

# You and me or just us?

Milla Nizar, Jed Pizarro-Guevara, &  
Line Mikkelsen (UC Berkeley)<sup>1</sup>  
Syntax and Semantics Circle, May 5, 2009

## 1. INTRODUCTION

Sometimes the coordination of singular pronouns expresses the same meaning as a plural pronoun:

- (1) [Alice and Barbara are talking about the party that their friend Caroline is organizing]
- a. She wants **you and me** to be in charge of the music.
  - b. She wants **us** to be in charge of the music.

We call such uses equi-denotational.

**Research Question:** when two pronominal expressions are equi-denotational, what factors influence (or perhaps even determine) which form is used?

- Part of recent wave of quantitative research on alternations, including Dative Alternation (Bresnan and Nikitina 2007), *that*-omission (Melnick Circle presentation), Genitive Alternation (O'Connor et al 2004).
- What makes pronominal coordination interesting?
  - Not a recognized alternation (no literature)
  - Intuitive asymmetry: coordination is marked compared to plural pronoun (borne out by frequencies of use in English; grammatical restrictions on pronominal coordination in some languages)
  - Alternation between phrase and word
  - Can be studied in all languages that have both pronouns and coordination

---

<sup>1</sup> This talk is based on an on-going collaborative project on pronominal coordination. The collaboration is carried out within the Undergraduate Research Apprentice Program (URAP), whose assistance we gratefully acknowledge. We also thank Professor Susanne Gahl for extensive help with the methodology and statistical analysis, as well as Mike Higgins, Sharmodeep Bhattacharya and Ying Xu from the Statistics Department. Presenter' names are listed alphabetically. We participated equally in the design and interpretation of the corpus study, but the actual searches, annotations, and statistical analysis were done by the first and second presenter.

- Search friendly: pronouns form a closed class and they and their coordinations can be identified by simple string-based searches, though certain coordinations yield high rates of false hits (manual inspection required)
- Pronouns are interesting
- Coordination is interesting

**Today's talk:** Report on a corpus study of pronominal coordination in (British) English. Elicit ideas for making sense of this data and suggestions for how to proceed.

## 2. THE CORPUS STUDY

### 2.1. Methodology

#### 2.1.1. The British National Corpus

Our study is focused on results from the British National Corpus, a 100 million word text corpus of spoken and written samples of British English from a wide range of sources. The written part composes 90% of the BNC, while the spoken part composes 10%.

#### 2.1.2. Search strings

We began this project by creating a table of all possible pronoun coordinations in English and their corresponding plural pronouns. We then ran searches for each of the coordinations and the plural pronouns.

	1	2	3m	3f	3n
1	_____	I/me and you we-incl/us-incl	I/me and he/him we-excl/us-excl	I/me and she/her we-excl/us-excl	I/me and it ?we-excl/us-excl?
2	you and I/ me we-incl/us-incl	you and you you-pl	you and he/him you-pl	you and she/her you-pl	you and it you-pl
3m	he/him and I/me we-excl/us-excl	he/him and you you-pl	he/him and he/him they/them	he/him and she/her they/them	he/him and it ?they/them?
3f	she/her and I/me we-excl/us-excl	she/her and you you-pl	she/her and he/him they/them	she/her and she/her they/them	she/her and it ?they/them?
3n	it and I/me ?we-excl/us- excl?	it and you ?you-pl?	it and he/him ?they/them?	it and she/her ?they/them?	it and it they/them

#### 2.1.3. From raw hits to actual matches

After frequencies for all the initial searches were documented, we sorted through the results of each search and eliminated any results that were not actual matches. The coordinations that took the form of 'accusative pronoun and nominative pronoun' were the cause of most erroneous results, as they were often actually the coordination of clauses, as in "You come down here to see **me and you** beat up my son" (BMM 997). For the plural pronouns, there were two main sources erroneous

hits in our searches. For *us*, the raw hits included many instances of *US*, as an abbreviation for the United States. Results from a search of *them* include a small number of usages as a determiner, as in “Get up **them** stairs” (CDM 2465).

