

How to make do with one verb: a corpus-based contrastive study of DO and MAKE

Gaëtanelle Gilquin

FNRS – Université catholique de Louvain

Åke Viberg

Department of Linguistics and Philology, Uppsala University

Abstract

This paper compares DO/MAKE in several related European languages, some having two different verbs at their disposal (e.g. *do* and *make* in English) and others having to make do with just one verb (e.g. French *faire*). Using translation corpus data, we demonstrate that, while there are similarities between some of these verbs (especially when the languages belong to the same group, i.e. have either one or two verbs), there are also considerable differences in the functions these verbs can perform or the preferences they exhibit, which results in a generally low degree of equivalence in translations. Our study also presents some results from an experiment aiming to establish the cognitively most salient functions of the different verbs. These results confirm the existence of differences among DO/MAKE verbs, and also show that frequency in language does not necessarily imply salience in the mind.

Résumé

Cet article compare DO/MAKE dans plusieurs langues européennes apparentées, certaines ayant deux verbes différents à leur disposition (ex. *do* et *make* en anglais) et d'autres devant se contenter d'un seul verbe (ex. *faire* en français). Grâce à l'exploitation de corpus de traduction, nous démontrons que, malgré la présence de certaines similarités parmi ces verbes (surtout lorsque les langues appartiennent au même groupe, c'est-à-dire possèdent soit un verbe, soit deux), il existe également des différences considérables en ce qui concerne les fonctions que ces verbes peuvent remplir ou les préférences dont ils font preuve, ce qui a pour effet un degré d'équivalence généralement peu élevé dans les traductions. Notre étude présente aussi quelques résultats d'une expérience dont le but était d'établir les fonctions les plus saillantes de ces verbes d'un point de vue cognitif. Ces résultats confirment l'existence de différences parmi les verbes DO/MAKE, et ils montrent également que fréquence dans la langue n'implique pas nécessairement saillance dans l'esprit.

1. Introduction

The English verbs *do* and *make*, and their equivalents in other European languages, are among the most frequent verbs and can often be found among the top ten, or at least the top twenty, of the most frequent verbs of the language. One important difference, however, is that, while English and other West Germanic standard languages have two distinct verbs (English *do/make*, German *tun/machen*, Dutch *doen/maken*), the majority of European languages have to make do

with just one verb, for example Swedish *göra*, French *faire*, Finnish *tehdä*, Modern Greek *káno* or Polish *robić*. This suggests a different organisation of the semantic space in the languages that have only one verb, as compared to those that have two. Interestingly, however, even languages from the same group (i.e. with either one verb or two verbs) have been shown to sometimes divide up the semantic space in different ways (see e.g. Nehls 1991). These assumed differences between DO/MAKE cross-linguistically make these verbs particularly worthy of attention.

This paper sets out to investigate the conceptual/semantic representation of *do* and *make* and their equivalents in several related European languages, namely Dutch (which, like English, has two verbs) and Swedish and French (which have a single verb). The general discussion will also include data from German. In our cross-linguistic exploration, we will rely on parallel corpora, which present original texts in one language and their translations into one or several other languages. However, it is also one of our aims to compare these corpus data with experimental data showing what uses of these verbs tend to be cognitively more salient. This way, we hope to be able to provide a better understanding of the role of DO/MAKE and its contribution to the typological profile of the languages studied (i.e. “an account of the distinctive character of [their] lexical structure in relation to other languages”, Viberg 2006a: 103), not only in terms of frequency in the language, but also in terms of salience in the mind.

2. The corpora

We used four different translation corpora in our investigation of the relations between DO and MAKE in several related languages. One is the Multilingual Pilot Corpus (MPC), which is being compiled by Åke Viberg and consists at present of extracts from ten novels in Swedish (for a total of around 250,000 words) and their translations into English, German, French and Finnish, plus, for some of the texts, translations into Dutch. This corpus made it possible to look for equivalences across all the languages we studied and provided us with illustrations for the general discussion of Section 3. We also used three other corpora that enabled us to study specific pairs of languages, which we decided to consider with English as the translated language. The data for Swedish-English come from the English-Swedish Parallel Corpus (ESPC), which contains original (fictional and non-fictional) texts in English and Swedish together with their translations into the other language. Because this corpus is the largest one we exploited within the frame of this study (it contains around 500,000 words of original texts in each language), we also used it as a basis for the description of the uses of *do* and *make* in original English (Section 4.1). The French-English data were extracted from the PLECI (Poitiers-Louvain Échange de Corpus Informatisés) corpus. The sample we selected comes from the fiction part of the corpus and contains extracts from nine novels in original French and their translations into English, for a total of some 100,000 words per language. Finally, we used the fiction part of the Namur Corpus¹ in order to compare Dutch and English, with a sample of about 100,000 words of original Dutch.

3. DO/MAKE: frequency and main functions

Table 1 shows the relative frequency per 100,000 words of DO/MAKE in the languages under study. As can be observed, the frequency of MAKE is at approximately the same level in all the

¹ See Paulussen (1999). We thank Hans Paulussen for kindly providing us with the data.

