

1.2. 'RADICAL' PRO-DROP IN RICH AGREEMENT LANGUAGES²

PRO-DROP AS ELLIPSIS: EVIDENCE FROM THE INTERPRETATION OF NULL ARGUMENTS

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Background:

It is generally accepted that there are (at least) two types of pro-drop (*cf.* a.o. Oku 1998, Baker 2001, Holmberg 2005, 2010, Tomioka 2003, Takahashi 2007, 2010, Speas 2006, Neleman & Szendrői 2007, Roberts 2010, Sener & Takahashi 2010, Miyagawa 2012).

A widely extended view: *pro drop via inflection/agreement vs. radical/discourse pro-drop*

Goals of the talk:

1. To show that reductionist approaches to the phenomenon of null arguments (NAs) must be preferred over non-reductionist approaches (Part 1).
2. To show that an reductionist analysis is possible, where NAs result from DP/NP-ellipsis across all pro-drop languages (Part 2).
3. To show that the interpretive properties of NAs can be accounted for in terms of an independently needed condition on Parallelism, which requires ellipsis sites to have a suitable discourse antecedent (Part 3).

1.2.1. FINITE CLAUSES VS. NON-FINITE CLAUSES

- (1) a. Nik Joni artikuluak eman dizkiot.
me.ERG Jon.DAT papers.ABS give 3plABS.aux.3sgDAT.1sgERG
'I gave the papers to Jon.'
- b. [e] [e] eman dizkiot.
give 3plABS.aux.3sgPAT.1sgERG
'I gave them to him/her/it.'
- (2) a. [e] nahi duzu [nik Joni artikuluak ematea]?
want AUX me.ERG Jon.DAT papers.ABS give.NMLZ
'Do you want me to give the papers to Jon?'
- b. [e] nahi duzu [[e] [e] ematea]?
want AUX give.NMLZ
'Do you want me/him/her/it/us/them to give me/you/him/her/it/us/them to me/you/him/her/if/it/us/them?'

- (3) a. Nya-angu-mangku.
see-PAST-1sg-2sg
'I saw you.'

- b. Purra-nja-rla [e], [e] nga-rnu [e].
cook-INF-PRIORITY eat-PAST
'Having cooked (it). (he/she/it) ate (it).'

1.2.2. INFLECTED VS. NON-INFLECTED MATRIX CLAUSES

- (4) a. Gopi/[e] hanNannu tinda.
Gopi.NOM fruit.ACC eat.PAST.3sg.M
'(Gopi) ate fruit.'
- b. [e] banuvdilla.
come.GER.NONPAST.NEG
'(I) am not coming.'
- (5) Ngajulu-rlu kapi-rla-ngku yi-nyi nyuntu-ku.
L-ERG FUT.C-1sg-2sg give-NPAST you-DAT
'I will give (it/them/...) to you.'

- Warlpiri Kannada Warlpiri*
(Legate 2002: 32)
(Laughren 1989: 326)
(Nadathalli 1998: 57)
(Nadathalli 1998: 58)

- By distinguishing different types of NAs (or different ways of licensing them), we imply that null elements with the same properties can have different sources in individual languages. In this regard, a unitary explanation has clear advantages.

1.3. THE PROPERTIES OF NAs ACROSS PRO-DROP LANGUAGES

1.3.1. DISCUSSION OF THE EMPIRICAL BASES FOR DIFFERENTIATING TYPES OF PRO-DROP

- If null arguments (NAs) have invariant properties cross-linguistically, the default hypothesis is that in all these languages, they are the same type of element, and are subject to the same licensing conditions.
- Assuming that languages can appeal to different sets of null elements with the same properties or to different licensing conditions with indistinguishable results has a substantial cost for the theory of grammar.
- A distinction should only be assumed if there is strong evidence that the same explanation cannot be given for the whole phenomenon under analysis.

¹ I will limit the discussion to standard referential null arguments, excluding other types of non-overt subjects, like null expletives, null generics, 'controlled' null subjects, null topics.

² Relevant abbreviations: [e] = null argument, AUX = inflected auxiliary, ABS = absolute, DAT = dative, ERG = ergative, INE = inessive, D = determiner sg = singular, pl = plural, NMLZ = nominalizing morpheme.

■ Generalization on the interpretation of NAs

There are empirical differences in the possible interpretations of NAs, regarding (i) the sloppy interpretation and (ii) the indefinite/quantificational interpretation.

- Sloppy reading of subjects in Japanese and Spanish

(6) A: Mary-wa [zibun-no teian-ga saiyō-sare-ni] omotteiru.
Mary-top self-GEN proposal-NOM accept-PASS-that think
'Lit. Mary thinks that self's proposal will be accepted.'

B: John-no [le] saiyō-sare-ni] omotteiru.
John-also accept-PASS-that think
'Lit. John also thinks that [e] will be accepted.'

- ✓ Strict reading for (6b): 'John also thinks that Mary's proposal will be accepted.'

(7) ✓ Sloppy reading for (6b): 'John also thinks that his own proposal will be accepted.'

(8) A: María cree que su propuesta será aceptada.
Maria believes that her proposal be.FUT.3SG accepted
'Maria believes that her proposal will be accepted.'

B: Juan también cree que [e] será aceptada.
Juan also believes that be.FUT.3SG accepted
'Juan also believes that [e] will be accepted.'

- ✓ Strict reading for (8b): 'Juan also believes that Maria's proposal will be accepted.'

✗ Sloppy reading for (8b): 'Juan also believes that his own proposal will be accepted.'