There was a significant problem in studying the 2<sup>nd</sup> person pronouns, as the singular and plural forms are identical. With no simple method to determine when the usage of *you* was singular or plural, we chose to focus our study only on the 1<sup>st</sup> and 3<sup>rd</sup> person results.

Additionally, the nature of the corpus does not provide us with an easy opportunity to determine whether or not usages of a plural pronoun would be equi-denotational to a corresponding coordinated pronoun. We chose not to enforce this equi-denotational restriction, keeping in mind that our results may be influenced by this decision.

#### 2.1.4. Annotation

We established 4 relevant factors to annotate the hits we collected.

- **Syntactic Position:** Subject, Direct Object, Indirect Object, Fragment, Object of a Preposition (Argument or Adjunct), Pivot of an Existential, or Pivot of an It-Cleft
  - Prefixed LD or RD, if the position is left- or right-dislocated
- **Plural Only Environment:** Predicate, Reciprocal, Preposition, Partitive, Noun or None
- **Lexical Marker of Plurality:** Collective, Distributive, Neutral, or None
- **Exclusivity Marker:** Present or Absent

#### 2.1.5. Stratification

Because coordinated pronouns are relatively rare, the raw hits for plural pronouns greatly outnumber that of coordinated pronouns. While there are 972 hits for coordinated pronouns, there are approximately 1 million hits for plural pronouns (excluding 2<sup>nd</sup> person pronouns). Of the 972 coordinated results, only 48 were 3<sup>rd</sup> person coordinations. In sampling the plural pronouns we maintained the number of 1<sup>st</sup> person pronouns (924) and matched that number for the 3<sup>rd</sup> person pronoun, sampling a total of 1848 plural pronouns. We divided up the nominative and accusative case hits based on their overall ratios in the total corpus.

In order to sample the plural pronouns in the corpus in a manner that eliminates sampling bias, we decided to stratify the corpus based on whether the results come from spoken or written text. We determined the ratio of spoken hits to the overall number of hits in all the coordinated pronoun results and further stratified them along person (1<sup>st</sup> person coordinations have 24% spoken hits and 3<sup>rd</sup> person coordinations have 14%). We then applied these ratios to our sample of plural pronouns (such that we sampled 24% of first person pronouns solely from spoken text and 76% from written, etc).

## 2.2. Results

Bearing in mind that we were not able to enforce the equi-denotational criterion, the following factors were found to correlate with coordination:

- Occurring in a plural only environment,
- The presence of a lexical marker
- The presence of a marker of exclusivity.
- Certain syntactic positions (object of adjunct P, fragment, pivot of it-cleft, right dislocated subject, and left dislocated subject)

### 2.2.1. Plural Only Environment

#### Predicate:

#### *debate*

- (2) Mr <name>, **you and I** have <pause> **debated** in the past er in this room er whether or not exceptional circumstances are necessary to define an inset boundary for a village which in the sketch plan of the greenbelt <unclear> to have been shown as washed over. (FMN 349)

#### *differ*

- (3) Where **you and I** probably **differ** is on the question of what to do about it. (HTR 2508)

#### *discuss*

- (4) I know **me and you** have **discussed** this earlier on and I, I, I didn't find it [pause] I found it confusing to be honest with you. (JT5 100)

#### *fall out*

- (5) I warned you the other night, **me and you** gonna **fall out** if you keep being cheeky. (KCT 13487)  
(6) First thing you do when **we fall out**. (ACE 677)

#### *get along*

- (7) Although, in spite of that fact and in spite of my initial fears, I think that **you and I** can probably manage to **get along**. (JXT 1000)

#### *get together*

- (8) And when we get it all together **you and I'll get together** and we'll draw something out ready for the next meeting to either agree approval or or yeah? (KM8 849)