West Germanic languages, whereas the frequency of DO varies dramatically. It is exceptionally high in English in comparison to the other two languages, but there is also a rather clear difference between Dutch and German, with German *tun* having a much lower frequency than Dutch *doen*. As regards the languages with a single verb for DO and MAKE, Swedish *göra* is clearly less frequent than French *faire*.²

Table 1. Frequency per 100,000 words of DO/MAKE in several languages³

	English	German	Dutch	Swedish	French
DO	560 (<i>do</i>)	68 (<i>tun</i>)	168 (<i>doen</i>)		
MAKE	217 (<i>make</i>)	232 (<i>machen</i>)	204 (<i>maken</i>)		
DO=MAKE				267 (<i>göra</i>)	410 (<i>faire</i>)

Table 2. Main functions of DO/MAKE

Main functions	Example
Pro-verb	What did they do ? / He left and she did too.
Support verb	I can't make a decision just yet.
Production	She made her own wedding dress.
Transformation	It was this movie which made him a star.
Causative-VP	I like him because he makes me laugh.
Causative-ADJ	What makes you so happy?

The main functions of DO/MAKE relevant for the languages in this study are displayed in Table 2 using simple English examples. *Pro-verb* describes cases where DO/MAKE refers either to a completely unspecified predicate as in (1) or to an already mentioned predicate as in (2).⁴

- (1) SW: Han undrade vad Barbro **gjorde**. (MPC)
 EN: He wondered what Barbro was **doing**.
 DU: Hij vroeg zich af wat Barbro **deed**.
 FR: Il se demanda ce que **faisait** Barbro.
 GE: Er fragte sich, was Barbro wohl **machte**.
- (2) SW: –Du kan i dag, hade Rantzau sagt, göra gott i det lilla. Det **gör** du. (MPC)
 EN: “Right now,” said Rantzau, “you can do good in a small way. And you **do**.
 DU: ‘Vandaag de dag kun je goed doen in het klein. En dat **doe** je ook.

² The frequency of *faire* in present-day French may even be underestimated in Table 1. The *Lexique 3* database (New et al. 2001), which relies on more recent data than BRULEX, indicates a relative frequency of 533 occurrences per 100,000 words in a corpus of fiction, and 881 in a corpus of film subtitles.

³ Sources: English: British National Corpus; German: Jones & Tschirner (2006); Dutch: CELEX; Swedish: Stockholm Umeå Corpus; French: BRULEX.

⁴ Nehls (1991), correctly, makes a distinction between the reference to an unspecified action, as in (1), and the use as a verbal pro-form, as in (2). In the former case *machen* is the preferred verb in German (although *tun*, according to Nehls, is not completely ruled out), whereas in the second case *tun* is the preferred alternative. Yet, since in English and Dutch DO is the normal verb in both cases, these two functions will be collapsed into one function called pro-verb in this study.

FR : – Aujourd’hui, reprit Rantzau, tu peux faire le bien à petite échelle. C’est ce que tu **fais**.

GE: »Du kannst heute«, hatte Rantzau gesagt, »im Kleinen Gutes tun. Das **tust** du.

DO/MAKE can be used to various degrees together with an abstract noun in the object slot as in (3). In such combinations, the type of action is specified in the noun and the verb serves as a *support verb*.

- (3) SW: Han **gjorde en rörelse** men svarade inte. (MPC)
 EN: He **made a movement** but didn’t reply.
 DU: Hij **maakte een beweging** maar gaf geen antwoord.
 FR: Il **fit un mouvement** mais ne répondit pas.
 GE: Er **machte eine Bewegung**, sagte aber nichts.

This use of DO/MAKE can be found in all the five languages under investigation and appears with both DO and MAKE in languages that make such a distinction. However, the usage patterns vary a lot. In many cases, the combination of support verb and abstract noun corresponds to a simple verb in some (or all) of the other languages (e.g. Fr. *faire peur* > En. *scare*), or another support verb is used (e.g. Du. *een eind maken aan* > En. *put an end to*).

When DO/MAKE describes the coming into existence of its object, it is used as a verb of *production* (creation is an alternative term). A typical example is shown in (4). In this example French uses a more specific verb, *fabriquer*, but *faire* can also be used as a verb of production.

- (4) SW: Prickbrädan som pappa **gjort**, Kårångbrädan. (MPC)
 EN: The game-board with holes Dad had **made**, the Korong-board.
 FR: La planche de prick que papa avait **fabriquée**, le jeu de Kårång.
 GE: Das Spielbrett, das Papa **gemacht** hatte, das Kårångbrett.

The use of DO/MAKE called *transformation* in Table 1 is related to the sense of production but is more abstract since it normally does not describe the coming into existence of a new entity, but rather a change with respect to the nature of an entity, the way it is categorized or characterized. In Swedish, Dutch and German, the original (or basic) category is described with an NP in the object slot and the new category in a prepositional phrase marked as Goal with Swedish *till*/Dutch *tot*/German *zu* ‘to’, whereas English uses a kind of double object construction.

- (5) SW: det var människans helighet som **gjorde** människan **till** icke-djur. (MPC)
 EN: and it was the sanctity of human beings that **made** them non-animals.
 DU: het was de heiligheid van de mens die de mens **tot** niet-dier **maakte**.
 FR: c’était le caractère sacré de l’homme qui différenciait l’homme de l’animal.
 GE: und die Heiligkeit des Menschen war das, was den Menschen **zum** Nicht-Tier **machte**.

French, instead of marking the new category as Goal, normally marks the original category as Source with the preposition *de* ‘from, of’. This is illustrated in (6) with a special example, since a paraphrase is used in (5). Note that in this case, English also marks the original category as Source with the preposition *of*, which is less usual than the double object construction.

