Current Trends in Contrastive Linguistics

Functional and cognitive perspectives

EDITED BY
María de los Ángeles Gómez González
J. Lachlan Mackenzie
Elsa M. González Álvarez

John Benjamins Publishing Company
Current Trends in Contrastive Linguistics
Studies in Functional and Structural Linguistics (SFSL)

Taking the broadest and most general definitions of the terms functional and structural, this series aims to present linguistic and interdisciplinary research that relates language structure — at any level of analysis from phonology to discourse — to broader functional considerations, whether cognitive, communicative, pragmatic or sociocultural. Preference will be given to studies that focus on data from actual discourse, whether speech, writing or other nonvocal medium.

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Volume 60

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Edited by María de los Ángeles Gómez González, J. Lachlan Mackenzie
and Elsa M. González Álvarez
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Functional and cognitive perspectives

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Contributors

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Cliff Goddard is a Professor in Linguistics at the University of New England, Australia. In the 1980s he published a grammar, a dictionary, and a number of scholarly articles on dialects of the Western Desert Language (Central Australia); in the 1990s his attention turned to Malay (Bahasa Melayu). He works primarily in the natural
semantic metalanguage (NSM) framework originated by Anna Wierzbicka. They have co-edited *Semantic and Lexical Universals* (John Benjamins 1994), *Meaning and Universal Grammar* (John Benjamins 2002), and *Cultural Scripts* (special issue of *Intercultural Pragmatics* 2004), and Goddard is the sole editor of *Ethnopragmatics* (Mouton de Gruyter 2006) and *Cross-Linguistic Semantics* (John Benjamins 2008). He has also published the textbooks *Semantic Analysis* (1998) and *The Languages of East and Southeast Asia* (2005), both with OUP.

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activates: evidence from verbless complement clauses in Spanish“, *Constructions* SV1-5/2006) and the whole family of object-related depictives in English and Spanish (forthcoming in *Language Sciences*).

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Anna Siewierska has been Professor of Linguistics and Human Communication in the Department of Linguistics and English Language at Lancaster University, UK, since 1994, having earlier worked in Australia, Poland and the Netherlands. Her major research interests are in language typology, the comparison of different theoretical frameworks, diachronic change, discourse pragmatics and most recently the morphosyntax of English dialects. Her books to date are The Passive: A Comparative Linguistic Analysis (Croom Helm 1984), Word Order Rules (Croom Helm 1988), Functional Grammar (Routledge 1991), Constituent Order in the Languages of Europe (edited, Mouton de Gruyter 1997), Case, Grammar and Typology (co-edited, John Benjamins 1998), Person (CUP 2004) and Universals and Universal Grammar (OUP, forthcoming).

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## Abbreviations used in glosses

Where morphological glosses are applied in this book, they follow the Leipzig Glossing Rules.

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<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<td>first argument</td>
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<td>adessive</td>
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<td>affirmative</td>
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<td>passive</td>
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<tr>
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<td>person marker (of the Finnish passive)</td>
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<td>perfective</td>
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<td>transitive</td>
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</table>
Introduction

María de los Ángeles Gómez González,
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University of Santiago de Compostela, Spain

This book is devoted to exploring the contribution of various recent developments in current linguistics to the contrastive analysis of languages. It offers twelve chapters in all, each of which develops a presentation given to the Fourth International Contrastive Linguistics Conference (ICLC4), which took place in Santiago de Compostela, Galicia, Spain from 20 to 23 September 2005. It is a companion volume to Gómez González, Mackenzie and Álvarez González (2008), which arose from the same conference but focuses on socio-cultural contrasts between language communities.1 The chapters of the present book similarly range across a broad gamut of languages, with most attention being given to those of Europe. It is characteristic of all these chapters that the phenomena examined are not seen as autonomous but as reflecting in various ways the cognitive and interactive strategies of language users. For most of the authors, too, there is an explicit or implicit desire that their work should be accessible and applicable in the daily practice of translators and language teachers. The book as a whole gives insight into how developments in theory and in the application of computer technology are advancing the field of contrastive linguistics.

1. Grammatical categories in contrast

Current Trends in Contrastive Linguistics begins with four chapters that show how developments in grammatical theory are helping scholars to provide more sophisticated accounts of the similarities and differences between languages. The chapters emphasize the relationships between contrastive linguistics and language typology as well as the importance of embedding the treatment of grammatical categories in their pragmatic contexts of use. In this sense, they all contribute to the development of ‘functional-typological linguistics’, to use Givón’s (1984) term for the tradition

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1. For further papers from the same conference, see Studies in Contrastive Linguistics (Santiago de Compostela University Press, 2006), co-edited by Cristina Mourón Figueroa and Teresa Iciar Moralejo Gárate.
of considering language universals and differences from the viewpoint of interpersonal communication, a tradition that can be traced back to Greenberg (1963). The four chapters show, each with its particular methods and emphases, not only how typology induces implication hierarchies from the comparison of multiple languages (Siewierska) but also how typology can impact the core business of contrastive linguists, i.e., the confrontation of pairs of languages: in providing cross-linguistic categories that provide a secure foundation for contrastive corpus analysis (Helasvuo and Johansson), through the development of grammatical theories that reveal unsuspected contrasts and generalizations (Mackenzie), and by identifying structured domains of meaning – typological clusters – which provide a unified context for language comparison (Salkie).

The first chapter is by the distinguished typologist Anna Siewierska, who explores the use of the impersonal third person plural (3pl) construction (They say that …) across the languages of Europe. The fundamental hypothesis is that the referential range of the construction in any one language correlates with the degree of its grammaticalization. It emerges that, of the various impersonal constructions found in the 31 languages examined, it is the third person plural construction that is most restricted in its reference, typically excluding speaker and hearer, and normally indicating a plural referent. The minority of languages that do permit an individual reading are those in which the third person plural morphemes are expressed solely by bound forms, as in Hebrew or Italian. The data suggests a tripartition of languages: the few that allow the individual reading, those permitting at best only a ‘joint specific activity’ reading and those limited to ‘organizational group use’; these are arranged in an implicational hierarchy.

The study of impersonal constructions is also central to the following chapter, by Marja-Liisa Helasvuo and Marjut Johansson. Whereas Siewierska gathered her data from an extensive questionnaire, Helasvuo and Johansson have adopted a radically different methodology, examining data drawn from internet forum discussions in Finnish and French on the new currency, the Euro. Their interest is above all in understanding how participants in these discussions place themselves in the discourse world and in indicating how ‘non-specific reference forms’ serve this goal. They focus on the passive in both languages and on certain 3rd person forms, namely the French pronoun on and the so-called zero person in Finnish. The authors’ characterization of the contexts of use of each construction suggests that the French passive and the Finnish zero person are used in parallel contexts (where the communicator wishes to generalize), and that the French on construction and the Finnish passive are both deployed to create alliances among the participants.

The following chapter, by J. Lachlan Mackenzie, uses the typologically oriented model of Functional Grammar (FG) to tackle the contrast between object pronoun position in Castilian Spanish and European Portuguese and to engage with current
debates on this matter. The treatment of syntax in FG ascribes particular importance
to the clause-initial position P1, and Mackenzie argues that the positioning of pro-
nouns in the two languages under comparison follows from differences in the occu-
pancy of P1. The placement of syntactic constituents in P1 is shown, in typically
typological-functionalist style, to be strongly associated with such pragmatic factors
as Topic-Focus distribution and illocutionary force. The approach is shown to have
consequences for the analysis of Subject in the two languages, and a case is made for
treating the Subject of ‘pro-drop’ languages as being in an appositional relationship
to the verb, finite or non-finite; its placement in the syntactic string is dependent, again,
on pragmatic factors.

The final chapter of this section, by Raphael Salkie, introduces the notion of a
typological cluster, a development of prototype theory. This notion is applied to the
domain of modality and more specifically to the modal verbs of English and German.
A typological cluster is any collection of linguistic features which have typological sig-
nificance: an example would be the famous transitivity prototype of Hopper & Thompson
(1980). Since typological work on modality is still in its infancy, working with clusters
is more sensible in this area than advancing the stronger claims associated with hier-
archies or conspiracies. On this basis, Salkie approaches the data, which are drawn
from a translation corpus, in the light of the four clustered criteria of possibility/necess-
sity, epistemic/deontic modality, subjectivity and scalarity. In this way he lays bare
similarities and differences between the language systems, showing how each modal
expression can be evaluated in its own terms with relation to the core identified by
the cluster.

2. Contrastive linguistics and corpus studies

The second section focuses more strongly on methodological issues, exploring the
enormous potential offered by parallel, computer-accessible corpora to the further
development of contrastive linguistics. A recurrent theme here is the contribution of
these relatively new forms of data-gathering to enhancing the testability, authentic-
ity and general empirical adequacy of cross-linguistic studies. The trend nowadays is
towards more nuanced approaches to difference and equivalence, with old-fashioned
one-to-one comparisons yielding to text-wide calculations of the relative frequency of
supposed equivalents and to statistically supported statements about the collocations of
alternatives. In translation studies, this has permitted much more refined notions of cor-
respondence between source and target (Barlow) and better-founded statements about
collocational fit (Maia and Butler). In various applied areas such as language pedagogy
and terminology mining, we see how linguistically informed computer programs are
now revealing vital advantages (Maia). In descriptive linguistics, too, computer-assisted
corpus work is showing that cognates, once ignored or assumed to be unproblematically 'the same', in fact differ appreciably from language to language (Butler, Gilquin).

The section begins with chapters outlining two major projects in corpus-driven contrastive linguistics. The first of these is by Michael Barlow, who presents his parallel concordancer ParaConc and illustrates its uses. He applies this tool, analogously to Salkie in the last chapter of the preceding section, to a corpus of translated texts (English and French) with a view to identifying recurrent patterns in them; the congruence that is uncovered is argued to be a truer and more textually valid type of equivalence. He focuses on the pair *go* and *aller*, gradually taking the reader ever deeper into the analytical possibilities afforded by the program, showing how it can automatically locate translation equivalents. Of particular importance is the frequency of collocates, and Barlow stresses their relevance for determining equivalent collocations in the languages compared, or more precisely the text types compared.

The second instrument for corpus research described here is *Corpógrafo*, a user-friendly and readily accessible suite of on-line tools created by PoloCLUP, a project of the Linguateca resource centre in Oporto, headed by Belinda Maia. Maia sets out its importance for the construction and analysis of corpora and explains the nature of the databases that have already been created with it. The various tools that have been developed are shown to have important pedagogical uses as well as allowing terminology extraction, concordancing, and the elaboration of text statistics. The chapter details how the tools can illuminate multiple problems in English–Portuguese translation and demonstrates their usefulness for the assessment of machine translation. An important conclusion from the application of these techniques is that the lexicon has a much stronger influence on language structure than has generally been thought.

The lexicon is central to Christopher S. Butler’s contribution, which demonstrates the potential of corpus analysis in the form of an interesting case study. At issue are the properties of the English adverbs *basically, essentially* and *fundamentally* – which dictionaries define in similar terms – as contrasted, on the basis of a thorough consultation of large bodies of authentic textual materials in both languages, with the related forms in Spanish, *básicamente, esencialmente* and *fundamentalmente*. After describing the text collections and analytical methodologies used, the chapter sets out the frequency distributions of the adverbs in the corpora of spoken and written English and Spanish. Butler then analyses the collocational profiles of each of the adverbs in order to detect the semantic areas associated with each. The chapter ends with a corpus-based analysis of the syntactic (particularly positional) properties of each adverb. This analysis reveals that the apparently similar items in fact display major differences, a fact that has thought-provoking consequences for the practices of linguistics and language teaching.

In similar vein, Gaëtanelle Gilquin in the final chapter of this section uses data from parallel corpora to debunk any notion that causative *make* and *faire* are direct equivalents in English and French respectively. Her study reveals that this is far from
being the case. In fact, applying the concept of ‘mutual translatability’, she finds that the two verbs correspond to one another in only a small minority of cases. A number of explanations are given for this lack of equivalence. Gilquin shows that make and faire differ with regard to such matters as the animacy of the causer, the nominal or pronominal status of the cause and the transitivity of the non-finite complement as well as the existence in French of causeeless constructions which have no direct equivalent in English (cf. faire remarquer ‘lit. make notice; observe’; faire oublier ‘lit. make forget; distract attention from’). The result is a nuanced description of similarities and differences that epitomizes the descriptive potential of the corpus-based contrastive method.

3. Meaning and cognition from a contrastive perspective

The final section, again with four chapters, turns to various aspects of the contrastive analysis of meaning, starting from the lexical concerns that were raised in the final chapters of the preceding section and then gradually moving out to the meaning of entire constructions. The theoretical frameworks applied are those of Natural Semantic Meta-language, Cognitive Grammar and Construction Grammar. In all these approaches, meaning is not seen as propositional or subject to truth conditions. Rather, a broader view is taken, which may even encompass imagery. The objective representation of reality is coupled to language-specific cognitive strategies and even to cultural differences in subjective awareness and the fashioning of personal identity. The result is a growing area of research which studies cross-linguistic differences between meanings and between forms of meaning creation, holding out the prospect of a semantic typology, to use the term to which Levinson & Wilkins (2006) have given initial currency.

The section starts with a study of the relevance of the Natural Semantic Metalanguage (NSM) approach to the contrastive study of languages and the cultures in which they are used. The authors are the leading proponents of this approach, Cliff Goddard and Anna Wierzbicka. Contrastive semantics, they insist, needs a tertium comparationis that is stable and language-neutral and represents the conceptualization of native speakers in maximum detail. The authors argue that NSM offers exactly these advantages, analysing data from Polish, Russian, Spanish, Galician and Australian English to support their case with regard to expressions of yearning and nostalgia as well as morphological diminutives. The method yields explications that lack the ethnocentrism of standard western semantic terminology and are easily accessible to speakers of the languages under analysis.

An analogous concern with avoiding the pitfalls of a purely propositional approach to meaning characterizes the chapter by Yoshihiko Ikegami. His central point is that Japanese differs essentially from English and other western languages in privileging subjective construal. Rather than objectifying the conceptualizer, the Japanese ‘fashion
of speaking’ – to employ Whorf’s (1956) phrase – involves the speaker-cognizer in the very scene s/he is construing. The self is embedded in the environment as an ecological self that may be projected into the other. This point is illustrated with examples taken from published renderings of Japanese literary extracts into French, German and English, in which the formulations in the original are ‘perceiverless’ in a way that cannot be captured in the translations. The lesson to be learned is that a cognitively oriented linguistics must be open to both objective and subjective language types.

It is Cognitive Linguistics (CL) that provides the framework for the chapter by Francisco José Ruiz de Mendoza Ibáñez and María Sandra Peña Cervel. They show that CL’s intricate and systematic theory of metaphor and metonymy offers tools with which to understand not only lexical questions but also, at a higher level, entire syntactico-semantic constructions and the alternations between them. Examining data from English and Spanish, the authors concentrate on the middle construction (The bread cuts easily; El pan se corta fácilmente) and the causative/inchoative alternation (He opened the door/The door opened; Abrió la puerta/Se abrió la puerta). Their CL method reveals how the two languages share the construction but also how they differ as a consequence of divergent conceptual strategies: thus in Spanish inchoatives, where there is no reduction of argument positions (cf. the examples given), the undergoer of the process is expressed through the reflexive pronoun se, the true agent is omitted, and the grammatical subject takes over this role.

The final chapter of the book pursues the extension of Cognitive Linguistics into the analysis of the syntactic expression of semantic configurations, adopting the framework of Construction Grammar (CxG). Francisco Gonzálvez García offers a detailed analysis of verbless complement constructions after verbs of calling and saying in English and Spanish (They called me a Frankenstein/Me llamaban Frankenstein). Drawing on the British National Corpus and the CREA Corpus of Spanish, Gonzálvez García outlines the main semantico-pragmatic motivations for treating configurations of this type as a specific ‘declarative’ sub-construction within the ‘subjective-transitive’ construction. It is shown that this sub-construction is subject to ‘constructional polysemy’ (whereby one construction neutralizes distinct but related senses) and also to ‘coercion’ (whereby the presence of one unit within a construction enforces a re-interpretation of another). Although both languages examined possess the declarative subjective-transitive sub-construction, the CxG method allows the author to lay bare subtle but important distinctions between the uses that each language makes of it.

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References


PART I

Grammatical categories in contrast
Ways of impersonalizing
Pronominal vs. verbal strategies

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The term impersonal is used in the literature to denote subjectless constructions, constructions featuring only a pleonastic subject, and constructions which lack a specified agent. This chapter focuses on the third of these types, which are often expressed in languages by the non-personal use of personal pronouns (pronominal impersonals) or by agentless passives, reflexive impersonals and participial impersonals (here designated by the cover term ‘verbal impersonals’). This chapter compares the use of pronominal impersonals, in particular that of the third person plural with verbal impersonals, with respect to their referential range. Adopting the principles of grammaticalization, I argue that third person plural constructions are more referentially restricted than their verbal counterparts.

1. Introduction

The notion ‘impersonal’ as used in linguistics is a very wide and arguably disparate one (see e.g., Siewierska 1984: 93–125, 237–251; Moreno 1987; Kitagawa & Lehrer 1990; Bauer 2000: 93–150; Blevins 2003). This is due to the fact that while some scholars conceive of impersonality in semantic terms, others adopt a syntactic approach and yet others a morphological perspective. Therefore any discussion of impersonalization must be prefaced by a specification of how exactly this term is to be interpreted.

The semantic characterizations of impersonality centre on two notions. The first of these is human agentivity or rather the lack of it.\footnote{The notion of agentivity is a highly controversial one. One reflection of this is that in Cognitive Linguistics it is viewed as a radial category with prototypical instances at the centre and less prototypical ones on the periphery. Langacker (1991: 238) defines a prototypical agent as being “human, exercising volitional control, being an energy source, directing action outward, and remaining basically unaffected by it”. My use of the term here covers both the prototypical and less prototypical instantiations (intransitive actions, no necessary control of effects of action) of agenhood provided that it involves humans.} Constructions which qualify as impersonal by virtue of the lack of a human agent controlling the depicted situation
or event include: (a) those expressing weather phenomena such as *Está chovendo* ‘It's raining’ in Galician and also many other European languages including English, (b) bodily sensations and emotions such as the Irish *Tá ocras orm* ‘I’m hungry’ (lit. is hunger on me) or the Latin *Me pudet* ‘I’m ashamed’ (lit. me shames) and (c) modality such as the Polish *Trzeba odejść* ‘It’s necessary to leave’ (lit. necessary to leave). The second semantic interpretation of impersonality has to do with reference. In contrast to the first approach, constructions which are considered to be impersonal in this second sense of the term depict situations and events which may be brought about by a human agent but crucially one which is not specified. This non-specificity of the entity bringing about the situation or event is variously understood. For some scholars it is taken to mean no concrete *person*, i.e., no concrete individual or group of individuals, for others it is interpreted as implying any person, i.e., anyone and/or everyone. These differences in interpretation have quite significant repercussions on the nature of constructions which are considered to be impersonal in this semantic/referential sense of the term. Both include within their scope the potential referents of the Portuguese *se*-construction in (1) as well as its English translation featuring the generalized *one*.

(1) Portuguese (Cavadas Afonso 2003: 17)

*Corta-se cabelos às terças.*

`cut.prs.3sg refl.3sg hair.pl at.def.pl Tuesdays`

‘One cuts hair on Tuesdays.’

However, only the former embraces the Polish *no/to* participle impersonals illustrated in (2) since such clauses cannot be seen as involving the speaker and thus literally anyone.

(2) Polish

*W szkole Piotrowi często dokuczano.*

`in school Peter.dat often make.fun.ipfv`

‘At school, Peter was often made fun of.’

The syntactic characterizations of impersonality involve subjecthood. Impersonal constructions are seen to either lack a grammatical subject altogether or alternatively feature only a pleonastic (semantically empty) subject, be it an overt one or potentially a covert one. Chief among constructions which qualify as impersonal in these terms are impersonal passives such as the one in (3) from Lithuanian, in which the human agent is not the subject, or the one in (4) from German, in which there is no lexical candidate for subject.

(3) Lithuanian (Ambrazas 1997: 282)

*Vaikų buvo miégama sodė.*

`child.pl.gen be.pst.3sg sleep.pst.ptcp.n garden.loc`

‘The children slept in the garden. (lit. “By the children was being slept in the garden.”)’
Ways of impersonalizing

(4) German
Es wurde getanzt.
it become.pst.3sg dance.pst.ptcp
‘There was dancing.’

Also included under this type of impersonals are extraposed constructions with pleonastic elements such as the Dutch (5) as well as various existential constructions such as the one in (6) from Spanish, and locative constructions such as the one in (7) from French in which the only overt candidates for subject do not display the full range of subject properties.

(5) Dutch
Er heeft iemand gelachen.
there has someone laughed
‘Someone laughed.’

(6) Spanish (Gillaspy Marsh 2002: 421)
Hay tres estudiantes atrasados.
have three students late
‘There are three late students.’

(7) French (Hoekstra & Mulder 1990: 43)
Il est tombé un enfant dans le canal.
it is fallen a child into the canal
‘A child has fallen into the canal.’

Finally, under the morphological view of impersonality, impersonal constructions are identified as having a main verb, normally differentiated for person, which either lacks any person specification altogether or is invariably third person. The former is exemplified by infinitival constructions such as the Russian root infinitival clause in (8), the latter by Finnish clauses with verbs in the 3sg and no lexical subject such as (9).

(8) Russian (Perlmutter & Moore 2002: 620)
Mne ne sdat’ ekzamen.
1sg.dat not pass.inf exam.acc
‘It’s not (on the cards) for me to pass the exam.’

(9) Finnish (Hakulinen & Karttunen 1973: 165)
Jos aikoo laihtua lopettaa syömisen.
if intend.prs.sg lose.weight.1st.inf finish.prs.3sg 4th.inf.gen
‘If you want to lose weight you give up eating.’

These different characterizations of impersonality are not necessarily mutually exclusive.2 For example, weather constructions in many languages qualify as imperson-

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2. A somewhat different typology of impersonal constructions is suggested by Moreno (1987), who makes a distinction between impersonals expressing uncontrolled events and those
sonal not only by virtue of the lack of a human agent but also by the presence of a pleonastic rather than a thematic subject, as is the case in English, and significantly also by featuring verbs which are invariably third person. Impersonal passives, in turn, may not only lack a thematic subject but also involve a non-specified human agent, as may also infinitivals and constructions with an invariant 3sg form of the verb. Nonetheless, convergences such as the above should not obscure the fact that the two semantic, the syntactic and the morphological notions of impersonalization sketched above are distinct. Although it is not impossible that there may be a top-order notion under which all four senses of impersonal may be unified, no such notion has yet emerged.3

The current chapter concentrates on impersonal constructions in the second of the above-mentioned semantic senses of the term, i.e., on non-specific agent impersonals. In particular it seeks to establish how pronominal impersonals differ from what I will refer to, for want of a better term, as verbal impersonals. Pronominal impersonals will be here represented by the third person plural (3pl) construction, and the verbal impersonals by agentless passives such as The results were eagerly awaited, reflexive impersonals such as the Portuguese se-construction cited earlier in (1) and participle impersonals such as the Polish construction in (2). In languages in which 3pl impersonals co-exist with some type of verbal impersonals, the former are often seen as potential functional equivalents of the latter (cf. They’ve stolen my bag. vs. My bag has been stolen.).

In this chapter I will explore the extent to which this is indeed so. The focus of attention will be on the issue of the referential range of the 3pl as compared to that of the verbal impersonals. The hypothesis underlying the investigation is that there may be a correlation between the referential range of impersonal constructions and the degree of grammaticalization of the linguistic expressions of their referents. If this is the case, the referential range of pronominal impersonals, in our case the 3pl one, may be expected to be more closely tied to the person/number features of the pronominal forms in question than that of verbal impersonals which feature minimal or no expressing controlled events. The former are agentless impersonals which are subdivided into those involving external events (e.g., weather phenomena) or internal events (e.g., bodily sensations). The controlled impersonals also fall into two types, those with a non-specific controller (which include my non-specified agent constructions) and those with a specific one which, however, is not the subject (agentless passives).

3. What the four types of impersonals have in common is that they lack a definite human agent as subject. Accordingly, they may all be seen as a means of agent backgrounding or defocusing. This, however, is hardly enough to provide a unifying definition of impersonals to the exclusion of other constructions such as anticausatives (e.g., The stick broke), unaccusatives (e.g., Mary fell) or instances of subject ellipsis (e.g., I returned late and found John waiting), for example.
morphological expression of their referents. Further, there may also be differences in the referential range of pronominal impersonals realized by free forms as opposed to bound, with the latter exhibiting fewer referential restrictions than the former.

The discussion is structured as follows. Section 2 takes a look at 3PL impersonal constructions from the point of view of different notions of impersonality and reviews their cross-linguistic distribution. Section 3 considers the referential properties of 3PL impersonals in the light of the impersonal vs. generic distinction and the extent to which the difference posited holds cross-linguistically and may be related to the degree of grammaticalization of the 3PL construction. In Section 4 we compare our findings relating to the referential range of the 3PL construction with the corresponding observations that have been made with respect to verbal impersonals. Concluding remarks will be provided in Section 5.

2. What is a third person plural impersonal construction?

While in some languages person forms of the 3PL may be interpreted non-specifically in other than subject function under some set of circumstances, here we will be concerned only with non-specific uses of the 3PL as subjects. Two cases in point are illustrated below.

(10) Icelandic

þeir eru búnir að loka veginum einu sinni enn.
3PL be.3PL finished to close road.def.dat one time again

'They’ve closed the road once again.'

(11) Polish

Muszę kończyć niestety, bo czekają na
must.1sg finish unfortunately because wait.3PL on
mnie z biadem.
me with dinner

'Unfortunately, I must end (our conversation) because they’re waiting for me at the dinner table.'

In so-called pro-drop languages such as Polish the impersonal reading of the 3PL is typically seen to depend on the absence of a corresponding free 3PL form. In other words the addition of oni ‘they’ in (11) is said to induce a definite interpretation of the 3PL. This is a curious property of not only the 3PL but also of other pronominal impersonal constructions, which, however, does not hold across the board. We will return to the issue below. But first let us consider some of the subdivisions of 3PL impersonals that have been suggested.
2.1 Vague vs. impersonal reference

In characterizing the different senses of the term impersonal in Section 1, I mentioned that even when conceived of as denoting an non-specific human agent, the notion of impersonality is not uniformly interpreted. For some scholars, for example, Cinque (1988), Cardinaletti & Starke (1998), Alonso-Ovalle (2002), it means essentially that the speaker has no concrete individual or sets of individuals in mind. For other scholars, most notably Kitagawa & Lehrer (1990), the notion of impersonality necessarily implies anyone or everyone with the possible inclusion of speaker and addressee. Under this second view the 3pl constructions in (10) and (11) do not qualify as impersonal. In fact, according to Kitagawa & Lehrer 3pl constructions are never impersonal, only vague, where by ‘vague’ is meant a specific group of individuals who are not identified or identifiable by the speaker and exclude the speaker and addressee. And indeed in terms of this approach the only instances of 3pl constructions which emerge as impersonal rather than vague would be ones where the 3pl is anaphoric to people, everyone or anyone as in (12), for example.4

(12) If anyone thinks they’re perfect, they must be crazy.

Needless to say, this restricted interpretation of impersonality is not the one espoused here.

A different characterization of the distinction between vague and impersonal which does not exclude 3pl constructions from the domain of impersonality has been suggested by various scholars including Cavadas Afonso (2003). Cavadas Afonso seeks to sub-divide Kitagawa & Lehrer’s class of vague constructions by making a distinction between the specificity of a group and the individuals comprising the group. Under this analysis vague reference occurs when the speaker is assumed to have a specific group in mind but not any specific individuals within that group. In the case of impersonal reference, on the other hand, not only the individuals but also the group is unspecified. That 3pl constructions can be both vague and impersonal in this sense of the terms is suggested by examples such as those in (13) and (14) in which the relevant instances of the 3pl are in italics.5

(13) Well my father’s best friend was a grocer but he unfortunately died and they put a manager into the shop and I got a job as an apprentice, well an unauthorized apprentice.

(14) What was the toilet like?
   It was a flush toilet, we were one of the lucky ones. They’d just started flush toilets in ordinary houses.

4. The speaker may be included in certain types of so-called generic 3pl constructions, such as the one illustrated further below in (17).

5. Most of the English examples of 3pl impersonal constructions are taken from a 50,000-word corpus of Lancaster dialect originating from the Northwest Sound Archive in Clitheroe.
In the case of (13) it is highly likely that the speaker knows which group of people were involved in the arranging of a manager but not the actual identity of the individuals comprising the group.\textsuperscript{6} In (14), on the other hand, the nature of the group is unknown also to the speaker. It could consist of the council authorities, builders, plumbers, people in Britain, etc.

While Cavadas Afonso's reinterpretation of the distinction between impersonal vs. vague points to the need for a more detailed analysis of the range of referents of 3\textit{pl} constructions, we will not pursue her particular approach to doing so here. Rather we will concentrate on yet another bifurcation of impersonals that has been suggested in the literature, namely into impersonal vs. generic.

2.2 Impersonal vs. generic

Whereas Kitagawa & Lehrer's notion of impersonality excludes 3\textit{pl} constructions from its scope, in terms of the approach outlined in Cinque (1988) and further developed by Cardinaletti & Starke (1998), 3\textit{pl} constructions emerge as not only impersonal but as prototypically so. Cinque and Cardinaletti & Starke juxtapose impersonal constructions to generic ones. Under their view impersonal constructions express propositions which apply to some unspecified individual or set of individuals, while generic constructions express law-like propositions which hold for all the members of a group, however defined.\textsuperscript{7} Given their law-like nature generics are associated with the absence of specific time reference. The situations and events expressed in impersonal constructions, by contrast, take place at a specified time. The impersonal vs. generic distinction is captured by Cardinaletti & Starke in terms of the four contrasts in (a) through (d):

a. Impersonal reference may be seen as involving quasi-existential quantification ‘There is at least one X’, while generic reference is associated with quasi-universal quantification ‘For every/all/any X’.

b. Impersonal reference requires specific time reference, while generic reference precludes it.

\textsuperscript{6} This is even clearer in the Polish example in (11) given earlier, where the group of people waiting are the speaker’s family (and potentially friends); the speaker is having a telephone conversation from home.

\textsuperscript{7} For a more comprehensive discussion of genericity and especially the difference between generic NPs and generic statements, on the one hand, and generic statements and characterizing sentences, on the other, see Behrens (2005) and the references therein. The constructions considered as generic by Cardinaletti & Starke (1998) would qualify as characterizing sentences as opposed to true generics in the more traditional approach discussed by Behrens and typically adopted within formal semantics.
c. Impersonal reference is incompatible with the inclusion of the speaker, while generic reference allows for the inclusion of the speaker.

d. Impersonal reference forbids but generic requires a range restriction on the subject.

Significantly in the light of these contrasts 3pl constructions may be used impersonally as in (15a) or generically as in (15b).

(15)  
   a. They have cleaned a cow today in Switzerland.
   b. They usually clean cows in Switzerland.

Cardinaletti & Starke argue that while the identity of the impersonal they in (15a) is truly unknown, it could be anybody, that of the generic they in (15b) is restricted to the inhabitants of Switzerland. Thus the impersonal construction can be best paraphrased as 'Somebody, whoever, cleaned a cow today and this event took place in Switzerland' while the closest paraphrase of the generic they is 'People who inhabit Switzerland clean cows'.

My analysis of spoken British English strongly suggests that the impersonal use of 3pl constructions is far more common than the generic. It must be pointed out, however, that the distinction between an impersonal and generic reading is not always as obvious as in the case of the examples in (15). In my corpus data there are examples in which the context of utterance imposes a generic interpretation despite the lack of an overt range restriction and/or the presence of specific time reference in the clause containing the 3pl. Consider (16), for instance.

(16) How old were you when you left school?
   15. But I’d stayed on a year longer. They left at 14 then.

The clause containing they in (16) refers to a habitual activity in the past. They is clearly generic, in the sense of the term used by Cardinaletti & Starke, since it does not refer to some unidentified set of individuals but rather to any schoolchild at a certain period of time at a specific place, namely the North-West of England. But this restriction on the referential value of they is due to the context, not to any range-imposing adverbial in the clause itself. A similar situation may be observed in (17). 8

(17) Well there were no procedures, it was just willy nilly, anybody when they’re ready … (...) boys and girls got bathed in front of each other you know in those days, you know at that age they didn’t bother.

Interestingly, in both (16) and (17) the speaker is implicitly included among the potential referents of they.

8. The they in (17) is ambiguous in that it may be seen as anaphoric to boys and girls or as antecedentless.
The impersonal vs. generic distinction as described above not only provides justification for regarding 3Pl constructions as impersonal ones but more importantly is claimed to carry with it a host of additional morpho-syntactic reflexes. One of these relates to the obligatory absence of a free-form subject pronoun in pronominal impersonal clauses in so-called pro-drop languages as mentioned at the beginning of Section 2. Recall that in the relevant languages, an overt free form is claimed to induce a definite interpretation. According to Cardinaletti & Starke (1998: 157) this is indeed so but only in clauses which are impersonal under their narrow interpretation of impersonal, not in generics. They argue that whereas an impersonal interpretation is compatible only with what they call deficient pronouns (weak forms, clitics and affixes), a generic pronoun may be strong, i.e., an independent person form. Their data suggest that this is so in Italian and Slovak. In Russian, Polish, Spanish and Greek, however, even in generic contexts the presence of a 3Pl free form induces a definite reading. Thus (18a) in contrast to (18b) can receive only a definite or deictic interpretation not a generic one.