- Indefinite reading of null subjects in Japanese and Spanish:

(10) A: Seerusanaga Mary-no uchi-ni kita.
salesman-NOM Mary-GEN house-to came
'A salesman came to Mary's house.'

B: [e] John-no uchi-ni-mo kita.
John-GEN house-to-also came
'Lit. Came to John's house, too.'

- ✓ Definite reading for (10b): 'The salesman came to John's house, too.'

✓ Indefinite reading for (10b): 'A salesman came to John's house, too.'

(12) A: Un vendedor fue a la oficina de María.
a salesman go.PST.3SG to the office of María
B: También [e] fue a la oficina de Juan.
also go.PST.3SG to the office of Juan
'Lit. Also went to Juan's office.'

- ✓ Definite reading for (12b): 'The salesman/He came to Juan's office, too.'

✗ Indefinite reading for (12b): 'A salesman came to Juan's office, too.'

- The hypothesis put forth in the literature: NAs across (and within) languages can be fundamentally different (cf. Oku 1998, Saito 2007, Takahashi 2007, 2010, Miyagawa 2012).³

(13) ✓ pro-type null arguments: licensed/identified via inflection/agreement
elided NPs/DPs: licensed by/in the absence of agreement/inflection
→ strict and definite readings

(14) ↗ pro-type null arguments: licensed/identified via inflection/agreement
elided NPs/DPs: licensed by/in the absence of agreement/inflection
→ strict & sloppy (definite) readings, and indefinite readings

§ener & Takahashi (2010): both types of NAs coexist in Turkish:
(15) (e) (e) at-tr-n. throw-PAST-1SG pro
Lit. I threw [e].

1.3.2. THE GENERALIZATION REGARDING THE SLOPPY READING IS INCORRECT

Prediction of (14): null DPs that trigger agreement will never allow a sloppy reading.

Facts: there are counterexamples to the generalization on sloppy readings (*cf.* also Koulidobrova (2011) on ASL, and Roselló & Quer (2013) on Catalan Sign Language).

(16) A: El primer año de tesis, mi director me trató muy bien.
the first year of thesis my supervisor cl.1sg(DAT) treat.PST.3SG very well.
'The first year, my supervisor treated me very well.'

B: Pues, ¡a mí [e] no me hizo ni caso!
well to me NEG cl.1sg(DAT) make.PST.3SG NEG attention
Lit. 'Well, to me, [e] didn't pay attention!'

(17) ✓ Strict reading for (16B): 'Your supervisor didn't pay attention to me.'

✓ Sloppy reading for (16B): 'My supervisor didn't pay attention to me.'

(18) A: Jonek bere txakurrak parkera eraman ohi ditu.
Jon poss dog park.to take HABIT 3plABS.AUX.3plPREG
'Jon habitually takes out his dogs to the park.'

B: Ba, Mirenk [e] mendira ematen ditu gehienetan.
well Miren mountain.to take 3plABS.AUX.3plPREG mostly
Lit. 'Well, generally Miren takes out [e] to the mountain.' (strict ✓; sloppy ✓)

(19) A: 18 ure bere nituenan, nire gurasoek moto bat eskaini zidaten.
18 year fill AUX.when my parents moto one offer AUX
'For my 18th birthday, my parents offered me a moto.'

B: Ba, ni-ri [e] liburu bat eskaini zidaten!
well me-DAT book one offer AUX.3sgABS.1sgDAT.3plPREG
Lit. 'Well, to me, [e] offered a book!' (strict ✓; sloppy ✓)

1.3.3. THE INDEFINITE READING OF NULL ARGUMENTS

Prediction of (14): there will be a one-to-one correlation between agreement and the availability of the indefinite reading.

Facts (I): the data in Basque is much more complex than predicted.

• As predicted if the indefinite reading is blocked by agreement, in finite clauses, null subjects and objects (generally) cannot have an indefinite interpretation (see Dugune 2006, Takahashi 2007);

(20) A: Saltzaila bat Miren etxera joan da.
salesman one Miren.GEN house.to go AUX.3sgABS
'A salesman went to Miren's house.'

B: [e] Jonen etxera joan da ere.
Jonen.GEN house.to go AUX.3sgABS too
Lit. [e] went to Jon's house, too.

(21) A: (Nik) saltzaile bat ikusi dut etxe aurrean.
L.ERG salesperson one see AUX.3sgABS.1sgERG house front.in
'I saw a salesman in front of the house.'

B: (Nik) [e] lantokian ikusi dut.
L.ERG workplace.in see AUX.3sgABS.1sgERG
Lit. I saw [e] in the workplace.

(definite ✓; indefinite ✗)

1.3.4. THE INDEFINITE READING OF PRO

Prediction of (14): there will be a one-to-one correlation between agreement and the availability of the indefinite reading.

Facts (II): the data in Basque is much more complex than predicted.

• As predicted if the indefinite reading is blocked by agreement, in finite clauses, null subjects and objects (generally) cannot have an indefinite interpretation (see Dugune 2006, Takahashi 2007);

(22) A: Jonen etxera joan da ere.
Jonen.GEN house.to go AUX.3sgABS too
Lit. [e] went to Jon's house, too.

(23) A: (Nik) saltzaile bat ikusi dut etxe aurrean.
L.ERG salesperson one see AUX.3sgABS.1sgERG house front.in
'I saw a salesman in front of the house.'

B: (Nik) [e] lantokian ikusi dut.
L.ERG workplace.in see AUX.3sgABS.1sgERG
Lit. I saw [e] in the workplace.