#### *get reacquainted*

- (9) The Steve Cropper connection came about because **he and I** got a chance to **get reacquainted** with one another down in Seville at the Guitar Legends concerts. (C9K 1751)

*meet*

(10) Your power is great -- and there I am not equal to you -- but it lies in me to make you smile, and if **you and I** never **meet**, then this play of love remains incomplete." (B1F 1312)

*part*

(11) We **parted** then, **you and I**, and that is my punishment. (ADA 2029)

(12) Here **we** definitely **parted** company, as they went east to Nelson while we continued north to Marahau. (HPP 1546)

*share*

(13) It's simply that **you and I share** a father. (FNT 3768)

*be alike*

(14) 'We're **alike, you and me**,' he told Mary. (FS2 276)

*be bound*

(15) **You and I**, General, **are bound** by a common brotherhood, the SS. (HTW 639)

*be close*

(16) **He and I** have always **been** very **close**. (FS1 752)

*be connected*

(17) You know, I sometimes feel as if **you and I were connected** by a string tying our two hearts together, and if you went to Ireland, I think that string might break and I might bleed to death. (FR6 1622)

*be forced apart*

(18) That now **you and I are forced apart** (CEV 377)

*be friends, be buddies*

(19) I want you to have it because it will mean that **you and I are friends**. (AEB 940)

(20) **We** need to **be friends** with these people, Masklin thought. (CEU 2014)

(21) **he and I are buddies**, dear! (KBF 2760)

*be inseparable*

(22) After all, **he and I will be** practically **inseparable** after tonight — to help us really get into the skins of our stage characters. (HA9 2171)

*be linked*

(23) It is that we **are** closely **linked, you and I**, my love. (G10 1647)

*be man and wife*

(24) I said **you and I were man and wife**, and to lose me would break or damage your bond with the King. (BP0 333)

*be (at) one*

(25) For a while it worked (there was redemption); and while it worked **he and I were one**, on the banks of the Vistula. (FYV 3547)

(26) Erm I'd like to refer to my page three or er section four in my conclusions because I think if I if I heard Professor Lock correctly I think **he and I are at one** in a suggestion which is is put to you in in if you like without prejudice to the generality of what I have been saying in support of the council's policy. (J9V 638)

*be paired*

(27) **We were paired** with Craig Stadler. (ASA 2074)

*be related*

(28) Mandy, I suppose if **you and I** are going to **be related** there's no hope at all I'm ever going to be able to tamp down that irrepressible side of yours, is there? (JY6 4250)

*be similar*

(29) So, in our generation, **you and I are similar**. (GX1 845)

*be tied together*

(30) I wish **you and I had been tied together** for ever!" (FRE 944)

*be together*

(31) Indeed, the paralysis he had suffered as a result of her suicide had given way to an energetic creative vitality since **he and I had been together**. (FAT 2679)

*change places*

(32) Under the bishop's plan **he and I** were to **change places**, and while I was on furlough he was to keep both jobs going, and I would do the same on my return. (CDC 461)

*have in common*

(33) That appears to be one experience **you and I have in common**. (H7W 1699)

*have a quarrel*

(34) **You and I have** no **quarrel**, Colonel Sharpe. (CMP 2224)

*have a relationship*

(35) It isn't altogether ethical, he said, while watching me shower hexagonal salt crystals from my inner thighs, "but then **you and I** haven't **had** an orthodox therapeutic **relationship**." (FR3 2013)

*have rows*

(36) I'm rather glad that **you and I** don't **have rows** and fall out. (JXT 1347)

*have a talk*

(38) Thought **you and I** should **have a talk**, Tod. (J13 1910)

*make enemies*

(39) She's trying to **make me and him enemies**. (KDW 8505)

*make love*

(40) Perhaps Signe had told him that **we had made love**. (HR7 1703)