- (6) FR: Je mesurai sa force : elle avait voulu mon père, elle l'avait, elle allait peu à peu **faire de** nous le mari et la fille d'Anne Larsen. (PLECI)
 EN: I took stock: She wanted my father; she had got him. She would gradually **make of** us the husband and step-daughter of Anne Larsen;

The use of DO/MAKE in analytical (or, alternatively, periphrastic) causatives is found in many languages. In the languages considered in this study, *make* has this function in English, *faire* in French and *doen* in Dutch. Dutch also allows the use of *laten* 'let' in this function. The equivalent of 'let' in German, *lassen*, is the main analytical causative available in German. In Swedish, the main alternative is *få* 'get'. This function will be referred to as **causative-VP** and is illustrated by (7). It does not include the case where *göra* is used together with a full sentential complement, as is sometimes the case in Swedish (see Section 4.2) – a use which, it should be noted, does not reach a frequency on a par with causative-VP.

- (7) SW: Nånting - var det en lukt? - **fick** honom att tänka på fisk. (MPC)
 EN: Something - was it a smell? - **made** him think of fish.
 DU: Iets – was het een geur? – **deed** hem aan vis denken.
 FR: Quelque chose - fut-ce une odeur ? - le **fit** penser à du poisson.
 GE: Irgend etwas - war es ein Geruch? - **ließ** ihn an einen Fisch denken.

DO/MAKE also serves as a causative to ascribe a property to the object of the verb in the syntactic frame [NP_{subject} + verb + NP_{object} + ADJP]. This function, which is exemplified in (8), will be referred to as **causative-ADJ**. Note that French does not use *faire* for this function, but the verb *rendre* ('render'). It can also be added that, quite commonly, the translation of *göra* + adjective involves a shift in construction (e.g. Sw. *göra rädd* lit. 'make afraid' > En. *frighten*, Fr. *faire peur* 'make fear').

- (8) SW: Det **gjorde** hundarna ännu *ilsknare*. (MPC)
 EN: That **made** the dogs even more *furious*.
 DU: Dat **maakte** de honden nog *razender*.
 FR: Ce qui **rendit** les chiens encore plus *furieux*.
 GE: Das **machte** die Hunde nur noch *wütender*.

It should be emphasised that what precedes is only an overview of the main functions of DO/MAKE. First, the languages under study display other, secondary and/or language-specific functions,⁵ such as phrasal verbs (which are possible in English, Swedish and Dutch, but which will be included in an 'other' category and will not be further discussed) or the use of *do* as an auxiliary in English and the environmental function of French *faire*, which will be treated separately below. Also, we were interested in the use of these verbs in productive syntactic frames/constructions, but it should be noted that, in addition, they appear in various types of set phrases, some of which reach a relatively high frequency (these will be included in our 'other' category). Finally, DO/MAKE can be combined with a much wider range of meanings and functions cross-linguistically than is the case in the relatively closely related languages investigated here (see e.g. Goddard 2002).

⁵ 'Specific' primarily refers to the languages for which data are presented and does not involve any strong claims about uniqueness in a broader sample of languages.

4. Corpus-based contrastive analysis of DO/MAKE

This section presents the main results of the corpus-based contrastive analysis of DO/MAKE, focusing on the three pairs of languages Swedish-English, French-English and Dutch-English, where Swedish, French and Dutch are the source languages, and English is the translated language. For each pair of languages, the frequency of occurrence of the six main functions listed in Table 1 will be shown in the original language (when relevant), together with the major translational equivalents in English. In addition, some other functions that are prominent (or particularly interesting) in the language will be discussed. Before going on to the results of the contrastive analysis, however, we will briefly survey the uses of English *do* and *make*, as they appear from the original English texts in the ESPC.

4.1. English

Table 3. Functions of *do*

Function of <i>do</i>	Syntactic frame	N	%
Pro-verb		781	20.5
Support verb	NP __ NP _{abstract}	164	4.3
<i>Other (language-specific) functions</i>			
Negation*)	NP __ not VP _{infinitive}	2,201	57.9
WH-question	WH __ NP VP _{infinitive} ?	212	5.6
Yes/no-question	__ NP VP _{infinitive} ?	193	5.1
Emphasis (Insisting)	NP __ VP _{infinitive}	125	3.3
Inversion	X __ NP VP _{infinitive}	11	0.3
Other		115	3.0
Total		3,802	100

*) Automatic coding

Frequency data on the functions of English *do* are shown in Table 3.⁶ Among the six main functions of DO/MAKE listed in Table 1, only two are performed by *do*, viz. pro-verb and support verb, with a predominance of pro-verb uses (20.5%, as against 4.3% as a support verb). The remaining functions of *do* are highly language-specific and mainly concern the use of *do* as an auxiliary ('periphrastic DO') – of which the negative function is the most frequent one, with a proportion of 57.9%. Since the auxiliary functions of *do* are so well known, they will not be discussed any further.

⁶ The preparation of this table proceeded in two steps. First, all examples containing the forms *not* or *n't*, which is separated from its head word with a space in the corpus, were automatically extracted and counted (see 'negation' in Table 3). All the other examples were then coded manually one by one. This procedure introduces a certain amount of error since the examples containing a negation may include some other uses of *do*, e.g. *If she didn't do it herself*, where the second occurrence of the verb functions as a pro-verb. In addition, 14 occurrences of *do* with a negative function turned up in the manually coded part (e.g. *He never does have an easy task*).

