Deverbal (Quasi-) Prepositions in English and French: With Special Reference to *Including* and *Y Compris* as Clause Linkers

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Abstract

This paper reports on a parallel corpus study of deverbal prepositions in English and French. The specific focus is on English *including* and French y compris. Both are descended from the Latin absolute construction and seemingly function in similar ways in present-day English and French, though the apparent voices differ: active in English; passive in French. Examination of paired sentences retrieved from English–French parallel corpora reveals an asymmetric correspondence between the two expressions. In section 2, standard descriptions of the functions of *including* are re-examined in the light of information obtained from a survey of English corpora. The existence of an extended use of *including* is confirmed. In section 3, relations between the two expressions are pointed out based on the results of surveys conducted on parallel corpora. Aspects of the asymmetry in correspondence between the examined. Section 4 considers the potential of corpus study for greater accuracy of usage descriptions in dictionaries.

1. Introduction

Deverbal prepositions and conjunctions exemplify two prototypical paths of grammaticalization (Hopper 1991). Despite recent uncertainty about the scope of grammaticalization, there is general agreement that the treatment of these deverbal forms represents a central issue in the study of grammaticalization, however delimited (Ramat and Hopper eds. 1998; Rissannen 2002).

In English, there are prepositions derived from present participle forms, such as *during*, *following*, *concerning* and quasi-prepositional expressions such as *according to*, *depending on*; and in French, *avant*, *concernant*, *devant*, *durant*, *pendant*, *suivant*, among others. In addition to such forms, there also exist quasi-prepositional expressions that are derived from past participle forms: *provided* (cf. *providing*) and *included* (cf. *including*) in English; *y compris* and *non compris* in French. These expressions have their roots in Latin absolute constructions. The participle forms have gradually lost their verbal nature, in the process of gaining the properties of prepositions.

This paper reports on an empirical study of deverbal (quasi-) prepositions in presentday English and French. In section 2, I will first present the result of a preliminary study using Brown, LOB, FROWN, and FLOB corpora. Among the English *-ing* prepositions, *including* shows interesting tendencies in frequency and usage: some examples indicate an extended use of *including* as a clause linker (Ohori 1995; Van Valin and LaPolla 1997). In section 3, I will compare *including* and *y* compris by examining sentence pairs retrieved from parallel corpora. The comparison confirms the extended usage of *including* in English, and thus a difference in the functions achieved by *including* and *y* compris in the respective languages.

2. Deverbal (Quasi-) Prepositions in English Corpora

2.1 Preliminary Survey

In a preliminary survey, four corpora in ICAME Collection of English Language Corpora (the Lancaster-Oslo/Bergen Corpus of British English, the Freiburg-LOB Corpus of British English, the Brown Corpus, and the Freigurg-Brown Corpus of American English) were searched for examples of the *-ing* forms. The data in the Brown Corpus and the LOB Corpus mainly consist of materials produced in 1961; the materials in the FROWN and in the FLOB corpora were mainly produced in 1991.

Frequencies of 26 types of *-ing* prepositions were calculated. Figure 1 shows the distribution of the six most frequent *-ing* forms.

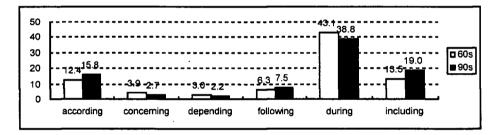


Figure 1: Frequencies per 100,000 words

It was noticed that the use of *including* seemed to be expanding and some further analyses of the examples were therefore carried out, focusing on *including*. It was found, in addition to (i) general growth in frequency, that (ii) more than half of the examples have the *including* +NP phrases in the post position, i.e., they are placed after the matrix clause with a comma preceding; and that (iii) frequency in informative texts is about nine times higher than in imaginative genres (cf. Biber et al. 1999: 372). Figure 2 compares the distribution of *including* across genres.

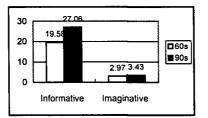


Figure 2: Frequencies of including in different genres

Biber et al. (1999: 372) refer to the frequent use of *including* in academic prose. The result shown above confirms the tendency: *including* is frequent in informative texts.

2.2 Functions of Including: Description in Quirk et al. (1985)

Quirk et al. (1985) discuss the function of exemplification performed by *including* as illustrated by (1).