(18) Russian (Perlmutter 2001: 9)

a. Zdes’ umirajut ot goloda i boleznej.
   here die.3Pl. from hunger and diseases
   ‘Here they’re dying of hunger and diseases.’

b. Zdes’ oni umirajut ot goloda i boleznej.
   here they die.3Pl. from hunger and diseases
   ‘Here they’re dying of hunger and diseases.’

What underlies the possibility of an overt 3Pl form receiving a generic as opposed to a necessarily definite interpretation remains unclear. The issue has not yet been systematically and exhaustively tested either within languages or across languages.9

Now that we have a somewhat better idea of what is meant by the term ‘3Pl impersonal construction’, we are in a position to say a few words about its cross-linguistic distribution. In what follows I will use the term ‘impersonal’ in both the broad sense of the term, i.e., for a construction denoting a non-specific agent irrespective of whether the agent may or may not receive a generic interpretation and in the narrow sense, where impersonal means non-generic, clarifying in each case the relevant reading.

2.3 The commonality of 3Pl impersonals

In the light of the above discussion of the impersonality of 3Pl constructions one would expect 3Pl impersonals, at least in the generic sense of the term, to be universal.

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9. Testing such delicate differences with informants is very difficult since the distinction between a non-specific group of individuals and anybody who fits the bill is not so easy to explain.
However, this does not appear to be so. There are languages in which 3\textit{pl} forms may receive only a definite reading. According to the respondents to my questionnaire this is the situation in Mandarin, Cantonese and Colloquial Sinhala as well as Japanese, Vietnamese and Thai.\textsuperscript{10} That the latter three languages do not allow for an impersonal reading of the expression used for third persons is not surprising, since they are typically seen as lacking true personal pronouns. The nominals that are used in lieu of pronominal forms continue to have transparent semantic content and are thus not easily interpretable as impersonal. Mandarin, Cantonese and Colloquial Sinhala, on the other hand, do have true person forms. While my data relating to these languages may be unreliable, the possibility that they may indeed not allow for impersonal interpretations of their 3\textit{pl} forms is suggested by the fact that there are yet other languages in which the impersonal use of the 3\textit{pl} forms is marginal at best. This is so in the Baltic-Finnic languages, especially Finnish and Estonian (Holvoet 2001: 381). In both languages the impersonal use of the 3\textit{pl} seems to occur only with speech act verbs, particularly in reporting rumours, as in (19).

(19) Finnish (Mullonen 1963: 34)

\begin{verbatim}
Siellä kuuluvat tienaavan hyvin.
\end{verbatim}

there be.rumoured.prs.3pl earn.act.ptcp well

‘It is said that one earns well here.’

This use of the non-specific 3\textit{pl} with speech act verbs is widely attested in European languages though in many it is stylistically restricted to proverbs, myths and fables. This is not the case in colloquial British English in which \textit{they} with speech act verbs, particularly \textit{call}, is not uncommon. Nonetheless, even in British English, the agentless passive (as in the translation of (19)) is a much more common option than the 3\textit{pl} with speech act verbs. According to the respondents to my questionnaire, in other European languages either the agentless passive is used with the relevant type of verbs or another non-specific agent construction. For example, in German, Danish and Swedish the \textit{man}-construction and in French the \textit{on}-construction are also possibilities. It is therefore quite curious that a usage of the non-specific 3\textit{pl} which is so heavily stylistically restricted in other European languages is the only one which

\textsuperscript{10} I developed a questionnaire aimed at establishing the uses of the 3\textit{pl} in 15 different contexts which was filled out by 39 colleagues and postgraduate students of the Linguistics and English Language Department at Lancaster University. The questionnaire was rather elaborate and too difficult to enable one to regard the responses of the informants as entirely reliable. I have therefore treated the results as suggestive rather than conclusive.
occurs in Finnish and Estonian.11 In some of the other Baltic Finnic languages such as Vepsian and Livonian the 3PL appears to be used impersonally more widely. This, however, is attributed to the influence of Russian and/or Latvian. What is important in the context of this discussion is that there are good reasons to assume that the impersonal use of the 3PL may not be universal. Whether this is indeed so remains to be established.

Claims to universality aside, the impersonal use of 3PL forms is clearly widely attested. My own investigations reveal that such usage occurs in most macro-areas of the globe. In Eurasia it is found in virtually all branches of Indo-European: Indic (e.g., Kashmiri), Iranian (e.g., Persian), Greek, Celtic, Germanic, Romance, Slavic and Baltic. It also occurs in most branches of the Uralic languages, i.e., the Samoyedic (e.g., Nenets), Ugric (e.g., Hungarian), Permic (e.g., Udmurt, Komi), Volgaic (e.g., Erzya Mordvin, Mari) as well as in the Turkic languages (e.g., Turkish), Caucasian (e.g., Abkhaz), the isolate Basque and in Dravidian (e.g., Tamil). In Africa non-specific uses of the 3PL are documented among the Afro-Asiatic languages within the Semitic (e.g., Hebrew, Arabic) and Chadic (e.g., Mupun) groups, among the Niger-Kongo languages in Bantu (e.g., Babungo, Nkore-Kiga), in Gur (e.g., Koromfe), Kru (e.g., Godie) and among the Nilo-Saharan languages in the Sudanic group (e.g., Kunama, Mundani, Ngiti). Among the languages of Oceania non-specific 3PL usage has been noted in, for example, Paamese, Tawala and the languages of New Caledonia. In New Guinea non-specific 3PL forms have been reported in Amele and Kobon and in Australia in Marunguku. Among the languages of North America the non-specific use of the 3PL appears to be less common. It is attested in Copala Trique and Tetelcingo Nahuatl. However, according to Mithun (1991) many families of the North have special non-specific bound forms attached to the verb corresponding to European free forms such as somebody, someone which are used impersonally rather than the 3PL.

In what sense of the term ‘impersonal’ the 3PL constructions in the above languages are actually used is by no means clear. The issue is not discussed in reference grammars, and data beyond just a few examples are available virtually only for some European languages. And even in the case of European languages much unclarity about the uses of the 3PL impersonal remains. The following discussion will be confined in the main to

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11 This is not to say that a 3PL impersonal construction is the preferred non-specific agent construction with *verba dicendi* in Finnish and Estonian. The impersonal passive or the 3SG impersonal seem to be the preferred choice. In fact only one of the two Finnish respondents to my questionnaire allows the impersonal usage of the 3PL.
the languages of Europe and will draw on the information that I have collected from the previously mentioned questionnaire, which has been filled out for 31 languages.\textsuperscript{12}

3. The referents of the 3\textsubscript{PL}

The range of referents of the 3\textsubscript{PL} in impersonals differs from those of generics in relation to both semantic role and referential properties.

Beginning with semantic role, 3\textsubscript{PL} impersonals are seen to be restricted to agentive subjects of either transitive or intransitive clauses. Accordingly, the 3\textsubscript{PL} in the examples in (20) through (22) featuring an unaccusative verb (20), a copulative verb (21) and occurring as the subject of a passive clause (22), can only receive a specific reading.

(20) Spanish (Jaeggli 1986: 50)
\begin{shaded}
Mueren en defensa de la democracia.
\end{shaded}
\textit{die.3\textsubscript{PL} in defence of the democracy}

'They die in defence of democracy.'

(21) Italian (Cinque 1988: 543, 545)
\begin{shaded}
Ieri, sono stati villani con tutti.
\end{shaded}
yesterday \textit{aux.prs.3\textsubscript{PL} be.ptcp} rude with all

'Yesterday, they were rude to all.'

(22) They were exposed to a lot of radiation in 1986 in Chernobyl.

3\textsubscript{PL} generics, on the other hand, are argued by Cinque (1988: 545) and Cardinaletti & Starke (1998: 157) to be compatible with non-agentive subjects. Thus (23) through (25), featuring the same verb types as in (20) through (22), are seen to be fine under a generic interpretation.

(23) Spanish
\begin{shaded}
Aquí mueren en defensa de la democracia.
\end{shaded}
\textit{here die.3\textsubscript{PL} in defence of the democracy}

'Here they die in defence of democracy.'

(24) Italian
\begin{shaded}
In questo ufficio, sono molto gentili col pubblico.
\end{shaded}
in this office \textit{be.prs.3\textsubscript{PL} very kind with.the public}

'In this office they are very kind to the public.'

\textsuperscript{12} I would like to express my thanks to colleagues and postgraduate students of the Department of Linguistics and English Language at Lancaster University and several international colleagues for taking the trouble to fill out this rather demanding questionnaire.
(25) In Chernobyl, they’ve been exposed to a lot of radiation.

As for referential properties, in its generic use the 3pl is always semantically plural and typically denotes people at some location, as in the examples above. The referents of 3pl impersonals are also often semantically plural but they need not be. The referents of 3pl impersonals typically involve what I will refer to following Myhill (1997) as organizational grouping, i.e., one or more members of some organization or institution acting as a group. In (26), for example, the group in question is the army.

(26) This er very good orderly got local leave after he’d done his stint up country ‘cos he’d made such a good job of it, they gave him local leave.

In (14) cited earlier the group is the local authorities. Much less frequently a 3pl impersonal is used to denote a group of unspecified agents involved in the same specific physical action as in (27) and (28).

(27) (…) and it showed where they used to take the prisoners in and they took ’em in at the side where the steps are going up to Townley, they took them in at the side while they were dancing in the long gallery that was the ballroom and they’d take them in underneath there and they were torturing them

(28) Did your father work after his accident?  
Oh, yes, he went back to work. You see, the accident, I was only a baby. I must have been only two months old actually when that happened. He used to joke about it. They brought him home on a door, carrying him from up these quarries up here on a door.

In both of these examples the referents of the italicized instances of they do not have any clear institutional or organizational affiliation. In (27) they denotes whoever was involved in bringing in prisoners to the castle and dealing with them there. The people in question may well have always been representatives of the same group of guards, but they may have had different affiliations. What seems to be relevant here is not their common affiliation but the fact that they were jointly involved in performing a series of specific activities. This is even clearer in (28), in which the only contextual indication of who they might have been is not provided until the subsequent clause.

The results of the questionnaire suggest that of the above two uses of 3pl impersonals, the organizational grouping one, as in (14) and (26), and the joint specific common activity one, as in (27) and (28), the former is cross-linguistically commoner than the latter. The joint specific common activity use does not appear to be available in Swedish or the South-West dialect of Finnish and is considered to be marginal at best in Icelandic, Danish and German. These languages do, however, allow for the organizational group use. Significantly, there are no languages among those that I have considered which allow for the joint specific common activity use of the 3pl but not for the organizational group use. In short, it appears that the possibility of the joint
specific common activity use in a language implies the possibility of the organizational group use, but not vice versa. It is worth mentioning that even those languages which do allow the common activity use differ with respect to the conditions under which such usage occurs. For instance, Myhill (1997: 814–815) suggests that English imposes considerably stricter requirements on this usage of the 3pl. than does Hebrew. Accordingly, while in Hebrew, the 3pl may be used in a context such as (29), in English it cannot, and the agentless passive must be used, instead.

(29)\[\text{vayishlax par’oh vayikra et-yosef vayricuhu} \]
and.sent Pharaoh and.3sg.called acc.Joseph and.3pl.hurried.3sg
\[\text{min-habor…} \]
from the dungeon
\[\text{’Thereupon Pharaoh sent for Joseph, and he was rushed from the dungeon.’} \]
(# they rushed him from the dungeon)

Coming back to the organizational grouping use, as pointed out by Myhill, it is often unclear whether one or more individuals are literally involved in the action. For instance in (26) it could well have been a single individual who decided that the orderly should have left or alternatively a number of individuals. In English as well as in Dutch it is mainly in such instances, i.e., when they are acting as representatives of a group, that the referents of a 3pl impersonal are open to an individual interpretation. However, this is not the case in other languages. For instance, Perlmutter (2001: 10) states that in Russian (30) is fine even when the speaker hears only a single person knocking.

(30)\[\text{Russian} \]
\[\text{Stučat v dver’} \]
\[\text{knock.3pl at door} \]
\[\text{’Someone is knocking at the door.’} \]

And Myhill (1997: 815) mentions that (31) is possible in Modern Hebrew in an out-of-the-blue context when there is no reason to suppose that more than one individual is involved.

(31)\[\text{Hebrew} \]
\[\text{Ganvu li et-ha-mexonit,} \]
\[\text{stole.3pl to-me acc-def-car} \]
\[\text{’My car was stolen.’ (Lit. } \text{’They’ve stolen my car.’)}^{13} \]

\[^{13}\text{ Myhill (1997: 816) maintains that the Hebrew construction in this case cannot be translated into an analogous they-construction in English since the English they requires some context to make it less vague, such as a preceding clause as in } \text{My car has been broken into. They’ve taken the radio. Weiner & Labov (1983: 34), however, note that they elicited three uses of non-specific they e.g., They broke into the liquor closet in response to the question What happened?} \]
In some languages the referent of a 3PL impersonal may actually be a person known to both speaker and addressee. For instance in both Spanish and Italian a 3PL impersonal may be followed by a clause specifying the identity of the person in question, as in (32).

(32) Italian (Cinque 1988: 543)

Prima hanno telefonato: mi pareva tua sorella.

earlier have.3PL telephoned me seemed your sister

'Someone (*They) telephoned earlier. It seemed to me that it was your sister.'

I have not been able to determine whether such a sequence would be felicitous in Russian. In Polish it would not be.

According to the respondents of my questionnaire, 3PL impersonals are not open to an individual reading in all languages. No such reading appears to be available in French, Swedish, Norwegian, Danish, Icelandic or German (for one informant) or the previously mentioned South-West dialect of Finnish. It is of interest to note that, with the exception of French, these are the very languages in which the joint common specific activity use of the 3PL was either marginal (Icelandic, Danish and German) or completely disallowed (Swedish and Finnish). Thus among the languages in my sample the distribution of the uses of 3PL impersonals seems to be in line with the implicational hierarchy in (33):

(33) organizational group use > joint specific activity use > single individual use

While the conditions under which an individual reading of the 3PL is possible differ from language to language, the possibility of such a reading seems also to imply the possibility of a joint specific activity use of the 3PL, and the existence of such usage in a language seems to entail the possibility of the organizational group use. That the individual use of the 3PL should be the least common is not surprising if one takes into consideration the semantics of 3PL forms. Interestingly enough, in the languages which do not appear to allow an individual reading of 3PL impersonals, the 3PL is realized either exclusively by a free form or necessarily by both a free and a bound form but not solely by a bound form. Observe that none of the above mentioned Germanic languages nor French are pro-drop ones, and Finnish normally drops first and second person pronouns but not third person ones.

4. Verbal impersonals

Verbal impersonals, in the sense of the term used here, cover agentless passives, on the one hand, and active impersonal constructions such as the Romance or Slavic reflexive
impersonals, or the Slavic or Finnic participle impersonals, on the other. In contrast to 3pl impersonals, verbal impersonals – both active and passive – have received an enormous amount of attention in the literature. Our discussion, however, will focus only on their referential properties.

4.1 Reflexive impersonals

Reflexive impersonals (see Ruiz de Mendoza & Peña, this volume) in Romance and Slavic are morphologically third person. In Romance the reflexive marker is homophonous with a third person reflexive clitic and the verb is in the third person singular. In Slavic languages it is only the verb that is in the third person, the reflexive marker having no person features. The referents of reflexive impersonals, just like those of 3pl impersonals, are necessarily human. However, whereas the referents of 3pl impersonals are typically confined to third persons, those of active reflexive impersonals tend to denote people in general and crucially often include the speaker and may also include the addressee. Accordingly, in the context of Kitagawa & Lehrer’s impersonal vs. vague distinction they qualify as impersonal and while not necessarily always meeting Cardinaletti & Starke’s criteria of genericity, they are often used generically.

Reflexive impersonals can be formed from both transitive verbs (see the Portuguese (1) in the introduction) and intransitive verbs of all classes, unergative (34), unaccusative (35), copulative (36) and even passive (37).

(34) Czech (Dorosz 1975: 79)

Z Brna se jede do Prahy přez Třebovou.
From Brno refl goes.3sg to Prague via Trebovo
‘One goes from Brno to Prague via Trebovo.’

(35) Spanish (Jaeggli 1986: 51)

Se llega cansado después de un viaje tan largo.
reﬂ. arrives tired after of a trip so long
‘One arrives tired after such a long trip.’

(36) Italian (Cinque 1988: 522)

Non si è mai contenti.
neg refl be.prs.3sg never satisfied
‘One is never satisfied.’

14. There are differences throughout Romance in regard to whether past participles if found in reflexive impersonals display singular or plural number agreement. For instance, in Italian the agreement is plural, in Spanish it is singular.
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(37) Polish (Kibort 2000: 91)

Było się bitym przez kaprala.
be.n.3sg refl beaten by corporal
‘One was beaten by the corporal.’

Unlike 3pl constructions, reflexive impersonals are typically used in contexts where the speaker is included or at least could be included as in (34) through (37). Nonetheless, this is not always the case. In questions, such as (38) for example, it is not the speaker but rather the addressee who is included among the non-specific referents of the reflexive impersonal.

(38) Polish

Co się robiło na przerwach?
what refl did.3sg on breaks
‘What did you used to do during the break?’

A clause such as (38) would normally be understood as asking about practices in which the addressee was involved but definitely not the speaker. In declaratives the exclusion of the speaker can be achieved contextually, as in (39) and (40) in which the speaker explicitly excludes him/herself from the range of potential referents.

(39) Serbo-Croatian (Spalatin 1973: 126)

Pitao sam ga sto se govori o meni.
asked be.3sg him what refl said.3sg about me
‘I asked him what was being said about me/I asked him what they were saying about me.’

(40) Polish

No nie wiedziałem, bo ja jestem na prowincji i w ogole
well not knew.1sg because I am in provinces and at all
się mnie nie informuje.
refl 3sg.acc not inform.3sg
‘Well I didn’t know because I’m in the provinces and they don’t inform me about anything at all.’

Reflexive impersonals such as (39) and (40) are very close to 3pl impersonals, as the translations of the two clauses suggest. Unlike in the case of 3pl impersonals, however, in (39) and (40) the addressee is not categorically excluded. It is sometimes suggested that reflexive impersonals are never open to a pure third person reading. But this is not so. Consider (41), for example as uttered now in 2008.

15. In Spanish the speaker is often excluded from reflexive impersonals formed from transitive verbs as opposed to intransitive ones.
Within the specified context, the referents of the reflexive impersonal are people in the 19th century among whom neither the speaker nor the hearer could be included. Nonetheless, if an adverbial specifying the time frame were to be placed not in the preceding clause as in (41) but rather in the sentence containing the impersonal reflexive as in (42), the speaker would be necessarily included.

(42) *W XIX wieku chodziło się do lazni miejskiej.*

In the 19th century one would go to the municipal baths.

Thus a clause such as (42) in Polish is only felicitous if uttered by a time traveller.

In Italian the extent to which the speaker and addressee are included depends on the specificity of time reference and the nature of the verb. Cinque (1988: 542) states that while with transitive and unergative verbs in contexts of specific time reference the typically reading of the referent of the reflexive impersonal is people in general, with other verbs such as unaccusative and copulative ones specific time reference induces a first person plural interpretation. Therefore while (43a) with an unergative verb is fine when neither the speaker nor the addressee is in Beirut at the time of uttering the sentence, (43b) would be felicitous only under such conditions.

(43) Italian

- *Oggi, a Beirut, si è sparato tutta la mattina.*
  today in Beirut be.3sg refl shot whole the morning
  ‘Today in Beirut they shot the whole morning.’

- *Oggi, a Beirut, si è nati senza assistenza medica.*
  today in Beirut be.3sg refl born without assistance medical
  ‘Today in Beirut we were born with no medical assistance.’

Recall that 3pl impersonals are in some languages open to an individual interpretation the exact nature of which differs from language to language. Reflexive impersonals are only rarely used with reference to a single individual and when so used the individual is necessarily the speaker in declaratives and the addressee in questions. A case in point is illustrated in (44).
(44) Polish

Proszę nie przerywać. Mówię się.
please not interrupt speak refl
'Please don’t interrupt. I’m speaking.'

4.2 Participle impersonals

Special participles used impersonally are found in Slavic, Baltic and Finnic languages (see e.g., Siewierska 1988; Holvoet 2001; Blevins 2003). In Finnic languages they appear to be able to denote a wide range of human referents; exclusively third persons as in (45a), a group among which the speaker may be included (45b) and even a group necessarily including the speaker as in (45c).

(45) Estonian (Blevins 2003: 483, 485)

a. Ōues kakeldi.
outside fight.pst.ipfv
'People are fighting outside.'

b. Soomes ollakse nii tõsised.
Finland.ines be.prs.ipfv so serious.nom.pl
'People in Finland are so serious.'

c. Sooh siis nüüd loetakse ja naerdakse ennast segaseks.
self.part muddled.tran
'So now one reads and laughs oneself silly.'

My data on the referential use of participle impersonals in Slavic are essentially restricted to Polish. The Polish no/to participles are used only in the perfective. Interestingly enough, unlike in the Estonian construction, the referents of the Polish no/to participles necessarily exclude the speaker. In terms of referential range, they are very close to 3pl impersonals and in fact the two constructions are often interchangeable. The no/to impersonals are, however, neutral with respect to number. They are therefore more easily used for singular referents than 3pl impersonals. Accordingly, in (46) a 3pl would hardly be felicitous and would imply that more than one kiss was involved with more than one party doing the kissing. The no/to participle carries no such implication.

16. I have not included in the discussion the impersonal Celtic autonomous verbal forms (see e.g., Fife 1992; Blevins 2003) which are similar to the Balto-Slavic constructions as they are not strictly speaking participles.
(46) Polish

Pocalowano go w czolo.

kissed.ipfv him in forehead

‘He was kissed on the forehead.’

Though very similar in referential range to 3\textsc{pl} impersonals, the no/to participle in Polish is stylistically neutral. 3\textsc{pl} impersonals, on the other hand, have a strongly colloquial flavour.

4.3 Agentless passives

In contrast to the referents of 3\textsc{pl} impersonals and reflexive impersonals and participle impersonals, the referents of the covert agent of an agentless passive are typically not confined to humans. In many languages the implied agents are necessarily those occurring with transitive verbs but they are typically not strictly agentive. They may include, for instance, experiencers. Nor do they display restrictions with respect to person or number. When non-specific they may be used to denote anyone and everyone, i.e., people in general, some loosely specified collective in which the speaker is or is not included or even one or more non-specific individuals. They thus embrace within their scope the potential referents of 3\textsc{pl} impersonals, reflexive impersonals and participle impersonals. It is thus not surprising that quite often 3\textsc{pl} impersonals or reflexive impersonals or participle agentless passives are interchangeable or at least appear to be so. To what extent they actually are interchangeable depends on the full set of non-specific agent constructions available in the language in question and the stylistic and other restrictions that each has. In English, for example, agentless passives and 3\textsc{pl} impersonals of transitive clauses are mutually substitutable in the colloquial spoken language but not in other registers or styles. Examples where the two constructions are actually used interchangeably are, however, not that easy to come by. Two cases in point from my dialect corpus are presented in (47) and (48). (The material in square brackets is inserted by me.)

(47) I don’t think it’s holy communion specifically they need, it’s nice to have someone visit them. Cos I’m convinced, this was started years ago, taking communion into these old people’s homes. But what they forgot was that all these old people involved, they weren’t all regular communicants

(48) Were bombs dropped in this area?

There was one [which was] dropped on Thompsons Park and that [was] dropped during the night and I never heard it, I slept through it and there were some [which were] dropped above Crown Point. There was supposed to be a mock airfield up there to distract the Germans and they dropped a few bombs round that area into the fields.\footnote{Under my analysis the they in (48) is not anaphoric to the Germans in the preceding clause, but rather to the referents of the covert agents of the preceding passive clauses: the German airforce.}
5. **Concluding remarks**

We have seen that the various impersonal constructions that we have considered differ with respect to their referential range. The referential range of the **3pl** is the most restricted. **3pl** impersonal constructions denote third person referents among which the speaker and/or addressee are hardly ever included. The referents of the **3pl** are typically semantically plural and in some languages must necessarily be so, i.e., an individual interpretation is excluded. The referential range of reflexive impersonals is considerably wider. In contrast to **3pl** impersonals, they include the speaker and/or addressee within their scope, but given an appropriate context may exclude either. Further, while typically implicating a group they are open to an individual reading which may denote the speaker or in questions the addressee. Participle impersonals do not constitute a unified group with respect to referential range. In Finnic, participle impersonals seem to have properties of both reflexive impersonals and **3pl** impersonals in that they allow third person readings and also readings which include the speaker and hearer. Whether they allow for an individual reading I do not know. The Polish participle impersonals are rather different. They are very reminiscent of **3pl** impersonals though more open than the former to an individual interpretation. Finally, agentless passives are referentially unrestricted.

The fact that the narrowest referential range is displayed by **3pl** impersonals and the widest by agentless passives is of interest since it is suggestive of there being a correlation between the referential range of impersonal constructions and the degree of grammaticalization of the linguistic expressions of their referents. While it is possible to argue that it is the whole construction rather than just the third person plural form which constitutes the linguistic expression of the referents of **3pl** constructions, in the light of the above discussion there is no denying that the person and number features strongly restrict the range of referents that **3pl** impersonal constructions denote. In agentless passives, on the other hand, there is no morphological expression of the non-specific agent. And significantly agentless passives display no referential restrictions on the implied agent. With respect to referential range, the non-specific agents of reflexive impersonals and participle impersonals stand in-between the two extremes of **3pl** impersonals on the one hand and agentless passives on the other. While the referents that they denote are not tied to any elements of the morphology (for instance, in the case of reflexive impersonals the reflexive marker and the third person singular form of the verb), there are person, number and in some languages even gender features associated with the construction which in concert with the lexical material, especially the predicate and adverbial modifiers, may have a constraining effect on referential interpretation. There is no need to consider the various proposals that have been made relating to the above since what is of import in the context of the current discussion is that verbal impersonals as a group are less referentially restricted than pronominal ones.
That the transparency of morphological marking may have a bearing on semantic interpretation is also suggested by the differences in the referential range of 3pl impersonals that we have noted on a cross-linguistic basis. Recall that the distribution of the various uses of 3pl impersonals among the languages considered here appears to conform to the implicational hierarchy in (33), according to which the existence of the more restrictive uses of the 3pl in a language, most notably the possibility of an individual reading, implies the presence of the less restrictive uses, i.e., the joint specific common activity use and the organizational group use, and the existence of the common activity use implies the existence of the organizational group use. The use of the 3pl to denote a single individual runs counter to what the number feature of the person form would lead us to expect. It is therefore of considerable interest that, with the exception of English, the languages which allow for an individual reading of the 3pl are those in which the third person plural morphemes are expressed solely by bound forms as opposed to free forms or a combination of free and bound forms. Recall that no individual reading of the 3pl appears to be possible in Danish, German, Icelandic, Norwegian, Swedish and the relevant dialect of Finnish. And the circumstances under which English allows for an individual reading are quite restricted, at least in comparison to languages such as Hebrew or Italian. That the possible interpretations of free person forms should be more restricted than those of their more grammaticalized counterparts, i.e., bound person forms, is fully in line with the principles of grammaticalization (see e.g., Lehmann 1982: 236; Haspelmath 1999: 1050; Croft 2000). This leads us to expect bound forms to evince a certain degree of semantic bleaching and thus be compatible with a wider range of interpretive possibilities than free forms. It now remains to be determined whether the same or comparable differences in the interpretation of 3pl impersonal constructions are to be found in languages other than the ones considered here and whether the existing differences also correlate with the morphological status of the 3pl morpheme.

References


Ways of impersonalizing


Construing reference in context

Non-specific reference forms in Finnish and French discussion groups

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Both Finnish and French have several personal forms which can be used for non-specific reference. This chapter focuses on the passive in both languages and on certain constructions containing 3rd person forms, namely, the French pronoun *on* + 3rd person verb form and the so-called zero person construction in Finnish which contains a 3rd person verb form without an overt subject and is interpreted as conveying non-specific reference. The forms are studied in their contexts of use in Internet discussion groups. We show how the linguistic context contributes to the construal of reference in the social situation between the participants, the on-going Internet discussion, and in the larger sociocultural situation, i.e., Finland and France.

1. Introduction

Forum discussions on the Internet represent a new kind of interaction in mediated everyday life. They allow for a rapid reaction to the events and issues of everyday life, and an opportunity for anyone who wants to express their opinion on the forum. As a media genre forum discussions are instantaneous and open. Depending on the type of institution, the discussions may offer a trivialized version of letters to the editor in newspapers or they may resemble everyday conversation. In this type of computer-mediated communication (CMC), the true identities of the writers remain unknown. The online identity, represented only by the nick, can be construed discursively according to the writer’s needs and wishes.

Forum discussions represent a genre in which the interaction takes place between two or more participants. They are temporally asynchronous and there may be pauses of varying length in between the different turns. They are public – all messages can also be read by those who do not participate in the written interaction. Furthermore, the turns do not necessarily follow each other, but the interaction can be divided into several sub-sequences which are comparable to schisming in face-to-face interaction (see Sacks *et al.* 1974; Egbert 1997). In the discussions, the anonymous writers express
their subjective opinion about a topic that belongs to a specific socio-cultural context. Forum discussions thus open up an interesting perspective on how reference to the writers themselves and the other participants is construed in context.

In this chapter, we discuss the use of non-specific reference forms in French and Finnish forum discussions. In forum discussions, the relationship between the writers is construed through written interaction. The use of non-specific reference forms allows us to observe the construal of writer identity as the reference of these forms is never predetermined but has to be construed in each context. This chapter will focus on passive forms in both languages and on certain constructions containing 3rd-person forms: the French pronoun *on* + 3rd person verb form, and the so-called zero person construction in Finnish. The Finnish construction contains a 3rd-person verb form without an overt subject, and is interpreted as conveying non-specific reference. The discussion is based on a careful analysis of actual data (see Section 5). The contextual construal of reference will be studied both from a micro and a macro perspective (see Section 2): we will analyse the use of these forms in their local context but at the same time we will take into account the more global context. The analysis shows how non-specific reference forms serve to organize textual sequences in the discourse. Furthermore, we show how the construal of reference is anchored in both the social and the sociocultural context.

2. Context and the construal of reference

In order to understand the construal of personal reference, we first need to define the notion of context, and to examine how meaning is contextualized and how these contextual resources can be utilized by discourse participants. As Linell (1998: 128) puts it, “a piece of discourse is embedded within (...) a matrix of different kinds of contexts”.

In this chapter, context is understood as a complex notion that refers to different levels of linguistic description and evaluation. It is a relational concept: it relates actors and their actions to their surroundings (Fetzer & Akman 2002). In this view, the speaker’s action is embedded in context. Context can be divided into linguistic, social and sociocultural context (Fetzer & Akman 2002; Fetzer 2004: 2–12). This division includes the micro (local) and macro (global) perspectives. The social context can be understood as the social situation, the speech event itself and its spatiotemporal characteristics; in our case, for instance the writers, the type of institution (journalism), and the means of communication (on-line). By sociocultural context we understand here the extralinguistic context in all its complexity – the participants’ specific background knowledge – their common ground, their knowledge of the world, and their shared cultural features. For instance, in their writing the actors contextualize the actions they
have been engaged in. This is what we want to focus on in this chapter: how the writers place themselves in the world and how they verbalize it in their messages.

On the micro level, it is the linguistic context that allows us to refer to the ongoing discourse. The linguistic context can be understood as constrained by the requirements of a communicative genre or an activity type (Levinson 1992). It is organized along different lines of sequentiality – for instance the textual sequentiality of a narrative organizes the discourse in a certain chronological order and imposes a certain type of connectedness of utterances (cf. Adam 1992).

Also, following the tradition of interactional linguistics, we consider context to be doubly contextual: utterances are both context-shaped and context-renewing (Heritage 1984: 242; Couper-Kuhlen & Selting 2001: 5). Linguistic structures are heavily context-sensitive, and their use reflects conversational or textual structure. At the same time, they contribute to creating interactional or textual structure. For example, the choice of pronouns is on the one hand context-dependent, i.e., it is determined by the sequential context; on the other hand it is context-sensitive, in the sense that it contributes to creating that organization.

In this chapter we focus on referential forms – pronouns and verbal person markers – that have been regarded as referential indexes or shifters whose reference “shifts” according to the speech situation (Silverstein 1976a: 117; for more discussion see Silverstein 1976b and Jakobson 1957). As we will demonstrate in our data analysis, these referential forms are also resources for speakers to create different positionings (e.g., alliances, affiliations etc.) with other speakers either present in or absent from the situation (cf. Linell 2005: 78). Therefore, indexicality can be seen as an even wider issue that concerns all utterances: as Linell (1998: 98) observes, all utterances are indexical in that “large parts of their meanings are unstated and must be supplied by actors in communicative contexts”.

3. Structures

In this section, we discuss the structural features of the non-specific reference forms that constitute the focus of our study. These include the so-called zero person construction in Finnish, the on-construction in French, and the passive in both languages. We rely on Siewierska’s (2005: 434) definition of a passive construction. According to Siewierska, a construction can be classified as passive if the following conditions are fulfilled:

a. it contrasts with another construction, the active;
b. the subject of the active corresponds to a non-obligatory oblique phrase of the passive or is not overtly expressed;
c. the subject of the passive, if there is one, corresponds to the direct object of the active;
d. the construction is pragmatically relative to the active;
e. the construction displays some special morphological marking of the passive.

As regards point (a) above, the subject is not overtly expressed in the Finnish passive, while in French it may appear as a non-obligatory oblique phrase (consider examples 1 and 2).

(1) *Talo maalat-t-i-in.*  
house:nom paint-pass-pst-pers  
‘The house was painted.’

(2) *La maison a été peint-e par des ouvriers.*  
‘The house was painted by some workers.’