(definite ✓; indefinite ✗)

1.3.5. THE INDEFINITE READING OF PRO

Prediction of (14): there will be a one-to-one correlation between agreement and the availability of the indefinite reading.

Facts (III): the data in Basque is much more complex than predicted.

• As predicted if the indefinite reading is blocked by agreement, in finite clauses, null subjects and objects (generally) cannot have an indefinite interpretation (see Dugune 2006, Takahashi 2007);

(24) A: Saltzaila bat Miren etxera joan da.
salesman one Miren.GEN house.to go AUX.3sgABS
'A salesman went to Miren's house.'

B: [e] Jonen etxera joan da ere.
Jonen.GEN house.to go AUX.3sgABS too
Lit. [e] went to Jon's house, too.

(25) A: (Nik) saltzaile bat ikusi dut etxe aurrean.
L.ERG salesperson one see AUX.3sgABS.1sgERG house front.in
'I saw a salesman in front of the house.'

B: (Nik) [e] lantokian ikusi dut.
L.ERG workplace.in see AUX.3sgABS.1sgERG
Lit. I saw [e] in the workplace.

(definite ✓; indefinite ✗)

1.3.6. THE INDEFINITE READING OF PRO

Prediction of (14): there will be a one-to-one correlation between agreement and the availability of the indefinite reading.

Facts (IV): the data in Basque is much more complex than predicted.

• As predicted if the indefinite reading is blocked by agreement, in finite clauses, null subjects and objects (generally) cannot have an indefinite interpretation (see Dugune 2006, Takahashi 2007);

(26) A: Saltzaila bat Miren etxera joan da.
salesman one Miren.GEN house.to go AUX.3sgABS
'A salesman went to Miren's house.'

B: [e] Jonen etxera joan da ere.
Jonen.GEN house.to go AUX.3sgABS too
Lit. [e] went to Jon's house, too.

(27) A: (Nik) saltzaile bat ikusi dut etxe aurrean.
L.ERG salesperson one see AUX.3sgABS.1sgERG house front.in
'I saw a salesman in front of the house.'

B: (Nik) [e] lantokian ikusi dut.
L.ERG workplace.in see AUX.3sgABS.1sgERG
Lit. I saw [e] in the workplace.

(definite ✓; indefinite ✗)

1.3.7. THE INDEFINITE READING OF PRO

Prediction of (14): there will be a one-to-one correlation between agreement and the availability of the indefinite reading.

Facts (V): the data in Basque is much more complex than predicted.

• As predicted if the indefinite reading is blocked by agreement, in finite clauses, null subjects and objects (generally) cannot have an indefinite interpretation (see Dugune 2006, Takahashi 2007);

(28) A: Saltzaila bat Miren etxera joan da.
salesman one Miren.GEN house.to go AUX.3sgABS
'A salesman went to Miren's house.'

B: [e] Jonen etxera joan da ere.
Jonen.GEN house.to go AUX.3sgABS too
Lit. [e] went to Jon's house, too.

(29) A: (Nik) saltzaile bat ikusi dut etxe aurrean.
L.ERG salesperson one see AUX.3sgABS.1sgERG house front.in
'I saw a salesman in front of the house.'

B: (Nik) [e] lantokian ikusi dut.
L.ERG workplace.in see AUX.3sgABS.1sgERG
Lit. I saw [e] in the workplace.

(definite ✓; indefinite ✗)

1.3.8. THE INDEFINITE READING OF PRO

Prediction of (14): there will be a one-to-one correlation between agreement and the availability of the indefinite reading.

Facts (VI): the data in Basque is much more complex than predicted.

• As predicted if the indefinite reading is blocked by agreement, in finite clauses, null subjects and objects (generally) cannot have an indefinite interpretation (see Dugune 2006, Takahashi 2007);

(30) A: Saltzaila bat Miren etxera joan da.
salesman one Miren.GEN house.to go AUX.3sgABS
'A salesman went to Miren's house.'

B: [e] Jonen etxera joan da ere.
Jonen.GEN house.to go AUX.3sgABS too
Lit. [e] went to Jon's house, too.

(31) A: (Nik) saltzaile bat ikusi dut etxe aurrean.
L.ERG salesperson one see AUX.3sgABS.1sgERG house front.in
'I saw a salesman in front of the house.'

B: (Nik) [e] lantokian ikusi dut.
L.ERG workplace.in see AUX.3sgABS.1sgERG
Lit. I saw [e] in the workplace.

(definite ✓; indefinite ✗)

1.3.9. THE INDEFINITE READING OF PRO

Prediction of (14): there will be a one-to-one correlation between agreement and the availability of the indefinite reading.

Facts (VII): the data in Basque is much more complex than predicted.

• As predicted if the indefinite reading is blocked by agreement, in finite clauses, null subjects and objects (generally) cannot have an indefinite interpretation (see Dugune 2006, Takahashi 2007);

(32) A: Saltzaila bat Miren etxera joan da.
salesman one Miren.GEN house.to go AUX.3sgABS
'A salesman went to Miren's house.'

B: [e] Jonen etxera joan da ere.
Jonen.GEN house.to go AUX.3sgABS too
Lit. [e] went to Jon's house, too.

(33) A: (Nik) saltzaile bat ikusi dut etxe aurrean.
L.ERG salesperson one see AUX.3sgABS.1sgERG house front.in
'I saw a salesman in front of the house.'

B: (Nik) [e] lantokian ikusi dut.
L.ERG workplace.in see AUX.3sgABS.1sgERG
Lit. I saw [e] in the workplace.