For the sake of completeness, it should be added that periphrastic DO does not exist in the German and Dutch standard languages but is used in various functions in many dialects of these languages, where it is highly stigmatized (see Tieken-Boon van Ostade et al. 1998). In Swedish, the only use that could be said to be periphrastic is the use of *göra* in combination with VP-topicalization (see Section 4.2). Similar to *göra* in this use, *do* used as a periphrastic verb can be regarded as a syntactic placeholder (see Hammarberg & Viberg 1977).

Table 4. Functions of *make*

Function of <i>make</i>	Syntactic frame	N	%
Support verb	NP __ NP _{abstract}	684	42.4
Causative-ADJ	NP __ NP ADJ	267	16.6
Causative-VP	NP __ NP VP _{infinitive}	201	12.5
Production	NP __ NP (of-NP)	183	11.3
Transformation	NP __ NP NP	53	3.3
<i>Other (language-specific) functions</i>			
Monitoring causative	NP make sure (that)-S	48	3.0
Other		177	11.0
Total		1,613	100

Judging from frequency data, the use as a support verb is the dominant function of *make*, as appears from Table 4. The table also shows that all the main functions of DO/MAKE (cf. Table 1) can be performed by *make* with the exception of the pro-verb function. Among the language-specific functions, one that is particularly interesting (though not very frequent) is the so-called monitoring causative (Viberg 2008), which involves the use of *make* in the phrase *make sure* followed by a (*that*)-S complement. This type of causative, an example of which is shown in (9), describes a situation where the subject of the verb is responsible for the coming about of the situation described in the sentential complement, leaving it open by what means this is achieved.

(9) **Make sure** he does some homework today. (ESPC)

4.2. Swedish-English

Let us now consider our first pair of languages, namely original Swedish and translated English, as represented in the ESPC. The results are displayed in Table 5, which is a shortened and slightly modified version of Table 2 in Viberg (2006b), where *göra* is described in more detail.⁷

⁷ In the account of the major translations, % refers to the proportion that the translation represents in relation to the number of occurrences of the verb in this particular function. Figures are given only for the most frequent translation(s) of each function.

Table 5. Swedish *göra* and its translations into English

Function of <i>göra</i>	Syntactic frame	N	%	Major translations					
					N	%		N	%
Pro-verb		602	34.4	do	443	73.6			
Support verb	NP __ NP _{abstract}	489	27.9	make	161	32.9	do	60	12.3
Causative-ADJ	NP __ NP ADJ	204	11.7	make	127	62.3			
Production	NP __ NP (av-NP)	124	7.1	make	65	52.4			
Transformation	NP __ NP till-NP	35	2.0	make	15	42.9	turn	8	22.9
<i>Other (language-specific) functions</i>									
Causative-S	NP/att-S __ att-S	54	3.1	make	11	20.4	mean	10	18.5
Placeholder	VP __ NP	9	0.5						
Other		243	13.9						
Total		1,751	100	do	587	33.5	make	395	22.6

It emerges from Table 5 that *göra* covers all the main functions of DO/MAKE except causative-VP. *Do* is the major translation of *göra* in the pro-verb function (73.6%), whereas *make* dominates as a translation in the other functions. While *göra* is not used as a periphrastic causative with a VP complement, it is used with a certain (but not very high) frequency as a causative verb with a sentential complement, as can be observed in the section on other (language-specific) functions. In this use, the cause is an event appearing as the subject of *göra* in the form of an *att* ('that')-S clause or a nominalization or similar type of abstract NP. *Make* is the most frequent translation for this use of *göra*, but several other verbs are also used with some regularity (e.g. *mean*, which accounts for 18.5% of the translations). Some characteristic examples are shown in (10)-(12).

(10) Och dom saknar den längtan som **gör** att dom flyttar. [lit. 'that makes that they move'] (ESPC)

and they lack the feeling of longing that **makes** people move.

(11) De onda tiderna **gjorde** att många satte sitt hopp till den unge kungen. [lit. 'The evil times made that many (people) placed their trust...'] (ESPC)

The evil times **caused** many people to place their trust in the youthful King.

(12) Det eftersatta underhållet av kommunal egendom, **gör** att reparationer och underhåll även i fortsättningen kommer att ligga på en stabil nivå. [lit. 'makes that repair and maintenance...'] (ESPC)

The neglected maintenance of municipally owned property **means** that repair and maintenance will continue to remain on a stable level.

Another language-specific use of *göra* worth mentioning in the present context is its use as a placeholder in VP-topicalization (Hammarberg & Viberg 1977). In Swedish, a VP containing a finite verb can be topicalized (primarily in colloquial style), as in (13).

- (13) Något måste de ju ta sej för medan de väntade, *och väntade gjorde de alla tolv* på vad som nu skulle ske där uppe i tornrummet. [lit. ‘and waited did they all twelve’] (ESPC) After all, they had to do something while they waited, *and all twelve of them were waiting* for what was about to happen up there in the tower room.

Following the functional characterization in Källgren & Prince (1989: 52), the initial VP in the second clause of (13) is topicalized and evokes an activity that is already in the discourse model, whereas the focal information is the polarity (affirmation/negation) of the whole proposition. The affirmative polarity is signalled by tonical stress on the finite form of *göra*. In this use, *göra* does not contribute any meaning that is not already present but serves a place-holding function to avoid the interpretation of the clause as a yes/no-question (cf. *Väntade de* ‘did they wait’ vs. *Väntade gjorde de* with VP-topicalization). The other languages in the MPC do not have any similar construction, at least not in the standard varieties, and have to resort to various types of paraphrases, as can be observed in (14). In German, it is possible to topicalize a verb in the infinitive as in (14), but not a finite form as in Swedish. After a topicalized verb in the infinitive, *tun* is used when there is no modal verb (like *kannst* in [14]), e.g. *Schreiben tut er nicht, aber lesen* lit. ‘Write does he not, but read’ (from Eroms 1998: 139).