In the Finnish example (1), it wouldn’t be possible to express the agent with a separate phrase. With regard to condition (c) above, there is no subject in the Finnish passive, and the object of the corresponding active clause remains the object in the passive (see example 1 and the discussion in 3.1.1 below). In contrast, the subject of the French passive corresponds to the direct object of the active as in the French example (2) where the subject of the passive clause *la maison* ‘the house’ would be the object of the corresponding active clause (cf. condition (c) above), and the agent is expressed with the non-obligatory oblique phrase *par des ouvriers* ‘by the workers’, which would be the subject of the corresponding active clause (cf. condition (b)). Let us now look more closely at the respective constructions and their structural features.

3.1 Finnish

3.1.1 Passive in Finnish

Foley & Van Valin (1984: 160) describe the Finnish passive as backgrounding in function: in a passive sentence in Finnish, the first argument of the verb (the pivot in Foley & Van Valin’s terminology) is backgrounded and no other argument assumes subject marking. This analysis is based on the fact that, in contrast with an active construction, the Finnish passive has no subject, and cannot express the agent with an independent constituent (such as the English *by*-phrase or the French *par*-phrase). In a passive clause, the object assumes some characteristics that are typical of subjects; it may for example be in the nominative case, similarly to subjects (cf. example 3), and in terms of word order it usually occupies the preverbal position typical of subjects in active clauses. Unlike subjects, however, it does not trigger agreement in the verb, and is therefore analysed as an object rather than a subject (cf. example 4, which illustrates an active transitive clause).
(3) Maija vie-t-i-in sairaala-an.
Maija:nom take-pass-pst-pers hospital-ill
‘Maija was taken to the hospital.’

(4) Me ve-i-mme Maija-n sairaala-an.
1pl:nom take-pst-1pl Maija:gen hospital-ill
‘We took Maija to the hospital.’

The passive transitive clause (3) contains no subject, and the object is in the nominative case (no marking). In the active transitive clause (4) the object Maijan stands in the genitive case and the subject me ‘we’ is in the nominative. The predicate agrees with the subject in person (1st person) and number (plural). (For further discussion see Helasvuo 2006.)

In some studies (see e.g., Comrie 1977; Sands & Campbell 2001) the Finnish passive is discussed as an example of an impersonal passive. In these studies the term impersonal is used to convey the point that the agent is non-specific; it has no overt expression or specific referent. Blevins (2003) goes even further, rejecting the treatment of the Finnish passive as a passive; instead, he suggests that it should be analysed as an impersonal as opposed to a passive construction. He bases his argument on the fact that the Finnish passive is subjectless, as no other argument takes the place of the suppressed subject. In his view, impersonal verb forms are insensitive to the argument structure of the verb. However, as shown above, the object of a passive clause does exhibit features typical of subjects of active clauses. In conclusion, we find it rather an unfortunate terminological choice to call the Finnish passive impersonal. Instead, we argue that the passive is part of the personal system in Finnish; in other words, it belongs to a system that serves to express the discourse roles of the participants (such as speaker, recipient, and the party talked about; see Siewierska 2004: 1). We prefer to speak about non-specific reference of the passive personal marker (for further discussion, see Helasvuo 2006). Table 1 illustrates the personal system in Finnish, using the verb katsoa ‘look’ as an example.

Table 1. Person system in Finnish (Adapted from Helasvuo 2001: 67)

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[stem + person marker]</td>
<td>[stem(+passive marker) + person marker]</td>
</tr>
<tr>
<td>active 1st person</td>
<td>katso-n</td>
<td>katso-mme</td>
</tr>
<tr>
<td>active 2nd person</td>
<td>katso-t</td>
<td>katso-tte</td>
</tr>
<tr>
<td>active 3rd person</td>
<td>katso-o</td>
<td>katso-vat</td>
</tr>
<tr>
<td>passive</td>
<td>katso-ta-an</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows that the passive form, unlike the active ones, does not distinguish morphologically between singular and plural number. We may also note that in colloquial Finnish the number distinction is often neutralized in the 3rd person as well; thus
we usually find that a 3rd person plural subject combines with a 3rd person singular verb form. Hakulinen & Karlsson (1979: 252) describe the 3rd person singular as the unmarked member of the (verbal) personal paradigm; it is also the verb form that is used in clauses with sentential or infinitival subjects.

It is important to note that Finnish has several subjectless clause types. In these clauses, the finite verb is either in the 3rd person singular (e.g., in predications describing the weather, such as *sataa* [rain-3sg] ‘it is raining’) or in the passive.

### 3.1.2 Zero person construction in Finnish

The so-called zero person construction expresses, among other functions, changes of state, emotion and perception. In the construction, the predicate is in the 3rd person singular form and there is no overt subject (cf. example 5).

(5) *Suome-ssa joutu-u sauna-an.*  
Finland-ines get-3sg sauna-ill  
‘In Finland, you wind up in a sauna.’

The implied subject can be expressed in English as *you* or *one*, in German and Swedish as *man* (cf. the English translation of example 5). Laitinen (2006: 209) describes the use of zero person constructions as a conventional way in Finnish of making generic statements concerning human beings; for instance (5) could concern anybody. It is similar to the passive in that it implies non-specific reference; in the zero person construction, however, the implied referent functions in the clause semantically more like an experiencer, whereas the passive implies an agent. On a par with the passive, the zero person has been described as a non-specific member in the personal system of Finnish (Hakulinen 1987; Helasvuo & Laitinen 2006). Referentially, both forms typically index a human referent (or an animate entity treated as a person).

### 3.2 French

#### 3.2.1 Passive in French

The passive in French is most easily recognizable by its morphosyntactic structure, the use of auxiliary verb *être* (be) and past participle (*participe passé*) (Gaatone 1998: 9–10).

(6) *Marie a été amené-e à l’hôpital par ses parents.*  
Marie have:3sg be:pass:ptcp take:ptcp-f  
‘Marie was taken to the hospital by her parents.’

In Foley & Van Valin’s (1984) terminology, a non-actor argument or the undergoer is the first argument (*pivot*) of the clause, and from a syntactic point of view it is the subject of the clause that triggers verb agreement. The actor has a peripheral status as an independent constituent preceded by the preposition *par* (or in some cases *de*); it
can also be left out. In other words, in this view the French passive has a foregrounding function. In example (6) above, the proper noun, Marie, is the undergoer of the clause and the verb agreement follows this, as can been seen in the past participle that takes a feminine form, amenée ‘taken’. The actor in (6) is expressed with the prepositional phrase par ses parents ‘by her parents’. In a recent definition, Gaatone (1998: 28) considers that the first argument imposes subject agreement (person and number) on the verb, while the second argument is the direct or indirect object and the third one is the second indirect object. He distinguishes two passives – the “classic” one, which he calls “promotional” (passive promotionnelle), as in (7) below, and the essentially impersonal passive (passive essentiellement impersonnelle), as in (8); the following examples are his (Gaatone 1998: 31–32), with our added glosses:

(7) Une enquête a été mené-e

    indef  investigation have:3sg  be:pass:ptcp  conduct:ptcp-f
    par  la  police.
    prep  def  police

‘An investigation was conducted by the police.’

(8) Il a été procédé à une enquête par la police.

    pron  have:3sg  be:pass:ptcp  proceed:ptcp  to  indef
    investigation  prep  def  police

‘There has been an investigation by the police.’

Example (8) illustrates a passive that occurs in an impersonal clause with a non-referential dummy pivot il (cf. Foley & Van Valin 1984: 156 for an example from Dutch: er wordt). There are some lexical restrictions: for instance certain direct transitives (coûter, posséder) cannot form a passive, while some verbs are used only in the passive (réputer) (Riegel et al. 1994: 434).

(9) Cette région est réputé-e par la qualité de son vin.

    this region  be:3sg  know:ptcp-f  prep  its wine quality

‘This region is famous for its wine quality.’

3.2.2 The pronoun on in French

Unlike the deictic pronouns of the 1st and 2nd personal forms, je/nous and tu/vous, the French subject clitic on is considered as an indefinite pronoun in traditional lexico-grammatical accounts (Chevalier et al. 1979: 228–230; Grevisse 1980: 644–648; Wagner & Pinchon 1991: 211). However, on is also very often considered as a personal pronoun, which can refer to the speaker(s) in a situation. It is always the grammatical subject, but it is semantically vague or indeterminate. The question of the nature of on – as indefinite or personal pronoun – has therefore been very often
discussed in the grammatical tradition (see for instance Le Bel 1991). There are two variants: *on* and *l'on* as is shown in examples (10) and (11) below:

(10) *Alors parfois on se cache on ne regarde pas on ouvre pas les yeux.*

‘So sometimes you hide you don’t look you don’t open your eyes’

(11) *Être ce que l’on mange.*

‘You are what you eat.’

The two forms *on* and *l’on* express stylistic variation: *on* is the more usual one, like in example (10), while *l’on* is usually used in written language (see, however, Coveney 2004 for cases in spoken language). It is typically used in connection with certain connectors, such as *et* ‘and’, *si* ‘if’, and *que* ‘that’ as in (11).

4. Functions

The functions of the forms under study have been discussed in the literature. They have been given a wide variety of interpretations ranging from clause-level notions such as topicalization or avoidance of personal forms to more global strategies such as politeness.

The functions of the Finnish passive and zero person constructions have been discussed in relation to politeness: it has been suggested that the passive and the zero person constructions offer a way to avoid making direct, explicit personal reference (Hakulinen 1987). According to Hakulinen (1987: 152), they could be interpreted as instances of negative politeness between strangers, but also as instances of an off-record strategy when used among intimates. Hakulinen (1987: 141–142) maintains that the avoidance of direct reference to the addressee is conventionalized as a politeness strategy in Finnish (cf. Brown & Levinson 1987), and that the passive and the zero person constructions offer grammatical resources for this strategy. In contrast, Laitinen (1995) is critical of this view and suggests that the zero person indeed functions to express personal reference that typically indexes speech act participants (speaker and addressee). However, the reference relation it creates is implicit, while the speech act pronouns ‘I’ and ‘you’ encode explicit reference. (See also Laitinen 2006.)

Helasvuo & Laitinen (2006) discuss the zero person construction and the passive in Finnish as grammatical forms whose function is to create open reference. As the reference is not explicitly stated, the participants have to infer it in the speech situation on the basis of contextual cues. In other words, the reference of these forms has to be construed in the speech situation by the participants of the speech act (Helasvuo & Laitinen 2006: 207).
The functions of the French passive construction have been given many interpretations, ranging from clause-level descriptions such as topicalization or stativization of the process described by the verb nucleus (cf. Gaatone 1998: 211–212) to more semantically and pragmatically oriented descriptions such as reduction of the importance of the actor. If the actor is omitted, the construction can be considered as expressing the avoidance of responsibility for the process described in the clause, or as self-distancing by the speaker (Riegel et al. 1994: 440). This could also be described as a politeness strategy similar to the interpretations of the Finnish constructions discussed above. The referent is said to be non-specific, because the speaker is not identified but remains anonymous; in such cases, however, the identity is inferable from the common ground of the speakers (cf. Riegel et al. 1994: 440). Moreover, the French passive construction is said to be frequently used in order to avoid the use of a personal form on, and in cases where the subject phrase of an active clause would be very long.

The French passive is used in both written and spoken language, and according to grammars its use is motivated by stylistic choice (Wagner & Pinchon 1991: 303). The passive, however, is not very frequent in conversation, and occurs only in specific linguistic contexts, such as in descriptions of a series of events in journalistic style (Blanche-Benveniste 2000: 57).

Modern grammatical accounts, as well as numerous other studies, discuss the function of on-construction as a subject clitic and its deictic value, for instance in interaction (Boutet 1994); other frequently raised issues concern the contribution of on to the process of impersonalization and the avoidance of person markers (see Siewierska 2004: 210, 236). This clitic does not have an antecedent in the previous text; its reference is construed in the discourse where it is used (Riegel et al. 1994: 196). The reference is usually to the 1st person plural, but it can also be to any other person, singular or plural, to a group of people, to a collective voice, or even to a rumour (Johansson 2000: 112–115). It may refer to the speaker(s) or other people present in the situation, or even, according to Blanche-Benveniste (2000: 75), to the 3rd person plural. In such cases the identity of the speaker is obscured and the speaker is anonymous; there can also be a process of distancing or depersonalization (Charaudeau 1992: 148–149). Such processes enable the speaker to express modesty or importance, or to refer to the action of a group (Charaudeau 1992: 148). In more indeterminate cases, on is used in generalizations or to express a general truth.

5. Data

Our data are derived from Internet discussion fora of leading national newspapers: the French Le Monde (www.lemonde.fr) and the Finnish daily Helsingin Sanomat and its weekly supplement Nyt-liite (www.helsinginsanomat.fi) and the tabloid Ilta-Sanomat.
The topic in the fora is the introduction of the common European currency, the Euro, at the beginning of 2002.

*Le Monde* contained 60 discussion starts from January 2002. The shortest discussions ranged from a couple of turns to ten; the longest contained 20 to 30 turns. The longest discussion consisted of 64 turns. One fourth of these messages received just one response or none at all. Out of this material, we have analysed seven discussions more closely, adding up to a total of more than 10,000 words. These discussions range from 7 to 18 turns, with 46 participants. The overall time-frame is ten days (31.12.2001–9.1.2002): during this period, the shortest discussion took six hours and the longest one nearly nine days.

The material we have collected from *Helsingin Sanomat* contained six discussion starts, which received from one to six responses. The time frame is approximately three weeks (29.12.2001–22.1.2002). For *Ilta-Sanomat* we have three discussions, all of which are fairly long. The longest contains 177 turns; it lasted for twelve days (18.1.2002–29.1.2002). The other two contained 92 and 53 turns. The Finnish discussions contain almost 25,000 words.

Table 2. Occurrences in the data

<table>
<thead>
<tr>
<th></th>
<th>Passive</th>
<th>on-construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>Tokens (in Σ 10000 words)</td>
<td>28</td>
</tr>
<tr>
<td>Finnish</td>
<td>Tokens (in Σ 25000 words)</td>
<td>253</td>
</tr>
</tbody>
</table>

Table 2 shows that the frequency of occurrence of the construction types is different in the two sets of data: the passive is far more frequent in the Finnish than in the French data, while the on-construction is used more often in French than the zero person construction in Finnish. The frequency of the French passive construction per one thousand words is 2.8 and that of the on-construction is 9.5. In the Finnish data, the passive is likely to occur 10.12 times and the zero person construction 1.72 times in a thousand words. Thus it is the Finnish passive and the French on-construction that seem to be equally frequent in these data.

6. **Non-specific reference forms in CMC**

In this section we examine more closely the use of non-specific reference forms in the two sets of data. We show how they can be used to create alliances – ‘us’ vs. ‘others’ – and to construct the writers’ self-positioning with regard to these alliances. We further demonstrate how these forms may be exploited to organize the text.

In the examples we have presented a morphological gloss only of those lines which form the focus of analysis. All typos and other types of non-standard usage
by the original writer have been retained in the examples (for example some writers may have left out accents in the French or added a blank space before commas and dots in the Finnish). Bold face is used in the examples to highlight the relevant structures.

6.1 Non-specific reference in the Finnish data

In the Finnish data, the passive is far more frequent than the zero person construction. While both offer a reference form that allows for non-specific reference, their semantic profiles are quite distinct: the implied referent of the passive is agentive, while the zero person construction is rather used to refer to an experiencer rather than to a semantic agent. Both forms imply a human or animate referent. They often alternate with each other in the same text.

Excerpt 12 illustrates how non-specific reference forms can be used to organize the discourse. In this example, the passive alternates with the zero person construction.

(12) *Ilta-Sanomat* 18.1.2002

porvarimies [nick, 'Man from the Right']

1. *TeeKoo(1): Ei mitään hyötyä*,
   ‘TeeKoo [nick]: [The Euro] is of no use;

2. *johtava-politiikko-mme vedätt-i-vät mei-tä* leading-pl politician-1PL:POSs drag-pst-3PL 1PL-PTV
   ‘our leading politicians dragged us’

3. *valheellisine lupauksineen kuin pääsiä narussa* with their false promises like a ram on a leash

4. *ja typerä kansa on kerta toisensa jälkeen aina* ‘and the stupid public has time after time’

5. *äänestänyt samat naamat Arkadianmäelle, joka takaa sen,* ‘voted the same faces into Parliament, which guarantees’

   ‘that no promises will be kept’

7. *eikä mikään muutu.*
   ‘and nothing will change.’

8. *Auto-j-en, alkoholi-n, elintarvikke-i-den,*
   car-pl-gen alcohol-gen food-pl-gen
   *viihde-elektoniika-n ym halpenemis-ta* entertainment-electronics-gen etc. cheapening-PTV
   *lupail-t-i-in* promise-pass-PST-PERS
   ‘There were promises of the reduction of prices for cars, alcohol, food, electronics, etc.’
9. ja verojen alennuksia eurooppalaiselle tasolle
   ’and of the reduction of taxes down to a European level’

10. tavaroiden, pääoman, palveluiden ja työvoiman vapaata liikkuvuutta,
    ’and the mobility of products, capital, services and labour force’

11. jotka jo perustamis-sopimuksen mukaisesti
    already founding-treaty-gen according.to
    pitäisi maassa-mme toteutta-a
    must-cond:3sg country-1pl:poss put.into.effect-inf
    ’which should be respected in our country according to the treaty’

12. mutta jo-i-ta ei edelleenkää toteuta-ta.
    but rel-pl-ptv neg further put.into.effect-pass
    ’but which are not respected.’

13. No jätt-i-vät-hän ne katteetom-i-en
    well leave-pst-3pl-clt they false-pl-gen
    lupaus-ten lisäksi
    promise-pl:gen in.addition.to
    ’Well, in addition to the false promises, they sure managed not …’

14. kerto-ma-tta että menett-isäi-mme oma-n raha-mme
    tell-inf-abe comp lose-cond-1pl own-gen money-1pl:poss
    ’… to tell us that we would lose our own currency’

15. ja nyt kun tämä kaikki tiede-tä-än,
    and now when this all know-pass-pers
    ’and now that we know all this’

16. niin nyt olisi jo 53%:a EU:a vastaan äänestäviä
    ’so now 53% would vote against the EU’

17. eli sinne ei men-tä-isi,
    in.other.words there.to neg go-pass-cond
    ’in other words, we wouldn’t join’

18. koska mädät politiikkamme ovat tehneet riistääkseen kaikki palkkamme
    ’because our rotten politicians have made [i.e., done their best] to take
    away all our income’

19. ja elintasomme väellisillä- ja haitta- ym. veroilla tuloverojen lisäksi
    ’and our standard of living with the help of indirect and environmental
    protection taxes etc. in addition to income taxes’

20. ’päästäksemme’ EU-maiden heikommin voivien joukkoon.
    ’so that we could “reach” the group of the poorest countries in the EU.’
passive constructions where non-specific reference can be inferred to refer to the politicians. The reference is anchored to the transitive clause in line 2. The reference of the zero person construction in line 10 is interpreted in the same way. While lines 8–12 explicate the false promises mentioned in line 3, line 13 is a turning point in the text: not only did the politicians make false promises but they also neglected to tell us things. Line 14 contains a transitive clause (similar to the one in line 2) with a first person plural subject ‘we’. This is followed by two passive constructions (lines 15 and 17) implying a reference that includes the speaker. This interpretation is anchored in the transitive clause in line 14. Note also that these clauses have been translated into English by ‘we’.

Thus example (12) shows how the non-specific reference forms (the passive and the zero person construction) can be used to create alliances, ‘them’ vs. ‘us’. The shift between the different interpretations is managed with transitive constructions which are used to anchor the reference.

Example (13) illustrates how the wider sociocultural context may affect the construal of a non-specific reference:

(13) Ilta-Sanomat 18.1.2002
Itsenäinen Suomi? [nick, ‘Independent Finland?’]

1. EU-n olemassaolo-a ei onneksi
   EU-gen existence-PTV NEG-3SG fortunately
   aikaisemmin huoman-nut,
   earlier notice-PTCP
   ‘Before this you wouldn’t even notice the existence of the EU’

2. mutta nyt kun markka-kin vie-t-i-in
   but now when mark-CLT take-PASS-PST-PERS
   ‘but now that they’ve taken the mark away’

3. ja meidä-t sekoitet-t-i-in Euro-i-lla ja sente-i-llä.
   and 1PL-ACC mix-PASS-PST-PERS euro-PL-ADE and cent-PL-ADE
   ‘and we’re all confused by euros and cents.’

4. EU valitettavasti näkyy.
   ‘the EU unfortunately is noticeable.’

5. Kaikki meistä eivät matkustele Euroopassa niin paljon,
   ‘Not all of us travel around Europe so much’

6. ett-ei tarvi-tta-v-i-a raho-j-a
   COMP-NEG+3SG need-PASS-PTCP-PL-PTV money-PL-PTV
   ol-isí voi-nut vaihta-a panki:ssa.
   be-COND+3SG can-PTCP change-INF bank-INES
   ‘that the money needed could not have been exchanged in a bank.’
7. **Rikkaa-t ja hyväosaise-t tätä vain hyöty-vät.**
rich-pl and well-to-do-pl this-el a only benefit-3pl
‘Only the rich and well-to-do benefit from this.’

8. **Samoin se että kaukana Brysselissä laadita-an**
also it comp far.away Brussels-ine draft-pass-pers
**toise-n valtio-n lake-j-a ja asetuks-i-a**
another-gen state-gen law-pl-pltv and code-pl-pltv
‘Likewise, the fact that far away in Brussels laws and codes are being drafted for another country’

9. **on kaikkea muuta, kun hyvä juttu.**
‘is far from a good thing.’

10. **Tunne on kuin jossain osavaltiossa, Suomi ei enää tunnu Suomelta.**
‘It feels like living in a state [in a federation], Finland doesn’t feel like Finland any more.’

11. **Moni Veteraani kääntyi varmasti haudassaan,**
‘Many a veteran would be turning over in his grave’

12. **jos näkisi mitä seuraavat sukupolvet maallemme tekevät.**
‘if he saw what the following generations are doing to our country’

The excerpt in (13) starts with a zero person construction. The non-specific reference can be understood to refer to the speaker or to anyone wishing to identify him- or herself with the experience described. This is followed by two passive constructions (lines 2 and 3). The latter presents meidät, ‘us’, as the undergoer of the action. The zero person construction in line 6 can again be interpreted as referring to the speaker or to anyone else. While lines 1–7 take a Finnish perspective, line 8 offers a widening perspective. The passive construction is anchored with the locative phrase Brysselissä ‘in Brussels’. The location of the European Union headquarters is used metonymically: the agent behind the action is understood to be the Union’s officials.

Example (14) illustrates how the reference of the passive may switch between speaker-inclusive and speaker-exclusive interpretations within one and the same text:

(14) **Ilta-Sanomat 18.1.2002**
rahvas haisee [nick, ‘the masses stink’]

1. **En ole aivan varma tarkoitetko ulkomaalaisella moskalla ruoan laatua**
‘I’m not quite sure whether by foreign junk you meant the quality of food’

2. **vai ruoan makua**
‘or the taste’

3. **mutta todet-ta-kon vielä suomalaist-a ruokakulttuuri-sta**
but notice-pass-1mp-pers still Finnish-el a culinary.culture-el a
‘but let this be said about Finnish culinary culture’
4. *sen verran, että suomalaiset ruoat tuovat mieleen pula-ajat*
   'that Finnish dishes remind us of times of depression'

5. *jolloin suome-ssa nähti-in nälkä-ä.*
   'when Finland-ines see-pass-pst-pers starvation-ptv'
   ‘when people were starving in Finland’

6. *Sekin kertoo masentavasti suomalaisesta ruokakulttuurista,*
   ‘Even that tells us discouragingly about Finnish culinary culture’

7. *että lanttulaatikko-a pide-tä-än juhla-ruoka-na*
   comp rutabaga.pudding-PTV consider-pass-pers feast-food-ess
   ‘that rutabaga pudding (a traditional Finnish dish) is considered a festive dish’

8. *tai liha olisi jotenkin vaurauden merkki.*
   ‘or that meat is somehow a sign of prosperity.’

9. *Toisin sanoen ainakin EU:n ansiosta*
   ‘In other words, thanks to the EU’

10. *voi-mme nautti-a herkullisemp-i-a ruokalaje-j-a*
    can-1pl enjoy-inf more.delicious-pl-PTV dish-pl-PTV
    ‘we can enjoy more delicious dishes’

11. *joita tulee ympäri EU:ta kun,*
    ‘which come from all over the EU than we could’

12. *että joutu-isi-mme tyyty-mä-än sii-hen moska-an*
    comp must-cond-1pl satisfy-inf-ill it-ill garbage-ill
    ‘if we had to settle for the garbage’

    rel-PTV 1pl-all Finland-ines ply-pass-pers
    ‘that they keep shoving at us in Finland.’

Example (14) starts out with a personal assessment, expressed with a first-person form (line 1). In line 3, the writer launches into a narrative sequence that begins with the passive imperative form *todettakoon* 'let it be said'. With this form the writer is clearly referring to her/himself. In line 5 there is a passive form that refers to Finnish people in general. In line 7 the writer continues using the passive form in much the same general sense, but at the same time s/he distances her/himself from the assessment that is being made (‘rutabaga pudding is considered [by Finns] a festive dish’). When the writer switches back to speaker-inclusive reference in lines 10 and 12, s/he uses first-person reference forms that explicitly include the speaker.

To sum up: the zero person construction and the passive represent non-specific reference forms in the system of personal reference in Finnish. They often alternate in the same context, and their reference has to be construed within that context. The passive allows for interpretations that either include or exclude the speaker/writer. As example (14) shows, this multitude of interpretations can be exploited
as a resource: the same form may be used despite subtle differences in the construal of reference. When inclusivity vs. exclusivity of interpretation needs to be made explicit, writers may resort to the use of specific reference forms such as the first person.

6.2 Non-specific reference in the French data

6.2.1 French passive constructions

In the French data, the passive is relatively infrequent. In several cases passive constructions are used in proverbs; in the other cases, the agent is not expressed. In these cases, the reference is anchored by various means in the linguistic context. There are various possibilities: the reference may be to a human being, to an institution or to a less determinate actor. In the following case, the agent is not expressed:

(15) *Le Monde*, 5.1.2002  
Re:Européen [re:Quetzalcoatl]  
chaixleon

1. *En sens inverse,*  
   ‘The other way round’
2. *j'ai remis une pièce de 10 Francs*  
   ‘I paid with a 10-franc coin’
3. *dont je n'avais pas remarqué*  
   ‘I hadn't noticed’
4. *qu'elle venait de Monaco.*  
   ‘that it was from Monaco’
5. *Je ne savais même pas que cela existait.*  
   ‘I didn’t even know that there was such a currency’
6. *Cette pièce m'a été refusé-e!*  
   This coin me have:3SG be:PASS:PTCP refuse:PTCP-F  
   ‘My coin was not accepted!’

In example (15), the writer describes a personal experience. Lines 1–5 describe a situation where the speaker is handling money, and it can be interpreted as a transaction situation involving a purchase. The last line contains a passive construction in which the first argument of the clause is the NP ‘this coin’, where the demonstrative determiner refers to the coin first mentioned in line 2. In line 6 there is a second argument, which can be interpreted as an indirect object *m’* (‘me’) referring to the speaker. The situation of the handling of the money allows us to conclude that the actor that had not been described in the narrative is a human actor, namely a salesperson. This could easily have been expressed by a *par*-phrase in line 6, but the writer has chosen not to adopt that alternative.
In example (16), the reference remains quite vague:

(16)  
1. *Une opportunité pour les USA:*l’Estonie.  
   ‘An opportunity for the United States:Estonia.’
2. *Il manque en effet aux USA un ancrage militaire en Europe du Nord.*  
   ‘As a matter of fact, the United States does not have a military base in 
   Northern Europe.’
3. *L’Estonie est destinée à devenir membre de l’OTAN et de l’UE.*  
   ‘Estonia is destined to be a member of NATO and the European Union.’
4. *Mais cela ne suffit pas*  
   ‘But that is not enough’
5. *pour justifier une implantation militaire des USA en Estonie.*  
   ‘to justify an American military base in Estonia.’
6. *Il y faut un bon motif.*  
   ‘One has to have a good pretext.’
7. *Ce bon motif pourr-ait être assez facilement provoqué en Estonie.*  
   ‘A good motive like this would probably be quite easy to provoke in Estonia.’
8. *En effet, un tiers des Estoniens est (…) d’origine russe.*  
   ‘As a matter of fact, one third of the Estonian population is of 
   Russian origin.’

In excerpt (16), the writer evaluates a state of affairs in which the topic is the American 
military presence in Europe. The excerpt has been abridged for the purposes of this 
discussion: between lines 2 and 3, there is an extended commentary on American 
military activities in Europe, and at the end the writer goes on to discuss the ethnic 
relations between the Estonians and the Russian-speaking minority in the country.

As for the passive, its reference can be tracked as follows. Lines 1, 2, and 5 con- 
tain the proper noun USA; it is also referred to in line 2 with *un ancrage militaire* 
‘military base’, and in line 5 with *une implantation militaire*, again ‘military base’. 
In line 6, the writer presents an argument about the USA needing a pretext for its 
military installation. The passive construction is used immediately following this, in 
line 7. The noun *bon motif* (‘a good motive’) is presented at the end of line 6 and is 
reiterated at the beginning of line 7, where it is the grammatical subject of the passive
construction. In this passive construction the verb is *provoquer* (‘provoke’), used with the modal verb *pouvoir* (‘can’) and the verb *être*, ‘be’. The agent is omitted, but the actor can be inferred as the United States and its military forces, already mentioned several times in this excerpt. In this example, the non-specific reference is anchored by two different referents.

In sum, in the first case the actor is human, although not mentioned. Here the speaker includes her/himself in the narrative as an experiencer. In the second case the passive refers to an institutional actor, a state, and the speaker does not include her/himself in the description.

### 6.2.2 The pronoun *on*

Example (17) contains several instances of the pronoun *on*, with reference varying according to the linguistic context.

(17) *Le Monde*, 17.1.2002

Réponse à Antoni, Hi-evreribody et Scalon1 [re:Antoni]

‘Response to Antoni, Hi-evreribody and Scalon 1 [re:Antoni]’

reginaldo [nick]

1. *D’abord merci à vous 3 pour vos réponses*
   
   *First thanks to you three for your answers*
   
   *que je trouve intéressante*
   
   that 1sg find-PRS:1SG interesting
   
   ‘First of all thank you all three for your answers that I find interesting’

2. *et je suis très content de continuer*
   
   *and 1sg be:PRS:1SG very happy to continue*
   
   *cette discussion.*
   
   *this discussion*
   
   ‘and I am very happy to go on with this discussion.’

3. *Avant tout ce que je trouve incroyable*
   
   *Above all that which 1sg find-PRS:1SG incredible*
   
   ‘Above all what I find incredible’

4. *c’est que on n’ entend que du positif*
   
   *is that pron neg hear:PRS:3SG but positive*
   
   ‘is that (we) hear only positive things’

5. *par rapport à l’Euro sans envisager les conséquences*
   
   ‘about the euro without any anticipation of the consequences’

6. *ou même discuter des désavantages.*
   
   ‘or even discussion of the disadvantages.’

7. *Pour décider une chose aussi importante qu’un changement de monnaie*
   
   ‘To (be able to) decide about something as important as a change of currency’
Construing reference in context

8. il aurait fallu avoir un dialogue entre toutes les différentes parties,
   ‘it would have been necessary to have a dialogue with all different parties,’

9. le fait que l’on ne soit même pas au courant des conditions de la monnaie unique
   ‘the fact that (we) are not even kept informed about the conditions of the single currency’

10. pour que cela marche est assez stupéfiant
    ‘of its functioning is rather astonishing’

11. et montre bien l’indoctrinement que l’on a en Europe.
    ‘and shows clearly how indoctrinated (we are) in Europe.’

12. Cela fait des mois que je discut-e de ces points avec des amis
    ‘I have been discussing with my friends for months (…’)’

Excerpt (17) contains three cases of the pronoun on and its variant l’on. At first sight, the use of the latter form (lines 9–10) could be seen as a sign of grammatical knowledge; this interpretation, however, is undermined by line 4, where the pronoun is used in its usual form and where the obligatory contraction with the connector que has not been used (4) (que on rather than qu’on). But what about the references in these three cases, and how do they organize the discourse?

First, the use of on has to be contrasted with the use of the first-person pronoun je ‘I’. The message begins with three instances of the 1st person pronoun, where the writer refers to himself. Lines 1–2 contain the first-person pronoun in metapragmatic utterances, referring to the forum and its ongoing discussion and to the writer’s evaluation of it. In line 3 the writer also refers to himself; the 1st person pronoun is followed by the verb trouver and by the evaluative adjective incroyable. This also introduces the topic of the discussion forum – the euro – and marks the opening of an argumentative sequence as the writer begins to express his opinion. The construal of the reference of on can be inferred as part of the arguments.

The first use of the pronoun on is in line 4, where it is combined with the perception verb entendre ‘hear’ and the noun le positif ‘positive things’. The construal of the reference has to be inferred at two stages. First, in line 4, the reference of on is left quite vague; it assumes an audience for an argument concerning the benefits gained by
the use of euro. This clause in fact forms an argument which is a generalized rumour, hearsay. In lines 5–8 the writer then builds a counter-argument to the one set forth in line 4, enumerating things that have not (to his mind) been heard. He lists negative aspects of the lack of public debate about the single currency (lines 5–8). In other words, there is an argument containing a generalized rumour, which is contrasted with arguments not heard in public. Thus the non-specific reference of on can be construed to mean ‘public’.