(definite ✓; indefinite ✗)

1.3.10. THE INDEFINITE READING OF PRO

Prediction of (14): there will be a one-to-one correlation between agreement and the availability of the indefinite reading.

Facts (VIII): the data in Basque is much more complex than predicted.

• As predicted if the indefinite reading is blocked by agreement, in finite clauses, null subjects and objects (generally) cannot have an indefinite interpretation (see Dugune 2006, Takahashi 2007);

(34) A: Saltzaila bat Miren etxera joan da.
salesman one Miren.GEN house.to go AUX.3sgABS
'A salesman went to Miren's house.'

B: [e] Jonen etxera joan da ere.
Jonen.GEN house.to go AUX.3sgABS too
Lit. [e] went to Jon's house, too.

(35) A: (Nik) saltzaile bat ikusi dut etxe aurrean.
L.ERG salesperson one see AUX.3sgABS.1sgERG house front.in
'I saw a salesman in front of the house.'

B: (Nik) [e] lantokian ikusi dut.
L.ERG workplace.in see AUX.3sgABS.1sgERG
Lit. I saw [e] in the workplace.

(definite ✓; indefinite ✗)

1.3.11. THE INDEFINITE READING OF PRO

Prediction of (14): there will be a one-to-one correlation between agreement and the availability of the indefinite reading.

Facts (IX): the data in Basque is much more complex than predicted.

• As predicted if the indefinite reading is blocked by agreement, in finite clauses, null subjects and objects (generally) cannot have an indefinite interpretation (see Dugune 2006, Takahashi 2007);

(36) A: Saltzaila bat Miren etxera joan da.
salesman one Miren.GEN house.to go AUX.3sgABS
'A salesman went to Miren's house.'

B: [e] Jonen etxera joan da ere.
Jonen.GEN house.to go AUX.3sgABS too
Lit. [e] went to Jon's house, too.

(37) A: (Nik) saltzaile bat ikusi dut etxe aurrean.
L.ERG salesperson one see AUX.3sgABS.1sgERG house front.in
'I saw a salesman in front of the house.'

B: (Nik) [e] lantokian ikusi dut.
L.ERG workplace.in see AUX.3sgABS.1sgERG
Lit. I saw [e] in the workplace.

(definite ✓; indefinite ✗)

1.3.12. THE INDEFINITE READING OF PRO

Prediction of (14): there will be a one-to-one correlation between agreement and the availability of the indefinite reading.

Facts (X): the data in Basque is much more complex than predicted.

• As predicted if the indefinite reading is blocked by agreement, in finite clauses, null subjects and objects (generally) cannot have an indefinite interpretation (see Dugune 2006, Takahashi 2007);

(38) A: Saltzaila bat Miren etxera joan da.
salesman one Miren.GEN house.to go AUX.3sgABS
'A salesman went to Miren's house.'

B: [e] Jonen etxera joan da ere.
Jonen.GEN house.to go AUX.3sgABS too
Lit. [e] went to Jon's house, too.

(39) A: (Nik) saltzaile bat ikusi dut etxe aurrean.
L.ERG salesperson one see AUX.3sgABS.1sgERG house front.in
'I saw a salesman in front of the house.'

B: (Nik) [e] lantokian ikusi dut.
L.ERG workplace.in see AUX.3sgABS.1sgERG
Lit. I saw [e] in the workplace.

(definite ✓; indefinite ✗)

1.3.13. THE INDEFINITE READING OF PRO

Prediction of (14): there will be a one-to-one correlation between agreement and the availability of the indefinite reading.

Facts (XI): the data in Basque is much more complex than predicted.

• As predicted if the indefinite reading is blocked by agreement, in finite clauses, null subjects and objects (generally) cannot have an indefinite interpretation (see Dugune 2006, Takahashi 2007);

(40) A: Saltzaila bat Miren etxera joan da.
salesman one Miren.GEN house.to go AUX.3sgABS
'A salesman went to Miren's house.'

B: [e] Jonen etxera joan da ere.
Jonen.GEN house.to go AUX.3sgABS too
Lit. [e] went to Jon's house, too.

(41) A: (Nik) saltzaile bat ikusi dut etxe aurrean.
L.ERG salesperson one see AUX.3sgABS.1sgERG house front.in
'I saw a salesman in front of the house.'

B: (Nik) [e] lantokian ikusi dut.
L.ERG workplace.in see AUX.3sgABS.1sgERG
Lit. I saw [e] in the workplace.

(definite ✓; indefinite ✗)

1.3.14. THE INDEFINITE READING OF PRO

Prediction of (14): there will be a one-to-one correlation between agreement and the availability of the indefinite reading.

Facts (XII): the data in Basque is much more complex than predicted.

• As predicted if the indefinite reading is blocked by agreement, in finite clauses, null subjects and objects (generally) cannot have an indefinite interpretation (see Dugune 2006, Takahashi 2007);

(42) A: Saltzaila bat Miren etxera joan da.
salesman one Miren.GEN house.to go AUX.3sgABS
'A salesman went to Miren's house.'

B: [e] Jonen etxera joan da ere.
Jonen.GEN house.to go AUX.3sgABS too
Lit. [e] went to Jon's house, too.

(43) A: (Nik) saltzaile bat ikusi dut etxe aurrean.
L.ERG salesperson one see AUX.3sgABS.1sgERG house front.in
'I saw a salesman in front of the house.'

B: (Nik) [e] lantokian ikusi dut.
L.ERG workplace.in see AUX.3sgABS.1sgERG
Lit. I saw [e] in the workplace.