(1) Many people, *including* my sister, won't forgive him for that. (p. 1315, Italics in original)

In their classification (2), exemplification is one of the semantic subtypes of apposition:

- (2) (A) EQUIVALENCE
 - (Ai) appellation: *that is (to say)*
 - (Aii) identification: namely
 - (Aiii) designation: that is to say
 - (Aiv) reformulation: in other words
 - (B) ATTRIBUTION
 - (C) INCLUSION
 - (Ci) exemplification: for example, say
 - (Cii) particularization: especially
 - (Quirk et al. 1985: 1308 Italics in original)

Although the authors acknowledge that there can be ambiguity between exemplification and identification, they refer to *including* as a representative of an 'unambiguous case of exemplification (p. 1316).'

2. 3 Extended Usage of Including: Out of Corpora

Despite the claim of Quirk et al., there exist examples of *including* that appear not to have the function of exemplification, as illustrated in (3)-(4):

(3) Currently Honda of America is undergoing a five step strategy to become selfreliant in the USA, *including*: boosting exports; increasing local content to 75 per cent by 1991; expanding production engineering; developing the second US assembly plant at East Liberty, and increasing R&D activities. (FLOB J44) (4) First-year coach Sam Wyche has dropped four starters from last year's 3-13 team, *including* Hill, Newton, Carter and middle linebacker Jesse Solomon, who was given his unconditional release last Friday. (FROWN A18)

It is rather a semantic relation of identification [category (Aii) in (2)] that is expressed by *including* in these sentences.

Other examples represent particularization [category (Cii) in (2)], as in (5)-(6):

- (5) The most informative sources . . . were periodic federal censuses, *including* especially the Census of Manufactures, available every ten years from 1869 to 1899 and every five years from 1899 to 1919. (FROWN J46)
- (6) Independent candidate Ross Perot has had several sessions with King, *including* one in February during which he first said he was interested in running for president. (FROWN A01)

These examples also suggest that *including* + NP, when postposed with a comma, introduces a piece of information that is semantically coordinate to that of the matrix clause (cf. Fillmore et al. 1988 on *let alone*; Uchida 2002 on participial clauses).

Moreover, *including* can sometimes be followed by a prepositional phrase, as illustrated by (7).

(7) The segment was aired nation-wide, *including* on the West Coast, where the show is tape delayed. (FROWN A22)

In this example, it is the two propositions—(i) *the segment was aired nation-wide*, and (ii) *the segment was aired on the West Coast*—that are actually connected by *including*, rather than two entities. This construction can thus be regarded from a cross-linguistic perspective as effecting a type of clause linkage (Ohori 1995; Van Valin and LaPolla 1997).

3. Parallel Corpus Study

3.1 Data and Procedure

The survey was designed (i) to compare the frequencies of *including* and *y* compris, (ii) to examine the correspondence of *including* and *y* compris among the English-French parallel data, and (iii) to describe the characteristic usages of *y* compris as a clause linker, in comparison with *including*, thereby providing suggestions for English-French bilingual dictionaries. Table 1 shows the materials used in the survey.

	Genre	Source	EN size	FR size
Informative	Institutional	5 texts from ARCADE, 1 text from ENPC ²	662	585
	Scientific	4 texts from ARCADE, ³ 1 text from Project Gutenberg ⁴	123	130
	Technical	1 text from ARCADE, ⁵ CRATER2 ⁶	566	663
Subtotal (Informative)			1,351	1,378
Imaginative	Literature	1 text from ARCADE, ⁷ 17 texts from Project Gutenberg, ⁸ 2texts from OMLC ⁹	1,638	1,589
Subtotal (Imaginative)			1,638	1,589
Total			2,990	2,967

(1,000 words)

Table 1: Parallel data

Using these parallel data, (i) the English sentences with *including* and the French sentences with y compris were extracted; then (ii) the corresponding parts were retrieved from the other language version; and (iii) the sentence pairs were classified.

3.2 Results

3.2.1 General Distribution. The distribution of *including* in the English data shows a tendency similar to that detected in the preliminary survey reported in §2.1. As shown in Figure 3, *including* appears far more frequently in informative texts (30.6 per 100,000 words) than in imaginative texts (1.5 per 100,000 words). Interestingly, this relation is also found in the case of *y compris* in French data: its frequency is by far higher (12.6 per 100,000 words) in informative texts than in imaginative texts (0.8 per 100,000 words).