Line 9 contains the second occurrence of the pronoun l’on. Here it is used with a verbal construction, être au courant (‘to know’, ‘to stay informed’) in a negative form. The object of the cognitive state of not knowing expressed in this argument is the lack of knowledge concerning ‘the conditions of the single currency’. This adds to the list he has given previously (lines 5–8). In line 8, he mentions that the discussion has not taken place with toutes les différentes parties (‘with all the different parties’), followed by the use of l’on in the next line. This reference can be interpreted as more specific than in the previous case. Here, the pronoun can be interpreted to mean ‘one of the different parties’, including the writer and the public.

This can be contrasted with the third use of l’on in line 11, where it is at the end of the argument, a sort of conclusion to the arguments put forth in lines 5–10. Here we first have a political evaluation, the noun endoctrinement (‘indoctrination’), followed by l’on used in a locative clause en (‘in’) Europe. Here, the reference of the pronoun is also vague, but it can be construed to mean those who have political power and who are able to impose this monetary reform on people. In all, these three cases also rely on social and sociocultural knowledge concerning the introduction of the euro.

In some cases where the on-construction was used, speakers clearly included themselves in the social context of the writing situation. In expressing their opinion, the on-construction conveyed past information. Speakers included themselves as recipients or evaluators of this information that they considered negative. Moreover, the reference was also locative (in France) and a mental process (forget) which includes the speaker.

7. Conclusions

In this chapter, we have explored ways in which non-specific reference forms can be used to organize discourse. We have focused on the use of the passive and the zero person construction in Finnish, and on the passive and the on-construction in French. We have shown how these personal forms and constructions contribute to the construal of reference in the local linguistic context, and how they can refer to wider social and sociocultural contexts. In other words, they are context-sensitive in multiple ways.
We have focused on the use of non-specific reference forms in actual CMC data, in which writers express their opinion in an open and public discussion forum in major national newspapers. The analysis shows how the use of these forms contributes to the construction of speaker identity, and of how s/he positions her/himself in the world and evaluates it.

In the Finnish data, the zero person construction is used in contexts where the writer describes a personal experience; this construction, however, leaves the reference open for other participants in the discourse, in our case the other participants in the discussion forum, to identify themselves with that experience. For example in (13) (line 1) the writer uses the zero person construction to describe his or her own experience EU:n olemassaoloa ei onneksi huomannut ‘you wouldn’t even notice the existence of the EU’; at the same time, he or she offers this experience for the participants to identify with (‘I wouldn’t notice and neither would you’). In contrast, the reference of the Finnish passive person marker can be understood as either including or excluding the speaker. For example in (12) the writer first uses the passive for reference that excludes the speaker (line 8: Autojen – halpenemista lupailtiin ‘there were promises of the reductions of prices for cars’), then uses the same form for making a reference that includes the speaker (line 15: nyt kun tämä kaikki tiedetään ‘now that we know all this’). The interpretation may be anchored in the linguistic or in the sociocultural context, or it may be left indeterminate.

In French, the construal of reference in passive constructions can be inferred from the linguistic context. The passive is used in cases where writers describe an event they have experienced; or the reference can be construed from the noun mentioned as actor in active person forms in topical sequences. In our analysis of example (16), we have shown that even though the actor was not mentioned, it was possible to understand that the narrative told by the writer described a monetary transaction. At the end of this example (16), s/he said that Cette pièce m’a été refusée ‘My coin was not accepted’. In the data, the identity varies from human to institutional or more indeterminate actors. The passive construction is used to narrate an experience or to argue for or against the Euro.

In the French on-constructions, the writers include themselves in the scene described. In some cases the on-construction alternates with the first-person singular pronoun; the latter is used to give judgements that are often positive, while the on-construction is used to refer to past information observed and to give negative evaluations (cf. example 17: le fait qu’on ne soit meme pas au courant ‘the fact that (we) are not even kept informed’). The on-construction is used to refer to the time of writing and to the sociocultural context. Writers can use it to refer either to themselves and the writing situation or to themselves as experiencers in the world. We suggest that this usage needs more thorough investigation across different types of data. Another possibility is reference to a larger social group, such as French society as a whole.
In our data, the on-construction was used in the majority of cases to create varying alliances among the ‘I’, the ‘us’ and the ‘them’. The opposing ‘them’ could for instance be European politicians, guilty of being insufficiently specific about the change of currency and European monetary politics.

Comparing the data from the two data sets, the French passive and the Finnish zero person construction are evidently both used in cases where some kind of generalization is being made. With the Finnish zero person construction, however, this generalization is presented as something relating to the personal experience of the participants (cf. e.g., example 13, line 1), and is offered for the participants to identify with. It thereby resembles the use of the French on-construction. We note, however, that our material is not large enough to draw a definitive conclusion. Both the Finnish passive construction and the French on-construction can be exploited in similar fashion to create alliances, according to how the reference is construed: as including or excluding the speaker (cf. Finnish example 12, lines 8 and 15 and French example 17). Through a close microanalysis of the constructions in their local contexts of use and a macroanalysis of the more global context, the chapter shows how reference is construed in context.

References


The contrast between pronoun position in European Portuguese and Castilian Spanish
An application of Functional Grammar

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Cast in Functional Grammar (FG), this chapter considers the syntactic placement of pronominal clitics in European Portuguese (EP), contrasting these with comparable phenomena in Castilian Spanish (CS). It emerges that EP constituent order results from the interplay of (at least) a single, minimally specified structural pattern, a principle of increasing syntactic weight, and the independently required principles of restrictive apposition and adverbial insertion. The specific difference between EP and CS reduces to the insight that EP allows placement of the verb in clause-initial position, whereas this is excluded in CS; verb position determines the occurrence of proclisis and enclisis, which we analyse as syntactic rather than morphological in EP. The chapter illustrates the applicability of FG to the comparison of languages.

1. Introduction

Functional Grammar (FG), as developed by Simon Dik and culminating in the two-volume posthumous Dik (1997a,b), is particularly well suited for the contrastive analysis of languages.¹ It offers a rigorous yet user-friendly framework in which both similarities and differences between language systems can be described and explained. More specifically, it strives to achieve ‘typological adequacy’ by postulating an abstract underlying structure which is hypothesized to apply to all language utterances and which nevertheless allows systematic variation in the filling of that structure. This underlying structure consists of a series of nested layers. The highest layers pertain to

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those aspects of linguistic communication which relate to verbal interaction: it is here that such matters as illocutionary force and the speaker’s addressee-oriented modalization of the utterance are located. The lower layers pertain to the description of the state of affairs presented in the utterance: it is here that tense, negation and aspect and the like are treated. The entire nested structure is converted into linguistic form by a set of expression rules, which regulate constituent order and morphological marking. For a full description of the model, see Siewierska (1991) or Dik (1997a).

The present chapter will be devoted to an analysis of the striking differences between ‘object’ pronoun position in Castilian Spanish (CS) and European Portuguese (EP). The theoretical framework to be used will be FG; such components of that model as are relevant for the analysis will be explained as they arise in the presentation. The analytical focus of the chapter will mainly be on EP, with the FG analysis of CS being that set out in Hannay & Martínez Caro (2008) and Martínez Caro (2006). The successive sections will deal with the clause-initial P1 position (Section 2), the treatment of clitics in FG (Section 3), clitic placement in EP and in CS (Section 4), the default position of the verb in EP and in CS (Section 5), and the analysis of the Subject in EP and in CS (Section 6), leading to conclusions in Section 7.

2. The clause-initial P1 position

One of the pillars of FG is the claim that the expression rules regulate the linear order of clausal elements through an appeal to structural patterns which all contain a clause-initial position known as P1. P1 is characterized not only by being reserved for the first constituent of the clause but also by being the home for constituents with a special pragmatic role (‘pragmatic highlighting’). In Dutch, for example, Given Topics,

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2. The FG model applied in this chapter has been superseded in recent years by Functional Discourse Grammar (FDG; see Hengeveld & Mackenzie 2008). The data presented here certainly lend themselves to analysis in that new model, but at the time of writing the FDG morphosyntactic component had not yet been sufficiently developed to deal with the complexities of pronouns in Spanish and Portuguese. In addition, the analysis of Castilian Spanish by Martínez Caro (2006), which is essential for my argument, is cast in FG.

3. FG observes that the first position of a clause (P1) may not correspond with the first position of the utterance. In utterances such as English Strawberries, I love them! the NP strawberries occurs in what is called P2, a pre-clausal position with its own intonation contour, while P1 is occupied by I. It has been argued (a) that P1 may in certain languages and under specific circumstances remain empty and (b) that P1 may be subject to multiple filling. Both these possibilities will return later in this chapter.
Contrastive Focuses and Stagers\(^4\) can appear in this position, as with the respective terms in bold in (1):

\[
\text{(1) a. } \text{Dat} \text{ (GivTop)} \quad \text{gelooﬁ } \quad \text{ik} \quad \text{niet.} \\
\text{That believe.prs} \quad 1\text{sg} \quad \text{neg} \\
\text{‘I don’t believe that.’}
\]

\[
\text{b. } \text{Ik} \quad \text{ken} \quad \text{Jan, maar zijn} \quad \text{vrouw} \text{ (ContrFoc)} \\
\text{1sg know.prs Jan but 3sg.m.poss wife} \\
\text{ken} \quad \text{ik} \quad \text{niet.} \\
\text{know.prs 1sg neg} \\
\text{‘I know Jan, but I don’t know his wife.’}
\]

\[
\text{c. } \text{Gisteren} \text{ (Stager)} \quad \text{heeft} \quad \text{het} \quad \text{geregend.} \\
\text{Yesterday aux.prs.3sg 3sg.n rain.ptcp} \\
\text{‘Yesterday it rained.’}
\]

Notice that although the position of \textit{ik} ‘I’ in (1b) is traditionally attributed by grammarians to its being Subject, the most economical stance within FG, one which also stresses the status of such an item in verbal interaction, is to ascribe its position to its being the Topic of its clause. In (1a) and (1c), by contrast, the Subject \textit{ik} is not Topic and does not occupy P1. All the clauses in (1) thus exemplify uses of the the P1 position, and indeed the basic structural pattern assumed in FG for Dutch main clauses (subordinate clauses being signalled by another, V-final structure) is \([\text{P1 } V_{\text{fin}} \text{ S O } V_{\text{nonfin}}]\), where \(V_{\text{fin}}\) and \(V_{\text{nonfin}}\) are positions for finite and non-finite verbs respectively and S and O are the default positions for Subject and Object.\(^5\)

A recurrent ambiguity in Functional Grammar has been the question whether the assumption of a universal position P1, hypothesized to be applicable to all languages, entails that every single clause in each language analysed contains this position. Thus we find Martínez Caro (2006) arguing that there is a P1 position in Spanish analogous to that in Dutch despite the fact that such a position remains unfilled in the verb-initial

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4. These are all pragmatic functions in FG: a Given Topic is a Topic “which has already been introduced into the discourse” (Dik 1997a: 213); a Contrastive Focus involves “some kind of contrast between the Focus constituent and alternative pieces of information” (Dik 1997a: 332); and Hannay (1991: 146) introduced the pragmatic function Stager for scene-setting occupants of clause-initial position.

5. Note that only the P1 position must be filled and that the remaining positions are retreat positions, i.e., these are occupied when there is a relevant occupant in the clause but are left empty if the relevant occupant is placed in P1. Thus, in (1c) the O position is empty because the verb \textit{regenen} takes no Object, and in (1a) the O position is empty because the Object occurs in P1.
clauses typical of that pro-drop language. Let us consider a few more examples, which also are taken from Dutch:

(2) a. *Geloof ik niet.*
   believe.prs 1sg neg
   ‘I don’t believe that.’

b. *Heeft het geregend?*
   aux.prs.3sg it rain.ptcp
   ‘Has it been raining?’

(2a) is a colloquial but fully normal alternative to (1a). Should we assume that (2a) follows the same pattern as (1a), with P1 simply being left empty, or is it now the verb *geloof* that occupies P1? And in (2b), does the finite auxiliary *heeft* occupy P1, and – if so – what is its pragmatic role (recall that P1 is defined not only positionally, but also in terms of pragmatic highlighting)? Can the notion of ‘pragmatic role’ be extended to cover the marking of illocutionary force, since what is signalled by the initial position of the finite verb in (2b) is an interrogative illocution? Questions such as these abound in the FG literature, and have yet to be answered satisfactorily.

The present chapter will claim that the question of P1 occupancy is crucial to an understanding of the clausal syntax of EP. More specifically, it will be asserted that several facts of its linear syntax are understandable only given the assumption that P1 is necessarily filled in that language. These facts will be contrasted with comparable data from CS, for which Hannay & Martínez Caro (2008) have provided an analysis in which P1-occupancy is not obligatory.

3. Clitics in FG

3.1 Clitics and the Wackernagel position

The central argument of this chapter will derive from an analysis of the positioning of clitic ‘object’ pronouns6 in the two languages under consideration, or more precisely

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6. It has been traditional to analyse these pronouns as ‘clitic’ because they display phonological dependency upon their verbal host: where the clitic precedes its host, it is known as a proclitic; where it follows, as an enclitic. The following discussion will address the issue whether analysis as clitics is appropriate for the relevant pronouns in both languages under examination as well as considering the alleged occurrence of mesoclisis (placement of the clitic between root and affix). In FG (Dik 1997a: 412), the positioning of clitics is handled by a principle that is independent of but interacts with structural patterns.
A2 and/or A3 clitic pronouns.\(^7\) A2 refers to the second argument (typically Patient), and A3 to the third argument (typically Recipient) in the valency frame of the verb in question. Consider the following examples from EP:

\[(3)\]
\[\begin{align*}
\text{a. } & \text{Dá- } \text{mo.} \\
& \text{give.IMP } 1\text{SG.A3+3SG.M.A2} \\
& \text{‘Give me it.’}
\end{align*}\]

\[\begin{align*}
\text{b. } & \text{Foi } -\text{me dado.} \\
& \text{be.PST.3SG } 1\text{SG.A3 give.PTCP} \\
& \text{‘It was given to me.’}
\end{align*}\]

FG claims that word order is the result of the interaction of a number of factors. One of these is the presence of one or more structural patterns of the type exemplified for Dutch in §2 above. Another is known as LIPOC, the Language-Independent Preferred Order of Constituents, which says that – everything else being equal – languages will sequence their constituents within the clause in left-to-right order of growing syntactic weight; this is essentially a restatement of Behaghel’s *Gesetz der wachsenden Glieder.* LIPOC was refined by Dik (1997a: 411–412) as Special Principle 7:

\[\text{SP7}\]
\[\text{Other things being equal, constituents prefer to be placed in an order of increasing complexity, which is defined as follows:}\]
\[\begin{align*}
& \text{a. clitic } < \text{pronoun } < \text{noun phrase } < \text{adpositional phrase } < \text{subordinate clause} \\
& \text{b. for any category X: X } \text{co } X \\
& \text{c. for any categories X and Y: x } < \text{X } \text{sub Y} \\
& \text{(co = coordinating element, sub = subordinating element)}
\end{align*}\]

Dik exemplifies from French, in which – essentially like CS – clitic pronouns occur in an earlier position than semantically corresponding noun phrases:

\[(4)\]
\[\begin{align*}
\text{a. } & \text{Jean a donné le livre à son frère.} \\
& \text{John aux.prs.3SG give.PTCP DEF book to 3SG.Poss brother} \\
& \text{‘John has given the book to his brother.’}
\end{align*}\]

\(\text{\textsuperscript{7}}\) Under an FG analysis, EP does not have Objects because it lacks the possibility of syncretizing the formal marking of second argument Patients (A2) and third-argument Recipients (A3), as is possible in English and Dutch, for example. It should be admitted, however, that there is formal (but not positional) syncretism of the Patient and Recipient 1st and 2nd person pronouns *me, te, nos* and *vos* in EP and *me, te, nos* and *os* in CS.
b. Jean l'a donné à son frère.
'John has given it to his brother.'

Notice that LIPOC is but one of several principles determining word order. One way in which languages differ is in the relative strength accorded to the various word-order determining principles. In English, for example, the effect of LIPOC is weaker than in French, as is apparent from the ungrammaticality of "John it has given to his brother; but the workings of LIPOC can be discerned in the ungrammaticality of "John has given to his brother it. Compare in this regard Scottish Gaelic in which the impact of LIPOC is even weaker, e in (5) being a full pronoun, but lower, i.e., further left, on the LIPOC hierarchy than the adpositional phrase dha bhràthair:

(5) Thug Iain dha bhràthair e.
'John gave it to his brother.'

The effect of LIPOC is thus for clitic pronouns (being lightest) to precede all other kinds of constituent. However, this does not necessarily mean that clitics will tend to gravitate to clause-initial position. Rather, as stated by Wackernagel's law, clitics tend cross-linguistically to occur in second position in the clause. This 'law' (to which many exceptions have been found, cf. Anderson 1993) applies with varying rigour to different languages: a good example is Serbian/Croatian, in which pronominal, verbal and clausal clitics all flock together in second position (Dik & Gvozdanović 1981). What blocks the clitics from occurring in absolute initial position in Serbian/Croatian is the even stronger effect of the P1 position in that language, which houses constituents with Topic or Focus function.8 Wackernagel's law can thus be seen as resulting from the collaboration of pragmatic highlighting (which causes P1-positioning) and LIPOC: second position is the best possible result, as it were, for LIPOC in a language with a strong (i.e., necessarily filled) P1.

Of particular interest in this regard is CS, in which clitics can occur in absolute first position, as in (6), taken from Martínez Caro (2006):

(6) Me gusta mucho la idea de ‘entrenamiento’.
'I very much like the idea of “training”.'

8. In FG (cf. Dik 1997a: 313), a constituent is assigned Topic or Focus function only if it has been subject to some kind of ‘special treatment’ (for example placement in P1). Topic assignment is possible where the entity referred to is ‘topical’, in the sense of being an entity “‘about’ which information is to be provided or requested” (Dik 1997a: 312). Focus assignment is possible where the entity is ‘focal’, in the sense of being “most important or salient with respect to the modifications which S[peaker] wishes to effect in PA [the Addressee’s pragmatic information]” (Dik 1997a: 312).
Martínez Caro ascribes the occurrence of clitic \textit{me} in clause-initial position to there being, as mentioned above, no obligatory filling of P1 in CS. In other words, \textit{me} in (6) is structurally – but not visibly – in the Wackernagel position, cf. (6′).\footnote{Note that Martínez Caro actually places \textit{la idea de ‘entrenamiento’} in a clause-final pragmatically highlighted position P0, but this is not relevant here.}

\[
(6') \quad \text{P1 c V S O X} \quad \text{– me gusta la idea … – –}
\]

However, Martínez Caro recognizes another structural pattern for CS declarative main clauses, (7′), in which the clitic appears in third position in sentences such as (7):

\[
(7) \quad \text{Este crecimiento de Madrid yo lo ve-o normal.} \\
\text{dem.m growth of Madrid 1sg.a 1 3.sg.m.a 2 see-1sg normal} \\
\text{‘This growth of Madrid strikes me as quite normal.’}
\]

\[
(7') \quad \text{P1 S c V O X}
\]

She concludes that the relevant clitics in CS (in (7), \textit{lo}) should be seen as attaching to the verb, in effect as prefixes, in both (6′) and (7′). She points out that their affixal status is supported by the fact that they can also appear ‘as a kind of suffix’ in non-finite verb forms and imperatives, as in (8):

\[
(8) \quad \text{a. para hacer-lo} \\
\text{purp do.inf-3sg.n} \\
\text{‘to do it’}
\]

\[
(8) \quad \text{b. ¡Haz-lo!} \\
\text{do.imp-3sg.n} \\
\text{‘Do it!’}
\]

and by the fact that, when there is more than one such clitic present, they display a rigid order that is more reminiscent of morphology than of syntax.

Taken to its extreme, Martínez Caro’s conclusion must be that CS lacks clitics of the type that are sensitive to LIPOC, and that \textit{me} in (6) and \textit{lo} in (7) should be reanalysed as prefixes; this is why she includes a position ‘c’ in the structural patterns (6′) and (7′) rather than leaving clitic placement to LIPOC. Her conclusion is shared by Miller & Monachesi, who, after a thorough survey of so-called clitic pronouns in Romance languages, state “qu’il y a une tendance, dans la majorité des langues romanes, à ce que les pronoms clitiques se comportent comme des éléments morphologiques” [there is a tendency in the majority of Romance languages for the clitic pronouns to behave like morphological elements] (2003: 114).
One of the minority of Romance languages in which clitics retain clitic status and therefore are sensitive to LIPOC is EP. Most of the phenomena to be discussed below also occur, *mutatis mutandis*, in Galician. Like all other Romance languages, EP possesses a set of non-A1 non-focusable personal pronouns, i.e., pronouns that cannot be used as Subjects of clauses and can never by themselves bear Focus.10 EP differs from sister languages in that the pronouns in question occur enclitically, i.e., immediately after and phonologically and orthographically attached to the verb, be it finite or non-finite,11 main or auxiliary. Consider the following examples:

(9) a. *Convidei-o* para *almoçar.*
    invite.1sg.pst-3sg.m.a2 purp lunch
    ‘I invited him to lunch.’

b. *Queremos* vê-la.
    want.1pl.prs see.inf-3sg.f.a2
    ‘We want to see her/it.’

c. *Vou-os* conhecendo melhor.
    aux.1sg.prs-3pl.m.a2 know.ger better
    ‘I’m getting to know them better.’

It is on the basis of just such data that Miller & Monachesi recognize enclisis as the ‘position par défaut’ [default position] (2003: 72) for EP clitics.

Before progressing, we should devote a few words to Brazilian Portuguese (BP) and also consider a recent challenge to the clitic status of the forms exemplified in (9).

3.2 An aside on Brazilian Portuguese

A reading of Azevedo’s (2005: 109–115) “non-exhaustive presentation” of clitics in EP and BP reveals that there is a distinction in Brazil between what he calls ‘monitored’ usage (which approximates to, but differs in various details from, EP and derives from norms taught at school) and what he calls ‘non-monitored’ BP, where – in distinction to EP – “proclisis is the general trend”, proclisis being the placement of the clitic immediately before the element to which it attaches. Proclisis applies in non-monitored BP to 1st and 2nd person pronouns. For the 3rd person, either non-clitic pronouns (i.e., *ele, ela, eles, elas* rather than *o, a, os, as*) are used in the position occupied by NP A2s

10. If Focus is required, a non-clitic pronoun preceded by the preposition a in a Focus-marking function appears in the canonical position: *Eu adoro-a a ela* ‘I love HER.’

11. The only non-finite form in EP to which the clitic cannot be attached is the past participle; Miller & Monachesi (2003: 73) report that this is, however, possible in Italian: *Lettolo, fu facile decidire* (lit. ‘It read, it was easy to decide.’).
(e.g., *Eu espero ele* ‘I await him’, cf. EP (*Eu* espero-o) or, in the singular, the 3rd person A3 clitic *lhe* is used with A2 meaning in proclitic position (e.g., *Eu lhe espero* ‘I await him’).

However, in a corpus analysis of the non-monitored spoken BP of ‘falantes cultos’ [educated speakers], Bagno (2005: 106–108) reports a massive preference for the strategy of zero realization of 3rd person pronouns, i.e., *Eu espero* in the sense of ‘I await him/her’. In a sample of 500 relevant transitive clauses, 479 (95.8%) displayed a zero pronoun. He attributes the dominance of this option to an avoidance strategy: “um modo de evitar o ‘certo demais’ e o suposto ‘errado demais’” [a way of avoiding the “too correct” (i.e., the use of a clitic, JLM) as well as the supposed “too wrong” (the use of a non-clitic form, JLM)] (Bagno 2005: 107); in Bagno’s written corpus, the frequency of zero realization falls to 40.1% (2005: 108). It will be clear that non-monitored BP presents a socio-psychologically complex situation which differs quite radically from EP; it will therefore be left out of consideration for the remainder of this chapter.

### 3.3 An aside on a challenge to the clitic analysis

A challenge to the clitic status of the EP phenomena exemplified in (9) has come from Luís (forthcoming), who reaches conclusions for EP that do not differ radically from the conclusion reached by Martínez Caro (2006) for CS: that the phenomena are morphological rather than syntactic elements. Let us consider Luís’s points. She points out that the putative enclitics are under certain circumstances subject to various sandhi processes: observe, for example, that in (9b) above *ver* ‘see’ appears as *vê* and a ‘3SGF’ as *la*; such processes are not found when the same elements appears as proclitics, cf. (10):

(10)  a. depois de eu a ver
        after 1SG 3SG.F.A2 see.INF
     ‘after I see/saw her’

 b. depois de eu *la *vê
        after 1SG 3SG.F.A2 see.INF
     ‘after I see/saw her’

If we follow Siewierska (2004: 34) and take the ‘variable host criterion’ (i.e., the requirement that the host should not vary as a result of cliticization) as being “definitive of clitic status”, the enclitic must therefore indeed be re-analysed as an affix, since EP infinitives lose the final r before 3rd person A2 forms. Siewierska also states (2004: 31) that ‘clitics tend not to’ exhibit allomorphic variation, which again argues for affixal status, since the 3rd person forms -o, -a, -os and -as appear either as -lo, -la, -los and -las or as -no, -na, -nos and -nas under specifiable conditions.
Luis (forthcoming), Luis & Otoguro (2004) and Luis & Spencer (2004) provide further arguments against clitic status, demonstrating that the putative enclitics:

- cannot be separated from the verb
- may intervene between the verb and tense/agreement suffixes
- when combined, display rigid ordering
- have idiosyncratic co-occurrence restrictions (e.g., 1sg.a3–2sg.a2)
- may enter into fusion (e.g., mo rather than me-o for 1sg.a3–2sg.m.a2)
- display syncretism in some of their forms (e.g., lho = 3sg/pl.a3.3sg.m.a2)

In the conclusion to this chapter, I will return to this challenge, arguing that the facts adduced by Luis and her collaborators (and which they take to point to a ‘morphological’ analysis, i.e., as affixes) are not incompatible with a ‘syntactic’ analysis in which clitics occupy a named position in the structural pattern laid down by the expression rules for EP. The position that the EP items in question are indeed clitic rather than affixal is defended by Vigário (1999), who argues that the relevant sandhi processes are not phonological in nature, as would be expected if the items were affixes.

4. Enclisis and proclisis in EP and CS

Enclisis may be the default for EP non-A1 clitics, but – as already anticipated in example (10) – in a large range of constructions, the clitic precedes the verb and attaches to it proclitically (this is not represented orthographically by a hyphen). Where the clause commences with a subordinator, for example que ‘that’, the pronoun appears between that subordinator and the verb. This qualifies the clitics as ‘special’ in Zwicky’s (1977) sense, since they can, it would appear, occur in different syntactic positions. Consider the following examples, which run parallel to those in (9) above:

12. The attachment of the proclitic is generally regarded as being looser than that of the enclitic. Not only are there no sandhi processes of the type mentioned in Section 3 but, for speakers who can accept the data in (ii) below with elision of the form under coordination (these data are based on Luis & Otoguro 2004: 336), the forms would qualify as what Siewierska (2004: 37), on the basis of Cardinaletti & Starke (1999: 169), terms ‘weak forms’, i.e., forms intermediary in strength between clitics and full pronouns.

(i) Comprou-o/*Ø e comeu-o.  
   buy.pst.3sg-3sg.m.a2 and eat.pst.3sg-3sg.m.a2  
   ‘He bought it and ate it.’

(ii) Não o comprou e comeu.  
    neg 3sg.m.a2 buy.pst.3sg and eat.pst.3sg  
    ‘He didn’t buy and eat it.’
This process, known in traditional EP grammar as 'inversion' and which yields a word order that is superficially similar to that found in CS, also applies where the clause in question is introduced by a prepositional subordinator of a non-finite clause (such as \textit{de} in (12a)), a question-constituent (such as \textit{por que} in (12b)) or a relative pronoun (such as \textit{quem} in (12c)):13

(12) a. \textit{Tenho \[de o convidar].}
    \begin{tabular}{llll}
    have & 1SG.PRS & PREP & 3SG.M invite \\
    \end{tabular}
    \textquote{I have to invite him.}'

    b. \textit{Por que se espalh-ou o medo?}
    \begin{tabular}{llllll}
    why & 3SG.REFL & spread-3SG.PST & DEF & fear \\
    \end{tabular}
    \textquote{Why did the fear spread?}'

    c. \textit{A rapariga por quem se apaixon-ou}
    \begin{tabular}{lllll}
    def & girl & PREP & who & 3SG.REFL fall.in.love-3SG.PST \\
    \end{tabular}
    \textquote{the girl with whom he fell in love}'

Subordinators, question-constituents and relative pronouns are according to Dik (1997a: 421) all typical occupants of P1. Their pragmatic function may be rather etiolated (Focus in the case of question-constituents and Topic in the case of relative pronouns), and subordinators may occupy P1 more by virtue of their being ‘relators’ in a Postfield language (Dik 1997a: 406–408), but they all count as “designated categories of constituents which must be placed in P1” (Dik 1997a: 409). Examples such as those in (12) may thus be interpreted as involving an application of LIPOC in conjunction with the assumption of an obligatorily occupied P1: the clitic is placed in the first available position after P1. As a result of the application of this principle, the structure exemplified in (6) for CS is excluded in EP. This observation is known in the Romance grammatical tradition as Tober-Moussafia’s Law – a ‘law’ that applies only to EP and Galician! – which states that ‘clitics cannot occupy absolute clause-initial position’ (Mira Mateus et al. 2003: 849).

13. Note that the preposition \textit{a} does not induce ‘inversion’ (\textit{Comecei a escrevê-lo} ‘I started to write it’) and that \textit{de} sometimes fails to induce ‘inversion’, so that \textit{Tenho de convidá-lo} is an alternative to (10a). (In the related language Galician, the clitic may even attach to the higher verb, so that ‘I have to give you some good news’ may be expressed as \textit{Teño que darche unha boa notícia, Teño que che dar unha boa notícia or Teñoche que dar unha boa notícia}; http://gl.wikipedia.org/wiki/A_colocaci%C3%B3n_do_pronome_en_galego, consulted 10.08.05), where \textit{che} is the 2nd person object clitic. All other EP prepositional subordinators than \textit{a} and \textit{de} obligatorily induce ‘inversion’, cf. (10).
In addition, the same phenomenon is observed when the clause begins with a range of ‘procliticizers’ (cf. Mira Mateus et al. 2003: 853: ‘proclisadores’). There is some variation possible here, but the following generally have a proclitic effect when in P1 position:

a. negatives, such as não ‘not’, ninguém ‘nobody’, nenhum ‘no’ and nunca ‘never’;
b. certain general quantifiers such as todo ‘all’, ambos ‘both’, só ‘only’, qualquer ‘any’, alguém ‘someone’, algo ‘something’, pouco ‘few’, bastante ‘enough, several’, and optionally muito ‘much, many’ and cada ‘each’;
c. correlative clause-conjoiners such as não só … como também … (‘not only … but also’), nem … nem … (‘neither … nor …’), ou … ou (‘either … or …’), quer … quer… (‘either … or …’);
d. temporal adverbs (in FG, layer 2 satellites) such as ainda ‘still’, já ‘already’, sempre ‘always’, raramente or raras vezes ‘seldom’;
e. propositional adverbs (in FG, layer 3 satellites) such as talvez ‘perhaps’, oxalá ‘hopefully’;
f. the Focus-markers também ‘also’, até ‘even’ and apenas ‘only’.

Some of these, e.g., não ‘not’ and those under (c), are strongly linked to P1 position, while others can occur either initially or later in the clause; procliticization occurs only when these items are in P1. The phenomenon is reminiscent of English, in which P1-positioned negatives, as well as the Focus-marker only and the temporal adverb seldom, etc. induce placement of the finite verb before the Subject:

(13)  a.  I have never heard such cheek!
    b.  Never have I heard such cheek!

(14)  a.  She only then understood.
    b.  Only then did she understand.

(15)  a.  Life’s goals are seldom fully attained.
    b.  Seldom are life’s goals fully attained.

In such cases, the P1-placement of the initial constituents in the (b)-examples is attributed to Focus assignment. So, too, we must assume that when the P1-placement of the items listed in (a) to (f) above turns them into ‘proclitics’, as in (16b) and (17b):

    (spelt Adorar-te-ei sempre)
    love-inf-2sg.a2-fut.1sg always
    ‘I will love you for ever.’

    b.  Sempre te ador-ar-ei.  
    (spelt Sempre te adorarei)
    always 2sg.a2 love-inf-fut.1sg
    ‘For ever will I love you.’
(17)  a. *Fala-se* russo também.
    speak.prs.3sg-refl Russian also
    ‘Russian is spoken also.’

    b. *Também se fala* russo.
    also refl speak.prs.3sg Russian
    ‘Also, Russian is spoken.’

The difference between the (a) and (b) sentences is that Focus is assigned to the adverbs in the latter, for emphasis or for contrast. The initial placement of these Foci reflects the pragmatic highlighting function of P1.

It was mentioned at the outset that P1 in Dutch can be used for Topic or Focus constituents. So, too, in EP P1 may also be used for Topic A2s, as in (18a), from Mira Mateus et al. (2003: 856), but the clause may also be formulated without inversion as in (18b), suggesting that *isso* then occurs in a pre-clausal position, as a kind of Theme (cf. Dik 1997b: 389–396):

(18)  a. *Isso te dissemos todos.*
    that 2sg.a3 say.pst.1pl all
    ‘That we all told you.’

    b. *Isso dissemos-te todos.*
    that say.pst.1pl -2sg.a3 all
    ‘That, we all told you.’