(definite ✓; indefinite ✗)

1.3.15. THE INDEFINITE READING OF PRO

Prediction of (14): there will be a one-to-one correlation between agreement and the availability of the indefinite reading.

Facts (XIII): the data in Basque is much more complex than predicted.

• As predicted if the indefinite reading is blocked by agreement, in finite clauses, null subjects and objects (generally) cannot have an indefinite interpretation (see Dugune 2006, Takahashi 2007);

(44) A: Saltzaila bat Miren etxera joan da.
salesman one Miren.GEN house.to go AUX.3sgABS
'A salesman went to Miren's house.'

B: [e] Jonen etxera joan da ere.
Jonen.GEN house.to go AUX.3sgABS too
Lit. [e] went to Jon's house, too.

(45) A: (Nik) saltzaile bat ikusi dut etxe aurrean.
L.ERG salesperson one see AUX.3sgABS.1sgERG house front.in
'I saw a salesman in front of the house.'

B: (Nik) [e] lantokian ikusi dut.
L.ERG workplace.in see AUX.3sgABS.1sgERG
Lit. I saw [e] in the workplace.

(definite ✓; indefinite ✗)

1.3.16. THE INDEFINITE READING OF PRO

Prediction of (14): there will be a one-to-one correlation between agreement and the availability of the indefinite reading.

Facts (XIV): the data in Basque is much more complex than predicted.

• As predicted if the indefinite reading is blocked by agreement, in finite clauses, null subjects and objects (generally) cannot have an indefinite interpretation (see Dugune 2006, Takahashi 2007);

(46) A: Saltzaila bat Miren etxera joan da.
salesman one Miren.GEN house.to go AUX.3sgABS
'A salesman went to Miren's house.'

B: [e] Jonen etxera joan da ere.
Jonen.GEN house.to go AUX.3sgABS too
Lit. [e] went to Jon's house, too.

(47) A: (Nik) saltzaile bat ikusi dut etxe aurrean.
L.ERG salesperson one see AUX.3sgABS.1sgERG house front.in
'I saw a salesman in front of the house.'

B: (Nik) [e] lantokian ikusi dut.
L.ERG workplace.in see AUX.3sgABS.1sgERG
Lit. I saw [e] in the workplace.

(definite ✓; indefinite ✗)

1.3.17. THE INDEFINITE READING OF PRO

- Nonetheless, there are contexts in which this reading becomes available (Dugune 2006):

(22) A: (Nik) bi gol sartu ditut
L.ERG two goal enter AUX.1SG.ERG.3PL.ABS season
'I scored two goals this season.'

B: ?Nik ere Δ sartu ditut!
L.ERG too enter AUX.1SG.ERG.3PL.ABS
'I scored (two goals), too.'

- Agreement-less contexts in which the indefinite interpretation is not available:

(23) a. (Nik) [saltzaila bat Mihen etxera joatea] nahi dut.
L.ERG salesperson one Miren.GEN house-to go.NMLZ.D.ABS want AUX
'I would like a salesperson to go to Miren's house.'

b. (Nik) [ϵ] Jonen etxera ere joatea] nahi dut.
L.ERG Jon.GEN house-to too go.NMLZ.D.ABS want AUX
'Lit. I want [ϵ] to go to Jon's house, too.'

■ **Facts (II):** Indefinite NAs found in Spanish-like languages do not constitute a subset of NAs.

(24) a. Compraste pan / ϵ pan?
buy.PAST-2sg bread the bread
'Did you buy bread/the bread?'

b. Sí, [ϵ] compré [ϵ].
yes buy.PAST-1sg

\times Definite reading: 'Yes, I bought it/the bread.'

✓ Indefinite reading: 'Yes, I bought bread.'

(25) a. Efere o Andreas merika kapia/liga /deka /ta vivlia?''
Did Andreas bring several/some/a few/ten/the books? (Giannakidou & Merchant 1997)

b. Ne, [ϵ] efere [ϵ].
yes, brought.3sg

\times Definite reading: 'Yes, he brought them/the books.'

✓ Indefinite reading: 'Yes, he brought ((several/some/a few/ten) books).'

► The data suggest that it is a distinct phenomenon (*cf.* Giannakidou & Merchant 1997, Moriyama & Whitman 2004).

■ *Another correlation that is worth taking into account: the DP-NP distinction.*

The categorial status of elided constituents could be crucial (Tomioka 2003, Barbosa 2011).

→ Alternative explanations are possible.

Summary. The analysis in (1.4) is not well-supported empirically:

- The sloppy reading of NAs is available in association with agreement morphology.
- Although the quantificational reading of NAs seems to be generally blocked in languages with agreement (unless the definite reading is unavailable), the correlation with agreement is not clearcut.

Conclusion: There are not enough reasons to abandon the null hypothesis that pro-drop is a unitary phenomenon cross-linguistically.

Part 2

PRO-DROPS THE ELLIPSIS OF ARGUMENTS

2.1. NON-PRONOMINAL READINGS OF NAs IN EAST ASIAN LANGUAGES

- NAs with a sloppy interpretation in cases like (25) and (27) cannot be of the *pro* type (*cf.* a.o., Huang 1991, Otani and Whitman 1991, Kim 1999, Saito 2004, 2007, Takahashi 2007, 2008a).
- These readings can be straightforwardly accounted for by an account in terms of ellipsis of arguments (Oku 1998, Kim 1999, Tomioka 2003, Saito 2004, 2007, Takahashi 2007, 2008a).

