 Ø ka debe roba  
 Ø NEG must steal  
 '(One) must not steal. Bayer (2013, 63, Table 4.2)
- Note: In (7-d) it is not clear if this is an
- (8) a. impersonal modal + infinitive comparable to Fr. *il ne faut pas* or  
 b. a null human impersonal subject + modal comparable to Fr. *on ne doit pas*
- CVC has no referential pro.
- (9) \*(N) papia txeu. / \*(Bu) papia txeu. / \*(E) papia txeu.  
 1SG speak much / 2SG speak much / 3SG speak much  
 Costa and Pratas (2012)

## 2.3 Haitian

- (10) Haitian expletives
- a. **Genlè** Jak damou. (créole haitien)  
seem Jak in-love  
It seems that Jak is in love. (DeGraff (1993, 71, ex 1))
  - b. **Sanble** li te fè frèt. (créole haitien, PaP)  
semble 3sg ANT faire frais  
Il semble qu'il a fait frais.
  - c. **Sanble** Pyè ap vwayaje demen.  
seem P. FUT travel tomorrow  
It seems that Pyè will be travelling tomorrow.
  - d. **Rete** de jou pou nou pati nan Antiy la.  
remain two day for 1PL leave to Antilles DET  
There are two days left until we leave for the Antilles.
  - e. Pou reyisi resèt sa a **fòk** nou mete sik kann.  
to succeed recipe DEM DET is-necessary 1PL put-in sugar cane  
To make this recipe well it is necessary to put in cane sugar.
- (11) Haitian weather pro
- a. li te **fè frèt** (créole haitien, PaP)  
3sg ANT does cold  
3sg ANT faire frais  
Il a fait frais. (différence dialectale avec le CH du nord, DeGraff 1993: 72  
(2))
  - b. Li **fè anpil lapli** ane sa a.  
3sg does a-lot rain year DEM DET  
It rains a lot this year. lit. It does a lot of rain this year.
- (12) Haitian adj+ extraposition
- a. Li pa **kwayab** pou moun sa eseye travèse Atlantik la pandan li  
3sg NEG credible that person this try cross Atlantic det while 3sg  
ap rame.  
PROG row  
It is incredible that this person tries to cross the Atlantic by rowing.
  - b. Li pa **posib** pou se Pyè ki se ansasen an.  
3sg NEG possible that P. SE P. who SE murderer det  
It is impossible that Pyè is the murderer.
  - c. Li **posib** pou Pyè pa lakay li.  
3sg possible that P. NEG home 3sg  
It is possible that Pyè is not at home. (lit. his home)

Il est possible que Pierre ne soit pas chez lui.

(13) Haitian impersonal human

- a. **Yap** frape.  
3pl+PROG frapper  
On frappe (lit. ils sont en train de frapper)
- b. **Yo** vòlè machin Pyè a.  
3pl steal car P. DET  
They stole Pierre's car.
- c. **Yo** montè taks ankò.  
3pl augmenter impôts encore  
Ils ont encore augmenté les impôts.
- d. **Yo** fè wonm ak kann.  
3pl make rhum with cane  
One makes rhum with sugar cane. (Lit. They make...)
- e. **Yo** vann bon pwason nan mache.  
3pl sell good fish on market  
They sell good fish on the market.
- f. An Frans, **yo** pale franse.  
in France 3pl speak French  
In France they speak French.
- g. **Yo** di patisye sa a fè pi bon tat nan vil la.  
3pl say baker DEM DET make most good cake in town DET  
They say this baker makes the best cake in (the) town.

## 2.4 Guadeloupéen

### (14) Guadeloupéen: expletive subjects

- a. Ka **rété** dé jou avan vwayaj an nou oz antiy.  
 IMPFV remain two days before journey of 1PL to Antilles  
 « Il reste deux jours avant notre voyage aux Antilles ».
- b. Pou réyisi rèsèt-lasa **fò**'w mété sik kann.  
 to succeed recipe-det must'2SG put suger cane  
 « Pour réussir cette recette il faut mettre du sucre de canne ».  
 (Maxime Deglas, p.c.)

### (15) Guadeloupéen: subject with *possible*-type predicates and extraposition

- a. Sa **enkwayab** kè moun-lasa ka éséyé travèsé latlantik èvè  
 that unbelievable that person-det IMPFV try cross Atlantic with  
 zaviwon.  
 oar  
 « Il est incroyable que cette personne essaye de traverser l'Atlantique à la  
 rame. »
- b. Sa **enposib** kè sé Pyè asasen-la.  
 that impossible that sé P. murderer-det  
 « Il est impossible que Pierre est le meurtrier ». (A l'heure du crime il était  
 chez moi.) (Maxime Deglas, p.c.)

### (16) Guadeloupéen: quasi-argumental / weather subjects

Ka **fè cho** dèwò-la.  
 IMPFV makes hot outside  
 IMPFV faire chaud dehors

'It is hot outside.' (There are some speakers that use an expletive subject *i*, but the null subject is more common.) (Maxime Deglas, p.c.)