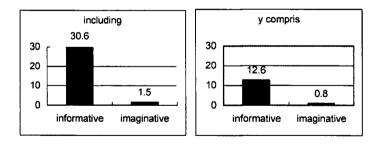


Figure 3: Frequencies of *including* and *y compris* in parallel data (per 100,000 words)

3.2.2 Asymmetry in Correspondence between Expressions. The classification of the retrieved sentence pairs revealed an asymmetric relation between *including* and *y compris*: only 36% of the English *including* sentences have *y compris* in their counterpart sentences, while 86% of the French *y compris* sentences have English counterparts with *including*. The white portions in the bars in the two graphs in Figure 4 represent the sentence pairs in which *including* and *y compris* do not correspond to each other.¹⁰

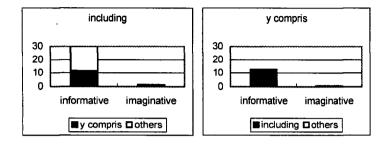


Figure 4: *Including* and *y* compris and their counterparts (per 100,000 words)

This implies a difference in the ranges of function and the paired sentences were further classified according to the expressions used for *including* in the corresponding French data. 3.2.3 *French Counterparts*. Figure 5 shows the French expressions and their incidence.

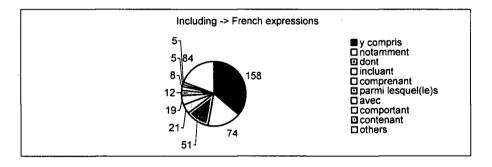


Figure 5: French expressions corresponding to including

The most popular French substitute for *including* other than y compris is notamment 'notably, in particular, more particularly' (11.7%). Sentence pairs (8)-(10) are the examples of this kind.

- (8) a. Among those affected were a number of trade union officials, *including* the President of the GBSU, the Treasurer of the GMWU and all the shop stewards.
 - b. Parmi les travailleurs frappés figurent un certain nombre de responsables syndicaux et *notamment* le président du STMG, le trésorier du SEBG et tous les délégués syndicaux d'atelier. (ARCADE ilo)
- (9) a. The Commission and India have begun a process of industrial cooperation covering almost all the disciplines encompassed by the information and telecommunications technologies, *including* the software industry.
 - b. La Commission a engagé avec l'Inde un processus de coopération industrielle qui couvre presque toutes les disciplines concernées par les TIT, *notamment* l'industrie du logiciel. (ARCADE joc)

- (10) a. If this is the first expiry of t12 for this uninhibition attempt on this link, the procedure is restarted *including* inspection of the status of the destination of the unhibit message.
 - b. Si c'est la première expiration de t12 pour cette tentative de fin d'inhibition de ce canal sémaphore, la procédure est à nouveau déclenchée, *notamment* dans le but d'inspecter l'état de la destination objet du message de fin d'inhibition. (ITU)

This implies that the extended function of particularization expressed by English *including* is not necessarily shared by French y compris and rather corresponds to *notamment*, which lexically expresses the relation of particularization (cf. § 2.3).

3.3 Other Findings: Characteristics of the Two Expressions

3.3.1 Commas and Parentheses. It should be noted that in the majority of the examples *including* and *y compris* are somehow detached from the matrix clause: either used with a comma before it, or put in parentheses. About 75% of English *including* phrases are detached from the matrix clause, whereas more than 90% of French *y compris* phrases are.

Here are some examples of the pairs in which English and French versions employ different punctuations.

- (11) a. They are based on . . . information flow diagrams but also cover more complex cases *including* cases of unsuccessful and / or abnormal operation.
 - b. Ils sont fondés sur les diagrammes de flux d'information . . . mais ils portent également sur des cas plus complexes, *y compris* des cas d'échec et / ou d'exploitation anormale. (ITU)
- (12) a. The Act . . . covered employees of the Ontario Public Service, all Ontario municipalities, municipal and provincial corporations, commissions, boards and agencies *including* universities, colleges, hospitals and health boards.
 - b. Cette loi . . . était applicable aux salariés de la fonction publique de l'Ontario, de toutes les municipalités de l'Ontario, des corporations, des commissions, des conseils et des organismes municipaux et provinciaux de l'Ontario, y compris les universités, les écoles secondaires, les hôpitaux et les conseils de santé. (ARCADE ilo)
- (13) a. If necessary the Commission has been prepared to take such further appropriate action as is within its powers *including* the opening of the Article 169 infringement procedure.
 - b. Le cas échéant, la Commission est toujours disposée à prendre toute autre mesure appropriée dans le cadre de sa compétence, *y compris* l'ouverture de la procédure d'infraction de l'article 169. (ARCADE joc)

Y compris is even more likely to be detached from the matrix clause by means of commas or parentheses.