Anaphoric null arguments:

- (25) Taroo-wa zibun-o senneta-ga, Ken-wa [ϵ] kabatta. Japanese
Tarloo-top self-ACC blamed-while Ken-top defended (Takahashi 2010)
Lit. While Taroo blamed self, Ken defended [ϵ]. (strict ✓, sloppy ✓)

Accounting for the sloppy reading:

- (26) a. *Ken,-wa *pro* kabatta.
Ken-top self-ACC defend
b. Ken,-wa *#batt-e* kabatta.
Ken-top self-ACC defend

Null arguments with internal structure:

- (27) A: John-wa [zibun-no tegami]-o suteta. Japanese
John-top zibun-GEN letter-ACC discard (Otani & Whitman 1991: 346-7)
'John threw out his letters.'
B: Mary-mo [e] suteta.
Mary-also self-ACC defend
Lit. 'Mary also threw out [e]'.
Accounting for the sloppy reading:

- (28) a. *Mary-mo *pro*, suteta.
Mary-also discard
b. Mary-mo [zibun-no tegami]-o suteta.
Mary-also zibun-GEN letter-ACC discard

2.2. EXTENDING THE ANALYSIS TO LANGUAGES WITH AGREEMENT

■ *My proposal: the whole pro-drop phenomenon should be reduced to ellipsis*

- The discussion that follows can be viewed as a proposal regarding how we could proceed in developing a unitary approach to the pro-drop phenomenon.⁴

■ *Immediate advantages*

- Reduction of the phenomenon of NAs to the independently attested ellipsis phenomenon.
- Ellipsis is (in principle) available in all languages; thus the analysis can be adapted to instances of pro-drop with and without agreement.

⁴ Although ellipsis or deletion analyses have been proposed for languages with agreement morphology by authors like Holmberg (2005, 2010), Sheehan (2007), Saab (2008), and Roberts (2010), they have not been unified with the ellipsis analyses of Japanese-like languages. Actually, these analyses do not necessarily predict the ellipsis of anaphors or DPs with internal structure to be possible (see Dugune 2013).

■ *Duguine (2008): NAs as elided arguments in Basque (see also Spanish (15))*

- (29) A: Jonek bere txakurrak parkera eraman ohi ditti.
 Jon poss dog park.to take HABIT 3plABS,AUX,3plERG
 'Jon habitually takes out his dogs to the park.'
- B: Ba, Mirenk, [e] mendira eramatzen ditu gehienetan.
 well Miren mountain.to take 3plABS,AUX,3plERG mostly
 Lit. 'Well, generally Miren takes out [e] to the mountain.' (strict ✓; sloppy ✓)
- (30) A: 18 ure bete nituean, nire gurasoek moto bat eskaini zidaten.
 18 year fill AUX,when my parents moto one offer AUX
 'For my 18th birthday, my parents offered me a moto.'
- B: Ba, ni-ri, [e] liburu bat eskaini zidaten!
 well me-DAT book one offer AUX,3sgABS,1sgDAT,3plERG
 Lit. 'Well, to me, [e] offered me a book!'
- (31) Jonek bere burua kritikatzen duelarik, Mirenek [e] goraiapaten du.
 Jon his/her head criticize AUX,when Miren praise AUX
 Lit. 'When Jon criticizes himself, Miren praises [e].'

Summary: there is evidence in favor of extending the ellipsis analysis of null arguments to languages with agreement morphology.

- A unitary analysis of pro-drop, besides being desirable (*cf.* Part 1), is also well-supported empirically.

3.2. FOX' DP-PARALLELISM CARRIES OVER TO NAs

■ *Strict/sloppy alternations in VP-ellipsis (Fox 2000)*

- (33) John takes out his dog, and Bill does <_{VP}>, too.
 A. ... take out *John's dog*. (strict reading)
 B. ... take out *Bill's dog*. (sloppy reading)
- (34) a. John, takes out [his, dog], and Bill, does <take [his, dog] out>, too.
 b. John takes out his dog, and Bill does <take out his dog>, too.

■ *Extending the analysis: strict/sloppy alternations with NAs*

Strict and sloppy readings in (29):

- (35) a. Jon takes [his, dog] to the park, and Miren takes <[his, dog]> to the mountain.
 b. Jon takes his dog to the park, and Miren takes <her dog> to the mountain.

Strict and sloppy readings in (30):

- (36) a. When Jon, criticizes himself, Miren praises <[Jon]>.
 b. When Jon, criticizes himself, Miren praises <herself>.

Strict and sloppy readings in (31):

- (37) a. My parents offered me a moto. // <They> offered me a book.
 b. My parents offered me a moto // <My parents> offered me a book.

■ *Standard cases of NAs*

- (38) He visto a Juan. [e] quiere hablar contigo.
 have,1sg seen to Juan wants talk with,you
 'I saw Juan. He wants to talk to you.'

- Referential Parallelism accounts for the generalization whereby null subjects are generally dependent on a discourse antecedent (*cf.* Frascarelli 2007).
- **Results:** Fox's (2000) DP-Parallelism can account for null arguments/DP-ellipsis the same way it accounts for the properties of DPs embedded within elided constituents (see also Duguine 2012).

THE PARALLELISM CONDITION ON DP-ELLIPSIS

3.3. PREDICTION I: VEHICLE CHANGE EFFECTS

■ *Assumption:* the Parallelism condition on ellipsis requires semantic as well as some type of syntactic identity (*cf.* Fox 2000, Merchant 2008, Chung 2013).