### (17) Guadeloupéen: R-impersonal subjects

- a. **Yo** ka vann bon pwason anba marché.  
 3PL IMPFV sell good fish under market  
 « Ils vendent du bon poisson sur le marché ».
- b. **Yo** ògmanté enpo.  
 3PL raise taxes  
 « Ils ont augmenté les impôts ».
- c. Ann almagn **yo** kay o travay a uitéd-maten.  
 In Germany 3PL go to work at 8-in-the-morning

In Germany, they go to work at 8am.

« En Allemagne, on va au travail à 8 heures du matin ».

- d. **Yo** ka di kè patisyé-lasa ka fè méyè tart taten a vil-la.  
 3PL IMPFV say that baker-DET IMPFV make best tarte tatin at town-DET  
 « On dit que ce pâtissier prépare la meilleure tarte tatin de la ville ».  
 (exemples Maxime Deglas, p.c.)

### 3 Analysis

- Both agreement and inventory of pronouns play a role in licensing null subjects.
  - Possible hypotheses
- (18) a. Hypothesis 1: The relationship between agreement and intrinsic features is a matching relationship, not an asymmetrical relationship of licensing or identification.
- b. Hypothesis 2: Languages vary between content assignment vs content identification.
- Different null pronouns reflect a hierarchy of deficiency of the pronoun.
  - Proposal: There is a difference in the structure of the null pronouns available in a language.

(19)

referential pro:	DP	[PersonP	[NumP	[NP]]] (Spanish)
antecedentless count pro:		PersonP	[NumP	[NP]] (Spanish pro + deficient 3pl)
antecedentless count pro:			[NumP	[NP]] (Mauritian, CVC = null <i>one</i> )
			[NumP	[NP]] (Ukrainian pro+ deficient 3pl)
antecedentless mass pro:				NP (Guadeloupéen)
expletive pro:				NP (Haitian)

- 3pl person *they* contains a 3rd person feature: excludes speaker and hearer.
- DPs with a lexical head-noun and indefinite pronouns do not have a 3rd person-feature: they do not exclude the speaker/hearer:

- (20) a. In Mexico, **they** eat late. (external perspective of the speaker)
- b. **Mexicans** eat late. (external or internal perspective of the speaker)

c. **Someone** should bring a picnic-hamper. (In fact, I can).

- If ((19)) were correct, null *one* would be more similar to a person-less full NP, not a personal pronoun.

## 4 Conclusion

- The variability of null subjects across languages without verbal agreement shows that variability in null subjects cannot be reduced to variable properties of agreement. —> also need different inventories of null pronouns
- The pro-drop patterns with inflected infinitives in Hungarian and the inflected negation in Modern Hebrew suggest that the licensing of referentially deficient null subjects (expletives, quasi-arguments, antecedentless human subjects) depends on the availability of a featurally deficient agreement form.
- Proposal for a deficiency hierarchy across null pronouns.
- Open question: what feature combinations distinguish null impersonal *one*, meteorological and expletive *pro*?
- Both content-identification and content-assignment for null subjects are instantiated across languages.
- Questions for further research:

- (21) a. Q1: What is the syntax of *possible*-type predicates?  
 b. Q2: What is the lexical category of the necessity predicate? Noun? Verb? Modal predicate?  
 MC.*bizin*, HC *fok*, GC *fò*

## 5 Appendix: The role of different agreement paradigms

- It is not a person-number-gender combination that allows human impersonal or expletives in a language.
- Work by Tóth (2000, 2011) and Shlonsky (1997) shows that agreement on non-finite categories and on verbs for the **same** person/number/gender features does not allow the same readings.
- This shows that the agreement plays a role in the licensing of the null subject.

## 5.1 Hungarian

- Hungarian has inflected infinitives.
- Tóth (2000, 2011) shows that the 3pl agreement on **finite verbs** and on **inflected infinitives** does not license the same pro-drop.
- The null subject with 3pl agreement on a **finite verb** can be human impersonal or anaphoric.
- The null subject with 3pl agreement on an **infinitive** can only be or anaphoric.

(22) a. Hungarian inflected 3pl infinitive:

# Hall-od? Jár-ni-**uk** kell az erdő-ben.  
 hear-2SG walk-INF-3PL must the forest-in  
 Can you hear? Someone(s) is/(are) walking in the forest.  
 (inflected 3pl infinitive) (Tóth, 2011, 226,33a).

b. Hungarian finite 3pl verb:

Zaj-t hallott-am. Bizonyára jár-**nak** az erdő-ben.  
 Noise-ACC heard-1sg. Surely walk-PRES3PL the forest-in  
 I heard some noise Someone(s) must be walking in the forest. (finite 3pl verb)(Tóth, 2011, 226,33b).