The conclusion must be, therefore, that all the EP procliticizing items just discussed are situated in P1, either because they are inherently P1-constituents (in the sense of Dik 1997a: 421) – such as subordinators, question-constituents, relative pronouns, or correlative coordinators – or because they have received either Focus or Topic function.\(^{14}\)

The most obvious prediction would be that only one of these phenomena can appear in any one clause, e.g., that a clause introduced by a subordinator could not also display fronting of a Focus or Topic element. However, we know that this is not impossible in English (*They said that never had any knight done such great feats of arms*), where the embedded clause has both a subordinator and a Focused satellite in initial position; in

\(^{14}\) The presence of a ‘proclitizer’ does not always in practice induce proclitic order. Initial sampling (this deserves further research) suggests that the default enclitic order can be used, ‘wrongly’ from the viewpoint of prescriptive grammar, where a clause introduced by a subordinator in P1 position offers communicatively important information, as in *O estudo […] revelou que bebês com cerca de dez meses concentram-se num foco de interesse* ‘The study […] revealed that babies round about 10 months old concentrate on the focus on interest’ (*Pública*, Público, 9 April 2006; p. 76) rather than the ‘correct’ *… se concentram … . It is as though the subordinate clause offers such important information that it behaves like a main clause (i.e., without a subordinator in P1).
EP, too, we find a comparable phenomenon in (19), where both *que* and *sempre* occur initially in the subordinate clause:

(19) *Disse que sempre me achou um homem atraente.*

say.pst.3sg comp always 1sg.a2 find-pst.3sg indf man attractive

‘He/she said that always he/she had found me to be an attractive man.’

Similarly, a subordinator can co-occur with the negative marker *não*, since both obligatorily occupy initial position:

(20) *Queria que não me acordassem.*

want.pst.ipfv.1sg comp neg 1sg.a2 waken.pst.sbjv.2pl

‘I would like you not to waken me up.’

However, it appears to be possible (at least in a *lapsus linguæ*, Vigário 1999: 223, although Luís forthcoming ascribes such possibilities to regional and idiolectal variation) for *não* also to display clitic properties and to appear proclitic to the verb (see also Mira Mateus *et al.* 2003: 866–867), perhaps to unburden the P1 position:

(21) *Queria que me não acordassem.*

want.pst.ipfv.1sg comp 1sg.a2 neg waken.pst.sbjv.2pl

‘I would like you not to waken me up.’

If these ‘procliticizers’ are indeed occupants of P1, then the proclitic position of the pronoun follows from the interaction between LIPOC and the structural pattern, with the clitic standing in the first available position after P1, which is the position immediately before the verb. One possibility would now be to devise two structural patterns, one for proclisis and one for enclisis. It is however theoretically more attractive to generalize over the two orderings by recognizing the default position of EP clitics, i.e., immediately after the verb, as also being the first available position after P1. In other words, in clauses such as those in (9) above, we must take the verb to occupy P1. This hypothesis will be explored in the following section.

5. The position of the verb in EP and CS

As we saw in §2 above, the idea that the verb could occupy P1 in CS ‘pro-drop’ clauses has been rejected by Martínez Caro (2006), who argues that such clauses in CS manifest an empty P1. This idea is nevertheless worth considering for EP. The claim that

15. It is possible that the negation here applies only to the predicate, so that the meaning is ‘I would like you to not-waken me,’ where ‘not-waken’ = ‘let sleep.’
the verb can occupy P1 is not entirely new in FG. Thus Mackenzie (forthcoming) argues that in Scottish Gaelic (typically typologized as VSO), the pervasive distinction between the independent and dependent forms of the finite verb correlates exactly with placement of that verb in or outside of P1 respectively. In (22a), it is claimed that *chunnaic* ‘saw.indep’ appears in P1 position, while *faca* ‘saw.dep’ in (22b) is denied that position by *am*, the interrogative-affirmative particle:

(22)  
a. *Chunnaic* mi an cù.  
see.pst.indep 1sg def dog
   ‘I saw the dog.’

b. *Am* faca tu an cù?  
inter.aaff see.pst.dep 2sg def dog
   ‘Did you see the dog?’

Interestingly, Nash & Rouveret (2002: 187) state on somewhat different grounds that Portuguese verbs with proclitics resemble dependent forms in Irish and Scottish Gaelic.

Extra evidence for P1-placement of the verbs in (9) may be drawn from an analysis of the future tense in EP. This is formed by the addition of endings (historically drawn from the auxiliary verb *haver*) to the infinitive form of the verb. The future and conditional tense forms require insertion of the non-A1 personal pronoun between the infinitive and the *haver*-derived suffix, for which reason the phenomenon is often treated as mesoclisis (cf. Luís & Spencer 2004). Consider example (23), with a future form (another example was already given as (16a)).

(23) *Fal-ar-lhe-ei* amanhã.  
spelt *Falar-lhe-ei amanhã*  
speak.inf-3sg.a3-fut.1sg tomorrow.
   ‘I’ll speak to him/her tomorrow.’

Although Luís & Spencer (2004), like Zwicky (1977) long before them, see the existence of just such forms as evidence for the affixal status of Portuguese clitics (because the alleged clitic occurs between stem and suffix), Vigário (1999) argues that such forms as *falar-lhe-ei* have two stresses (on *ar* and *ei*), suggesting two phonological words (*falar-lhe* and *ei*), in keeping with the historical derivation of *falarei* ‘I’ll speak’ from *falar* ‘speak.inf’ and *hei* ‘I have’. The clitic would in this analysis be added to the word *falar* in the formation of *falar-lhe-ei*. Vigário (1999: 232) supports this with the case

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16. To my knowledge, placement of the verb in P1 was first proposed within FG by Helma Dik (1995) for Ancient Greek.

17. Future and conditional forms with ‘mesoclisis’ are avoided in spoken EP except in formal declarations; interestingly, they occur frequently in television and film subtitles, presumably to save space.
of *satisfazer-se-ia* 's/he would satisfy himself/herself', where the clitic *se* is attached to *satisfazer* 'satisfy.\text{INF}'. The point is that the cliticless conditional is formed from an allomorph of *satisfazer*, namely *satisfar-* and takes the form *satisfaria* 'would satisfy' rather than *satisfazeria*, which argues against mere affixlike insertion of the clitic. After providing additional arguments, Vigário concludes that "mesoclisis is not formed in the lexicon, but is rather the result of a syntactic construction" (1999: 234).\(^{18}\)

From the point of view of the present FG analysis, we can regard *falar* in (23) as occurring in P1 position, with *lhe* showing up where we would expect a clitic, namely immediately after P1. The *haver*-derived suffix is finite, and will appear in the verb slot of the structural pattern for EP, of which more in \S 6 below. ‘Mesoclisis’ thus reduces to a variant of enclisis.

One point requires clarifying before we continue. FG permits in principle the multiple filling of a slot. For instance, De Groot (1989) argues that in Hungarian the P1 position, which is used for Topic constituents, can be occupied by various elements, provided that they are all Topics of the ongoing clause. We have already seen, in the discussion of example (19) in \S 4 above, instances of multiple filling of P1 in English and EP. And EP (as does Serbian/Croatian, see Section 5 above) similarly allows multiple filling of the post-P1 clitic position, with a maximum of 3 clitics being possible. These are strictly ordered according to the following formula: impersonal *se* + A3 + A2. Combinations of A3 and A2 generally undergo various morphophonemic processes, often leading to monosyllabic portmanteau forms. Consider the following examples of multiple filling:

\begin{itemize}
\item (24) a. *Disseram-mo.*
  \begin{itemize}
  \item *say.pst.3pl-1sg.a3+3sg.a2*
  \item ‘They told me (it)’
  \end{itemize}
\item b. *Deu-se-lhe poder.*
  \begin{itemize}
  \item *give.pst.3sg-impers-3sg.a3* power
  \item ‘He/she was given power.’
  \end{itemize}
\item c. *Ou se da-va razão à Greenpeace ou não*
  \begin{itemize}
  \item either *impers give.pst.ipfv.3sg* right \
  \item *to-def Greenpeace or neg
give.1sg.alg+3sg.a2* \
  \item *dava.*
  \item ‘Lit. Either right was given to Greenpeace or it was not given to them.’
  \end{itemize}
\end{itemize}

‘Either Greenpeace were agreed with or they were not agreed with.’

(Adapted from barnabe.weblog.com.pt/arquivo/102895.htm, consulted 28/07/05)

\(^{18}\) Although Luis & Spencer (2004: 182) claim to ‘see no merit’ in this analysis, they do not address the case of *satisfazer-se-ia.*
As the examples show, there is no difference in the ordering of elements in proclitic and enclitic clusters, which is further evidence for the unity of the post-P1 clitic position.

Note that the contraction of A3 and A2 pronouns to one clitic word may have been stimulated by their occupying one position in the structural template. Thus a sequence of me (1sg.a3) + o (3sg.a2) is not reduced to mo in Dá-me o livro ‘Give me the book’), since me and o here occupy different positions, me being in the clitic position and o being part of the occupier of the A2 position.

The question remains of the pragmatic role of the verb as occupier of P1. It will be clear that the verb in this position is neither Topic nor Focus (although it can be in Ancient Greek, cf. Helma Dik 1995). But interpersonal grammar covers more than just these pragmatic functions. For English, in which only sparing use is made of P1 for Topic and Focus assignment, and P1 is little more in the main clause than the default location for Subject, Mackenzie (2000) argues that P1’s major role is to signal illocution. The following generalizations, although vastly oversimplified, are a starting point for understanding the role of P1 in making illocution identifiable: where a verb occupies P1 in English, this signals Interrogative or Imperative illocution, with the verb’s form (auxiliary or infinitive respectively) indicating the precise illocutionary status of the clause; where P1 is occupied by a non-verb, this indicates Declarative mood. Consider the following examples:

(25)  a. Julian can sing. (non-verb in P1 > Declarative)
    b. Can Julian sing? (auxiliary verb in P1 > Interrogative)
    c. Sing me a song, Julian. (infinitive form in P1 > Imperative)

Note also, from examples like (22b), that other languages, in that case Scottish Gaelic, regularly use placement of a particle in P1 to show illocutionary status.

In EP, an initial finite verb form in a main clause can signal either Declarative or Interrogative illocution, the difference being expressed later in the clause, through intonation or punctuation. Imperative is signalled by an initial verb with a special imperative form or, in the case of a polite Imperative, a subjunctive form. We may therefore conclude that the EP verb occupies P1 as a default, much as the Subject is the default occupant of P1 in English.

EP, with the verb as the default occupant of P1, thus emerges as being very different, despite superficial similarities, from CS, in which the verb can only appear in V position (Martínez Caro 2006).

6. The subject in EP and in CS

In order to understand the contrast between the positioning of non-A1 pronouns in EP and CS, we have had to consider the positioning of the verb. It is now necessary to
turn to the Subject, in order to reveal further relevant contrasts between EP and CS. In both these languages an overt NP Subject is not required grammatically (the phenomenon known as ‘pro-drop’), and consequently the Subject has a somewhat appositional character, as mentioned for Spanish by Siewierska & Bakker (2005: 204, 216). Unsurprisingly, this looser attachment allows the Subject to take up various positions in the clause. This is demonstrated for CS by Martínez Caro (2006) and Hannay & Martínez Caro (2008), who distinguish two or possibly three pattern positions for the Subject in that language. The crucial observation I wish to emphasize for EP is that the presence of a Subject in an EP clause has no effect whatsoever on the proclitic or enclitic positioning of pronouns as documented above. In other words, the appearance of a Subject in clause-initial position does not have the effect of denying P1 position to the verb. How Subjects are added to the EP clause is something I will return to below.

But let us now consider (26a) as a variant of (9a) with an explicit Subject:

(26) a. Eu convidêi-o para almoçar.
   1sg invite.1sg.pst-3sg.m.a2 purp lunch
   ‘I invited him to lunch.’

   1sg 3sg.m.a2 invite.1sg.pst purp lunch

If eu ‘I’ had occupied P1 position, we would expect proclisis, as in (26b), but this is ungrammatical in EP. The conclusion I wish to draw is that the EP Subject never appears in P1, in contrast to CS as described by Martínez Caro (2006). A corollary is that Subject does not have its own slot in the EP structural pattern; how it is added to the clause is a point to which we will return below.

Let us propose that the expression rules of FG for a grammar of EP recognize the following structural pattern as basic:

(27) P1 CL V A2 A3

This pattern captures the ubiquity of P1 and the requirement that ‘objects’ (here more properly shown as second and third arguments respectively) should follow the verb. The verb’s default position is in P1, as mentioned, but it occupies the V position (the retreat position, cf. fn. 5) whenever P1 is filled otherwise. For example, an ‘object’ may appear in P1 if Topic, as in (18a) above. Finally, the structural pattern can recognize one position for all clitics, namely the position immediately after P1: if the verb occupies P1, the result is called ‘enclitic’; if P1 houses some other element, we get ‘proclisis’.19

19. An even more reduced version of (27) is thinkable, and perhaps theoretically preferable, without the CL position, since the placement of the clitic immediately after P1 follows from the operation of LIPOC.
Let us exemplify this conclusion with some simple examples. In (28), the verb is in P1, whether or not there is a specified Subject, and the clitic follows that P1 position, yielding enclisis. In (29) it is the negative não that is in P1 position, and again the clitic follows that position, this time yielding proclisis.

(28)  

a. *Demiti-u se.* (spelt *Demitiu-se.*)

resign-3sg.pst 3sg.refl

'S/he resigned.'

b. *A ministra demitiu-se.*

def.f minister-f resign-3sg.pst 3sg.refl

'The minister resigned.'

(29)  

a. *Não se demiti-u.* (spelt *Não se demitiu.*)

neg 3sg.refl resign-3sg.pst

'S/he did not resign.'

b. *A ministra não se demiti-u.* (spelt *A ministra não se demitiu.*)

def.f minister-f neg 3sg.refl resign-3sg.pst

'The minister did not resign.'

Interacting with this basic pattern but separate from it are various rules for the initial, medial or final placement of adverbials, known in FG as satellites. Consider the following examples, which show the placement of *ontem* 'yesterday' in each of these positions:

(30)  

a. *Ontem não me levantei.*

yesterday neg 1sg.a2 raise-pst.1sg

'Yesterday I didn't get up.'

b. *Lisboa tornou-se ontem numa cidade-fantasma.*

Lisbon turn-pst.3sg-refl yesterday in.indf town-ghost

'Lisbon yesterday became a ghost town.'

c. *Não se fez nada ontem.*

neg 3sg.refl do.pst.3sg nothing yesterday

'Nothing was done yesterday.'

The rules determining satellite placement in EP still have to be investigated but they clearly will be partially sensitive to pragmatic functions. But there are other factors known to determine the placement of satellites, too, such as the layer at which they are situated at the representational level (cf. Dik *et al.* 2005: 197–199 for further discussion). The fundamental point is that the expression rules handling satellites must add those satellites in various interstices of (27), notably in the position preceding P1 (as in (30a), in the position between V and A2 (as in (30b), and in the position following A3 (as in (30c)). Only those satellites which have procliticizing force (as specified in §4 above) can be placed in P1.
The final leg of my proposal for EP is that the positioning of the Subject is handled by a mechanism which is akin to that for the placement of satellites. As mentioned before, the FG analysis of pro-drop languages such as EP, as represented by that of Siewierska & Bakker (2005: 216), is that in a sentence such as (30b) above the Subject of tornar-se 'become', namely Lisboa 'Lisbon', stands in apposition to the affix -ou. In my view, this appositional status should be interpreted as involving restrictive apposition, as opposed to the non-restrictive appositions discussed by Hannay & Keizer (2005) as constituting distinct discourse acts, since the Subject is part of the same discourse act as the other constituents of the clause. Notice that like any other appositional element, the Subject will not occupy a slot in the structural pattern (27); it will be satellite-like in being added to the basic structure defined by that pattern.

The Subject in EP will therefore be seen as occurring in restrictive apposition to the marking on the verb, finite or non-finite (note that EP infinitives can be conjugated), rather than, as has been traditional but remains paradoxical, the verb being seen as agreeing with an (often absent) Subject. Consider the following examples:

\[(31) \begin{align*}
\text{(a)} & \quad \text{antes que os pais cheguem a casa } \\
& \quad \text{before def parents arrive.prs.sbjv.3pl to home}
\text{(b)} & \quad \text{antes de os pais chegarem a casa } \\
& \quad \text{before def parents arrive.inf.3pl to home}
\end{align*}\]

In (31a) os pais stands in restrictive apposition to the finite ending -em, in (31b) to the non-finite ending -em.

In FG, Subject is a so-called syntactic function which can be assigned to an argument of a predicate. In EP, Subject can be assigned to the first argument (leading to the active voice) or to the second argument (leading to the passive voice). If the Subject refers to the speaker, addressee, or a non-lexically specified entity, the expression rules will express it as a verbal affix in combination with a pronoun under specifiable pragmatic conditions including the assignment of the pragmatic function Focus; if these conditions (to be set out in the following paragraphs) are not fulfilled, the Subject will be expressed merely as a verbal affix – this is in essence the FG account of pro-drop.

A further parallel with satellites resides in the fact that a lexical or pronominal Subject in EP can occupy initial, medial or final position. It has been argued by Costa (2004) that the positioning of the Subject is dependent upon pragmatic factors, although I should stress that some of the data he adduces have been doubted by my native-speaker informants, who typically prefer the deployment of cleft constructions and/or prosodic prominence for the expression of the pragmatic distinctions he makes. Nevertheless, let us consider the following data, with interpretations derived from Costa’s analysis.
In all four sentences os pais ‘the parents’ is Subject; in (32a) it appears in initial, in (32b) and (32c) in medial, and in (32d) in final position. And in all four sentences, the verb venderam (‘they sold’) is in P1 position, lhe (‘to him/her’) in CL position and o carro (‘the car’) in A2 position. The various positions of the Subject are associated with different dispositions of the pragmatic functions Topic and Focus. In (32a), os pais is Topic and o carro is New Focus: under these circumstances, the Topic appears in a position preceding P1 (we will return to this apparent paradox below) and the Focus in the default position for the argument in question (here A2, hence after the clitic position). In (32b), with medial positioning of the Subject, the intended reading (resisted by many informants) is a neutral statement, with neither os pais nor o carro in Focus; and in (32c), with the same word order but with prosodic emphasis on both os pais and o carro (informants here volunteer a cleft construction as preferable), the intended reading is one of radical correction of a misapprehension: yes, there was a sale, but you are wrong about both vendor and buyer; both Subject and A2 are therefore in Contrastive Focus. In (32d), finally, which informants do accept if given an explicit context (e.g., the continuation, não os avós ‘not her grandparents’), the Subject alone is in Contrastive Focus.

Whatever the exact status of these data (which clearly will require further research), it is clear that the position of the Subject is variable relative to a static clausal syntax. I propose the following rules for the placement of the Subject in EP (as reflected in the data under (32)):

a. If the Subject is Topic, place it before P1 (initial placement);
b. If the Subject has no pragmatic function, place it after the V position (medial placement);
c. If the Subject is ContrFocus and the A2 and/or A3 is also ContrFocus, place Subject after the V position (medial placement);
d. If the Subject is ContrFocus and the A2 and/or A3 is not ContrFocus, place Subject after A3 (final placement).
In subordinate clauses, for example those introduced by *que* ‘that’, the same rules apply (although (b)–(d) probably apply much less frequently, since subordinate clauses are not usually the arena for pragmatic contrasts), with the difference that in rule (a) the Subject has to appear ‘within the clause’, i.e., between the P1 and the CL position, cf. (33):

(33) *que* (P1) *os pais* (CL) *lhe* (V) *venderam* (V) *o carro*  
that the parents 3sg.A3 sell.PST.3PL the car

‘that her parents sold her the car’

In FG terms, we here see the Principle of Domain Integrity (Dik 1997a: 402) at work, a principle that induces constituents to remain ‘within their proper domain’.

What we observe, therefore, is that Subject and satellites are in effect rivalling for the same three intraclausal positions: initial, medial and final. How that competition is resolved is a matter for future research. But we should point out that the appositional analysis helps us to understand the positioning of the Subject in such sentences as (32a): P1 is seen not as the absolute initial position of the clause, but as the initial position of the structural pattern (as shown for EP in (27) above), to which independent mechanisms, such as satellite insertion and/or appositional procedures, can add further components expressing those elements of the underlying representation not covered by the pattern.

The major advantage of this analysis, in my view, is that the relatively simple structural pattern for EP reflects its status as a language with fairly low NP-density (as indeed has been claimed for Spanish, cf. Bentivoglio 1992). Where the Subject is pronominal and not in Focus, there will be no overt expression (‘pro-drop’); given the frequency with which this happens, it seems appropriate that there should be no S position in the pattern which will so often remain empty and that the specification of a Subject should be left to a separate, although independently needed, principle of apposition. This approach has been preferred to introducing more than one S position into the structural pattern (as has been proposed for CS by Hannay and Martínez Caro 2008), and to proposing further pragmatically laden P positions (such as Hannay and Martínez Caro’s P0). As far as I can see, this aspect of my proposal could also be applied to the CS data, and ultimately the choice between the two approaches may be a matter of taste. But my proposal does line up with Costa’s conclusion (2004: 160) that “the intuition that European Portuguese is an SVO language is derived.”

7. Conclusion

This chapter has considered the question of the placement of second-argument, third-argument and impersonal clitics in EP against the backdrop of the FG analysis of CS word order in Martínez Caro (2006) and in Hannay & Martínez Caro (2008). It has been shown that the constituent order of EP results from the interplay of (at least) a single and minimally specified structural pattern, LIPOC, and the independently
required principles of restrictive apposition and satellite insertion. The specific difference between EP and CS has boiled down to the insight that EP allows placement of the verb in P1 position, whereas this is excluded in CS. It is the occupancy of that position in EP that determines the choice between proclitic and enclitic placement of the clitics on which this chapter has focused. In very simple terms: if the verb is in P1, we have enclisis; if something else is in P1, we have proclisis.

A further difference between the approach put forward here and Martínez Caro’s (2006) analysis of CS is that the EP clitics are taken not to be affixal: in other words, it is proper that their positioning should be dealt with by the rules dealing with constituent order. In Section 3, it was pointed out that various articles (Luís forthcoming, Luís & Otoguro 2004; Luís & Spencer 2004) have defended affixal status for EP clitics too, arguing that they (a) cannot be separated from the verb; (b) may intervene between the verb and tense/agreement suffixes (as in ‘mesoclisis’); (c) when combined, display rigid ordering; (d) have idiosyncratic co-occurrence restrictions; (e) may enter into fusion; and (f) display syncretism in some of their forms.

However, none of these correct observations seems to me incompatible with a ‘syntactic’ analysis. Let us consider them one by one: (a) the inseparability of enclitic and verb follows from the juxtaposition of P1 and CL in (27); (b) ‘mesoclisis’ has been shown to reduce to enclisis and again to involve the P1 – CL sequence; (c) rigid ordering is neutral between morphology and syntax: the se – A3 – A2 ordering (see Section 5) can be specified syntactically as well as morphologically; (d) idiosyncratic co-occurrence restrictions are similarly not restricted to morphology: there are dialects of English in which two prepositionally unmarked object pronouns are impossible (*I sent you them), but no one would see this as arguing for morphological status for English pronouns; (e) a possible explanation for fusion has been given in Section 5 above, namely reduction of anomaly of the multiple occupancy of a slot; and (f) syncretism can be seen as a by-product of fusion.

The chapter, finally, has demonstrated the applicability of FG as a suitable model for the comparison of languages. Since it appeals to the interplay of various universal principles, which interact in different ways in different languages, it becomes possible to pinpoint contrasts between languages very precisely. Without the apparatus offered by FG, it would have been impossible to determine that the contrast between EP and CS clitic placement is determined by differential access of the verb to the structural clause-initial position.

References


Modals and typology

English and German in contrast

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One approach to contrastive linguistics is to set up typological categories and then to compare languages in relation to these categories. After a critical analysis of prototype theory we introduce the notion ‘typological cluster’, and apply this notion to modality. We propose a set of criteria which identify the category of modality. Some English modal verbs meet all the criteria and are said to be central members of the cluster. Others frequently fail to meet the criteria and are called secondary members. Using data from a translation corpus, this analysis can explain some contrasts between modals in English and German, notably can and können, and should and sollen.

1. Modality as a typological category

In contrastive linguistics we often want to say that expressions in two languages are different in some respects but similar in others. One way to do this is to compare the two languages in relation to some abstract level of analysis which has independent justification. In this chapter I propose that typological categories are a level of analysis which can yield useful insights when comparing modal verbs in English and German. I shall argue that a valuable concept here is a typological cluster, a development of prototype theory.

The next sections explain why a new approach to modality is needed (1.1), and then review prototype theory in psychology and lexical semantics (1.2), in grammar (1.3) and in typology (1.4). I discuss previous work on modality that draws on prototypes (1.5), and then set out the framework that we shall use in this chapter (1.6), proposing a set of criteria which characterise the category of modality. Section 2 examines some English modal verbs with respect to the criteria, and section 3 contrasts English and German modal verbs using data from the intersect translation corpus (Salkie 2006).

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Some uses of modal verbs in the two languages meet all the criteria, but others do not. I argue that this analysis can explain some contrasts between English and German modal verbs.

1.1 Defining modality

Linguists disagree radically about how to define modality. Among the main proposals are:

a. A broad interpretation. Palmer’s extensive survey, for instance, says that “modality is concerned with the status of the proposition that describes the event” (2001: 1). The weakness of this approach is its vagueness: what it includes and excludes is unclear.

b. A narrow definition. Van der Auwera & Plungian say that they “propose to use the term ‘modality’ for those semantic domains that involve possibility and necessity as paradigmatic variants”, a definition which they describe as “relatively restricted” (1998: 80). This strategy unfortunately excludes some semantic domains, such as volition and evidentiality, which many scholars would want to include.

A way to resolve this dilemma is to distinguish explicitly between central members of the modality category which most linguists would accept, and secondary ones whose status is disputed.

1.2 Prototypes in cognitive psychology and lexical semantics

This approach to linguistic categories is usually associated with prototype theory. In a series of experiments in the 1970s, the psychologist Eleanor Rosch asked subjects to say how good an example something is of a related superordinate category (cf. Rosch 1973, 1978 [2004]). With “bird”, for instance, the items offered included robin, turkey, penguin and bat. Subjects consistently said that a robin was a very good example of a bird, but rated the others lower on a scale through “moderately good example” to “bad example” and “not an example at all”. Hence robins were proposed as prototypical birds, the best example of the category of bird. The contention was that the prototype was more likely to be freely volunteered as an example of the category, that the prototype is acquired earlier by children, and that other items are judged to belong to a category by implicit comparison with the prototype.

Rosch never suggested that all categories are organized with reference to prototypes, and played down the significance of her work for psychology, saying that it does not “constitute a model of how categories are processed (how categorizations are made) in the minds of adult speakers of a language” (1978 [2004: 92]). Nonetheless, many linguists have been eager to use prototype theory as a key part of lexical semantics (for a recent overview see Taylor 2005). Prototypes are a key part of the Cognitive Linguistics framework (cf. Evans & Green 2006: 249 ff.), and are assumed with little
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discussion in many recent grammars of English (e.g., Greenbaum 1996: 92; Biber et al. 1999: 59; Huddleston & Pullum 2002: 54, 172 & 531). Prototypes have been linked with the notion of “family resemblances” by Wittgenstein. In his famous discussion of “games”, Wittgenstein (1953: 31–32) said that there is no property which is common to all games, but rather a series of similarities and relationships. Prototypes have also been linked to semantic categories which supposedly have “blurred boundaries” (Geeraerts 1989: 592–593). Prototype theory was a strong influence on one of the most innovative English dictionaries of recent times, the New Oxford Dictionary of English (Pearsall & Hanks 1998), recently revised as the Oxford Dictionary of English (Soanes & Stevenson 2003); cf. the discussion in Hanks (2005: 193–194).

Criticisms of prototypes as an approach to lexical semantics are not lacking, however. Allan (2001) concludes his discussion with the words: “All in all, prototype semantics has failed to deliver startling insights into semantics” (339). Kleiber was still more damning, referring to “l'imprécision” of prototype theory and “une confusion fébrile dans les concepts employés” (1990: 185). Another severe critic is Wierzbicka, who offers explicit analyses for some of the words that were often cited as resistant to such treatment without prototypes. She also argues that Wittgenstein was simply wrong about games: all games involve doing something for pleasure, and include rules (cf. Wierzbicka 1990 [2004: 468]). She concedes, though, that for certain words it is helpful to think in terms of prototypes.

On the question of indeterminate category boundaries, everyone agrees that the match between semantic categories and the real world is sometimes not straightforward. It does not necessarily follow that the categories have unclear boundaries: a category may be perfectly clear, but hard to apply in certain cases because of the way the world is. A recent discussion by Cruse & Croft (2004: 95), which is generally sympathetic to prototype theory, notes that recent work on categorization includes proposals that concepts such as “bird” are not fixed, but are construed dynamically in particular contexts, depending on real world knowledge and other factors. In this approach to categorization, boundaries of concepts can be seen as clear and determinate, but the way in which they are construed on given occasions is variable.

As for the Oxford Dictionary of English, it appears that the authors simply assumed that any distinction between core senses and sub-senses of a word involved prototypes. This is not so: in many cases, the sub-sense offered in the dictionary is just a specialized use of the core sense: thus for perfuse they give a core sense of “permeate or suffuse with a liquid, colour, or quality” and a medical subsense of “supply [an organ or tissue] with a fluid by circulating it through blood vessels”. This is hardly recognisable as an application of prototype theory.

To sum up, it appears that some cognitive and semantic categories exhibit prototype effects of the kind that Rosch described. How many categories behave in this way is unclear. The issue of fuzziness at category boundaries, and the distinction between
primary and secondary senses of a word, have sometimes been seen as indissolubly linked with prototype theory, but in fact they are not. Whether the influence of prototypes in these areas has been beneficial remains controversial.

1.3 Prototypes in grammar

Since Rosch’s work became widely known, linguists have tried to apply her framework to grammatical categories, particularly word classes. Before surveying some of the key work of this type, some words of caution are in order. Firstly, it is not clear that grammatical categories can sensibly be said to exhibit prototype effects. No one has done experiments where grammatically untutored native speakers are given a list of words and asked to rank them as good or bad examples of the category “preposition”. Grammarians have, however, proposed sets of criteria for categories such as “preposition”, and found that some words meet all the criteria, while others only meet some. This phenomenon has been called variously \textit{gradience, fuzziness} or \textit{squishiness}; we return to this topic below.

An issue which has been linked to gradience, but which does not have a necessary connection with it, is whether grammatical categories can be defined (in whole or in part) in semantic terms, or whether only formal and functional criteria should be allowed. The claim that grammatical categories have a semantic basis is central to Cognitive Linguistics, and is linked to prototypes by Winters (1990) and Langacker (1999), among others. Thus Langacker makes many claims like this one:

\begin{quote}
The conceptual referent of a prototypical noun is a physical object, and for a prototypical verb, an agent-patient interaction. (1999: 22)
\end{quote}

Whether this is a valid approach to nouns and verbs is not our primary concern here: the point is that one can make similar claims about prototypical nouns and verbs using syntactic and functional criteria.Prototypes and semantically-based grammar are two separate theoretical positions.

Another question raised by the quotation from Langacker is whether his use of the term “prototypical” has any implications for cognition. The term as he uses it appears to mean little more than “basic, straightforward, easy to analyse, a good starting point”. Many introductions to grammar introduce a concept of a “basic” or “simple” sentence (active, declarative, etc.); similar terms in the literature include “kernel sentence” from the early generative literature, and “canonical construction” in Borsley (1999) and Huddleston & Pullum (2002). It may be useful to take these simple constructions as a point of departure in grammatical analysis, but unless they exhibit prototype effects, and have the other consequences claimed for prototype categories (early acquisition, psychological salience, etc.), I see no good reason to call them prototypes.

A notion that has been linked to prototypicality is \textit{markedness}. A widely accepted understanding of markedness applies it to opposed pairs where one pole (the unmarked
one) applies unless special conditions hold – in which case the other, marked member is found. Thus voiced vowels are unmarked, voiceless ones marked, whereas for stops and fricatives it is the other way round (cf. Waugh & Lafford 2005: 496). The claim is that unmarked categories are more common and are acquired earlier, and that in historical change, unmarked categories evolve into marked ones only in particular environments, but the reverse process tends not to be restricted in this way. For example nasal vowels (marked) often emerge from oral ones because of a nasal consonant nearby, while oral vowels emerge in many different ways (Waugh & Lafford 2005: 492).

There is a large literature on markedness in language acquisition: for L1 a useful survey is Dressler (2003), and for L2 we can refer to the “markedness differential hypothesis” of Eckman (1977) and subsequent work. Markedness appears to be a real phenomenon in grammar with discernable consequences, whereas prototypicality is less certain – though Haspelmath (2006) argues that for many phenomena which are usually described in terms of markedness, simpler alternative accounts are available. Most of the supposed properties of grammatical prototypes discussed in Winters (1990) can be reformulated in terms of markedness, as she herself appears to recognise (1990: 304).

With these caveats we can turn to the use of prototypes in English grammar. What we find is mostly a close parallel to the misconceptions in lexical semantics: gradience and indeterminacy are taken to be linked to prototype theory, and so is the distinction between “core” or “central” uses of a grammatical form and “peripheral” or “secondary” ones. Although gradience in grammar is an important issue, it is not directly relevant to the analysis of modality offered later in this chapter, so we do not need to discuss it here in detail. We can note that gradience is discussed repeatedly in Quirk et al. (1985), almost exclusively in relation to cases where a word or grammatical construction can be assigned to one of two categories: examples include whether for should be treated as a subordinating or co-ordinating conjunction (90), or the multiple criteria for distinguishing between different types of multi-word verb (1160–1161). In the recent successor to this grammar, Biber et al. (1999), similar issues are discussed with a reference to the core-periphery distinction, and an allusion (probably puzzling to most readers) to different types of bird (1999: 59); but their discussion adds nothing substantial to the treatment in Quirk et al. (1985).