Reciprocal:

*each other*

(41) Once again **you and I** face **each other**, with a banker sitting between. (ARR 364)

(42) **We** knew **each other** on sight, did we not? (HGD 1122)

*one another*

(43) I wanted so much to put into words, in a novel or a play, all that **you and I** felt for **one another**, not just to love love but to inscribe it as George Eliot and Willa Cather had done. (AC6 1009)

Preposition:

*between*

(44) he said er, now John I don't want you to think what happened **between me and you** will make any difference about being sent back for. (H4B 257)

(45) One portion of chips'll be enough **between us** cos they give you quite a <pause> generous helping of chips (KC2 5327)

*betwixt*

(46) And **betwixt** both **me and you**. (ATE 802)

## Partitive:<sup>2</sup>

### *any of X*

(47) It is, however, extremely unlikely that **any of us** could find a use for a hundred of these cars, even if we could solve the problem of getting into them, and this illustrates a fundamental difference between the car and the computer, and another reason for speaking of a microelectronics revolution. (CAN 19)

### *few of X*

(48) Very **few of us** forget our names, our addresses, our birthdays or the names of our children -- because those things interest us. (AYK 1673)

### *most of X*

(49) **Most of us** didn't even notice the placement! (CG2 533)

### *none of X*

(50) They're just so much pornography and **none of us** turn up our noses at a bit of that now and then. (GUD 2636)

### *one of X*

(51) The importance attached to maintaining a job share position in our practice is such that **one of us** was appointed only weeks before going on maternity leave. (EC7 1886)

### *those of X*

(52) It is ironic that **those of us** who want to live in an environment-friendly style, and are really "on your side", should have to fight an increasing plethora of restrictions and regulations designed, it seems, to discourage us from using rail at all. (HPP 1703)

## Noun

### *team*

(53) But if the **team** was **you and me**, for a start, and Jazz is okay — he wants to do it, I can tell the way he looked, and he's bright ... well, we're halfway there.' (AT4 2480)

---

<sup>2</sup> Plural pronouns can serve as the second NP in partitive expressions like *X of us/them*, where X is a numeral or quantifier. In general, we annotated pronouns in this position as in a plural only environment, but did not count the initial numeral or quantifier as a lexical marker. We made an exception for *both of us*, which has the form of a partitive, but not the meaning.

**Table 1: Plural Only Environment with first person pronouns in BNC**

	Plural Only Environment	No Plural Only Environment	Total
Plural ( <i>us, we</i> )	19 (2%)	905 (98%)	924
Coordinated ( <i>you and I, me and him, etc</i> )	165 (18%)	759 (82%)	924
Total	184	1664	1848

### 2.2.2. Lexical Markers of Plurality

#### Distributive:

*both (X & Y both, both X & Y, Z both, both of Z, floated both)*

(54) Which, said the lady politician, in her famously gravelly voice, "they are not, as **you and I both** know." (GV8 2795)

(55) The basic law of capitalism is you or I, not **both you and I**. (FSW 729)

(56) I'll go with you, I said, which surprised **us both** a little. (G3G 957)

(57) Indeed there were mistakes, terrible ones, **both of us** would have avoided if we could. (ED7 2128)

(58) And **you and I** will **both** leave this house, this narrow stone hell, this house of living death. (FR6 1954)

*separately*

(59) By this time, Malc's Gran was living with his parents and the rift between him and Pop was too great to overcome, so **we** lived **separately** until we found an over-priced flat in a none too salubrious area of Sheffield. (CA9 1206)

#### Collective:

*together*

(60) **He and I** spent a happy weekend visiting London **together**. (FPU 1109)

(61) Now I was conscious of Aisha's words when **we** stood **together** in the storeroom and she tried to dissuade me from going to London: "Go alone to London without an aunt or a husband or your mother and they'll say you've sold your soul. (A0U 1480)