(23) a. Hungarian inflected 3pl infinitive:

# Nem hagy-ják [éjjelente az utcá-n a himnusz-t énekel-ni-**ük**].  
 not let-3pl at.nights the street-on the anthem-acc sing-INF-3PL  
 ‘They do not let them sing the anthem on the street at night.’

b. Hungarian finite 3pl verb:

Nem hagy-ják, hogy éjjelente az utcá-n a himnusz-t énekel-**jék**.  
 not let-3pl that at.nights the street-on the anthem-acc sing-3PL.SUBJ  
 ‘They do not let them sing the anthem on the street at night.’ (Tóth, 2011, 231, ex 42a/b)

- Toth (2011):

(24) **3pl agreement:** the unavailability of the arbitrary readings is due to the property of the 3PL agreement morpheme on the infinitive: this agreement morpheme always requires the presence of a referential null subject and therefore cannot be used as default agreement. (Tóth, 2011, 231)

## 5.2 Modern Hebrew

- In simple sentences anaphoric 3rd person cannot be null in Modern Hebrew (MH). In embedded sentences can have null subject co-referent with higher argument. (Borer, 1989).
- Non-referential 3rd person can be null in MH.

- (25) a. haya kar (MH)  
be[past]-3ms cold  
It was cold. (ex(7-29)a.,Shlonsky 1997:123 - quasi-arg)
- b. hitxolela ba-xuc sEXara.  
rage[past]-3fs in-the-outside storm  
'A storm raged outside.' (ex(7-31)a.,Shlonsky 1997:124 - DP-expletive)

- Impersonal human pro patterns with non-referential *pro*

- (26) maxru šam kartisim. (MH)  
sell[past]-3mp there tickets  
'They(arb) sold tickets there.' (ex(7-29)b.,Shlonsky 1997:123)

- MH has an **inflected** negation  $\text{?eyn}$ .
- The **inflected** negation  $\text{?eyn}$  does **not** allow quasi-argumental or non-referential null-subjects:

- (27) a. \* $\text{?eyn}$  -o kar. (MH)  
neg 3ms cold  
'It isn't cold.' (atmospheric pro)
- b. \* $\text{?eyn}$  -am mitxolelot kan sufot.  
neg 3.pl occur here storms  
'Storms don't occur here.' (DP-expletive)
- c. \* $\text{?eyn}$  -o kaše li-lmod polanit.  
neg 3.ms difficult to-learn Polish  
'It isn't difficult to learn Polish.' (CP-expletive)
- d. \* $\text{?eyn}$  -am dofkim ba-delet.  
neg 3PL knock(benoni).PL on-the.door  
'Noone is knocking on the door.' (existential pro<sub>arb</sub>)
- e. \* $\text{?eyn}$  -am ma $\text{?arixim}$   $\text{?et}$  ha-truma šela.  
neg 3pl value.benoni.pl acc the-contribution her  
'People don't value her contribution.' (universal pro<sub>arb</sub>) (Shlonsky, 1997, p.141))

## References

- Baptista, Marlyse, 1995. On the nature of pro-drop in Capeverdean Creole. *Harvard Working Papers in Linguistics*, 5:3–17.
- Barbosa, Pilar, 2011. Partial pro-drop as null NP anaphora. ms, Univ do Minho.
- Bayer, Rachel, 2013. *Null subjects in Creole languages*. Master's thesis, University of Michigan, Ann Arbor.
- Borer, Hagit, 1989. Anaphoric AGR. In Jaeggli, Osvaldo and Kenneth Safir (eds.), *The Null Subject Parameter*, pp. 69–109. Dordrecht: Kluwer.
- Costa, João and Fernanda Pratas, 2012. Embedded null subjects in Capeverdean. *Journal of Linguistics*, 49:33 – 53.
- DeGraff, Michel, 1993. Is Haitian Creole a pro-drop language? In Byrne, Francis and John Holm (eds.), *Atlantic Meets Pacific. A global view of pidginization and creolization*, pp. 71–90. Amsterdam / Philadelphia: John Benjamins.
- Shlonsky, Ur, 1997. *Clause Structure and Word Order in Hebrew and Arabic*. Oxford: Oxford University Press.
- Syea, Anand, 1993. Null subjects in Mauritian Creole and the pro-drop parameter. In Byrne, Francis and John Holm (eds.), *The Atlantic meets the Pacific: A global view of pidginization and creolization*, pp. 91–102. Amsterdam/ Philadelphia: John Benjamins.
- , 2012. *The syntax of Mauritian Creole*. Bloomsbury.
- Tóth, Ildikó, 2000. *Inflected infinitives in Hungarian*. Ph.D. thesis, Katholieke Universiteit Brabant, Tilburg.
- , 2011. Non-referential readings of null subjects in Hungarian. In Kenesei, István (ed.), *Approaches to Hungarian*, pp. 209–237. Amsterdam/ Philadelphia: John Benjamins.