3.3.2 *Prepositional Phrases.* As mentioned in $\S2.3$, *including* is sometimes followed by a prepositional phrase, establishing a textual relation between the two propositions. Dupré and Keller (1972) describe a similar use of *y compris* as in (14).

(14) La locution y compris, qui ne se trouvait que devant des noms (j'ai lu tout le journal, y compris les réclames), se loge maintenant très souvent devant une

préposition: par exemple, c'est difficile, y compris pour des raisons diplomatiques. C'est une innovation. M. COHEN (11, p. 42) (Dupré and Keller 1972: 486)

This 'innovation' seems to have developed in both languages. A comparative survey is therefore worth carrying out.

In our parallel data, 25 (13%) of the 186 French samples of y compris are followed by a prepositional phrase. The sentences in (15)-(17) illustrate this.

- (15) ... les propositions présentées dans le Livre vert ont principalement pour but de garantir la création d'un service universel de qualité généralement accessible et abordable (*y compris* pour les habitants des régions éloignées ou ...). (ARCADE joc)
- (16) L'ensemble de ces outils sont mis en réseau, les rendant ainsi disponibles à tous, y compris aux pigistes. (ARCADE citi1)
- (17) Il exprime le ferme espoir que ... et que tous les travailleurs pourront constituer les organisations de leur choix, *y compris* dans une organisation qui fasse suite à l'ex-UGTC, s'ils le désirent. (ARCADE ilo)

Among the English samples of *including*, however, only seven (1.6%) out of 437 are with prepositional phrases.

- (18) Of that amount, five billion dollars could be invested to stimulate employment, *including* by building a high-speed train line, whereas the other five billion could be used to reduce the deficit. (ARCADE hans)
- (19) As a consequence, a complaint was lodged which was not answered, thus preventing a discussion of the matter in other bodies, *including* in the courts (ARCADE ilo)

It appears that the use of *including* with prepositional phrases is not as free as that of y compris. This observation is further supported by the fact that nearly 90% of the *including* sentences that correspond to the French 'y compris + prepositional phrase' are in the form of '*including* + noun phrase.' Sentences in (20)-(22) are the English counterparts of (15)-(17).

- (20) ... the options set out in the Green Paper have as their principal aim to guarantee a good quality universal service which is accessible and affordable to all (*including* residents of remote regions or ...). (ARCADE joc)
- (21) All these tools were put on a network so that they would be available to everyone, *including* freelancers. (ARCADE citi1)
- (22) It expresses the firm hope that . . . and that all workers will be able to establish organisations of their choosing, *including* an organisation carrying on from the ex-UGTC if they so wish. (ARCADE ilo)

3.3.3 Quantifying Expressions. The third point to be focused upon is cooccurrence with quantifying expressions. As many as 40% of the matrix clauses of *including* and *y compris* contain some quantifying expressions. Since both *include* and *comprendre* lexically designate the logical relation of inclusion, this fact may appear quite trivial. It must be noted, however, that the relation established by *including* or *y compris* in these examples is not necessarily a simple logical relation between entities. It can be rather a textual relation of particularization or elaboration between the general fact that is described in the matrix clause on the one hand, and the specific fact introduced by the *including* or *y compris* clause on the other. In the sentences in (23), for example, the matrix clause gives a general description of a

fact: the members of the National Army searched every building, while the following including/y compris clause introduces a specific fact: they searched the headquarters of the University Workers' Union.

- (23) a. Finally, FASGUA alleges that ... 500 members of the National Army ... launched an attack on the University of San Carlos and searched every building, *including* the headquarters of the University Workers' Union where they caused extensive damage and seized trade union documents.
 - b. Enfin, la FASGUA allègue que ... 500 hommes de troupe de l'Armée nationale ont pris d'assaut ... les installations de l'Université de San Carlos, fouillant tous les édifices, *y compris* le siège du Syndicat des travailleurs de l'université, où ils ont causé des dégâs graves et ont confisqué des documents syndicaux. (ARCADE ilo)

In this regard, *including* and *y* compris appear to share the textual function of particularization or elaboration, although the use of *y* compris is more limited in general, because of the competing forms (*notamment*, *dont*, etc.) as shown in § 3.2.3.¹¹

4. Toward Better Descriptions of Usage

4.1 Including in English-French Dictionaries

Harrap's Standard French and English Dictionary (1961) gives the translation 'y compris' for including. The relevant example with its translation is we were six including the host 'nous étions six y compris notre hôte.' Cassell's New French-English, English-French Dictionary (1962) gives the translations 'comprenant, y compris.' It gives an example including the ladies, with the translations 'y compris les dames, les dames comprises.' Harrap's New Standard French and English Dictionary (1980) refers to including in the entry of 'include' and gives one example: price including carriage with the translation 'prix y compris le port.'