- (14) SW: I Mattisborgen, vad ska du med en häst där? *Rider gör du ju i skogen*. [lit. ‘Ride-Present do you in the woods’] (MPC)
 EN: To Matt’s Fort -- what do you want a horse there for? *Riding is for the woods*.
 DU: „Wat moet jij thuis met een paard beginnen? *je rijdt er toch op in het bos?*
 FR: Et qu’en feras-tu, au château ? Un cheval, *c’est fait pour aller dans la forêt*.
 GE: Auf die Mattisburg? Was willst du denn da mit einem Pferd? *Reiten kannst du doch nur im Wald*. [lit. ‘Ride-Infinitive can you only in the woods’]

4.3. French-English

French *faire* can be used in all the major functions of DO/MAKE save for the causative-ADJ function, which is normally fulfilled by means of the verb *rendre* (cf. En. *make someone happy* > Fr. *rendre quelqu’un heureux*). Table 6, which is based on data from PLECI, shows that the use of *faire* as a support verb is predominant, with a percentage of 35.7%. *Faire* also often functions as a causative-VP (24.5%) and a pro-verb (20.8%). As regards its translation into English, *make* is the most frequent equivalent for all the main functions of *faire* except the pro-verb, with which *do* represents a very high proportion of 67.7%.

Table 6. French *faire* and its translations into English

Function of <i>faire</i>	Syntactic frame	N	%	Major translations					
					N	%		N	%
Support verb	NP __ NP _{abstract}	213	35.7	make	42	19.7	do	24	11.3
Causative-VP	NP __ VP _{infinitive}	146	24.5	make	32	21.9			
Pro-verb		124	20.8	do	84	67.7			
Production	NP __ NP (de-NP)	22	3.7	make	4	18.2			
Transformation	NP __ de NP NP	10	1.7	make	2	20.0			

<i>Other (language-specific) functions</i>									
Environmental	Il (/ça) ____ N/ADJ	23	3.9						
Verbal commun.		15	2.5	say	8	53.3			
Other		43	7.2	do	3	7.0	make	2	4.7
Total		596	100	do	110	18.5	make	84	14.1

Among the other (language-specific) functions, we find the use of *faire* with an impersonal subject and a noun or adjective as a complement in expressions such as *il fait froid/chaud* ‘it is (lit. does/makes) cold/hot’ or *il fait jour/nuit* lit. ‘it does/makes day/night’, usually translated in English as ‘it is (day)light/dark’. This use is referred to as the environmental function because it covers general aspects of the immediate situation such as temperature or light. A typical example is shown in (15). The use of DO/MAKE in environmental expressions has parallels in the use of Spanish *hacer* and Greek *káno*, except that these languages do not use any placeholder corresponding to *il* ‘it’.

- (15) Il **faisait** sombre, il **faisait** chaud et le rouge de la moquette criait dans mes yeux. (PLECI) It **was** dark and warm, and the red of the carpet rejoiced my eyes.

Another language-specific function of *faire* is its use as a direct-report verb (verbal communication) in examples such as (16). This use forms a parallel to the verb roots combining the meaning SAY/DO in certain Australian and other languages. The English translation involves the verb *say* in a majority of the cases (53.3%).

- (16) Enfin la pluie, **fit** Loro avec soulagement. (PLECI) ‘Rain at last,’ **said** Loro with relief.

4.4. Dutch-English

Finally, let us turn to the last pair of languages, Dutch-English, which is also the only pair where both languages have two different verbs for DO/MAKE. The Namur Corpus provided us with the data for this analysis. Table 7 displays the results for *doen* and shows, among others, that only three of the main functions of DO/MAKE are fulfilled by *doen*, viz. pro-verb (the most frequent use, with a proportion of some 56%), support verb and causative-VP. *Do* is the preferred translation, except for the causative function, which cannot be expressed by means of *do* in present-day English (although *do* was the main causative verb in Old English, cf. Ikegami 1981). Nowadays, the main analytical causative in English is *make*. Yet, it is not *make* that accounts for the largest proportion of translations in the corpus data, but *remind*. However, it should be emphasised that this is due to the presence of a single verb in the non-finite complement of the Dutch causative construction, namely *denken* (‘think’), as illustrated in (17). This underlines the role that lexical combinations can play in translation phenomena.

- (17) Ze **doen** me **denken** aan jonkvrouwen in de verlaten vleugel van een kasteel. (Namur) They **remind** me of three noblewomen in the deserted wing of a castle.

Table 7. Dutch *doen* and its translations into English

Function of <i>doen</i>	Syntactic frame	N	%	Major translations					
					N	%		N	%
Pro-verb		128	55.9	do	93	72.7	pretend	7	5.5
Support verb	NP __ NP _{abstract}	40	17.5	do	16	40.0	hurt	5	12.5
Causative-VP	NP __ NP VP _{inf.}	24	10.5	remind	6	25.0	make	4	16.7
<i>Other (language-specific functions)</i>									
Put		8	3.5	put	4	50.0			
Behave	NP __ ADJ/ADV	5	2.2	be	3	60.0			
Verbal commun.		1	0.4						
Other		23	10.0						
Total		229	100	do	111	48.5	make	10	4.4

Doen also appears in a variety of other (language-specific) uses. It can be used with the meaning ‘put’, as exemplified in (18). In half of the occurrences of this meaning, the translation in English is *put*. *Doen* can also be followed by ADJ/ADV (adjectives and adverbs have the same form in Dutch) to express the meaning ‘behave’. In this case, the English translation often involves the verb *be*, cf. (19). Finally, we found one instance of verbal communication, which was one of the possible (though not common) uses of French *faire*.