*arm in arm* ((62) occurs as the interlocutors are considering a vacation in Paris)

(62) yeah, **you and I arm in arm** Dick. (KDR 1635)

*jointly*

(63) One day in 1964, while Richard was playing Hamlet on Broadway, **he and I** were interviewed **jointly** in a private corner of an Eighth Avenue bar and restaurant much frequented by theatre people. (CL2 767)

Neutral:

*two*

(64) Always thought I was the shy one of **us two**. (BP8 158)

(65) Between **two** beings, **he and I**, he like a Vulcan and I boiling too, a kind of struggle was preparing itself ... (FET 1883)

In general, coordinated pronouns occurred more frequently with lexical markers than plural pronouns do:

**Table 2: Lexical markers with first person pronouns in BNC**

	Lexical marker present	Lexical marker absent	Total
Plural	8 (1%)	916 (99%)	924
Coordinated	63 (7%)	861 (93%)	924
Total	71	1777	1848

Interestingly, this is equally true for both distribute and collective markers.<sup>3</sup>

**Table 3: Distributive markers with first person pronouns in BNC**

	Distributive marker present	Distributive marker absent	Total
Plural	3 (0%)	921 (100%)	924
Coordinated	32 (3%)	892 (97%)	924
Total	34	1813	1848

**Table 4: Collective markers with first person pronouns in BNC**

	Collective marker present	Collective marker absent	Total
Plural	5 (1%)	919 (99%)	924
Coordinated	31 (3%)	893 (97%)	924
Total	36	1812	1848

---

<sup>3</sup> There was only one instance of a neutral marker with first person pronouns, namely (65).

### 2.2.3. Exclusivity Markers

*just*

(66) it's **just her and me**. (A74 82)

(67) They had tea, **just** the four of **them**. (CK9 2355)

*only*

(68) There's **only you and me**. (H0F 171)

*but*

(69) **You and I** are **but** two of them, yet every one counts. (C8K 223)

*separately*

(70) Why don't **you and I** talk about it **separately** then. (JN7 69)

*except*

(71) Nobody knows anything about this **except you and me**, and we are friends, aren't we, Shelley? (JYA 4176)

*alone*

(72) It was strange with Aunt Louise in the house, **she and I alone** together, our relationship a delicate bubble which must at all costs be kept floating intact. (AC7 204)

While exclusivity markers are not ungrammatical with plural pronouns, they are rare. We found no instances in our 924 sample of first person plural pronouns (see Table 5) and only 2 instances with third person plural pronouns (see (67))

**Table 5: Exclusivity markers with first person pronouns in BNC**

	Exclusivity marker present	Exclusivity marker absent	Total
Plural	0 (0%)	924 (100%)	924
Coordinated	53 (6%)	871 (94%)	924
Total	53	1795	1848

### 2.2.4. Syntactic Position

Coordinated pronouns show greater variation in syntactic position than do plural ones. This is at least partly due to the high proportion of the nominative plural pronoun (*we*) which is restricted to subject position.

**Table 6: Syntactic position of first person pronouns in BNC**

	Coordinated	Plural
Subject	504 (55%)	790 (85%)
Object of P (adjunct PP)	135 (15%)	30 (3%)
Fragment	78 (8%)	3 (0%)
Direct object	55 (6%)	76 (8%)
Object of P (argument PP)	54 (6%)	20 (2%)
Right-dislocated (subject, direct object, indirect object, object of P (argument and adjunct PP), pivot of expletive)	47 (5%)	-----
Left-dislocated (subject, direct object, object of P (argument))	21 (2%)	1 (0%)
Pivot of <i>it</i> -cleft	16 (2%)	-----
Pivot of existential	11 (1%)	-----
Indirect object	3 (0%)	4 (0%)
Total	924	924

Certain syntactic positions seem to favor coordinated pronouns, including:

Object of P (adjunct PP):