Le Robert & Collins Dictionnaire Français-Anglais, Anglais-Français (1993) lists an entry 'including' as a preposition and gives the translations 'y compris, compris, inclus,' as cited in (24).

(24) including prep y compris, compris, inclus. that comes to 200 francs ~ packing cela fait 200 F y compris l'emballage or l'emballage compris or l'emballage inclus; there were 6 rooms ~ the kitchen il y avait 6 pièces en comprenant la cuisine or si on comprend la cuisine or la cuisine (y) comprise or y compris la cuisine; ~ the service charge service compris; not ~ tax taxe non comprise; . . . several projects, ~ ... plusieurs projets, dont ... or parmi lesquels

Descriptions in The Oxford-Hachette French Dictionary 2 (1997) are cited in (25).

(25) including prep (y) compris; ~ July y compris juillet; not ~ July sans compter juillet; £10, ~ coffee 10 livres sterling, café compris; up to and ~ Monday jusqú'à lundi inclus; ~ service service compris; ~ Mary/not ~ Mary we'll be six avec Mary/sans Mary nous serons six.

In the five dictionaries examined here, there is no reference to the extended usage of *including*, which was discussed in sections 2 and 3.

4.2 Y Compris in French-English Dictionaries

A New French-English and English-French Dictionary (1923) does not have the entry 'compris' nor provide any description or example of y compris under the entry 'comprendre.' Cassell's New French-English, English-French Dictionary (1962) lists the entry 'compris,' with reference to y compris as in (26).

(26) **compris**, *a*. Understood; included. *Non compris*, not including, exclusive of, without; *y compris*, inclusive of, including; *tout compris*, inclusive, all found.

Le Robert & Collins Dictionnaire Français-Anglais, Anglais-Français (1993) lists an entry 'y compris' and provides four examples, all of which are in the form of y compris and a noun phrase without matrix clause.

(27) compris, e (ptp de comprendre) adj a (inclus) . . .

b y ~: 100 F y ~ l'électricité ou l'électricité y ~e 100 francs including electricity ou counting (the) electricity ou electricity included; $Y \sim moi$ myself included, including me ou myself; y ~ Jean including Jean, Jean included.

The Oxford-Hachette French Dictionary 2 (1997), which is corpus-based, offers one complete sentence and two examples in which y compris is followed by a prepositional phrase, as shown in (28).

(28) IV y compris loc adv including; tout le monde peut se tromper moi/toi y ~ everybody makes mistakes, myself/you included; y ~ à Paris in Paris too; y ~ dans les journaux even in the newspapers.

4.3 Concluding Remarks

Based on the results of the surveys, three facts should be given attention. First, there are extended functions of *including*: identification and particularization. Second, some of the examples of *including* can be best translated using *notamment*, which lexically expresses the relation of particularization. Third, the combination 'y compris + prepositional phrase' is employed more freely than is the case with *including*.

From this viewpoint, it appears that the examples of y comprises listed in The Oxford-Hachette French Dictionary 2 (1997) properly reflect observed usage, while the descriptions of including reviewed in § 4.1 fail to reflect the complexity of actual usage. These findings support the conclusion that detailed observations of parallel data retrieved from corpora can contribute to greater accuracy of usage descriptions in bilingual dictionaries.

Acknowledgements

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Endnotes

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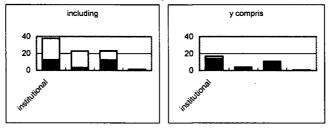
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10. The frequencies among the subcorpora are roughly as follows. The white portions represent the cases where *including* and *y compris* do not correspond to each other.



11. An example of sentence pair where the French version employs dont for including:

(i) a. By not taking the necessary steps to deal with the deficit . . . the government is sacrificing the future of government services to all Canadians, *including* people in the agricultural field.

b. En ne prenant pas maintenant les mesures . . . pour juguler le déficit, le gouvernement sacrifie l'avenir des services gouvernementaux offerts à tous les Canadiens, *dont* ceux qui travaillent dans le secteur agricole. (ARCADE hans)

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