Huddleston & Pullum (2002) gloss the term “prototypical” as “most central” in statements like this:

Prototypical NPs – i.e., the most central type, those that are most clearly and distinctively NPs – are phrases headed by nouns and able to function as complement in clause structure (2002: 54).

Elsewhere, Huddleston & Pullum do not bother with the word “prototypical”:

The most central type of relative clause functions as modifier within a nominal head in NP structure (2002: 63)
It is not clear that using the term “prototypical” adds anything to “most central”. In their section on modality, Huddleston & Pullum make regular use of the term, for example:

Prototypical deontic modality is subjective, with the speaker as deontic source, the one who imposes the obligation or grants permission. (2002: 183)

They also, however, use a plethora of other terms in this section with virtually the same import: “core concepts in modality” (177), “typically”, “characteristically” and “default” (174). The following statement says basically the same thing as the one just cited from p. 183:

Modality is in the first instance a matter of the speaker’s attitude… (173; italics added)

It appears, then, that Huddleston & Pullum are simply taking over the widespread loose use of “prototypical” to mean “basic, simple, clear” that we noted above, rather than being committed to prototype theory in any serious way. This is characteristic of much work that uses this term.

1.4 Prototypes in typology

Many typological studies which use the term “prototype” have a similar loose connection to prototype theory proper. A good example is Shibatani (1986), which proposes a number of features that characterise passive constructions in the languages of the world. Together these make up what he calls the “passive prototype” (1986: 837). He argues that some features are more fundamental than others, and suggests that his approach shows up similarities between passives and related constructions in a new and insightful way. This is important typological work, but the term “prototype” is not useful as a label for Shibatani’s set of features as he does not make any claims about typicality, cognitive salience, or any of the other features of prototypes. Similar remarks could be made about work on transitivity as a prototype by Hopper & Thompson (1980).

The most comprehensive attempt to use prototype theory in typology is made in Croft (1990, 2003). Croft notes that the zero-coded verb form (the one with no inflections) in many languages is third person singular, present, positive, realis and active. He calls this cluster of features a typological prototype, and proposes that this kind of combination of features represents the “core” members of the category, with “peripheral” members lacking some of the features (Croft 2003: 163). This is a fruitful strategy, which I shall develop further in this chapter in relation to modality, but there are problems with it. Firstly, the evidence for prototypicality turns out to be the same as the evidence for markedness: core members of a category are supposed to be more frequent in texts, more likely to have zero coding, and more versatile in their behaviour.
Modals and typology

(Croft 2003: 163). These are essentially the same criteria that Croft used to characterise the unmarked member of a markedness relationship, as he himself notes. Secondly, text frequency is not easy to establish, as it is affected by text genre, the written vs. spoken distinction, the type-token distinction, and other linguistic variables which may not be relevant in a particular case. Thirdly, it is not clear that Croft’s typological prototypes exhibit prototype effects. Croft refers to Rosch, and says that “to be typical, [core members of a category] must be commonly perceived and attended to by human beings” (2003: 163); but his criteria of textual frequency, zero coding, and behavioural versatility do not add up to “typicality” in Rosch’s sense. Indeed, zero coding arguably means that unmarked items may be less salient than marked ones.

The solution to these problems is to keep Croft’s basic idea but to divorce it from prototype theory (and also from markedness theory) by using different terminology. I propose to use the term typological cluster for any collection of linguistic features which have typological significance. The claim will simply be that a particular collection of features contributes to the typological analysis of the world’s languages. Terms like noun, verb, subject, and relative clause are typological clusters: each can be seen as a collection of various linguistic features, and there are competing proposals about which features are most relevant and most important. Based on the analysis of many languages, it is a reasonable hypothesis that these terms are likely to be useful in describing any language. Any proposal to set up a typological cluster has to show that it does indeed have significant value in analysing a range of languages, and that the features claimed to be in the cluster are the right ones. Shibatani’s passive prototype, and the transitivity prototype in Hopper & Thompson, are both typological clusters.

A typological cluster is simply a list of features: it makes weak typological claims. Stronger claims are made by what we can call typological hierarchies, which are often represented by semantic maps (cf. Haspelmath 2003; Van der Auwera & Plungian 1998; de Haan 2004). Such hierarchies claim that a combination of features only occurs in some language if another combination occurs: a well-known example is the noun phrase accessibility hierarchy of Keenan & Comrie (1977).

The strongest type of claim involves what we can call a typological core structure: the claim in such cases is that across the world’s languages, such structures are more likely to occur, more stable across time, easier to acquire and textually more frequent than structures which depart from the core. Examples might be the “typological conspiracies” discussed by Croft (2003: 226 ff.).

Typological work on modality is at an early stage: in this domain we should therefore be making proposals about typological clusters rather than stronger claims about hierarchies or core structures. However, even a typological cluster implicitly makes claims about centrality: items which have all the features in the cluster will be more central to the category than those which only have some of the features.
Whether this has any significance beyond descriptive convenience should become clear with further research. I will use the terms “central” and “secondary” for clusters, reserving the terms “core” and “periphery” for more advanced claims about core structures.

1.5 Prototypes and modality

One paper which uses prototype theory to analyse an English modal is Aijmer (1986). Aijmer argues that the history of will can be seen as a series of prototypes which developed into new prototypes. The analysis is mostly convincing, but the use of prototypes does not assist it. Aijmer says that “the prototype functions as a focus from which the other meanings can be derived by extension” (1986: 12); but it is the entire set of features of the meaning of will at each stage which constrain possible changes, not a subset of features which are prototypical in Rosch’s sense. In other words, Aijmer is in fact presenting a series of typological clusters, not a series of prototypes. Aijmer says that “the prototype is the most stable part of the meaning of a word” (1986: 19), but in fact her paper demonstrates that just about any part of the meaning of will is liable to change, for many reasons. Her analysis gives some insights into these changes, but it does not constrain them as a hierarchy or a core structure would.

Similar remarks can be made about Morris (1990), who argues that the future in Germanic is a non-prototypical tense because it is (a) usually periphrastic and (b) shares features with modals. As with Aijmer, however, the historical analysis is based on a set of features of future time forms, any of which are liable to change over time. Once again we are dealing with a cluster here.

A more recent attempt to use prototype theory to explain aspects of modality in English is Cort et al. (2006). They list semantic, morphological and semantic criteria for the class of modals in English, and note that some items meet more of the criteria than others. They propose, therefore, that “modal” is a prototype category in English, with core members (can/could, may/might, must, shall/should, will/would) and others which are peripheral. They conclude, however, that it may not actually be possible to set up a prototype model, since the supposed core members differ among themselves with respect to the criteria. For example, one of their semantic criteria is “highly irregular meaning relation between present and past tense”; but they note that with can/could the relation is sometimes regular, and that must does not have a past tense counterpart. They also note that diachronic changes to English modals involve movement away from and towards the set of core properties, which also casts doubt on the prototype approach.

The problem here – which also applies to Aijmer’s paper – is that any attempt to set up a core structure for a single language is misconceived. Clusters, hierarchies and core structures are typological tools, which can be used in the analysis of individual
languages but only in relation to cross-linguistic features. This will usually involve semantic and pragmatic features, since it is often hard if not impossible to compare morphological and syntactic features across languages without starting from shared meanings. To have any explanatory value at all, clusters must be typological, not language-specific.

Although Coates (1983) does not mention prototypes explicitly, her study is worth a mention at this point because she devotes particular attention to gradience in her account of English modals. The introductory chapter appeals to fuzzy set theory, which influenced some of the early work on prototypes in grammar such as Lakoff (1972). Like Lakoff, Coates leaves aside the central principle of fuzzy set theory – that the degree to which x is a member of the set Y is quantifiable – because it is unworkable with most linguistic data. Instead, she links gradience with clusters of features, proposing that examples of the modal can range from the “ability” core to the periphery of “possibility”. Coates makes no claims about the salience or stability of core versus peripheral instances of modals, and this suggests once again that we are dealing with clusters rather than a model which makes stronger explanatory assertions. Furthermore, her apparently random proliferation of terminology outdoes even Huddleston & Pullum: Coates has clines, continua, overlaps and gradients, as well as cores, skirts and peripheries. At one point we are told that “examples [of root modals] occur less frequently at the core than outside it” (1980: 86), which makes the notion of “core” seem rather pointless. Elsewhere we are told that gradience is an essential feature of root modality (21): but since “root” is defined negatively as anything which is “not epistemic”, this is hardly surprising. In short, although Coates’s book is rich in insights about individual modals, it is unconvincing in its approach to gradience.

1.6 A typological cluster approach to modality

We propose four criteria for the typological category of modality, the first two quite traditional, the second two more problematic. The criteria are semantic and pragmatic, the assumption being that cross-linguistic categories usually have to be characterized in this way. Other properties of modal expressions, particularly their morphosyntactic behaviour, will vary from language to language. The claim is that we can begin to delimit and partition the conceptual area of modality in the world’s languages by using these criteria.

1.6.1 Possibility and necessity

The obvious place to look for criteria for modality is previous research in the area. In this vein, we shall adopt the proposal cited above from Van der Auwera & Plungian as a starting point, treating it as just one criterion among others, rather than the only one. As they note, the view that possibility and necessity are central to modality is
widespread and traditional. Their position is supported by Kiefer, who claims that “the relativization of the validity of sentence meaning to a set of possible worlds” is “the essence of modality” (1994: 2515). If we take this criterion seriously, it excludes from the centre instances of “dynamic” modality, proposed by some analysts to cover ability *can* and the “characteristic behaviour” uses of *will* in English (Palmer 2001: 9). These uses of *can* and *will* do not invoke other possible worlds. Since several scholars have suggested that dynamic modality may not be a type of modality at all (e.g., Palmer 1990: 37; Papafragou 1998: 2), assigning dynamic uses of modals secondary status seems reasonable.

1.6.2 *Epistemic and deontic*

At the heart of many analyses of modality is the distinction between epistemic modality, which refers to “judgements about the factual status of the proposition” (Palmer 2001: 8), and deontic modality, involving attitudes to “acts performed by morally responsible agents, e.g., obligation and permission” (Papafragou 2000: 3). It is natural to take these two domains as our second criterion: items which express either of them will be central to modality, while items which do not will be secondary. This criterion will assign to the secondary zone dynamic modality (which already failed the first criterion), and alethic or logical modality (Lyons 1977: 791). Future time uses of *will* also fail this criterion.

It may be that epistemic modality should be treated as more central than deontic: the fact that they are expressed by many of the same items in English and German may be of limited significance typologically. Alternatively, it may be that epistemic modality is felt to be more central because it usually meets the next criterion, whereas instances of deontic modality are more varied. We leave this question open here.

1.6.3 *Subjectivity*

This term, introduced by Lyons (1977: 797), has been used in several different ways in the analysis of modality, and remains controversial (cf. Verstraete 2001; Narrog 2005; Timotijevic forthcoming). Verstraete conceives of subjective modality as bringing into existence “a particular position of commitment [by the speaker – RS] with respect to the propositional content of the utterance” (2001: 1517). He calls this type of commitment “modal performativity”, distinguishing it from the traditional use of the term performativity which links it with illocutionary force (and for which he proposes the term “interactive performativity”). Let us suppose that central instances of modality are subjective in this sense, making this our third criterion for modality.

As defined by Verstraete subjectivity is a pragmatic notion, since it crucially involves the speaker. A possible refinement of our third criterion would be to add to it a statement about pragmatics: modal expressions which involve pragmatics will be more central than those which do not. Specifically, we propose that central instances of modality
involve “primary pragmatic processes” in the sense of Recanati (2004: 21). These are processes which are required for a sentence to have a complete propositional meaning in a particular context: the clearest examples involve indexical expressions such as personal pronouns and tenses, which must have their reference assigned from the context. A sentence such as *I live in Belgium* only has a full propositional meaning after the application of the pragmatic processes of assigning a reference to the subject pronoun and the time of speaking. Recanati calls this type of pragmatic process *saturation*, because it involves filling in a slot in the meaning of a sentence which would otherwise be empty and therefore uninterpretable. Any process which involves identifying the speaker will be a primary pragmatic process in this sense. Secondary pragmatic processes, in contrast, involve inferences or other extensions from the propositional content: they have a much wider range and are typically optional. Saturation plays a crucial part in the analysis of some English modals in the work of Papafragou (1998: 14; 2000: 43).

If we refine our third criterion in this way, the question arises of the relation between the modal expression and the rest of the sentence that contains it. Many studies of modality simply take for granted that a distinction has to be made between the (pragmatic) modal part of an utterance and the (semantic) residue. Various ways of representing this distinction have been proposed. In generative studies, the distinction is often made in the syntax (cf. Wurmbrand 1999; Butler 2003), while other work distinguishes between the modal expression and “the propositional content of the utterance” (Verstraete 2001: 1517; cited above), or assumes a distinction between the modal expression and the “embedded proposition” (Papafragou 2000: 43). In some cases it is easy to recognise this division, particularly where negation can apply either to the modal or the proposition:

(1) You must not go (p is negated – “it is necessary that you not go”).
(2) You need not go (modal is negated – “it is not necessary that you go”).

In other instances, the distinction is less clear:

(3) John can’t swim.
(4) There won’t be any trouble at the next match.

Here the negation seems to have scope over the whole sentence, since we can paraphrase (3) and (4) as:

(3’) It is not the case that John can swim.
(4’) It is not the case that there will be trouble at the next match.

Another aspect of our third criterion, then, is whether there is a sharp division between the meaning of the modal expression and the meaning of the rest of the sentence; that is, whether or not there is a complete proposition which can be identified separately from the modal.
Summarizing, the third criterion (subjectivity) has three components:

i. commitment by the speaker
ii. primary pragmatic processes
iii. a sharp distinction between the modal expression and the propositional content

It is hard to decide whether these are three separate criteria or so closely connected that we should take them together. For ability uses of can, the three criteria yield the same result. We have already noted in relation to example (3) that “dynamic” can ranks low on part (iii); for this use of can we can accept Papafragou's claim (2000: 43–44) that no primary pragmatic process is involved, so it fails (ii); and it is easy to see that speaker commitment is not involved in interpreting ability can. In this case, then, the three criteria all work in the same direction, consigning ability can to secondary status.

For will, part (ii) of the subjectivity criterion has to be treated separately from the other two. Papafragou does not discuss will, but in its straightforward future time uses like (4) it lacks speaker commitment and forms part of the proposition (on the reasonable assumption that time reference is part of the truth-conditional content of a sentence, since John will arrive has different truth conditions from John arrived); hence it fails parts (i) and (iii). Future time will passes part (ii), however, since time reference is indexical, but this is not the reason why core instances of modality pass part (ii): it just so happens that primary pragmatic processes are involved in time reference. Thus future time will meets one part of the third criterion but fails the other two, which suggests that they should in fact be regarded as separate.

Turning now to German, ability uses of können behave like those of can. For uses that are usually labelled epistemic, the subjectivity criterion yields mixed results, as in this example from Öhlschläger (1989: 208):

(5) Der Angeklagte kann nicht der Täter sein.
   “The accused cannot be the culprit”

As Öhlschläger notes, this is paraphrasable as “I consider it impossible that the accused is the culprit”, with negation of the modal (thus meeting criterion [iii]), and speaker commitment in Verstraete's sense, so criterion (i) is met. No primary pragmatic process is involved, though: there is no need to appeal to the context to make sense of this sentence. Hence it fails criterion (ii), providing more evidence that the three parts of the third criterion are separate.

1.6.4 Extremes of the modality scale

Our final criterion takes account of the fact that modal expressions can often be located on a scale. This is clearest for epistemic examples, where the factual status of a proposition may be judged to be just possible at one extreme, or highly certain at the other. In between we find expressions of probability or moderate certainty, for example:
(6) John has possibly arrived by now.

(7) John has probably arrived by now.

(8) John has almost certainly arrived by now.

The two extremes have well-known logical properties with respect to negation. They also have pragmatic properties which are shared with other scalar expressions (cf. Levinson 2000: 83). The logical and pragmatic properties of modal expressions at intermediate points on the scale, such as probably in (7), are more variable. Let us tentatively take location near one of the extremes of the scale as a criterion for modality. We thus treat may and must as near the centre. The English auxiliaries can, could and might also meet this criterion, as does need at the opposite extreme.

It could be argued that the fourth criterion follows from the first one, since possibility and necessity are extreme points on a scale. We shall keep it separate here, however, in the hope that further research may clarify this question.

In summary, central members of the modal category meet these four criteria:

A. They express possibility or necessity.
B. They are epistemic or deontic.
C. They are subjective, involving
   i. commitment by the speaker.
   ii. primary pragmatic processes.
   iii. a sharp distinction between the modal expression and the propositional content.
D. They are located at one of the extremes of a modal scale.

2. Using the criteria – English

The morphosyntactic and semantic properties of English modal verbs are described at length in reference grammars, most recently Biber et al. (1999: 483–502) and Huddleston & Pullum (2002: 172–212). Detailed surveys using corpus examples are Coates (1983) and Palmer (1990); and a subset of modals – can, may, must and should – are treated in depth within the framework of Relevance Theory by Papafragou (1998, 2000). We shall focus on these four items here.

The typological criteria proposed in section 1.6 apply to specific uses of modal expressions. For English modal verbs, we cannot ask whether must, for instance, is a central modal expression: instead, we ask whether its different uses meet the criteria. Consider these cases:

(9) BNC-baby is distributed worldwide by Oxford University Computing Services on a not-for-profit basis, and under the terms of a standard license agreement. Each copy of the corpus must include a copy of this corpus header and any redistribution or republishing of the corpus texts (...) is strictly forbidden. (BNC)
(10) They are a primitive, but very interesting, group with Cambrian origins, and reached their greatest variety in the Ordovician. Some of them evidently lacked a stem, and **must** have lain loosely on the bottom. (BNC)

(11) In order that any great amount of modification should be effected in a species, a variety when once formed **must** again, perhaps after a long interval of time, vary or present individual differences of the same favourable nature as before; and these **must** be again preserved, and so onwards step by step. (Darwin, *Origin of Species*)

Example (9), a straightforward deontic use, meets all three criteria, as does the epistemic example (10). In (11), however, the necessity in both instances of **must** does not emanate from the speaker but from the facts of the real world: no other possible worlds are invoked, nor is this a classic deontic example like (9), and there is no subjectivity as we have defined it. Example (11) is therefore not a central instance of modality. As noted above, this is not to claim that this type of use is infrequent, or marginal to English grammar, or unstable over time. The important thing is that we should not assume that because **must** belongs to the morphosyntactic class of English modals, all its uses are necessarily “modal”. Typological studies of modality should not automatically try to cover uses of this kind; instead, each use of each modal should be confronted separately with the criteria.

Each supposedly modal expression must be analysed separately: we cannot assume in advance that all the members of the morphosyntactic class of English modal verbs meet the criteria in the same way. Frequency is relevant: the more common uses give us a clue to whether a modal verb can plausibly be analysed as having an underlying meaning which is more or less central. The most common uses of **must** and **may** seem to meet all or most of the criteria, whereas **can** and **should** usually do not. The following examples, from Biber *et al.* (2002), illustrate this:

(12) a. The only problem **may** be that the compound is difficult to remove.
    b. That **may** be wrong, though.
    c. You **may** do some maths if you want to.

(13) a. It **must** have fallen out trying to fly.
    b. Your feet **must** feel wet now.
    c. I **must** now confess something which I kept back from you in chapter three.

(14) a. An isolated system is an ideal system. It **cannot** be achieved in practice.
    b. I **can** hear what she's saying to somebody.
    c. You **can** get cigarettes from there, can't you?
    d. You **can** read my book.

(15) a. You **should** relax.
    b. If the crop is to be harvested by machinery, varieties **should** be cultivated which do not easily shatter.
c. If the preceding work has been done with care there should be few, if any, off-types.

In their most likely interpretations, the different uses of may and must in (12) and (13) meet all the criteria. A possible exception is (12a): when this example refers to a specific instance of a compound, and reflects speaker uncertainty about how this instance will behave in the real world, then it meets criteria A and C; but in its generic sense of “sometimes this compound is difficult to remove”, it refers to the real world only and does not express uncertainty, thus failing to meet these two criteria.

Turning to the examples of can in (14), the first three fail all the criteria. They do not involve possibility in the strict sense of invoking other possible worlds (criterion A). They do not involve “judgements about the factual status of the proposition” and or attitudes to “acts performed by morally responsible agents, e.g., obligation and permission”, so they are neither epistemic nor deontic (criterion B). They are not subjective as we have used the term (criterion C). Only the clear permission use in (14d) meets all the criteria: it involves necessity, is deontic, and involves speaker commitment and primary pragmatic processes to identify the source of the permission.

As for should, the deontic example in (15a) appears to meet all three criteria, whereas (15b) and (15c) do not. In (15b) we can see a parallel to the non-deontic use of must in (11): the “necessity” comes from factual circumstances. In (15c) we have weak prediction, roughly paraphrasable as “in the normal course of events”, which is not a central modal feature.

Our initial results, then, suggest that most uses of must and may meet the criteria for modality, while most uses of can do not. Should is somewhere in between.

3. Using the criteria – German and English in contrast

The forms and uses of German modals are set out in reference grammars such as Grebe et al. (1973: 66–74), Griesbach (1986: 271–281) and Zifonun et al. (1997: 1882–1920); for a survey in English, see Durrell (2002: 348–364). Important theoretical treatments are Öhlschläger (1989) and Diewald (1999, 2000). Öhlschläger treats the modals separately: “eine einheitliche Bestimmung des semantischen Beitrags der Modalverben … ist m.E. nicht möglich” [“a unified semantic definition of the semantic contribution of the modal verbs .. is in my opinion not possible”] (1989: 252). Diewald, on the other hand, does propose a semantic template for most uses (she uses the term “prototypical", but once again loosely as a paraphrase for “clear-cut and easy to analyse”).

The morphosyntactic class of modal verbs in German is usually taken to include müssen, können, sollen, wollen, dürfen and mögen, with some analysts treating möchten as a separate item, rather than as the past tense counterpart of mögen. We shall not
discuss wollen and mögen/möchten here, as their most common uses involve volition and desire, making a comparison with English modals difficult. As for dürfen, a great many of its corpus occurrences are in negative contexts (darf nicht, dürfte nur, etc.), and dealing with modals and negation would take us too far afield. We shall therefore restrict attention to müssen, können, and sollen.

If we look carefully at the German modals, we find that müssen usually meets all the criteria but können and sollen vary. The remaining examples are taken from the intersect translation corpus (Salkie 2006): we shall take some instances of the German modals and examine how they are translated into English. The use of data from translation corpora is controversial in contrastive linguistics, with Gellerstam (1996) cautioning against its use, Mauranen (1999) and Celle (2006: 8–14) defending it, and Teubert (1996) arguing that comparable corpora and parallel (translation) corpora both have their place. My own view is that the best translators are highly skilled professionals, whose intuitive understanding of the textual and stylistic norms of the target language is unmatched – precisely because their primary concern is to avoid interference from the source language. High quality translations can therefore be a particularly good source of natural data. Of course, not all translations meet these standards, but readers are able to judge for themselves the quality of examples offered in studies like this one.

This chapter is not a quantitative study, and a few examples are taken from the corpus to illustrate my theoretical argument. These examples thus come with a guarantee of authenticity, but not of representativeness.

With these words of warning in mind, here are some examples of müssen and their English translations:


b. The current Doha world trade round must give high priority to the interests of the developing countries. (Deutschland Zeitschrift)

(17) a. Und in Indien wie in Griechenland hat man den gleichen Fehlgriff gemacht: “wir müssen schon einmal in einer höheren Welt heimisch gewesen sein (statt in einer sehr viel niederen: was die Wahrheit gewesen wäre!), wir müssen göttlich gewesen sein, denn wir haben die Vernunft!” …

b. And in India, as in Greece, the same mistake was made: “We must once have been at home in a higher world (instead of a very much lower one, which would have been the truth!); we must have been divine, for we have reason!” (Nietzsche)

The German originals are deontic in (16a) and epistemic in (17a): they meet all the criteria for modality, as do their English translations which use must. I am not, of
course, claiming that closeness to the centre of the category is the only factor which
determines whether a sentence with a modal verb in German is translated using a
 corresponding modal verb in English. It is, however, what we would expect when two
languages have modal expressions with similar meanings which are usually central
instances of modality.

With können we find a more complex situation:

(18)  a.  Als Orientierung für hiermit nicht Vertraute kann dienen, dass z.B. Hand/Hand Arbeit (also Handstände in den Händen der Unterperson) etwa bei C beginnt.

b.  If you’re not familiar with this rating system, it may help to know that hand-to-hand (i.e., handstands on the hands of the base) starts at about level C. (Juggling magazine)

(19)  a.  Dieses Styropor kann am vergangenen Donnerstag für die schnelle Ausbreitung des Feuers verantwortlich gewesen sein.

b.  The styrofoam may have caused the rapid spreading of the fire last Thursday. (German-news)


b.  We consider it important that Blix and the UN mission in Iraq receive every conceivable assistance – including intelligence from secret service sources – so that the weapons inspectors can work in a targeted way. (Deutschland Zeitschrift)

(21)  a.  Zudem können die Anlagen so weit draußen installiert werden, dass sie aus dem Sichtfeld der Küstenbewohner geraten und somit niemanden mehr stören.

b.  Moreover, the plants can be installed so far out to sea that they disappear from the view of the coastal inhabitants and thus no longer disturb anyone. (Deutschland Zeitschrift)

The examples in (18–19), where können meets the criteria, are translated using may. These examples involve possibility, epistemic judgement, and the subjective involvement of the speaker. In (20–21), on the other hand, the translators have chosen can. In (20–21) we are in the real world, the domain of facts where subjectivity is not involved (failure to meet criterion [C]); the examples are not epistemic or deontic (negative for criterion (B) – compare the discussion of (14a–c) above); and they express ability, which is related to possibility but is not a central type of possibility as we have defined it, because ability does not invoke other possible worlds (criterion A).
Turning now to *sollen*, in cases like (22) and (23) we find translations with *should*, whereas in (24–25) the English translation does not use a modal verb:

(22)  
\[ \begin{align*} 
\text{a.} & \quad \text{Die Chemiepreise } \text{sollten} \text{ aufgrund der geringen Basis im Jahresvergleich ein positives Vorzeichen erlangen.} \\
\text{b.} & \quad \text{Chemical prices *should* show a positive change against the low basis of the previous year. (Company report)} 
\end{align*} \]

(23)  
\[ \begin{align*} 
\text{a.} & \quad \text{Ich bin schon zu alt, ich hätte jünger anfangen } \text{sollen}. \\
\text{b.} & \quad \text{I'm too old, I *should* have started younger. (Juggling magazine)} 
\end{align*} \]

(24)  
\[ \begin{align*} 
\text{a.} & \quad \text{Noch in diesem Jahr } \text{sollen} \text{ die Unterlagen für Propentofyllin bei der europäischen Zulassungsbehörde eingereicht werden.} \\
\text{b.} & \quad \text{The documentation on propentofylline is *to* be submitted to the European approval authorities this year. (Company report)} 
\end{align*} \]

(25)  
\[ \begin{align*} 
\text{a.} & \quad \text{Der Behördenmitarbeiter } \text{soll} \text{ dem Geschäftsführer Aufträge illegal vermittelt und ihm Ausschreibungsunterlagen zugänglich gemacht haben. Dadurch habe die Firma entsprechend niedrigere Angebote abgeben können.} \\
\text{b.} & \quad \text{The government employee *is said* to have passed on applications for tender to the company owner enabling him to offer lower prices than his competitors. (German-news)} 
\end{align*} \]

Example (22a), expressing a moderately confident prediction, fails our three criteria (strictly speaking, it meets the subjectivity criterion but for irrelevant reasons which have to do with the expression of time, not modality). This is also true of the English version (22b) – compare (15c) above which has a similar use of *should*. The deontic examples in (23) are closer to the centre of the modality category, though even here we could argue that in central instances of deontic modality like (9) the speaker imposes an obligation on the hearer and the time orientation is future – which would make (23) less central. It turns out that English *should* is useable in these contexts, but not in (24) and (25). We might expect that an item like *sollen*, the majority of whose uses are not centrally modal, will correspond some of the time to similar items in other languages, but less often than an item like *müssen*.

Consider finally this multimodal example, where we find German *soll* corresponding to *should*, a modal adjective *necessary* used to render *muss*, and the words *can* and *should* introduced where German has future time reference with *wird* (though German *gebeten*, which has the sense of “summoned” or “asked”, arguably has a deontic force which corresponds to *should*:)

(26)  
\[ \begin{align*} 
\text{a.} & \quad \text{Wie viel gesellschaftliche Solidarität } \text{soll} \text{ sein, wie viel Selbstverantwortung } \text{muss} \text{ sein? Wie wird Arbeit billiger, wer wird – zwecks Eigenvorsorge im Alter – zusätzlich zur Kasse gebeten?} 
\end{align*} \]
b. How much social solidarity should there be, how much individual responsibility is necessary? How can the work be made cheaper; who should pay more for their private pension? (*Deutschland Zeitschrift*)

A full analysis would have to take into account the idiomatic use here of *soll sein* and *muss sein* in German, for which a literal translation into English would be inappropriate. My point, though, is that here the (usually) least central modal *can* has no modal counterpart in the German; the (sometimes) more central *should* has two different German equivalents; and the (normally) most central *müssen* corresponds to the centrally modal use of *necessary.*

4. Conclusion

When we compare across languages the use of expressions which have traditionally been taken as modal, many factors come into play, including idiomatic properties of individual words and their syntactic behaviour. My argument here, however, has been that if we analyse modals in relation to the centre of the category of modality, we can explain some correspondences across languages, and also some cases where “modal” expressions do not correspond in the two languages.

The typological cluster approach invites us, as a minimum, to re-examine what we mean by “modality”. It offers a set of explicit criteria which can be revised, removed or augmented as research progresses. It can help to resolve disagreements between scholars who take a narrow view of modality and those who want a broader approach (and who, like Palmer 2001, wish to include such things as expressions of volition and evidentiality as types of modality). It also encourages us to examine each putative modal expression in its own terms, without assuming in advance, for example, that all the members of the morphosyntactic class of English modals share similar semantic and pragmatic properties. We have argued in particular that *can* and *must* behave very differently with respect to the criteria. Finally, as this chapter has tried to show, using typological clusters offers a new perspective for contrastive linguistics. In upcoming work I argue that it also sheds light on the vexed question of whether English and German have future tenses.

References


PART II

Contrastive linguistics and corpus studies
In this chapter we explore a corpus-based approach to contrastive analysis, in which the tools and concepts of corpus linguistics are applied to contrastive studies (Altenberg & Granger 2002: 7). Following this approach, we start with few assumptions and examine the frequency data generated by the application of a parallel concordancer to a translation corpus. We use this data to guide our investigations into similarities in the paradigms of go and aller, focusing on collocations and idiomatic uses. We show how collocate frequency information is used to determine equivalent collocations in two languages and to distinguish different usage patterns.

1. Introduction

In this chapter we explore a corpus-based approach to contrastive analysis, in which the tools and concepts of corpus linguistics are applied to contrastive studies. One reason for the revival and transformation of contrastive analysis as contrastive linguistics is the possibility of using large text corpora (Altenberg & Granger 2002: 7) to search for usage patterns. We also illustrate the use of a parallel concordancer, ParaConc, and demonstrate the advantages and limitations of using such a program for contrastive linguistic analyses.

Within the European linguistic tradition there has always been an interest in contrastive studies and that tradition has continued even as contrastive analysis fell out of favour in America. This continuing interest was no doubt fostered by the reality of a multilingual Europe. Typically such studies proceed in one of a couple of different ways. One alternative, which was probably more common in the sixties, is the creation of a contrastive grammar of two languages for some domain such as phonology or syntax (cf. Moulton 1962; Kufner 1962). In another approach, a particular word, construction, or semantic category is chosen and then the corresponding or “equivalent” items in two languages are investigated. For both approaches, the notion of “equivalence” and the problem of what to use as the basis of the comparison (tertium comparationis) is inescapable. We may not be comparing apples and oranges when attempting contrastive studies, but we are, at best, comparing different types of apple.
In the earlier era of Contrastive Analysis, Nickel (1971: 5) refers to the problem of equivalence, stating that while “formal equivalence can be established relatively easily”, it is difficult to identify “functional-semantic equivalence”. Identifying functional equivalence is unquestionably difficult, but identifying formal equivalence in a meaningful way is also not trivial. It is true that in one sense, establishing formal equivalence can be straightforward: establishing a link between the passive construction in French and the passive construction in English, for instance. At the time Nickel was writing, the equivalence between the two passives would be seen as a link between two language systems, i.e., two grammars. This link will be a tenuous one if the two passive structures have little overlap in terms of usage. We can determine the extent of the usage overlap by calculating recurrent translation equivalence. In other words, examining the grammar of two languages and identifying a similar construction (e.g., passive) is only the first step. It is necessary to determine the correspondence in terms of usage of the formally equivalent structures.

The approach taken in this chapter employs translated texts and hence relies on, loosely speaking, what the translator judges to be equivalent in the two languages. These translated texts form a parallel corpus, which contains a summation of many individual decisions by the translators of what expressions are equivalent in function. This correspondence between the linked expressions in the corpus is not exactly the same as translation equivalence, because the translator is translating texts, not words or constructions, and is aiming for the best overall translation of one text into the other. This objective entails making a series of compromises, since many levels of equivalence must be taken into account: lexis, syntax, discourse, etc. The translator is not aiming for simple equivalence in terms of lexis because, for example, choosing an appropriate sentence structure in the translated text may affect the lexis used. Each translator must consider all the factors associated with any individual translation and decide on the best overall result.

Another issue related to the use of translated text is the fact that the translation process itself alters the features of language. Features of translation include, according to Baker (1996), simplification, explicitation, and a tendency for the translated text to be influenced by the structures in the original text. These features are likely to be apparent in the translation of a single book, for example. From a contrastive linguistics perspective, the use of large corpora should help to “wash out” the influence of particular translations so that reliable equivalence data can be obtained.