(18) Aan tafel **doen** de abbés pilipili in hun Vlaamse groentesoep en zij eten fufu, een Zaïrees maniokgerecht (Namur) At lunch, the abbés **put** spicy pilipili in their Flemish vegetable soup and eat fufu, a Zaïrian manioc dish

(19) Louis moest niet zo pietepeuterig **doen**, Louis shouldn’t **be** such a nitpicker, they felt vonden ze [lit. ‘do so pernickety’] (Namur)

Table 8. Dutch *maken* and its translations into English

Function of <i>maken</i>	Syntactic frame	N	%	Major translations					
					N	%		N	%
Support verb	NP __ NP _{abstract}	58	31.9	make	26	44.8	do	4	6.9
Causative-ADJ	NP __ NP ADJ	44	24.2	make	27	61.4			
Production	NP __ NP (van-NP)	25	13.7	make	14	56.0			
Transformation	NP __ NP tot-NP	9	4.9	make	4	44.4	turn	4	44.4
<i>Other (language-specific functions)</i>									
Causative-S	NP __ dat-S	4	2.2	make	2	50.0			
Other		42	23.1						
Total		182	100	make	77	42.3	doen	19	10.4

Maken exhibits all the main functions of DO/MAKE except pro-verb (performed by *doen*) and causative-VP (performed by *doen* or *laten* ‘let’). It mostly functions as a support verb (31.9%) or a causative-ADJ (24.2%). In all its main functions, it is predominantly translated into English by means of *make*. Marginally, *maken* can also function in a causative construction with a sentential complement, which is to be related to the Swedish construction with *göra att*, e.g.

(20) uitgezette poriën, zwarte stippen en een Open pores, blackheads, and a dirty, sallow
vuile, gele tint **maakten** dat zij zich als een complexion **made** her feel like an outcast.
verstootelinge voelde. [lit. ‘made that she felt’]
(Namur)

4.5. Comparison of *do*/*doen*/*make*/*maken*/*göra*/*faire*

The different verbs under study (*do* and *make* in English, *doen* and *maken* in Dutch, *göra* in Swedish, and *faire* in French) can be compared with each other, using as a basis the findings of the preceding sections. First, let us consider the functions (among the main functions of DO/MAKE listed in Table 1) occurring in the corpus data (original texts). Table 9 summarizes the results. A cursory look at the table shows that, interestingly enough, none of the verbs display exactly the same pattern of usage. It appears that the DO verbs have the fewest functions: pro-verb and support verb, plus, in the case of Dutch, causative-VP. The other verbs can fulfil all the functions except one or two – pro-verb for *make*, pro-verb and causative-VP for *maken*, causative-VP for *göra*, and causative-ADJ for *faire*. In languages that have both DO and MAKE, the two verbs tend to be mutually exclusive for a particular function. The only exception is the support-verb function, which is performed by *do(en)* as well as *make(n)* – though normally with different abstract nouns in the object position. By comparing the possible functions of the verbs in English and Dutch, we can also already notice that there will necessarily be cases where cognate verbs are not translated into each other, since the causative-VP function is expressed by means of *make* in English and *doen* in Dutch. As for the DO=MAKE verbs, they cannot simply be said to combine the functions of DO and MAKE, as each of them has one of the main functions of DO and MAKE missing. For *göra*, this is the causative-VP function, which is associated with *make* in English and *doen* in Dutch, and which in Swedish requires the use of the causative *få* ‘get’ (or the use of a sentential complement, rather than a non-finite complement, with *göra*). For *faire*, the missing function is that of causative-ADJ, performed by the MAKE verbs in English and Dutch, but normally requiring the verb *rendre* in French.

Table 9. Possible functions of DO/MAKE in corpora of original texts

	<i>do</i>	<i>make</i>	<i>doen</i>	<i>maken</i>	<i>göra</i>	<i>faire</i>
Pro-verb	✓		✓		✓	✓
Support verb	✓	✓	✓	✓	✓	✓
Production		✓		✓	✓	✓
Transformation		✓		✓	✓	✓
Causative-VP		✓	✓			✓
Causative-ADJ		✓		✓	✓	

Not all the possible functions of the DO/MAKE verbs are equally probable in language. Table 10 displays the most frequent and second most frequent uses of each verb, as they emerge from the corpus analysis of the original texts. If we disregard the negative function of *do*, which is an extremely language-specific use, it turns out that the DO verbs tend to be associated with the pro-verb function, whereas the MAKE verbs are most frequently used as support verbs (note also the importance of causative-ADJ with both *make* and *maken*). As for the DO=MAKE verbs, they present mixed results, with *göra* showing a preference for the pro-verb function, like DO (but having the support-verb function as its second most frequent use), and *faire*, a preference for the support-verb function, like MAKE.