(73) These seemingly harmless four words are repeated several times to form the lyric "As clouds roll by **for you and I**". (CBC 7427)

(74) Did nearly go **without us**. (KBW 17847)

Fragment:

(75) yeah, **you and I** arm in arm Dick. (KDR 1635)

(76) But er **we** er <pause> Oliver please! (KDE 510)

Pivot of Existential:

(77) And then you can you know, I mean, technically we have expanded cos if you look in in a couple of years there was **me and you** doing it wasn't there? (G4X 1339)

Pivot of *it*-cleft:

(78) It's just **me and you**, she said to herself. (HTY 2792)

Right-dislocated subject:

(79) Let's talk about us — **you and me**.' (HHA 4351)

Left-dislocated subject:

(80) **He and I** we we-- worked together on the electrical staff at  
[gap:name] colliery. (HMD 1207)

### 2.3. Statistics

Based on what we've annotated, we developed two models using logistic regression. We chose logistic regression since the data that we're dealing with are more categorical in nature than numerical.

The first model that we've developed takes into account the following predictors: syntactic position, plural only environment, presence of a lexical marker and the presence of an exclusivity marker.

We fed R the data using the `glm()` function and here is the output:

```
Call:
glm(formula = simple$Outcome ~ simple$SynPos + simple$POE + simple$LM +
     simple$Excl, family = binomial(link = "logit"))

Deviance Residuals:
    Min       1Q   Median       3Q      Max
-1.8685  -0.6760   0.7007   0.7007   3.0562

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
(Intercept)    1.5539     0.1506  10.320 < 2e-16 ***
simple$SynPosFRAG -3.5757     0.4282  -8.351 < 2e-16 ***
simple$SynPosIO   -0.5604     0.7787  -0.720 0.471753
simple$SynPosLD-D0 -15.4777    1455.3975 -0.011 0.991515
simple$SynPosLD-OPAdj -16.2876    929.2378 -0.018 0.986015
simple$SynPosLD-S   -4.2145     1.0446  -4.035 5.47e-05 ***
simple$SynPosOPAdj -1.8301     0.2107  -8.685 < 2e-16 ***
simple$SynPosOPAr   -0.4928     0.2572  -1.916 0.055374 .
simple$SynPosPIVOT-EXP -16.1821    334.5665 -0.048 0.961424
simple$SynPosPIVOT-IT  -3.6461     1.0643  -3.426 0.000613 ***
simple$SynPosRD-D0  -16.7676    682.8391 -0.025 0.980409
simple$SynPosRD-IO  -17.1200    1455.3975 -0.012 0.990615
simple$SynPosRD-OPAdj -16.1176    621.3101 -0.026 0.979304
simple$SynPosRD-OPAr -17.1200    1455.3975 -0.012 0.990615
simple$SynPosRD-PIVEXP -17.1200    1455.3975 -0.012 0.990615
simple$SynPosRD-S   -3.7928     0.6239  -6.080 1.20e-09 ***
simple$SynPosS     -0.2748     0.1595  -1.723 0.084929 .
simple$POEYes     -1.6423     0.1612 -10.185 < 2e-16 ***
simple$LMYes      -2.6390     0.2560 -10.309 < 2e-16 ***
simple$ExclYes    -2.7015     0.6419  -4.209 2.57e-05 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 3632.7 on 2819 degrees of freedom
Residual deviance: 2881.9 on 2800 degrees of freedom
AIC: 2921.9

Number of Fisher Scoring iterations: 14
```

The way these results are usually interpreted is that any predictor that has a p-value less than .001 is statistically significant (annotated as \*\*\* in the output); therefore it has an effect in the model. A negative coefficient (=estimate column in the output)

means that it favors the coordinated construction, whereas a positive coefficient favors the plural one. From this, we can see that that the presence of a lexical marker favors the coordinated construction. Similarly, a plural only environment favors coordination. The presence of a marker of exclusivity tends to favor it as well.