- Ambiguity of anaphora: bound-variable use and (co-)referring use (*cf.* Reinhart 1983, Heim & Kratzer 1998, Kratzer 2009).

- Fox (2000): both bound variables and referential DPs can undergo ellipsis (as part of a larger elided constituent).

→ **Prediction:** 'vehicle change effects' (Fienko & May 1994) in the realm of NAs (*cf.* also (37a)).

- (39) Jonek irakasleek [e]_i lagunduko dute-la use du.
 Jon professors help,FUT AUX-that think aux
 Lit. 'Jon thinks that the professors will help [e].'

- (40) Jonek irakasleek bera/*Jon_i lagunduko dute-la use du.
 Jon professors he/Ion help,FUT AUX-that think aux
 'Jon thinks that the professors will help him/Jon.'

3.1. THE CONDITION ON DP-PARALLELISM: FOX (2000)

- *Assumption:* the Parallelism condition on ellipsis (adapted from Fox 2000: 117)
 DPs in the elided VP and its antecedent must either
 a. have the same referential value (Referential Parallelism), or
 b. be bound by identical dependencies (Structural Parallelism).

- Strict/sloppy alternations in ellipsis are accounted for in terms of referential/bound variable pronouns.

3.4. PREDICTION II: NULL ANAPHORS REQUIRE AN OVERT ANTECEDENT

Anaphors are generally BVs (Reinhart 1983, Büring 2005).

→ **Prediction:** Null anaphors will only be licensed when the discourse context provides another anaphor bound in an identical dependency. The prediction is borne out (*cf.* Hoji (1998) on Japanese, Huang (1989) on Chinese, and Kim (1999) on Korean, citing Whitman (1988)):

- (41) Taroo-wa zibun-o semeta-ga, Ken-[e] kabatta.
Taroo-top self-ACC blamed-while Ken-top defended
'While Taroo blamed himself, Ken defended [e].'
- (42) John-[e] zibun-o #/[e], nagusamera (koto).
John-NOM self-ACC consoled
'When Jon consoled [e].'
- (43) Jonek[bere] burna kritikaten duelarik, Mirenek [e] goraiapaten du.
Jon poss-head criticize AUX.when Miren
'When Jon criticizes himself, Miren praises herself.'
- (44) #Mirenek, [e] goraiapaten du.
Miren praise AUX
'Miren praises herself.'

- (51) Jonek[bere] burna kritikaten du, baina Mirenek [e] goraiapaten du.
Jon his head criticize AUX but Miren
'Jon criticizes himself, but Miren praises [e].'
(✓ strict; ✓ sloppy)

■ **A similar effect seems to hold in Japanese:**

- | | | | |
|------|---|----------|------------------|
| (41) | Taroo-wa zibun-o semeta-ga, Ken-[e] kabatta.
Taroo-top self-ACC blamed-while Ken-top defended
'While Taroo blamed himself, Ken defended [e].' | Japanese | (Hoji 1998: 130) |
| (42) | John-[e] zibun-o #/[e], nagusamera (koto).
John-NOM self-ACC consoled
'When Jon consoled [e].' | Japanese | (Takahashi 2010) |
| (43) | Jonek[bere] burna kritikaten duelarik, Mirenek [e] goraiapaten du.
Jon poss-head criticize AUX.when Miren
'When Jon criticizes himself, Miren praises herself.' | Basque | (Hoji 1998: 130) |
| (44) | #Mirenek, [e] goraiapaten du.
Miren praise AUX
'Miren praises herself.' | | |

3.5. FURTHER SIMILARITIES WITH VP-ELLISSIS

3.5.1. Ellipsis with non-linguistic antecedents

■ NAs without a linguistic antecedent.

- (45) [*Context: observing a student smoking in the classroom*]

- [e] hai gan-de sinu kamosirenai.
lung cancer-of die may
'He may die of lung cancer.'

- Takahashi (2008a), Abe (2009): cases like (26) show that (at least certain) NAs are not elided DPs
(46) [*Context: Hankamer attempts to stuff a 9-inch ball through a 6-inch hoop*]
Sag: #It's not clear that you'll be able to <_{vp}>.

- However, VPE with non-linguistic antecedent is also possible (Lobeck 1995, Merchant 2004):
(47) a. [John attempts to kiss his wife while driving] John, you mustn't.
b. [As an invitation to dance] Shall we?
c. [Mary gets John an expensive present] Oh Mary, you shouldn't have!

- 3.5.2. Sloppy reading and the size of ellipsis
- **Observation on VP-ellipsis:** There can be contrasts in the availability of the sloppy reading between the ellipsis of a larger vs. smaller constituent when both are possible (Sag 1976, Fox & Takahashi 2005, Hardt 2006, Merchant 2008).

- (48) a. John said Mary hit him. Bill said she did too <_{vp}>. *hit Bill (✗ sloppy)
b. John said Mary hit him. Bill did too <_{vp}>.
say Mary hit Bill (✓ sloppy)

■ **Contrasts in DP-ellipsis in Basque**

- (49) Jonek[bere] burna kritikaten du, eta Mirenek ere [e] kritikaten du.
Jon his head criticize AUX and Miren too criticize AUX
'Jon criticizes himself, Miren criticizes [e], too.'
(✓ strict; ✗ sloppy)
- (50) Jonek[bere] burna kritikaten du, eta Mirenek ere.
Jon his head criticize AUX and Miren too
'Jon criticizes himself, Miren does, too.'