Table 10. Most frequent functions of DO/MAKE in corpora of original texts

Verb	Most frequent function	%	Second most frequent function	%
Do	negation	58	pro-verb	21
Doen	pro-verb	56	support verb	17
Make	support verb	42	causative-ADJ	17
Maken	support verb	32	causative-ADJ	24
Göra	pro-verb	34	support verb	28
Faire	support verb	36	causative-VP	24

These differences in functions and frequencies explain the relatively low degree of correspondence between the verbs cross-linguistically. As appears from Table 11, while the most frequent translations of DO/MAKE into English are either *do* or *make* (rather than other verbs), the degree of equivalence is below 25% in a majority of the cases. The correspondence between *göra* and *do* represents an exception, as it amounts to 34%. The other two exceptions concern the relation between Dutch and English: *doen* is translated by means of *do* in 48% of the cases, and *maken* is translated by means of *make* in 42% of the cases. Clearly, the availability of two verbs rather than just one to express DO/MAKE enhances the chances of finding a closer correspondence with English. It should be borne in mind, however, that these figures are very much dependent on the frequencies of the different uses of DO/MAKE. Thus, while it is true that, on the whole, *göra* is most often translated by means of *do*, the causative-ADJ uses of *göra* are mostly translated by means of *make* (62%). A more detailed analysis such as the one carried out in the preceding sections, therefore, remains crucial in understanding the cross-linguistic relations between the DO/MAKE verbs. Ideally, it should also be completed by an investigation of the other combinations of languages (e.g. Dutch-Swedish or Swedish-French).

Table 11. Most frequent translations of DO/MAKE into English

Verb	Most frequent translation	%	Second most frequent translation	%
Göra	<i>do</i>	34	<i>make</i>	23
Faire	<i>do</i>	18	<i>make</i>	14
Doen	<i>do</i>	48	<i>make</i>	4
Maken	<i>make</i>	42	<i>doen</i>	10

5. Cognitive contrastive analysis of DO/MAKE

As mentioned at the beginning of this paper, one of our aims was also to supplement the translation corpus data with experimental data informing us about the degree of cognitive salience of the different uses of DO/MAKE. In order to do so, we designed an online experiment which required subjects to produce the first sentence they could think of including a given stimulus word, following a methodology described in Gilquin (2008). The experiment was run using *WebExp* (see Mayo et al. 2005) and included the DO/MAKE verbs studied here (among other stimulus words). It was performed separately for each language and was taken by native speakers of the different languages (with a number of subjects ranging from 21 for the Dutch experiment to 63 for the French experiment). The data for English, French and Dutch come from Gilquin (2007). In what follows, we briefly present the most relevant results.

Table 12. Comparison of the most salient and most frequent functions of DO/MAKE

Verb	Most salient function in experiment			Most frequent function in corpus		
	<i>Function</i>	<i>% experim.</i>	<i>% corpus</i>	<i>Function</i>	<i>% corpus</i>	<i>% experim.</i>
Make	production	45	11	support V	42	15
Do	pro-verb	44	21	negation	58	10
Maken	production	33	14	support V	32	19
Doen	<i>pro-verb</i>	52	56	<i>pro-verb</i>	56	52
Göra	<i>pro-verb</i>	70	34	<i>pro-verb</i>	34	70
Faire	<i>support V</i>	59	36	<i>support V</i>	36	59

As Table 12 reveals, the most salient functions according to the sentence production experiment are: production for the MAKE verbs, pro-verb for the DO verbs and *göra*, and support verb for *faire*. These results only partially overlap with the most frequent functions as attested in the corpora (see right part of Table 12). More precisely, while *doen*, *göra* and *faire* exhibit convergence between frequency and salience (as indicated by italics in the table), *make*, *do* and *maken* show divergent tendencies. Besides, some of the most salient uses as they emerge from the experiment actually present a low frequency in the corpus data (the sense of production, for example, most salient with *make* and *maken*, represents a small proportion of 11% and 14%, respectively, in the corpora). This suggests that frequency has a role to play in what people consider salient or not (cf. bottom part of Table 12), but it also bears out the possible discrepancy between frequency and salience brought to light by several recent studies (e.g. Nordquist 2004, Gilquin 2008).

As regards the relations between the different DO/MAKE verbs, it is interesting to notice that the data for the most salient functions confirm the link, established on the basis of the most frequent functions in the corpora, between *make* and *maken* (although the preferences are different in the corpus data as compared to the experimental data). The link between *do* and *doen*, which was slightly less clear in the corpora, is also confirmed here, together with the connection of these two verbs with *göra*. *Faire*, in this case, stands apart from the other verbs.

6. Conclusion

The very presence of two DO/MAKE verbs in some languages, where other languages have just one verb, as well as some claims found in the contrastive literature suggest that there are cross-linguistic differences in the behaviour of DO/MAKE. This is largely corroborated by the present study. The translation corpus data, which constitute the essential basis of our empirical analysis, reveal that, on the whole, the DO/MAKE verbs in English, Swedish, French and Dutch present different patterns of usage, with a number of language-specific functions, and, as a result, are not very often translated into each other (although some functions across certain pairs of languages exhibit very high degrees of equivalence). The experimental data, which come as a supplement to the corpus data and represent the more cognitive aspect of language, confirm these differences, and also bring to light the possible discrepancy between frequency and salience. On the other hand, the analysis also provides evidence for some similarities among the DO/MAKE verbs, and in particular a closer correspondence between the languages that have two verbs to express DO and MAKE, viz. Dutch and English. Swedish *göra* comes closer to the DO verbs, both in terms of the most frequent and most salient uses, whereas French *faire* resembles the MAKE verbs in showing a preference for the support-verb function in corpora but stands apart from all the other verbs when it comes to salience.