In terms of syntactic position, fragments, left dislocated subjects, objects of adjunct PPs, pivots of it-cleft and right dislocated subjects favor the coordinated construction.

After that, we wanted to see what particular type of lexical marker and what particular POE-head favor the coordinated construction. So we developed another model that takes into account the different types of lexical markers and POE-heads.

We fed R the data using the `glm()` function and here is the output:

```
glm(formula = separate$Outcome ~ separate$SynPos + separate$POE +
     separate$LM + separate$Excl, family = binomial(link = "logit"))

Deviance Residuals:
    Min       1Q   Median       3Q      Max
-1.8731  -0.5456   0.6756   0.6756   3.1687

Coefficients:
                Estimate Std. Error z value Pr(>|z|)
(Intercept)      15.8637   1692.6772    0.009 0.992522
separate$SynPosFRAG  -3.5761     0.4295   -8.325 < 2e-16 ***
separate$SynPosIO   -0.5448     0.7901   -0.690 0.490477
separate$SynPosLD-DO -14.9397   2399.5447   -0.006 0.995032
separate$SynPosLD-OPAdj -17.2396   1506.9749   -0.011 0.990873
separate$SynPosLD-S  -4.2248     1.0450   -4.043 5.28e-05 ***
separate$SynPosOPAdj -1.9001     0.2150   -8.839 < 2e-16 ***
separate$SynPosOPAr  -1.7958     0.2771   -6.480 9.16e-11 ***
separate$SynPosPIVOT-EXP -17.1414    543.6858   -0.032 0.974848
separate$SynPosPIVOT-IT  -3.6112     1.0688   -3.379 0.000729 ***
separate$SynPosRD-DO -17.5218   1014.9737   -0.017 0.986227
separate$SynPosRD-IO -18.1304   2399.5447   -0.008 0.993971
separate$SynPosRD-OPAdj -17.8817   1428.0723   -0.013 0.990009
separate$SynPosRD-OPAr -18.1304   2399.5447   -0.008 0.993971
separate$SynPosRD-PIVEXP -18.1304   2399.5447   -0.008 0.993971
separate$SynPosRD-S   -3.7602     0.6266   -6.001 1.96e-09 ***
separate$SynPosS      -0.2032     0.1633   -1.244 0.213326
separate$POEBetween  -18.2105   1692.6772   -0.011 0.991416
separate$POEBetwixt  -32.0269   2187.5139   -0.015 0.988319
separate$POENo       -16.8463   1692.6771   -0.010 0.992059
separate$POENoun     -34.9766   2936.4895   -0.012 0.990497
separate$POEPartitive  0.1437   1725.9560  8.33e-05 0.999934
separate$POEPredicate -20.0369   1692.6772   -0.012 0.990555
separate$POEReciprocal -18.7739   1692.6772   -0.011 0.991151
separate$LMDist      -0.4551     0.5286   -0.861 0.389228
separate$LMNeut       3.0085   2465.8327    0.001 0.999027
separate$LMNo         2.5469     0.3343    7.619 2.56e-14 ***
separate$ExclYes     -3.2112     0.7606   -4.222 2.42e-05 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 3632.7  on 2819  degrees of freedom
Residual deviance: 2708.4  on 2792  degrees of freedom
```

The same syntactic positions are statistically significant in favor of the coordinated construction: fragment, left dislocated subject, object of adjunct PPs, pivot of it-cleft, and right dislocated. Similarly, the marker of exclusivity remains statistically significant in favor of coordination.

What is interesting to note is that none of the lexical markers and none of the POE-heads are actually statistically significant this time around. Instead the absence of a lexical marker (LMNo) is significant. This variable, however, favors the plural construction due to its positive coefficient.

One way to analyze the change in the statistical significance of LM and POE is that collectively they favor the coordinated construction. However, not any particular type of LM or POE head has a strong preference of the coordinated construction.