We propose, then, to gain access to information on equivalence by using parallel corpora to search for congruence and non-congruence for particular language features, whether grammatical, such as reflexive constructions, or more lexical, such as prepositions (cf. Gellerstam 1996; Aijmer, Altenberg & Johansson 1996). Hence we rely on equivalence in translated texts in the sense of recurrent translation patterns (Krzeszowski 1990: 27).
The use of translated texts can be seen as a part of the wider notion of usage-based approaches to grammar. The term ‘usage-based’ was introduced in Langacker (1987) and explicated in more detail in Langacker (1988, 2000). A usage event is defined as a form-meaning pairing assembled by the speaker in a particular context for a particular purpose (Langacker 1987: 66). A usage-based approach, not surprisingly, assumes that the primary object of study is the language people actually produce and understand, rather than an abstract formal system independent of usage. Furthermore, language in use is taken to be the best evidence we have for determining the nature and organization of linguistic systems. In this view, there is an intimate relation between grammatical structures and instances of use: grammar gives rise to usage and usage gives rise to grammar (Kemmer & Barlow 2000).

The analysis of corpora provides information on usage and hence can lead to insights into the nature of grammar. The usage-based approach can be extended to cover translation by viewing usage in terms of connections between form-meaning pairs in two languages. Again, there are complications, since knowing two languages does not necessarily mean that it is a straightforward task to translate from one to the other. There is a process of learning to translate which precedes any actual translation. In other words, the translator must acquire knowledge of links between forms in both languages, mediated by appropriate meanings and other knowledge enabling translation.

Corpus analyses have led to particular insights into the form and functioning of language in use. The first and most obvious contribution is in highlighting the pervasiveness and the range of functions of collocations (Pawley & Syder 1983; Sinclair 1991; Kjellmer 1994) and other syntagmatic units with a lexical component. These units come in a variety of shapes and sizes, and are referred by a variety of names: chunks, prefabricated units, lexical bundles, etc. Although they are notoriously difficult to classify, this level of linguistic structure, somewhere between individual words and more abstract syntactic structures, carries a high functional load in languages.

The second major contribution of corpus linguistics is in highlighting and quantifying variability in language. The extent of variability has been masked to some degree by the use of intuition data in theoretical linguistics, and, indeed, one of the very motivations for using intuition data in the first place is to abstract away from patterns of variation. Corpus studies have, however, brought new aspects of variation into perspective, including considerable work on register and text types (Biber 1988), local grammars (Hunston & Sinclair 2000), and variation in lexicogrammatical expressions.

The third major influence of corpus studies relates to the provision of frequency information, and with that tends to come an emphasis on typical forms of expression rather than on the range of possible forms of expression. The consequence for contrastive studies is that we can establish three sets of relations. The first is general equivalence, in other words we can ask the question, for an expression in Language A,
what range of expressions might be equivalent in Language B? To establish this general map of equivalence, we are taking account of translation equivalences that occur at least once. And it is in this regard that there are limitations in the use of corpora for two reasons. One is the simple fact that corpora are samples, which means that some equivalences will not occur in any particular sample – and this will be particularly true for word combinations. The second limitation is that some equivalences may be more the result or byproduct of the translation process rather than a true equivalence in the two languages. However, if in this case we find that an equivalence occurs when translating from Language A to Language B, and also when going from Language B to Language A, then we can feel confident that the particular relationship between the two languages is real.

Using corpus analysis tools it is possible to go beyond general equivalence and give a quantitative view of equivalence, which from a usage perspective is potentially more important. For a word or collocation or construction in language A we can ask what the most common translation equivalents are, and similarly for language B. Using frequency data it is possible to build up a more detailed equivalence map and describe the central translation equivalents. This frequency equivalence is complex in a couple of ways. First of all, if we look at the frequency distribution of a word in a single language, we typically find that the core or prototypical usage is not the most frequent. Thus for see, the ‘seeing with the eyes’ meaning is not the most frequent in texts. We can, of course, still uncover instances where the prototype use in Language A is equivalent to the prototype use in Language B. Thus for the verb go, we find the examples in (1) in which go has the prototypical meaning of movement from one physical location to another. The equivalent sentence in French uses the equivalent verb aller.¹

(1) Mr. Donnelly often goes to the United States.
M. Donelly va souvent aux États-Unis.

Looking at a sample of the data, we discover that only around 10% of the instances of go, including go plus particle, could be considered prototypical (in the sense of used in the basic domain of motion through space), with the majority of uses, including various collocations and phrasal verbs, being associated with a more extended metaphorical meaning, where the movement associated with go is located within a conceptual rather than physical space. Some examples are go a long way to, go ahead, go along with, go beyond, go hand in hand, go in for, and go through.

Hence we observe the skewed frequency pattern for a particular expression where the prototypical or basic meaning is rather infrequent in most texts: some

extended meanings are highly frequent; while yet other non-prototypical meanings are infrequent.

Next we need a third frequency calculation for the equivalence relation itself, since any particular expression in Language A will have a probabilistic relationship with a set of expressions in Language B, taking a 1:1 relationship to be at the limit of the probabilistic range.

2. Parallel concordancing

As an illustration of the ideas proposed above, we will use a parallel concordancer, ParaConc, to identify recurrent patterns in translated texts. This software is essentially a search engine, but it can be used to provide, on demand, a rich picture (in terms of co-text) of “translation equivalences” (with the caveats given above). Thus the software can present the user with (i) multiple instances of the search term and (ii) a large context for each instance of the search term, thereby allowing a thorough analysis of usage in terms of the equivalences between two languages. Of particular interest here is the congruence in particular forms in two languages. For example, we can use the software to examine the congruence between the English verb go and the French verb aller. How likely is go to be translated by aller and how likely is aller to be translated by go? This may be an appropriate question at this most coarse level of granularity for some equivalences, but for highly polysemous expressions such as go, a more fine-grained investigation is usually needed in order to consider the different senses or uses of go and the extent each sense/use is likely to correspond to an equivalent expression based on aller.

The advantage of the usage-based approach advocated here is that we do not simply rely on intuitions to judge congruence. We can obtain quantitative information on correspondences between two languages, which gives us a somewhat more objective picture of the degree of correspondence of patterns. There are, as we might expect, some caveats associated with the use of correspondence data, in addition to those mentioned above. For one thing the frequency data will vary to some extent depending on the type of corpus used in the analysis. Another problem is that if the numbers are very large, it is not feasible to check every go-aller pair to ensure that the two words are in fact equivalent and not simply by chance co-occurring in their respective text segments. To mitigate this problem, we can check a sample and make any necessary adjustments to the frequency data if we find chance cooccurrence. Third, it must be said that corpus data typically needs to be interpreted, and so intuitions about language are not eliminated completely. Rather, the idea is that the interpretation is carried out on the more solid basis of quantitative empirical data.
2.1 Alignment

ParaConc accepts up to four parallel texts, which might be four different languages or an original text plus three different translations. Unfortunately, it is not possible to simply load translated texts into the program without any pre-processing because the software contains no information regarding individual languages or translation equivalents. To be analysed by ParaConc, the translated texts have to be aligned, and this alignment is something of a barrier to the widespread use of parallel corpora. Alignment is the provision of information on equivalent text segments in the two languages, typically using the sentence unit as the basic alignment segment. Naturally such an alignment is not necessarily one in which each sentence of Language A is always aligned with a single sentence of Language B, since the same information can occur in one sentence in Language A but may be distributed across more than one sentence in Language B, and vice versa.

Aligning the two corpora is necessary because as stated above, no language-particular information is encoded within the program, and thus the search routines act in a mechanical manner, as in the following example. If the first instance of the search term occurs in text segment 342 of the corpus being searched (Language 1), then the program simply displays that segment in the upper window and displays text segment 342 of the second corpus (Language 2) in the lower window. This process is simply repeated for all instances of the search term. The result is that most segments of the searched language will correspond to sentences containing a translationally equivalent segment in the second language. Although this process is mechanical, it often provides a remarkably good approximation of correspondence of equivalent sections of the text, which can be used for closer examination of recurrent correspondences of smaller chunks, i.e., the collocations that languages use to render much of their ideational content.

The size of the aligned segments is not set by the software, however. It would be possible to work with paragraphs as the basic alignment unit, but then the results of a search will be more cumbersome, because the translation of a word or phrase will be embedded within a large amount of text that must be read and interpreted by the analyst. Setting an alignment unit this large would lead to a considerable amount of scanning by the researcher in order to locate the equivalent term.

A semi-automatic alignment utility is included in the program to prepare texts that are not already pre-aligned. If unaligned files are loaded, the user enters information about the format of the files, either through reference to SGML tags or via specifications of patterns. Thus the user specifies the form of headings and the way in which paragraphs are marked in the files making up the corpus. ParaConc uses this information to assist in the alignment process.

If the files contain section headings (e.g., Chapter 1, Chapter 2, etc), then the first step is to align the files at the level of these sections. Based on the information entered
in format, the software attempts the alignment and the user can then intervene, if necessary, to make adjustments by merging/splitting sections, as appropriate. (If there are no section headings, then we assume the document consists of a single section.) Once the sections are aligned, the second step is to align the paragraphs within each section. Again the software will attempt to do this alignment automatically and modifications can be made as necessary. Sentence level alignment, if it is not indicated by sgml tags, is performed using the Gale-Church algorithm (Gale & Church 1993). After this process, the user goes through the files one more time to make sure that the sentence alignment is satisfactory. The alignment information can be saved internally. Alternatively, the newly aligned corpus can be exported.

Simple text searches for words or phrases can be performed for either of the languages of a bilingual corpus and the resulting concordance lines can be sorted according to the alphabetical order of the words surrounding the search word. We can start by performing a simple search for go, but since go is very common we might want to look at just 200 examples. If we do that, we will also want to cull those examples from different parts of the corpus and not just take the first 200 instances that occur. We might take every 30th instance. These options, along with other settings, are shown in Figure 1.

![Figure 1. Search settings.](image)

The search can be based on any of the languages represented. Thus if English and French corpora are loaded, it is possible to search for an English word or phrase and
get the English hits and the equivalent sentences (text segments) in French, or vice versa. The basic text search is simple: a word or a phrase can be entered, including wildcard characters if necessary. The symbols acting as wildcards are user-defined, but the default symbols are as follows: ? for one character; % for zero or one characters; and * for zero or more characters.

The instances of go in the English corpus are displayed in kwic format in a scrollable window, as shown in Figure 2. Clicking on one particular example of go in English highlights both the English and French lines. (Double-clicking on a particular line evokes a context window, which provides an enlarged context for the particular instance of the search word.)

![Figure 2. A simple text search for go.](image)

The lower part of the window contains the French sentences (or text segments) that are aligned with the hits displayed in the top window. Thus the display of equivalent units in the two languages is based solely on the alignment process, described above.

### 2.2 Sorting the results

Let’s follow this example of the search for go further. Once the search is ended, we can bring to bear the usual advantages of concordance software to reveal patterns in the results data. We are likely to be interested, for example, in identifying different uses (and translations) involving go and one simple but useful technique is to sort the concordance lines so that they are in alphabetical order of the word following the search term. One easy way to achieve this ordering is to select 1ST RIGHT, 2ND RIGHT, from the SORT menu. This command sorts the concordance lines in alphabetical order of the word following the search term and if there are multiple instances of lines with the same following word, such as a, it sorts those lines according to the alphabetical
order of the word in the second position following the search term. This type of sorting, shown in Figure 3, makes repeated sequences of words stand out visually and by quickly scrolling through the concordance lines, it is fairly easy to get a sense of the major patterns of use. In this case the main use of go is in reference to conceptual distance: go beyond, go as far as, go some way, etc.

Analysing go, we discover that one of the most common idioms in the corpus is the phrase [it/that] goes without saying. Searching for this phrase and examining the French equivalents, based on 100 instances, we obtain the results shown in Table 1.

Table 1. French equivalents of go

<table>
<thead>
<tr>
<th>French Equivalent</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>il/cela va de soi</td>
<td>43</td>
</tr>
<tr>
<td>il va sans dire</td>
<td>9</td>
</tr>
<tr>
<td>il/c'est evident</td>
<td>9</td>
</tr>
<tr>
<td>Not translated</td>
<td>8</td>
</tr>
<tr>
<td>il est bien entendu</td>
<td>5</td>
</tr>
<tr>
<td>bien sûr</td>
<td>5</td>
</tr>
<tr>
<td>c'est clair</td>
<td>4</td>
</tr>
<tr>
<td>naturellement</td>
<td>4</td>
</tr>
<tr>
<td>pas besoin de vous dire</td>
<td>2</td>
</tr>
<tr>
<td>c'est une evidence</td>
<td>2</td>
</tr>
<tr>
<td>cela ne veut pas dire ... ne</td>
<td>1</td>
</tr>
<tr>
<td>je dois faire remarquer</td>
<td>1</td>
</tr>
<tr>
<td>c'est bien sûr totalement incontestable</td>
<td>1</td>
</tr>
<tr>
<td>pour la raison très simple</td>
<td>1</td>
</tr>
<tr>
<td>il ne fait donc aucun doute</td>
<td>1</td>
</tr>
<tr>
<td>il convient de dire</td>
<td>1</td>
</tr>
<tr>
<td>il est certain</td>
<td>1</td>
</tr>
<tr>
<td>c'est un fait entendu</td>
<td>1</td>
</tr>
</tbody>
</table>
Again we find a skewed frequency distribution in which the strongest link is between *it/that goes without saying* and *il/cela va de soi*. Almost half the instances come from this central pair of equivalent expressions and the remainder are either not translated or are translated by one of sixteen alternative expressions. It is clear that these alternative expressions are of different types and the choice of a particular alternative will depend to some extent on other elements within the sentence or the discourse. One way to think about the equivalences is to consider the meaning or function of *it/that goes without saying* and to see the range of expressions given in Table 1 as falling within the general meaning domain, albeit with some differences.

Similarly, we can search for *va de soi* and look at the equivalents in English, again for 100 instances. The results are shown in Table 2.

<table>
<thead>
<tr>
<th>English equivalents of <em>va de soi</em></th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>of course</em></td>
<td>32</td>
</tr>
<tr>
<td><em>goes without saying</em></td>
<td>17</td>
</tr>
<tr>
<td><em>Not translated</em></td>
<td>13</td>
</tr>
<tr>
<td><em>Naturally</em></td>
<td>12</td>
</tr>
<tr>
<td><em>Obviously</em></td>
<td>7</td>
</tr>
<tr>
<td><em>it is obvious</em></td>
<td>4</td>
</tr>
<tr>
<td><em>it is clear</em></td>
<td>3</td>
</tr>
<tr>
<td><em>needless to say</em></td>
<td>2</td>
</tr>
<tr>
<td><em>take it for granted</em></td>
<td>2</td>
</tr>
<tr>
<td><em>Certainly</em></td>
<td>1</td>
</tr>
<tr>
<td><em>there can be no question</em></td>
<td>1</td>
</tr>
<tr>
<td><em>there is no doubt</em></td>
<td>1</td>
</tr>
<tr>
<td><em>it is important</em></td>
<td>1</td>
</tr>
<tr>
<td><em>no doubt</em></td>
<td>1</td>
</tr>
<tr>
<td><em>Definitely</em></td>
<td>1</td>
</tr>
<tr>
<td><em>it is to be expected</em></td>
<td>1</td>
</tr>
<tr>
<td><em>it is self-evident</em></td>
<td>1</td>
</tr>
</tbody>
</table>

### 2.3 Advanced Search

The simple searches described in the previous section will suffice for many purposes and are especially useful for exploratory investigations. The basic search method is also very useful when used in conjunction with a sort-and-delete strategy. Particular sort configurations can be chosen to cluster unwanted examples, which can then be selected and deleted. For more complex searches, however, we need to use the Advanced Search command. This command brings up a more intricate dialogue box (displayed in Figure 4), which at the top contains the text box in which the search query is entered.
One important part of the advanced search dialogue box is labelled search syntax. Below this are three radio buttons corresponding to different kinds of search. The first, text search, refers to the basic searches described above.

The regular expression search, or regex search, allows for search queries containing Boolean operators (and, or and not). For example, a first attempt to create a regular expression to capture the go lemma might be go[en]?[se]?. This expression will match the string go followed optionally by e or n, and s or e. (The expression will potentially also capture gons, goee, etc. and hence we are assuming that no such words exist in the corpus.) Regex searches are string searches rather than word searches, which means that our search expression will also find go in good. To avoid this situation, we need to indicate spaces or word boundaries (using the metacharacter \b). A further complication is the past form of go, went, which historically was associated with a different verb paradigm and does not contain the go stem. To capture this form, we can add a disjunction so that our search string finds both the more regular forms of go and went. Thus one way of specifying the search string for go, omitting word boundary metacharacters, is (go[en]?[se]?|went).

We can briefly mention the third option in the advanced search dialogue box, tag search, which allows the user to specify a search query consisting of a combination of words and part-of-speech tags, with the special symbol & being used to separate words from tags in the search query. This search syntax is used whatever particular POS tag symbols are used in the corpus. (Thus it is necessary to enter the form of the tags in tag settings before a tag search can be performed.) To give an example: the search string go&N* finds instances of go tagged as a noun.
3. Frequency information

We have emphasized the importance of frequency information in corpus analyses and in the examples given so far the frequencies are small enough to be counted manually. Typically, however, we rely on computers to do the counting. ParaConc furnishes a variety of simple frequency statistics, but the two main kinds are corpus frequency and collocate frequency. The command corpus frequency data creates a word list for the whole corpus (or parallel corpora), according to the settings in frequency options. The results can be displayed in alphabetical or frequency order and the usual options (such as stop lists) are available.

Choosing the collocate frequency data command displays the collocates of the search term ranked in terms of frequency. The collocation data is usually organized in four columns, spanning the word positions 2nd left to 2nd right, as shown in the collocate list for the go lemma in Figure 9. The columns show the collocates in descending order of raw frequency and we can see, for example, that one of the most common words following go in this corpus is beyond. The frequency information is useful as a preliminary way of identifying collocations and for classifying the different meanings of the search term.

![Figure 5. Collocate frequency table for go.](image)

One disadvantage of the simple collocate frequency table is that it is not possible to gauge the frequency of collocations consisting of three or more words. For instance, it would be hard to spot that goes without saying is a collocation when examining the table in Figure 5.
To calculate the frequency of sequences of three or more words, it is necessary to choose advanced collocation from the frequency menu and select English, or the appropriate language. The top part of the dialogue box associated with advanced collocation allows the user to choose from up to three word positions, for example, searchword 1st right, 2nd right. The program counts and displays the three-word collocations based on the selected pattern. Alternatively, it is possible to choose a span of a certain number of words and the program calculates the most frequent sequences regardless of the position in the sequence of the search term. The frequency calculations for four-word sequences containing go are shown in Figure 6.

![Figure 6. Frequent four-word sequences based on go.](image)

4. Finding translations

It can be seen from Figure 2 that while all the instances of go are clearly displayed, it is difficult to look through the equivalent French segments in order to locate possible French translations of go within each segment. To alleviate this, we can highlight potential translations for English go by positioning the cursor in the lower French results window and clicking on the right mouse button. A menu pops up and we can select search query. Doing this provides access to the usual search commands and hence allows us to enter a possible translation of go such as aller, entrer etc. The program then simply highlights all instances of these verb forms in the French results window.

This highlighting helps pinpoint possible translations or indicates segments in which these two common translations do not occur. However, we can change the format in an interesting way and alter the context for the French results so that the lines in the lower window are transformed into a kwic, i.e., concordance, layout. If necessary,
we can re-sort the concordance lines in the lower window since the sort and display commands apply to whichever window is active. The two text windows then appear as shown in Figure 7. Naturally, only those words in the French text that have been selected and highlighted can be displayed in this way. By sorting on the search word, all the kwic lines are grouped together at the top of the text window; the residue can be found by scrolling through towards the bottom of the window. This is a revealing display, but we have to be careful and not be misled by this dual kwic format. There is no guarantee that for any particular line, the instance of aller, for example, is in fact the translation of go. It could simply be accidental that aller is found in the French sentence corresponding to the English sentence containing go.

Figure 7. Dual kwic format.

The idea behind dual kwic display is to let the user move from English to French and back again, sorting and resorting the concordance lines. This process provides equivalence information on phrases or terms in the two languages.

4.1 Hot Words and translation

In the previous section we described the use of search query to locate possible translations in the second window. In this section we will look at a utility in which possible translations and other associated words such as collocates are suggested by the program itself. We will refer to these words as hot words. To run the Hot Words routine, we position the cursor in the lower (French) half of the results window and click using the right mouse button. Choosing hot words invokes a procedure which calculates the frequency of all the words in the French results window and then brings up a dialogue box containing the list of hot words ranked according to their Log Likelihood value. The ranked list of candidates of French hot words, based on go, is shown in Figure 8. Leaving aside the idiosyncratic presence of go itself, there are three forms of aller in the list.
The other words include a form of *entrer* and the noun *astronaute*, which is merely associated with “going”.

![Hot Words - French (Standard)](image)

*Figure 8. Hot Word List.*

How well the Hot Words routine performs depends on various factors including the number of instances of the search word and more generally on the nature of the language being investigated. The more highly morphological a language, the more difficult it is to get good results with the Hot Words routine, which is based on the counting of word forms. Since the verb *go* in English is associated with many French translations, *va, vais, aller*, etc., the link between the English and French verbs is harder to detect.

In an attempt to improve the results, we can select the paradigm option in Hot Words. By checking this option the Hot Words routine promotes to a higher ranking in the list those words whose form resembles that of other words at the top of the list. This is a simple way of dealing with morphological variation without resorting to language-particular resources. Applying this option to the first set of results yields the somewhat improved list shown in Figure 9.

A similar utility called translation attempts to give translation equivalents rather than hot words. In the list shown in Figure 8, we find words such as *astronaute* which has a collocational relationship to *go*, or more precisely, it is a translation of a collocate of *go*. In using the translation utility, the user selects the number of desired translation candidates, typically three or four, and the program attempts to identify the translations using statistical measures. The underlying algorithm is similar to Hot Words except that it is designed to favour translations over collocations. Applying the translation routine gives the list shown in Figure 10.
We can see that although *go* is still included in the new results, *astronaute* no longer appears in the list and so in this case there is an improvement if the goal is to identify translations. The utility is useful as a way of getting a sense of the common translation in terms of single words, and as mentioned above the quality of the results obtained by these routines will vary depending on the languages being searched, the number of hits, and the parameters set by the user. There are some obvious problems
with the routine: only the most distinctive translation candidates appear and only isolated words, rather than phrases, are presented.

5. Parallel Search

Finally, one type of search tailored for use with parallel texts is the parallel search. The dialogue box for this type of search is shown in Figure 11. As the name suggests, this is a bilingual search in which the forms appearing in the aligned text segments can be specified. For instance, it is possible to look for text segments in which go occurs in the English and aller occurs in the equivalent text segment.

Figure 11. Parallel Search dialogue box.

Clicking on the Pattern box under Language: English brings up the search dialogue box and in this case we want to look for the go lemma and so use a regular expression search, as described above. And moving to Language: French and again clicking on Pattern, we can specify another search string such as the lemma for aller. Clicking OK initiates the search routine and the software locates only those examples in which a form of go occurs in the English text segment and a form of aller is present in the corresponding French segment. If the not box (under Language: French) is selected, then the search routine will display go only if aller does not occur in the equivalent French segment.

This search is particularly useful for providing general information on the degree and nature of congruence between two candidate expressions. The steps involved as follows:

i. perform a parallel search for wordA-wordB (such as go-aller) and examine the usage and collocations for wordA (and wordB);
ii. perform a parallel search for wordA-NOT wordB and again examine the usage of wordA;

iii. switch languages and hence search for wordB-wordA and repeat the procedure.

The data from these searches can be used to discover which meanings and uses of wordA translate into wordB and which meanings and uses don't translate. Before undertaking the steps outlined above, we can obtain a general idea of formal equivalence by performing an exploratory text search. In the parallel corpus examined here, we find that approximately 29% of aller verb forms are translated using go and about 28% of go verb forms are translated with aller. Thus there is not a particularly high level of congruence between the two paradigms and the lack of overlap is due in part to the fact that around a quarter of instances of go are phrasal verbs.

Figures 12 and 13 show the collocations associated with go in the go-aller and in the go-NOT-aller search respectively. Extracting some of the frequency data for the collocations of go in the two searches we obtain the picture in Table 3.

<table>
<thead>
<tr>
<th>Count</th>
<th>Pct</th>
<th>Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>73</td>
<td>1.8196%</td>
<td>it goes without saying</td>
</tr>
<tr>
<td>64</td>
<td>1.5952%</td>
<td>goes without saying that</td>
</tr>
<tr>
<td>27</td>
<td>0.6730%</td>
<td>not go far enough</td>
</tr>
<tr>
<td>25</td>
<td>0.6281%</td>
<td>does not go far</td>
</tr>
<tr>
<td>24</td>
<td>0.6982%</td>
<td>go hand in hand</td>
</tr>
<tr>
<td>17</td>
<td>0.4237%</td>
<td>go as far as</td>
</tr>
<tr>
<td>17</td>
<td>0.4237%</td>
<td>to go further than</td>
</tr>
<tr>
<td>15</td>
<td>0.3739%</td>
<td>go further than the</td>
</tr>
<tr>
<td>15</td>
<td>0.3739%</td>
<td>we need to go</td>
</tr>
<tr>
<td>14</td>
<td>0.3490%</td>
<td>it does not go</td>
</tr>
<tr>
<td>12</td>
<td>0.2991%</td>
<td>need to go further</td>
</tr>
</tbody>
</table>

Figure 12. Collocations based on go in a parallel go-aller search.

As mentioned above, most uses of go refer to movement in a conceptual rather than physical space and so the similarity in congruence with respect to collocates of the respective verb forms gives an indication of the similarity of conceptual metaphors in the two languages. Thus, examining the table, we see that go further is most strongly associated with aller translations, with the sample pair in (2) showing that same metaphor holds in both English and French.

(2) The Commission believes that we must go further.
La Commission croit que nous devons aller plus loin.

At the other end of the scale, go through does not usually have an aller equivalent and we find that French uses other metaphors for the different meanings of go through. Examples are shown in (3) and (4).
In this chapter we have briefly explored a corpus-based approach to contrastive analyses in which we have started with few assumptions and have let the frequency data generated by a parallel concordancer guide our investigations into similarities in the

<table>
<thead>
<tr>
<th>2-Left</th>
<th>1-Left</th>
<th>1-Right</th>
<th>2-Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>48 the</td>
<td>227 to</td>
<td>115 to</td>
<td>150 the</td>
</tr>
<tr>
<td>36 we</td>
<td>62 not</td>
<td>69 on</td>
<td>76 to</td>
</tr>
<tr>
<td>29 way</td>
<td>42 that</td>
<td>68 into</td>
<td>43 in</td>
</tr>
<tr>
<td>25 and</td>
<td>37 it</td>
<td>49 back</td>
<td>40 and</td>
</tr>
<tr>
<td>25 that</td>
<td>34 will</td>
<td>46 beyond</td>
<td>32 with</td>
</tr>
<tr>
<td>20 this</td>
<td>38 has</td>
<td>43 through</td>
<td>31 it</td>
</tr>
<tr>
<td>20 which</td>
<td>31 which</td>
<td>32 ahead</td>
<td>27 far</td>
</tr>
<tr>
<td>19 have</td>
<td>28 have</td>
<td>29 out</td>
<td>25 this</td>
</tr>
<tr>
<td>17 i</td>
<td>23 we</td>
<td>26 down</td>
<td>19 a</td>
</tr>
<tr>
<td>15 if</td>
<td>20 should</td>
<td>25 along</td>
<td>18 saying</td>
</tr>
<tr>
<td>14 when</td>
<td>17 can</td>
<td>24 far</td>
<td>14 further</td>
</tr>
<tr>
<td>14 will</td>
<td>17 cannot</td>
<td>21 by</td>
<td>14 we</td>
</tr>
<tr>
<td>13 do</td>
<td>17 i</td>
<td>20 without</td>
<td>13 enough</td>
</tr>
<tr>
<td>13 does</td>
<td>16 they</td>
<td>19 hand</td>
<td>13 way</td>
</tr>
<tr>
<td>12 should</td>
<td>14 and</td>
<td>18 against</td>
<td>12 beyond</td>
</tr>
<tr>
<td>11 as</td>
<td>14 would</td>
<td>16 and</td>
<td>12 on</td>
</tr>
<tr>
<td>11 it</td>
<td>12 must</td>
<td>15 for</td>
<td>11 i</td>
</tr>
</tbody>
</table>

Table 3. Comparison of collocations based on *go*

<table>
<thead>
<tr>
<th></th>
<th>go-aller</th>
<th>go NOT aller</th>
<th>Percentage change</th>
</tr>
</thead>
<tbody>
<tr>
<td>further</td>
<td>317</td>
<td>63</td>
<td>10.9</td>
</tr>
<tr>
<td>without</td>
<td>152</td>
<td>70</td>
<td>46.1</td>
</tr>
<tr>
<td>too</td>
<td>71</td>
<td>37</td>
<td>52.1</td>
</tr>
<tr>
<td>far</td>
<td>85</td>
<td>50</td>
<td>68.8</td>
</tr>
<tr>
<td>hand</td>
<td>70</td>
<td>44</td>
<td>62.8</td>
</tr>
<tr>
<td>in</td>
<td>86</td>
<td>57</td>
<td>66.3</td>
</tr>
<tr>
<td>against</td>
<td>64</td>
<td>44</td>
<td>68.7</td>
</tr>
<tr>
<td>into</td>
<td>74</td>
<td>183</td>
<td>247.3</td>
</tr>
<tr>
<td>ahead</td>
<td>35</td>
<td>89</td>
<td>254.3</td>
</tr>
<tr>
<td>back</td>
<td>23</td>
<td>124</td>
<td>539.1</td>
</tr>
<tr>
<td>on</td>
<td>59</td>
<td>341</td>
<td>578.0</td>
</tr>
<tr>
<td>through</td>
<td>21</td>
<td>149</td>
<td>709.5</td>
</tr>
</tbody>
</table>

(3) Macedonia did not go through a war.  
La Macédoine n’a pas participé à la guerre.

(4) I am very pleased that this report has gone through.  
Je suis très content que ce rapport ait été adopté.

6. Summary

In this chapter we have briefly explored a corpus-based approach to contrastive analyses in which we have started with few assumptions and have let the frequency data generated by a parallel concordancer guide our investigations into similarities in the
paradigms of go and aller, focusing on collocations and metaphorical uses. We see how different types of searches can be used to discover the degree of congruence between lexis or constructions in a pair of languages. Furthermore, we have observed how collocate frequency information is useful for determining equivalent collocations in two languages and for distinguishing different usage patterns.

Since the results obtained are based on usage, they are tied to a particular situation and text type and therefore we cannot talk about a general relationship of equivalence between expressions in two languages. Examining a variety of text types will reveal those aspects of language that are more uniform and those that are more variable.

Finally, we have examined some of the features of a parallel concordance program, ParaConc, concentrating mainly on the use of different search options and on ways of automatically locating translation equivalents.

References


Machine translation and human translation

Using machine translation engines and corpora for teaching and research

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Machine translation and human translation often encounter the same difficulties at the level of the word and sentence. This chapter describes a methodology which encourages students to select examples of such problems from corpora, evaluate the performance of on-line machine translation engines with them, and compare the results with those of human translation. This has proved a way of providing training in linguistic analysis and the use of corpora as language resources in an interesting way. The methodology has been made possible by the project Linguateca, and the computational tools it develops also offer opportunities for research projects in the areas of human and machine translation, terminology extraction, corpus linguistics, contrastive linguistics and related areas.

1. Introduction

Machine translation (MT) has made progress over the last decade or so, but many of the problems MT finds difficult to solve are similar to those experienced by human translators. This chapter will describe how PoloCLUP of the Linguateca project (http://www.linguateca.pt) developed the METRA tool to study MT by using freely available on-line MT engines. It will also explain how the tool TrAva was designed in order to analyse MT output more formally, and discuss the theoretical problems involved.

The pedagogical objective in producing these tools was to allow students to observe cross-linguistic problems in MT and to compare the results to the human translations available in Linguateca’s English/Portuguese parallel corpus, COMPARA. The exercise also serves as a good introduction to using available monolingual corpora in English and Portuguese as reference resources for language professionals in general, and translators in particular. Reference will also be made to Linguateca’s online set of tools, the Corpógrafo, which has been designed for the construction of monolingual and comparable corpora. Although the majority of work done with the Corpógrafo is related to special domain corpora and terminology extraction, it also provides tools.
for concordancing, n-grams and text statistics that have proved very useful for more general levels of linguistic analysis. We shall discuss the pedagogical methodology that has developed as well as the resulting project and research work.

Research based on the tools described has focused as much on their development as on the results obtained. The popularity of the tools has led, in turn, to the accumulation of a considerable amount of material that can be used for a wider variety of research projects than originally planned. The results of research so far have led us to question the theoretical basis of MT and of our own methodology and results. Suggestions will be made as to the way in which the theory should be reviewed as well as how our tools and resources can be explored in the future.

2. Why MT Matters

MT is important for a variety of reasons. Human translation is expensive, takes time and is usually unavailable when it is needed for communicating quickly and cheaply with people with whom we do not share a common language. There are also the obvious political reasons deriving from the ideal of a multi-lingual, multi-cultural society, an ideal which, in its turn, results in its commercial importance. For those who work on MT, it is a subject that has proved of considerable scientific and even philosophical interest. The complexity of human language, in general, and individual languages, in particular, has been studied for centuries, and the efforts to develop MT engines have only served to underline the reasons why.