Transposing a text from one language to another is not an easy process. Not only do words and expressions tend to differ cross-linguistically in their patterns of usage and the preferences they exhibit (in terms of frequency or lexical combinations, for instance), but as a rule, speakers of the languages also have different cognitive constructs associated with these particular words and expressions. Ideally, all of these factors should be taken into account when translating a text. A great deal of work has already been done in order to bring to light such linguistic and cognitive phenomena. However, the task is gigantic, and although corpora and modern experimental methods have facilitated access to reliable materials, the intricate relations that exist between languages still remain, to a very large extent, a “dark zone”. We hope that this study has shed some light on the small area of DO/MAKE verbs.

References

- Eroms, Hans-Werner. 1998. Periphrastic *tun* in present-day Bavarian and other German dialects. In: Ingrid Tieken-Boon van Ostade, Marijke van der Wal and Arjan van Leuvensteijn (eds) *DO in English, Dutch and German. History and Present-Day Variation*, pp. 139-157. Münster: Nodus Publikationen.
- Gilquin, Gaëtanelle. 2007. Universality and language specificity in prototypicality. Paper presented at the Second International Conference of the Association Française de Linguistique Cognitive (AFLiCo), 10-12 May 2007, Lille.
- 2008. What You Think Ain't What You Get: Highly polysemous verbs in mind and language. In: Jean-Rémi Lapaire, Guillaume Desagulier and Jean-Baptiste Guignard (eds) *Du fait grammatical au fait cognitif. From Gram to Mind: Grammar as Cognition. Volume 2*, pp. 235-255. Pessac: Presses Universitaires de Bordeaux.
- Goddard, Cliff. 2002. The search for the shared semantic core of all languages. In: Cliff Goddard and Anna Wierzbicka (eds) *Meaning and Universal Grammar. Theory and Empirical Findings. Volume 1*, pp. 5-40. Amsterdam: John Benjamins.

- Hammarberg, Björn and Åke Viberg. 1977. The place-holder constraint, language typology, and the teaching of Swedish to immigrants. *Studia Linguistica* XXXI: 106-163.
- Ikegami, Yoshihiko. 1981. On the development of causative use of the verbs *do* and *make* in English. In: Y. Terasawa et al. (eds) *Eigo no rekishi to kozo: Miyabe Kikuo kyoju kanreki kinen ronshu (The history and structure of English: essays presented to Professor Kikuo Miyabe on the occasion of his sixtieth birthday)*, pp. 85-99. Tokyo: Kenkyusha.
- Jones, Randall L. and Erwin Tschirner. 2006. *Frequency Dictionary of German. Core Vocabulary for Learners*. London & New York: Routledge.
- Källgren, Gunnel and Ellen F. Prince. 1989. Swedish VP-topicalization and Yiddish verb-topicalization. *Nordic Journal of Linguistics* 12(1): 47-58.
- Mayo, Neil, Martin Corley and Frank Keller. 2005. WebExp2: Experimenter's manual. Available at http://www.hrcr.ed.ac.uk/web_exp/docs/UserManual.pdf.
- Nehls, Dietrich. 1991. English DO/MAKE compared with German TUN/MACHEN and Dutch DOEN/MAKEN. A synchronic-diachronic approach. *International Review of Applied Linguistics in Language Teaching* 29(4): 303-316.
- New, Boris, Christophe Pallier, Ludovic Ferrand and Rafael Matos. 2001. Une base de données lexicales du français contemporain sur internet: LEXIQUE. *L'Année Psychologique* 101: 447-462. <http://www.lexique.org>.
- Nordquist, Dawn. 2004. Comparing elicited data and corpora. In: Michael Barlow and Suzanne Kemmer (eds) *Usage-Based Models of Language*, pp. 211-223. Stanford: CSLI.
- Paulussen, Hans. 1999. *A corpus-based contrastive analysis of English "on/up", Dutch "op" and French "sur" within a cognitive framework*. Unpublished PhD dissertation, University of Gent.
- Tieken-Boon van Ostade, Ingrid, Marijke van der Wal and Arjan van Leuvensteijn (eds). 1998. *DO in English, Dutch and German. History and Present-Day Variation*. Münster: Nodus Publikationen.
- Viberg, Åke. 2006a. Towards a lexical profile of the Swedish verb lexicon. In: Åke Viberg (ed.) *The Typological Profile of Swedish*. Thematic issue of *Sprachtypologie und Universalienforschung* 59(1): 103-129.
- 2006b. What one verb can do: The Swedish verb *göra* in a crosslinguistic perspective. In: Mickael Suominen, Antti Arppe, Anu Airola, Orvokki Heinämäki, Matti Miestamo, Urho Määttä, Jussi Niemi, Kari K. Pitkänen and Kaius Sinnemäki (eds) *A Man of Measure: Festschrift in Honour of Fred Karlsson on his 60th Birthday*. Special Supplement to *SKY Journal of Linguistics* 19: 243-257. Turku: The Linguistic Association of Finland.
- 2008. Swedish verbs of perception from a typological and contrastive perspective. In: María de los Ángeles Gómez González, J. Lachlan Mackenzie and Elsa M. González-Álvarez (eds) *Languages and Cultures in Contrast and Comparison*, pp. 123-172. Amsterdam: John Benjamins.