- (51) Jonek[bere] burna kritikaten du, baina Mirenek [e] goraiapaten du.
Jon his head criticize AUX but Miren
'Jon criticizes himself, but Miren praises [e].'
(✓ strict; ✓ sloppy)

■ **A similar effect seems to hold in Japanese:**

- | | | | |
|---------|---|----------|------------------|
| (52) A: | John-[e] zibunzisin-o suisensita.
John-NOM self-ACC recommended
'John recommended himself.' | Japanese | (Hoji 1998: 138) |
| B: | Bill-[e] suisensita.
Bill-also recommended
'Bill also recommended [e].' | Japanese | (Takahashi 2010) |
| (53) | Taroo-wa zibun-o semeta-ga,
Taroo-top self-ACC blamed-while Ken-top
Lit. While Taroo blamed self, Ken defended [e]. | Japanese | (Takahashi 2010) |

3.6. CONCERNING THE CONTRASTS IN THE AVAILABILITY OF THE SLOPPY READING

■ **Recall the contrast in the availability of the sloppy reading in Spanish**

- | | | | |
|---------|---|---------|------------|
| (8) A: | Maria cree que [su propuesta será aceptada].
Maria believes that her proposal will be accepted
que [el] será aceptada]. | Spanish | (Oku 1998) |
| B: | Juan también cree que [el] será aceptada].
Juan also believes that [el] will be accepted.
Lit. Juan also believes that [el] will be accepted. | Spanish | |
| (16) A: | El primer año de tesis, [mi director me trató muy bien].
The first year of thesis my director cl.1sg(pst) treat.pst.3sg very well. | Spanish | |
| B: | Pues, [la mi [el] no me hizo ni caso].
well to me NEG cl.1sg(pst) make.pst.3sg NEG attention
Lit. Well, to me, [el] didn't pay attention. | Spanish | |

- **Local binding of variables.** I would like to suggest that local and non-local variable binding must be distinguished (*cf.* Kratzer 2009), and that only the former is relevant for Structural Parallelism (32b).
- The possessive pronoun *su* 'his/her' in (8B) cannot be bound locally and hence it cannot be elided via Structural Parallelism.
 - ✗ sloppy reading
 - ✓ sloppy reading

- **Prediction I:** the presence of a local binder for the possessive pronoun in (8B) will make the sloppy reading available.
- | | | | |
|---------|---|---------|--|
| (54) A: | Maria cree que [su propuesta le será aceptada (a ella)].
Maria believes that her proposal cl.3sg(pst) will.be accepted to her.
Lit. Maria believes that her proposal will be accepted to her. | Spanish | |
| B: | Juan también cree que [el] le será aceptada (a él)).
Juan also believes that [el] will be accepted to him.
Lit. Juan also believes that [el] will be accepted to him. | Spanish | |

We can also observe a 'repair' effect via the ellipsis of a larger constituent:

- (55) A: María cree que [su propuesta será aceptada].
Maria believes that her proposal will.be accepted
B: Juan también <>.
Juan also

Lit. 'Juan too.'

■ **Prediction II:** with a non-local binder, the sloppy reading will not be available for null objects.

- (56) A: Mirenak [zuzendarriak bere proposamena irakurriko du-el] ute du. Basque
Miren.ERG director.ERG her proposal.ABS READ.FUT AUX-that think AUX
B: Jonek ere [zuzendarriak [e] irakurriko du-el] ute du.
Jon.ERG also director.ERG READ.FUT AUX-that think AUX

Lit. John also thinks that the director will read [e]. (✓ strict; ✗ sloppy)

■ Under this analysis, the Japanese data in (6) is the unexpected one: the sloppy reading suggests that the ellipsis of a variable which is non-locally bound is allowed:

- (6) A: Mary-wa [izbum-no teian-ga saioo-sare-ru-to] omotteiru. Japanese
Mary-top self-GEN proposal-NOM accept-pass-that think (Oku 1998: 165)
B: John-mo [te] salioo-sare-ru-to] omotteiru.
John-also accept-pass-that think (✓ strict; ✓ sloppy)

Lit. John also thinks that [e] will be accepted.'

But this is precisely one of the crucial properties of the reflexive *zibun*: it can be bound at a distance:
(57) John-wa [Bill-ga zibun-o sem-e-ta to] it-a. Japanese
John-top Bill-nom self-ACC blame-PAST C say-PAST
John said that Bill blamed {himself / him}.

Conclusions

- Adopting a reductionist approach to the phenomenon of null arguments (NAs) must be preferred over adopting a non-reductionist approach.
- Such an analysis is possible, by extending the ellipsis analysis to the whole pro-drop phenomenon.
- The basic distributional and interpretive properties of NAs can be straightforwardly accounted for in terms of Fox's condition on DP-Parallelism.

A different characterization of the phenomenon

- The DP-ellipsis analysis characterizes pro-drop as an epiphenomenon (*cf.* also Sigurdsson 2011).
 - It suggests that NAs are a default option, and are universally available.
 - Such an analysis is possible, by extending the ellipsis analysis to the whole pro-drop phenomenon.
 - Dryer & Haspelmath (2011):
(Sample: 711 languages)
 - null subject languages: 70%
 - non-null subject languages: 11,5%
 - languages with an unclear status: 18,4%.
- In turn, this suggests that we must completely invert our perspective on the issue: it is those cases in which NAs are not licensed that must be accounted for, rather than those cases in which they are licensed.
- Müller (2006, 2008), Dugueine (2013): 'Poor agreement' in languages like German results from morphological operations which happen to block the morphosyntactic licensing of null arguments.

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