

Appendix: *CorpusSearch* Queries

The queries shown below may be used by interested researchers in order to replicate the results in the same corpus or in one compatible with the *CorpusSearch* annotation scheme.

Table 3 used the number of tokens from (A1) and from (A2) – (A1).

(A1) Query for preverbal objects with a demonstrative (matrix clauses)

node: IP-MAT

```
query: (IP-MAT iDoms NP-ACC*|NP-DAT*)
      AND (IP-MAT iDoms VB*|TR*|HV*|ET*)
      AND (NP-ACC*|NP-DAT* Precedes VB*|TR*|HV*|ET*)
      AND (NP-ACC*|NP-DAT* iDomsMod D*
          est*|ess*|aque1*|aquest*|aques*)
```

(A2) Query for postverbal objects with a demonstrative (matrix clauses)

node: IP-MAT

```
query: (IP-MAT iDoms NP-ACC*|NP-DAT*)
      AND (IP-MAT iDoms VB*|TR*|HV*|ET*)
      AND (VB*|TR*|HV*|ET* Precedes NP-ACC*|NP-DAT*)
      AND (NP-ACC*|NP-DAT* iDomsMod D*
          est*|ess*|aque1*|aquest*|aques*)
```

Table 4 used the number of tokens from (A3) and from (A4) – (A3).

(A3) Query for preverbal objects without a demonstrative (matrix clauses)

node: IP-MAT

```
query: (IP-MAT iDoms NP-ACC*|NP-DAT*)
      AND (IP-MAT iDoms VB*|TR*|HV*|ET*)
      AND (VB*|TR*|HV*|ET* Precedes NP-ACC*|NP-DAT*)
      AND (NP-ACC*|NP-DAT* iDoms N*)
```

(A4) Query for postverbal objects without a demonstrative (matrix clauses)

node: IP-MAT

```
query: (IP-MAT iDoms NP-ACC*|NP-DAT*)
      AND (IP-MAT iDoms VB*|TR*|HV*|ET*)
```

```

AND (VB*|TR*|HV*|ET* Precedes NP-ACC*|NP-DAT*)
AND (NP-ACC*|NP-DAT* iDoms N*)

```

Tables 5 and 6 may be obtained by replacing “IP-MAT” by “IP-SUB” in the corresponding queries above (they are parallel to Tables 3 and 4, respectively).

For Table 7, (A5) was used in order to classify the results from the alternate query of (A1), aiming at subordinate clauses.

(A5) Coding query to distinguish preverbal demonstratives in different types of subordinate clauses

```

node: CP*
coding_query:
1: {
r: ((CP-REL|CP-FRL iDomsMod IP-SUB NP-ACC*|NP-DAT*)
AND (NP-ACC*|NP-DAT* iDomsMod D* ess*|est*|aquel*)
AND (NP-ACC*|NP-DAT Precedes VB*|ET*|TR*|HV*))
c: ((CP-THT iDomsMod IP-SUB NP-ACC*|NP-DAT*)
AND (NP-ACC*|NP-DAT* iDomsMod D* ess*|est*|aquel*)
AND (NP-ACC*|NP-DAT* Precedes VB*|ET*|TR*|HV*))
a: ((CP-ADV iDomsMod IP-SUB NP-ACC*|NP-DAT*)
AND (NP-ACC*|NP-DAT* iDomsMod D* ess*|est*|aquel*)
AND (NP-ACC*|NP-DAT* Precedes VB*|ET*|TR*|HV*))
}

```

For Table 8, the number of subject pronouns was obtained from (A6), the number subjects as demonstrative DPs from (A7), and the number of other DPs from (A8) – (A7) – (A6).

(A6) Query for 3rd person subject pronouns

```

node: IP-MAT
query: (IP-MAT* iDoms NP-SBJ*)
AND (IP-MAT* iDoms VB*|TR*|HV*|ET*)
AND (NP-SBJ* iDomsMod PRO el|ell|ele*|elle*|ela*|ella*)
AND (IP-MAT* iDoms NP-ACC*)

```

(A7) Query for subject demonstrative DPs

```
node: IP-MAT*
query: (IP-MAT* iDoms NP-SBJ*)
      AND (IP-MAT* iDoms NP-ACC*)
      AND (NP-SBJ* iDomsMod D* est*|ess*|aque1*)
      AND (IP-MAT* iDoms VB*|TR*|HV*|ET*)
```

(A8) Query for expressed DPs

```
node: IP-MAT*
query: (IP-MAT* iDoms NP-ACC*)
      AND (IP-MAT* iDomsMod NP-SBJ* N|D|Q|PRO)
```

For Figure 1, the number of null subjects was obtained from (A9), and the number of expressed subjects considered the results from (A10) + (A11).

(A9) Query for null subjects

```
node: IP-MAT*
query: (IP-MAT* iDoms NP-SBJ*)
      AND (IP-MAT* iDoms NP-ACC*)
      AND (IP-MAT* iDoms VB*|TR*|HV*|ET*)
      AND (NP-SBJ* iDoms *pro*)
```

(A10) Query for subjects expressed by personal pronouns

```
node: IP-MAT*
query: (IP-MAT* iDoms NP-SBJ*)
      AND (IP-MAT* iDoms NP-ACC*)
      AND (IP-MAT* iDoms VB*|TR*|HV*|ET*)
      AND (NP-SBJ* iDoms PRO)
```

(A11) Query for subjects expressed by demonstrative pronouns

```
node: IP-MAT
query: (IP-MAT* iDoms NP-SBJ*)
      AND (IP-MAT* iDoms NP-ACC*)
      AND (NP-SBJ* iDoms D*)
      AND (D* iDomsOnly est*|ess*|aque1*)
      AND (IP-MAT* iDoms VB*|TR*|HV*|ET*)
```

For Figure 2, the number of frame setters was obtained from (A12) + (A13) + (A14), but with the results manually filtered in order to exclude inconsistencies and repetitions. The number of sentences with an accusative object was obtained from (A15).