Regarding the fit of the model, we are well aware that both models don't really have a particularly good fit. However, we can clearly see that the second model can account for more of the data than the first model. In terms of deviance, the residual deviance of the second model decreased by 173.5 from that of the first model. Despite the improvement of the second model, the residual deviance is still relatively high. Perhaps there are other predictors that we have not included that can better show the tendency of using one construction over the other.

### **3. INTERPRETING THE RESULTS**

Some general ideas and observations:

1. Plural pronouns are unmarked compared to coordinations because plural pronouns are shorter and language users prefer shorter expressions (Economy? Laziness?).
2. Plural pronouns may denote groups; coordination of pronouns cannot (cf. Partitive Constraint).
3. A. Coordination mentions each participant, plural pronouns do not.  
B. Coordination may focus each conjunct (Haspelmath 2004).  
C. Coordination profiles each of the referents of the conjuncts (Eve Sweetser p.c.).

Relating 3A-C to the significant factors in the corpus study:

#### **Plural-Only Environment**

- Using an argument expression that mentions/focuses/profiles each participant fits an environment that requires a certain number of participants, especially where this requirement matches the thematic role structure of the relevant head.

#### **Lexical Markers**

- Intuitively, distributive markers predicate that the relevant eventuality holds of each individual participant as opposed to the group. Such an interpretation is further facilitated by coordination, if coordination mentions/focuses/profiles each of these individual participants.
- Intuitively, collective markers predicate that the relevant eventuality holds of the complex entity made up of the individual participants, as opposed to each of

them. Nonetheless, one could argue that in order to construe the complex individual needed for the collective interpretation, the hearer/speaker must access each participating individual (referring to existing groups vs. establishing a group)

#### **Exclusivity**

- Addresses group size and constituency, which is explicated by coordination but not by plural pronoun.

#### **Syntactic Position**

- Left-dislocation and Right-dislocation can be used to clarify reference and for focus, both of which fit coordinated pronouns better than plural pronouns.
- Pivot of expletive and cleft constructions are focus positions (information focus and identificational focus respectively) and as such fit coordinated pronouns better than plural ones.
- Object of P (adjunct): perhaps a position for new referents? Also *between* is frequent among the adjunct PPs (34/135 for coordinations; 1/30 for plurals) and *between* favors coordination (see Plural Only Environment)
- Fragment: for local person, perhaps some interpersonal and/or interactional functions that fit coordination better than plural? For all persons: fragment ~production difficulty/uncertainty ~ introducing new referent ~ coordination?

## **4. WHERE WE GOT AND WHERE TO GO FROM HERE**

Summary of results of corpus study:

- Plural only environments and lexical markers collectively favor the coordinated construction.
- No particular type of lexical marker imposes a strong preference toward the coordinated construction.
- The absence of such favors the plural pronoun
- Markers of exclusivity favor coordinated constructions
- Coordinated pronouns are spread out over a wider range of syntactic environments and favored by certain non-canonical syntactic positions, including dislocated position, pivot of a cleft and fragments

Elicitation study: Design equi-denotational contexts that vary along various linguistic and social factors and elicit a forced choice between plural and coordinated pronouns.

## **REFERENCES**

Bresnan, Joan and Tatiana Nikitina. 2007. "[The Gradience of the Dative Alternation](#)." To appear in *Reality Exploration and Discovery: Pattern Interaction in Language and Life*, edited by Linda Uyechi and Lian Hee Wee. Stanford: CSLI Publications

Haspelmath, Martin (2004) "Coordinating constructions: an overview." In: Haspelmath, Martin (ed.) *Coordinating constructions*. Amsterdam: Benjamins, 3-39.

O'Connor, M.C., A. Anttila, V. Fong (2004). Differential possessor expression in English: Re-

evaluating animacy and topicality effects. Annual Meeting of the Linguistic Society of America, January 9-11, 2004. Boston, MA.