(A12) Query for fronted PPs and AdvPs
(clauses with an accusative object)

```
node: IP-MAT*
query: (IP-MAT* iDoms PP*|ADVP*)
      AND (IP-MAT* iDoms VB-D|VB-I|VB-P|VB-R|VB-RA|VB-SD|VB-
      SP|VB-SR|VB-F|ET-D|ET-I|ET-P|ET-R|ET-RA|ET-SD|ET-SP|ET-
      SR|ET-F|SR-D|SR-I|SR-P|SR-R|SR-RA|SR-SD|SR-SP|SR-SR|SR-
      F|HV-D|HV-I|HV-P|HV-R|HV-RA|HV-SD|HV-SP|HV-SR|HV-F|TR-
      D|TR-I|TR-P|TR-R|TR-RA|TR-SD|TR-SP|TR-SR|TR-F)
      AND (IP-MAT* iDoms NP-ACC*)
      AND (PP*|ADVP* Precedes VB-D|VB-I|VB-P|VB-R|VB-RA|VB-
      SD|VB-SP|VB-SR|VB-F|ET-D|ET-I|ET-P|ET-R|ET-RA|ET-SD|ET-
      SP|ET-SR|ET-F|SR-D|SR-I|SR-P|SR-R|SR-RA|SR-SD|SR-SP|SR-
      SR|SR-F|HV-D|HV-I|HV-P|HV-R|HV-RA|HV-SD|HV-SP|HV-SR|HV-
      F|TR-D|TR-I|TR-P|TR-R|TR-RA|TR-SD|TR-SP|TR-SR|TR-F)
      AND (PP*|ADVP* iDoms !\***)
      AND (PP*|ADVP* iDoms !CP*)
```

(A13) Query for fronted adverbial DPs
(clauses with an accusative object)

```
node: IP-MAT*
query: (IP-MAT* iDoms NP-ADV*)
      AND (IP-MAT* iDoms VB-D|VB-I|VB-P|VB-R|VB-RA|VB-SD|VB-
      SP|VB-SR|VB-F|ET-D|ET-I|ET-P|ET-R|ET-RA|ET-SD|ET-SP|ET-
      SR|ET-F|SR-D|SR-I|SR-P|SR-R|SR-RA|SR-SD|SR-SP|SR-SR|SR-
      F|HV-D|HV-I|HV-P|HV-R|HV-RA|HV-SD|HV-SP|HV-SR|HV-F|TR-
      D|TR-I|TR-P|TR-R|TR-RA|TR-SD|TR-SP|TR-SR|TR-F)
      AND (IP-MAT* iDoms NP-ACC*)
      AND (NP-ADV* Precedes VB-D|VB-I|VB-P|VB-R|VB-RA|VB-
      SD|VB-SP|VB-SR|VB-F|ET-D|ET-I|ET-P|ET-R|ET-RA|ET-SD|ET-
      SP|ET-SR|ET-F|SR-D|SR-I|SR-P|SR-R|SR-RA|SR-SD|SR-SP|SR-
      SR|SR-F|HV-D|HV-I|HV-P|HV-R|HV-RA|HV-SD|HV-SP|HV-SR|HV-
      F|TR-D|TR-I|TR-P|TR-R|TR-RA|TR-SD|TR-SP|TR-SR|TR-F)
```

(A14) Query for fronted adverbial clauses and participial clauses

(clauses with an accusative object)

node: IP-MAT*

query: (IP-MAT* iDoms CP-ADV*|IP-PPL*)

AND (IP-MAT* iDoms VB-D|VB-I|VB-P|VB-R|VB-RA|VB-SD|VB-
SP|VB-SR|VB-F|ET-D|ET-I|ET-P|ET-R|ET-RA|ET-SD|ET-SP|ET-
SR|ET-F|SR-D|SR-I|SR-P|SR-R|SR-RA|SR-SD|SR-SP|SR-SR|SR-
F|HV-D|HV-I|HV-P|HV-R|HV-RA|HV-SD|HV-SP|HV-SR|HV-F|TR-
D|TR-I|TR-P|TR-R|TR-RA|TR-SD|TR-SP|TR-SR|TR-F)

AND (IP-MAT* iDoms NP-ACC*)

AND (CP-ADV*|IP-PPL* Precedes VB-D|VB-I|VB-P|VB-R|VB-
RA|VB-SD|VB-SP|VB-SR|VB-F|ET-D|ET-I|ET-P|ET-R|ET-RA|ET-
SD|ET-SP|ET-SR|ET-F|SR-D|SR-I|SR-P|SR-R|SR-RA|SR-SD|SR-
SP|SR-SR|SR-F|HV-D|HV-I|HV-P|HV-R|HV-RA|HV-SD|HV-SP|HV-
SR|HV-F|TR-D|TR-I|TR-P|TR-R|TR-RA|TR-SD|TR-SP|TR-SR|TR-
F)

(A15) Query for clauses with an accusative object

node: IP-MAT*

query: (IP-MAT* iDoms NP-ACC*)