A full history of MT can be studied in detail in Arnold et al. (1994: 13–16), Melby (1995: Chapter 2) and Austermühl (2001: 154–156), and here we shall merely touch on a few important facts and dates. Modern attempts at MT are considered to date from 1947, when Warren Weaver, whose experience in code-breaking during World War II led him to presume that MT would be a fairly simple affair, convinced the American authorities to invest heavily in MT. However, the results proved to be less than satisfactory, and Bar-Hillel (1959) declared that FAHQMT – Fully Automatic High Quality Machine Translation – was technically and philosophically impossible. Translation could be either fully automatic or high quality, but not both. The ALPAC Report (1964) officially recognized the limitations of MT and funding for projects in the United States was withdrawn.

However, MT research continued with private investment in Canada and Europe and in 1976 the European CEC purchased the SYSTRAN system as the basis for its EUROTRA project. There were also other MT projects, of which the best known are probably Logos, Metal and Power Translator. Despite the limited success of the EUROTRA project, there was a slow upward trend in development during the 1970s and 1980s, and today MT technology is applied at various levels. On the one hand there are highly specialized systems that have been designed and developed for use
in specific situations. These systems normally deal with language in special domains and every effort is made to make sure that the syntactic structures are straightforward. The usual examples that are quoted are the METEO system in Canada (see Hutchins & Somers, 1992: Chapter 12), which translates meteorological news between English and French, the Caterpillar implementation of MT as described by Lockwood (2000), and two Castilian Spanish <-> Catalan systems used to translate newspapers in Barcelona. One of these is called El Segre and uses a system provided by Incyta, derived from an earlier Siemens system, and the other, El Periódico de Catalunya, has its own in-house system. However, most people first came into contact with MT when it began to be used on the Internet, and now many people use it all over the world with varying degrees of success and satisfaction.

Arnold et al. (1994: 21–23) draw attention to the various popular misconceptions about MT and counteract them with facts that describe its possibilities and limitations. The different types of MT architectures described in Arnold et al. (1994: chapter 4) and Austermühl (2001: 158–166) can be summed up as those with:

a. direct architecture, which uses simple parsing and relies on large lexical and phrasal databases, producing rather ‘word-for-word’ translation;
b. transfer architecture, in which the source text is analysed and represented as an abstract source structure which is then transferred into an abstract target language structure. There are monolingual dictionaries for each language and a bilingual one to make the connection between the languages. Each language system can, in theory, be re-used with other languages;
c. interlingua architecture in which an interlingual or language-independent representation substitutes the transfer level between two languages in transfer architecture.

The major approaches today debate the advantages and disadvantages of the theories of Transfer versus Interlingual MT, and whether MT should be Rule-based, based on a bottom-up linguistically orientated syntactic + lexical basis, or Example-based, based on the statistical results of large databases of aligned originals and their translations. The present tendency, according to Maegaard (ed.) (1999), would seem to be towards obtaining the best of all worlds and creating Multi-engine MT. State-of-the-art projects are attempting to solve the problem of Speech-to-Speech Translation but, until the speech recognition and production technologies have developed beyond their present state, this will continue to be an area for research.

3. MT and the human translator

For the present and immediate future, the uses the more general public makes of MT are restricted to ‘gist’ translation, or fast translation for intelligent users, when human
translation is out of the question because of time and other factors. For example, this is an option the European Commission translation services offer people in a hurry. The on-line MT engines are aimed at helping tolerant users deal with ephemeral texts and, generally speaking, they help communication in many situations.

At another level we can talk of human aided MT, in which the human editor/translator often pre-edits the text, or applies the criteria of controlled language, and works with special language domains, as described in Austermühl (2001: 164–165). After the MT process, the human editor/translator will post-edit the text before publication. There is every reason why university programmes for human translators should include training in human-aided MT, if for no other reason than the fact that translation technology is working on integrating MT tools into existing translation memory software, as can be seen from Lange & Bennett's (2000) description of an experiment with Logos and Transit. The professional translator today has to learn to make the best of the technology available, and the only way to avoid being a slave of these systems is to understand how they work and to use them to advantage.

It is understandable that human translators should react negatively to the idea of MT. This is partly because their more traditional training has made them expect a high standard of either functionally adapted or creatively translated texts, and they find the MT results unacceptable. The type of exercise described here is by no means intended to substitute this training, which is very valuable for the literary and more culturally orientated translation that MT producers have never seriously aspired to produce. However, most professional translators earn their livings by translating more mundane, technical texts and, as MT and other forms of translation technology improve, it is also understandable that they should feel threatened by their possibilities.

The positive side of increased communication through MT, for the human translator, is that it encourages curiosity about texts in unknown languages in people who would previously have simply ignored their existence. In the long run, this curiosity can only lead to a demand for more good human translation. In fact, it is probably true to say that English is a bigger threat to multilingualism and the translator than MT.

4. Evaluation of machine translation

The evaluation of human translation has always been a subject for lively discussion, whether the critic is evaluating student translation, editing professional translation or complaining about perceived mistakes in published translations, and the level of the objections will range from totally justifiable to highly subjective. Research into the translation process tries to analyse the psychological reactions of translators as they translate, using methods including Kussmaul's (1995) 'think-aloud protocols' and
Jakobsen’s (2003) Translog software for tracking translator’s work patterns on the computer. The quantity of analysis of the finished result of translation is enormous, but not much is conducted in a systematic manner, despite efforts by such people as House (1977, 1997) to introduce functional analysis of translation, Baker (1998) and Laviosa (1998) to observe tendencies in translation using translation corpora, and attempts to establish ‘universals’ of translation (see Mauranen 2004).

It is therefore only to be expected that the evaluation of MT should also be a complex issue, and cover both the MT systems themselves and the resulting translations. The types of evaluation of MT used are described in FEMTI – A Framework for the Evaluation of Machine Translation in ISLE at http://www.isi.edu/natural-language/mteval/printableclassification.html, Elliott (2002) and in Sarmento et al. (2007). Since MT systems are usually constructed by computational linguists, or people with training in both linguistics and computer programming, it is only natural that people with a similar training should evaluate these systems for reasons pertaining to the efficiency of the technology from an internal point of view. There are various obvious reasons for carrying out this kind of evaluation, which requires looking into the ‘glass box’ of MT, or being able to see into the system and examine, correct or criticise it. This type of analysis goes beyond the pedagogical methodology discussed here, although we hope it may prove a possibility for future research.

External evaluation, in which the system is evaluated by outsiders dealing with the ‘black box’ of MT, or with access only to the results, is carried out by MT providers in order to test their systems with potential users. Although external evaluation is carried out using (semi-)automatic techniques, as demonstrated by Rajman & Hartley (2002), a more traditional method is to ask potential users to test a system that has been prepared for a specific purpose and to evaluate the results on a gradient of excellent to unintelligible. The people chosen to do the evaluation are rarely experts in translation, who might be hyper-critical, and the emphasis is on evaluating the system on the macro-level of overall competence of the system, rather than on the micro-level of syntactic or lexical detail. At a more ad hoc level, there must be plenty of people who apply their own tests to on-line systems in order to decide which commercial system to buy. It was within the context of looking at on-line ‘black boxes’ that our own experiment was carried out.

5. Experimenting with the evaluation of MT as a pedagogical exercise

The original background for the experiment described here was a forty-four hour seminar in Semantics and Syntax within a Master’s degree in Terminology and Translation at the University of Porto in 2003. The group of students on this course had a very varied knowledge of linguistics, and it was necessary to find a way of educating
those with little more than basic notions of grammar in the implications of linguistic analysis, while allowing those with a more sophisticated background to explore the area in more depth. We were also interested in MT as a possible tool for translators and decided to examine on-line MT in order to encourage linguistic analysis of its possibilities and limitations. Our task was transformed from patient access and re-access to the on-line MT engines to the rapid recovery of several MT results for one request by the creation of METRA within the scope of the Linguateca project (see Santos et al. 2004).

5.1 METRA

There are several freely available English (EN) <> Portuguese (PT) on-line MT engines, and PoloCLUP of Linguateca created a tool, METRA (http://www.linguateca.pt/metra), which automated the process of submitting an original sentence in EN or PT and obtaining PT or EN results from seven online MT engines. We have experimented with the following nine MT engines:

e. FreeTranslation – http://www.freetranslation.com/
f. Google – http://translate.google.com/translate_t – a version of the SYSTRAN system
g. SYSTRAN – http://www.systranbox.com/systran/
h. T-Mail – http://www.t-mail.com/(no longer available)
i. WorldLingo http://www.worldlingo.com/en/products_services/worldlingo_translator.html – a version of the SYSTRAN system

Of these nine MT engines, four – SYSTRAN, Babelfish, Google and WorldLingo – are all based on the SYSTRAN system and the results are nearly always identical. SYSTRAN’s site is dedicated to selling its own products, but the Babelfish (Altavista) and Google versions are part of these search engines. WorldLingo and the other free machine translation services are offered by organizations with an interest in providing a wide variety of professional language services, including human translation, localization and project management. Amikai, Applied Languages and WorldLingo are the names of these bigger organizations, whereas E-Translation is the MT engine for the German firm Linguatec, and Free Translation is one of the SDL company products.

The new version of METRA, METRA3, has reduced the number of engines to seven (Amikai, Applied Languages, Babelfish, E-Translation Server, Free Translation, Google, and WorldLingo) in order to speed up results and cut down on repetition, as can be seen in Figure 1.
METRA receives hundreds of ‘hits’ per week and the new version asks them to choose which translation they prefer. In this way we hope to acquire some sort of general users’ evaluation of the engines.

With the help of METRA, we have developed pedagogical exercises which involve the use of corpora for finding examples of words, phrases or syntactic structures that are problematical for MT, and often for human translators as well. This methodology owes more to the theory and practice of Contrastive than Computational Linguistics, but the hope is that the training involved will educate future translators in the strengths and weaknesses of MT, while increasing their awareness of linguistic problems in human translation.

5.2 Using corpora to find ‘genuine’ examples

The use of corpora and corpus linguistics techniques to find ‘genuine’ examples has always been a parallel, rather than a secondary, objective of our methodology. In fact, these two activities were developed together with a view to breaking down any remaining objections to using technology for studying language. Besides this, the same students are also usually investigating the possibilities of creating their own corpora both for the analysis of general language and the extraction of terminology from...
special domain corpora using Linguateca’s on-line suite of tools for this purpose, the Corpógrafo (see Maia 2005; Maia & Sarmento 2003; Sarmento et al. 2004).

The normal way of training and evaluating MT is to use ‘test suites’ (see FEMTI at the ISLE site at http://www.isi.edu/natural-language/mteval/printableclassification.html), in which the slots in a specific syntactic structure are systematically filled with a variety of lexical items until the machine can be said to have learned how to reproduce the structure correctly using a representative lexicon. Since both the teachers and the students on our programmes are well aware of the problems posed by real-life translation, this technique seems unnatural, and so we insist that students should find ‘genuine’ sentences in corpora. In order to do this, our students, who are nearly all native speakers of Portuguese, are encouraged to find suitable sentences in the British National Corpus (BNC) on our intranet, cross-reference the results by concordancing the online monolingual Portuguese corpus CETEMPúblico (at http://www.linguateca.pt/cetempublico) for apparent equivalents in Portuguese, and compare the MT results to the human translations in the English/Portuguese parallel corpus COMPARA (at http://www.linguateca.pt/compara), or in other available sites such as the European Commission page, which is, after all, a freely available multi-lingual parallel corpus (EN page at: http://europa.eu.int/comm/index_en.htm).

Each student researcher is asked to choose an item for analysis, such as lexical and/or structural mismatches, homographs, polysemous lexemes, synonyms and their collocations, areas of syntactic complexity, multiword units or ‘lexical bundles’ (Biber et al. 1999: 990–1024), and other linguistic phenomena which cause problems to both MT and human translators. Although examples of the type of work expected of them are given, students are encouraged to find their own ‘problems’. This obliges them to try out their own hunches on the various corpora until they find something that interests them. This freedom to choose encourages them to experiment with the corpora and develop their ability to use the search syntax imaginatively (most of our corpora use the IMS syntax, developed by the Institut für Maschinelle Sprachverarbeitung of the University of Stuttgart). After floundering around for a bit as they experiment with different ideas and get used to the technology, they eventually find something that catches their attention and their experimentation is then driven by personal interest. This has proved to be a better methodology than distributing teacher-chosen tasks.

By the time the ‘problem’ has been chosen, the students are familiar with the various corpora and some will even construct their own. They are also encouraged to build their own ‘corpora’ out of the concordanced sentences they find on the large monolingual corpora. This can be done by simply applying ‘cut-and-paste’ to the concordances and using Microsoft Word or Excel. The results can then be analysed more carefully using concordancing programmes, or be uploaded on to the Corpógrafo for use with the different types of concordancing and n-gram tools supplied there.

In many cases, a large amount of material is accumulated and the next lesson to be learnt is how to make sense of it all, an important step in developing good research
methodology. The concordancing tools will eventually show up which aspects are most interesting, common, rare, or of little interest, and deadlines and the need to limit the scope of the work in hand will force a decision to focus on certain aspects and create some sort of classification of the phenomena observed. At this point, the examples can be reduced to a manageable number and tagged using the classification developed. This can be done by adding an extra column in Word or Excel to either monolingual or parallel corpus examples, manually labelling each example, and then applying the Sort function to group the examples.

The next step is to submit examples of each group to METRA. At this stage, students are warned against making deliberate attempts to confuse the systems by using incomplete, badly constructed or ambiguous sentences, or asking them to translate proverbs, clichés, or idioms like that old favourite, ‘raining cats and dogs’. Also, since some of the MT engines only accept a limited number of words, ‘pruning’ of unnecessary words from the examples chosen is sometimes necessary. This pruning will depend on the item being studied, but the exercise itself is useful for distinguishing what are the essential or unnecessary words or information in the sentence.

The results of METRA can be compared with human translations if the source text examples have been taken from a parallel corpus such as COMPARA or the EC page. Alternatively, the student researchers can compare the results with translations done by themselves or colleagues. Naturally, the analysis of the MT results will depend on the problem chosen, the linguistic education of the researcher and the individual interests of each person.

6. TrAva and evaluation of MT

Another tool that was developed for research into the evaluation of MT was the TrAva tool. The objective was to provide an online system which obliged students to classify both the input problem they were studying and the output of the various MT engines in a way that was registered on our server. The objectives behind this exercise owed more to Computational than Contrastive linguistics and the lessons learnt show up the problems of the two areas working together. The tool was developed with the help of a computer engineer and computational linguists, and used for experiments in MT evaluation by post-graduate students, most of whom were professional translators. Although the tool has its limitations, the exercise in producing it proved to be educational for all concerned.

In order to make a tool that was computationally manageable, and relevant to our student researchers, we reduced the number of METRA engines to four – Free Translation, SYSTRAN, ET Server and Amikai, and, as the students were all native speakers of Portuguese, these engines were only required to work in the EN > PT direction. Each researcher worked in an individual space on the server and could access and
review their work. When requested, the teacher or administrator could access student work and give advice or solve technical problems.

6.1 Classification of errors – problems

The main problem was to develop appropriate systems of classification, and there were various problems that had to be faced, apart from choosing rules that were simple enough for use by a mixed ability group of student collaborators. It must be remembered that we were working with ‘black boxes’, i.e., with no knowledge of the original systems used to programme the MT engines, so it was necessary to develop our own classificatory procedures. Since no two languages have exactly parallel grammatical and lexical systems, or completely parallel systems of linguistic analysis or related terminologies in which to discuss them, this was not easy. On top of this, the rules used by the different MT engines do not necessarily coincide with more generally known linguistic classifications and we had no access to them anyhow. Besides this, the linguistic theories that suit analysis of human translation – systemic-functional analysis, text linguistics or discourse analysis – differ considerably from those used for MT.

Besides these problems, we must remember that different teams of linguists appear to work in each separate language direction in MT and this means that a back-translation will rarely produce the original, as can be seen if one tries out our tool BOOMERANG (available at: http://poloclup.linguateca.pt/ferramentas/boomerang) which will return the results of METRA translations for repeated back-translation until the ‘original’ and the ‘translation’ reach a fixation point, as can be observed in the following example:

(1) a. Original (BBC News)

Two wild ducks found in Schleswig-Holstein have tested positive for the virulent strain.

b. Translations (Free Translation)

i. Dois patos selvagens achados em Schleswig-Holstein testaram positivo para a tensão virulenta.

‘Two ducks wild finds in Schleswig-Holstein quizzed positive for the virulent tension.’ (back-translation)

ii. Dois patos selvagem acha em Schleswig-Holstein interrogou positivo para a tensão virulenta. (back-translation)

‘Two wild ducks finds in Schleswig-Holstein interrogated positive for the virulent tension.’ (back-translation)

iii. Dois patos selvagens acha em Schleswig-Holstein interrogado positivo para a tensão virulenta. (back-translation)

‘Two wild ducks finds in positive Schleswig-Holstein interrogated for the virulent tension.’ (back-translation)
As we can see, although the first translation into Portuguese is correct except for the lexical item *strain > tensão*, the back-translations then generated lead to some confusion over the correct parsing of *found > achados > finds > acha*, as well as both lexical and parsing problems with *tested > testaram > quizzed > interrogou > interrogated > interrogado > interrogated*. This tool has provided considerable amusement to those who use it, but the results can also be studied more seriously by anyone attempting to understand the mismatches in the parsing systems and dictionaries being used by the MT engines.

6.2 Classification of errors – possible solutions

In the end, the choice of classification was dictated by circumstances, the first of which was the availability of the BNC on the faculty intranet. This allowed students to search for items of the English lexicon and syntax using the BNC part-of-speech (POS) classification, and this exercise was in itself pedagogical. The BNC PoS codes are fairly standard and relatively simple to understand, while allowing those students better versed in linguistics to create PoS strings that find quite sophisticated structures. For example, the string ‘adverb + past participle + adjective + noun’ can be used to find complex noun phrases like ‘*the newly elected Labour Minister*’, or even pronoun + verb + article + noun + preposition + noun, as in ‘*She drove the children to school*’.

The procedure of searching corpora, finding a problem and testing it on the MT engines was similar to that used with METRA. The difference was that the translations appeared on a page which asked the researcher to classify the segment being examined in terms of the BNC PoS codes, or by simply typing in the critical section of the original into the space provided, as can be seen in Figure 2 overleaf.

The researcher then attempted to explain any errors in terms of Portuguese grammar, as can be seen in Figure 3 on p. 135.

The researcher was also asked to describe the MT results in terms of acceptability, to provide a good human translation, and to add any comments that he/she considered might help in the understanding of the problem being analysed.

Although this process may seem fairly straightforward, it is in fact very difficult. The idea of limiting the analysis to a specific segment is to help the researcher concentrate on one particular problem, rather than analyse every problem that arises in each translation. If an MT engine is very ‘word-for-word’, this focusing may help. However, most MT engines use quite sophisticated parsing systems and one may well have to take this wider scope of analysis into consideration, as can be seen in the following example:

(2) a. Original (BNC)

*Strategic vision cannot be achieved without a coherent sustained industrial strategy.*
b. Machine translation (Amikai)

‘Não pode ser alcançada (uma) visão estratégica sem uma estratégia industrial continua coerente’.

‘Not can be achieved (a) vision strategic without a strategy industrial continues coherent’. (back-translation)

where we can see that, although the passive has been maintained, the subject has been moved to a more natural position after the verb in the PT MT version (despite the omission of the indefinite article), and the translation engine has correctly moved the adjectives in the complex noun phrase from the EN left to the PT right position.

Clearly, the same PoS system of classification could not be used on the output because the result was often difficult to interpret in an equivalent PoS manner. Several attempts to provide a satisfactory classification of the errors were made and the final one turned out to be rather too complex for the student evaluators. The only major miscalculation in the classification system, however, was the fact that ‘lexical choice’ was given as just one option among many more ‘syntactic’ errors. The result was that, although the ‘error’ was more often than not a combination of lexical and syntactic factors, it was impossible to register this fact, and students tended to choose the ‘lexical choice’ option by default, rather than attempt to go deeper and explain the ‘error’
Figure 3.

as ‘syntactic’. This problem was the result of paying too much attention to the theory by which the syntax is the primary consideration of the MT developer, and the function of the lexicon is merely to fill the slots in the syntactic structure. Now that more attention is being given to the way the lexicon drives the syntax, to the lexical patterns that can be observed using parallel corpora and statistical analysis, and to the way multi-word units (MWUs) function, and are translated by corresponding MWUs in the target language, the focus is different and the developers appear to be working on these aspects, as we have had occasion to observe.

7. Student projects and research

The methodology described for METRA has now been used with several groups, including undergraduate groups studying contrastive linguistics as preparation for translation work. There are clearly an enormous number of possible ‘problems’ that could be analysed using METRA and the other Linguateca tools, and it is obvious that a large team, able to understand how each system works and to access the ‘glass box’ versions to analyse and adapt them, would be needed for any systematic analysis.
A team of this kind cannot be built out of student projects, although the work done so far would be good preparation for more sophisticated work.

In defence of the MT engines it must be said that, in our more pedagogical situation, when students are searching for a problem to study, they actually discard plenty of ideas because either the MT results are correct or the same mistake is made consistently. The former need no analysing, and latter phenomenon is just boring and, presumably, relatively easy to correct if one only had access to the system. Besides this, we find that students who are taught contrastive linguistics using this methodology often resort to MT as a tool to help them do their translation homework later on. This means that they consider MT useful, even if this method does not exactly please teachers trying to get them to do ‘good’ translation!

Some students are interested in comparing the different MT systems and choose aspects that some engines translate correctly and compare them to others that do not, and they provide statistics to prove which engine is best, as is demonstrated in Pinhão & Napolskij (2006). However, the fact is that, being trainee human translators, most students are naturally drawn to the language problems that they themselves find difficult to solve. From the point of view of serious evaluation of MT, this may seem a luxury, but from the pedagogical point of view, the exercise is of considerable value.

7.1 Lexical problems – collocation, synonymy and polysemy

Many of the projects have been done on lexical phenomena, such as collocation and polysemy, which are also well-known problems for the human translator. Choosing the correct collocation is a major problem for human translators, and incorrect usage is often the principal clue to identifying a text as a translation. An example of a study of collocation is that carried out on the lexical group *beautiful, handsome, pretty, good-looking*, which does not map onto the Portuguese group *belo/a, bonito/a, lindo/a*. The collocational use of these adjectives to describe people and things depends on context and even on the social background of the speaker.

On other occasions, the lexical group contains a larger and more specific set of synonyms in one language than the other. An example of this was work done on verbs meaning *cut*, particularly in the area of cooking instructions, and the more specific *carve, chop, dice, grate, grind, mince, slice* and *shred*. The English words are very specific and only some of them need a word other than the Portuguese *cortar*, although *carve* will have different translations according to whether one is carving turkeys, wood or other substances, and the MT engines produced *esculpir, gravar* and *trinchar*. Another project focused several words expressing light, such as *blaze, gleam, glitter, glow, shine, sparkle*, and *twinkle*, words well-known for the difficulties they present to the translator.
Observation of the results for these lexical areas suggests that MT programmers opt for various solutions. One solution would seem to be the existence of such small dictionaries in the on-line engines that the result is simply the un-translated English word, and this is often the result in the case of the free versions of SYSTRAN. Another strategy would seem to use the more general word, for example, cortar for some of the more specific cut synonyms, and brilhar or cintilar for the shine synonyms. This, in fact, is the way many human translators solve the problem of very specific synonyms in translation as was observed by Maia (1988) in relation to the field of light effects, and at a more general level by Laviosa (1998: 565) when she demonstrates that the lexical density of translations is lower than in the originals. Sometimes the MT engine seems to deliberately choose the most frequent usage for the translation, as when it translates the Portuguese preposition em by in and ignores the possibilities of on, the logic presumably being that the answer will at least be right most of the time. However, it is also true to say that many of the choices made suggest that programmers often choose equivalents in the target language in a somewhat haphazard manner.

On other occasions, the MT engine can be asked to use a special domain lexicon, as is the case with E-Translation, which offers quite a wide variety of lexicons if one accesses their site directly. For example, their results for the cut synonyms show the presence of a cooking lexicon. Another student chose to try out examples from technical texts on printers with words like attach, display, flash, open, replace, and store, and was able to demonstrate that, whereas E-Translation, with its more technical lexicons, did well here, Amikai, which is trained for translating e-mails, does badly.

Polysemous words are another well-known problem for the human translator and there has been plenty of work done on polysemous words like be, fair, fine, get, hold, issue, let, play, right, run, and watch. Verbs with weak, or general, semantic content, that change meaning according to their complementation, are another area to explore, and phrasal verbs also cause problems. Here are examples with get that show how the different programmes just take one possible meaning in Portuguese and apparently hope for the best:

(3)  *I get a lot of charity appeals through the mail.*

a.  Eu *começo* muitos de apelações do charity através do correio.
   ‘I begin ……..’

b.  Obtenho muitos apelos de caridade através do correio.
   ‘I obtain ……..’

c.  Eu *adquiro* muita caridade atrai pelo correio.
   ‘I acquire ……..’

(4)  *I felt it was a bit hard that I should get a mysterious pain in the knee on top of all my other problems.*
It should be possible to work out some of the lexical items which collocate with get on a more regular basis and align these meaning with appropriate translations, but it will be very difficult to obtain good translations in all circumstances.

7.2 Lexical + syntactic problems – homographs, closed system words, lexical bundles/multi-word units, clichés, idioms

The distinction between polysemous items and homographs is not always easy to make, but homographs can be considered as those words – often polysemous – that are written in the same way, but act as different parts-of-speech. The problem with these words and MT is that, apart from providing a suitable lexical equivalent, the engine often has problems parsing the sentences in which they occur. Homographs like fight, hold, like, look, round, and words ending in -ing, all cause MT problems because of their syntactic variety.

The following examples with round show just how difficult the parsing of such homographs can be:

(5)  I put my arm round Amy's back and she leaned her head against my shoulder.

a. Ponho o meu braço Amy redondo costas e ela inclinaram a sua cabeça contra o meu ombro.
   ‘I put my arm Amy round back …..’

b. Eu pus a parte traseira do meu amy redondo do braço e inclinou sua cabeça de encontro a meu ombro.
   ‘I put the back part of my amy round of the arm ….’

c. Eu pus o meu braço que Amy arredondada está de volta e ela apoiou a sua cabeça contra o meu ombro.
   ‘I put my arm that Amy rounded is back ……’

d. Eu pus meu braço redondo Amy atrás e ela apoiou a cabeça dela contra meu ombro.
   ‘I put my arm round Amy behind …..’
(6) Unless, of course, it’s the actions that make the words memorable, and not the other way round.

a. A menos que, naturalmente, é as ações que fazem as palavras memorável, e não o outro meio **redondo**.
   ‘….and not the other means round’.

b. A menos que, naturalmente, for as ações que fazem as palavras memorable, e não a outra maneira **redonda**.
   ‘….and not the other manner round.’

c. A não ser que, naturalmente, são as ações que tornam as palavras memoráveis, e não **rodeiam** a outra maneira.
   ‘……and not they surrounded another manner’.

d. A menos que, claro que, é as ações que fazem as palavras memorável, e não o outro **círculo de modo**.
   ‘……and not another circle of mode’.

Closed system words like prepositions, adverbs, and conjunctions, also cause MT difficulties and some interesting work has been done on **above, across, at, before, even, just, since, too**, and many others. The next example shows how difficult MT finds it to cope with **across** being used as an adverb:

(7) The meteorite blasted a hole 200 kilometers **across**.

a. O meteorito explodiu um buraco 200 quilômetros **do outro lado**.
   ‘….200 kilometers of other side’.

b. O meteorito explodiu um furo 200 quilômetros **transversalmente**.
   ‘… 200 kilometers transversally’.

c. O meteorito arruinou um buraco 200 quilômetros **através de**.
   ‘… 200 kilometers across of’.

d. O meteorito dinamitou um buraco 200 quilômetros **por**.
   ‘….200 kilometers for’.

Modality also causes problems because, although verbs such as **can/could/may/might, had better, need, shall, supposed to, would**, etc., have been worked on from the point of view of supplying acceptable syntactic equivalents, the fact is that the finer nuances expressed by these verbs depend very much on the context. It must be remembered that the modal verbs of a language like English do not necessarily correspond to an equivalent modal verb system in the target language.

Comparatives and superlatives also cause the machines problems, as do quantitative expressions like **some** and **any**. Unsurprisingly, tags, as in **You did see him, didn’t you?**, are not tackled by MT, perhaps because this very colloquial aspect of language is of little interest to people working on systems designed for written communication.
There have been some interesting analyses of more syntactically orientated phenomena, a good example of which was work done on complex noun phrases in English of the kind that have multiple adjectives or other premodifiers before the noun. Although the MT systems seemed able to cope with the right movement of multiple adjectives in the PT translation, they had problems with non-obvious qualifiers, as in the following example:

(8) The 22-year-old Swedish super star has arrived in Suffolk in determined mood.

a. Os 22-estrela formidável, sueca ano velho chegou em Suffolk em disposição determinada.
   ‘The (plural) 22-star formidable Swedish year old …’

b. A estrela 22-year-old super sueco chegou no suffolk em modo determinado.
   ‘The star 22-year-old super Swedish …’

c. A estrela de extranumerário sueca 22-ano-velha chegou em Suffolk em determinado humor.
   ‘The star of extranumerary Swedish 22-year-old …’

A further area which is of interest to corpus linguists are the frequently occurring multi-word units, or ‘lexical bundles’ (Biber et al. 1999) such as I wonder if, would you mind, I/she would rather, I want you to, I’m meant to, it can be seen/argued that, it is likely/possible that and many others. As we can see in the following example, although I know is recognized as the lexical bundle I know (that), the phrase I’m meant to is not:

(9) I know I’m meant to say no.

a. Sei que eu sou querido dizer para dizer não.
   ‘I know that I am wanted to say to say no.’

b. Eu sei que eu estou significado dizer o No.
   ‘I know that I am signified to say the No.

c. Sei de ser significado para dizer n.
   ‘I know of to be signified to say n.’

d. Eu sei que eu sou querido dizer dizer que não.
   ‘I know that I am wanted to say to say that no.’

The work done so far would seem to indicate that not enough attention has been paid to the possibilities of substituting these set phrases by similar ones in the target language, and it is this aspect that the theory and practice of Example-based MT needs to explore in greater depth.
8. Future research possibilities

The tools that have been developed within Linguateca for MT analysis and corpora exploration open up a lot of possibilities for general, contrastive and computational linguists.

8.1 METRA and corpora work for contrastive linguistics

The methodology that has been developed with our corpora has proved to be successful in that students begin to use corpora for all kinds of linguistic study, and not just translation. The possibility of observing words in plenty of contexts in monolingual corpora is invaluable as a means of understanding the importance of collocational correctness; a parallel corpus allows trainee translators to observe how professionals have (not) solved the problems they too have to face; and the need to build corpora, particularly comparable corpora of the kind encouraged by our Corpógrafo tools, is an excellent way of educating students to recognize different types of text and discourse and encouraging them to do further research into these areas.

Using METRA and the comparison between human and machine translation is a useful focus for the work derived from the corpora, and the exercise encourages in-depth analysis of linguistic phenomena. We are also asking those who use it to evaluate the results they get by indicating which translation they consider to be the ‘best’. The results of this initiative will be interesting and possibly point the way to research into the answers given.

8.2 TrAva – possible developments

The TrAva tool proved too complex for use with undergraduates, and we are well aware that it by no means offers a final solution to the problem of evaluating MT. However, the research that resulted from its creation needs to be continued and extended with a large and well-qualified group of researchers. One of the first decisions that need to be taken is over the theoretical basis for the classification of input and output.

One solution would be to study and work with the theoretical concepts on which each MT engine is based. However, this might actually be counter-productive because, if MT still makes mistakes, this is partly due to insufficiently developed theory. To use PoS analysis for the input is clearly too basic because, as we have seen, MT works at a more sophisticated level than word-for-word. Therefore, there needs to be agreement on the type of analysis needed at lexical, phrasal and syntactic levels, and the emphasis must be on a classification that focuses on the relationships between these levels.

The insights resulting from the observation of the way the lexicon interacts with syntax, as shown by Partington (1996) and Hunston & Francis (1998), the ability to identify common lexical groupings in certain genres, as in Partington’s analysis of
political discourse (2002), the realization of the frequency with which lexical bundles occur (Biber et al. 1999), the ‘formulaic sequences’ of Schmitt (ed. 2004), and many other works that have shown the possibilities of observing the way discourse is constructed, both qualitatively and quantitatively, should be used to construct a relevant classification. This research has shown that the lexicon has a much more controlling influence on language structure than was previously thought. Hoey’s (2005: 1) lexical priming takes this even further by arguing that “lexis is complexly and systematically structured and that grammar is an outcome of this lexical structure”. These observations must be allowed to modify the theoretical basis for MT programming. Some computational linguists have been working on this by trying to harness the statistical results derived from parallel corpora but, if these results are to be really effective, they must be coordinated with quality control of the parallel corpora and improved by the insights derived from the experience and knowledge of contrastive linguists and professional translators.

8.3 CORTA and the METRA logs

The result of the first TrAva experiment was a corpus, called CORTA, of over a thousand sentences + up to four MT results, and it was consultable online for some time. However, it is the METRA logs which now offer the most interesting possibilities for serious research. METRA has gained a popularity that goes way beyond the confines of academia, and is being used hundreds of times a week by people all over the world, especially in Brazil and Portugal. The result is that there is now an enormous quantity of material in the logs of METRA that could be used for various types of research. The logs register all the requests made in either EN or PT + 5 MT versions from the online engines.

It is possible to search the logs on-line and this process offers the possibility of evaluating everything from minor aspects of lexical usage and syntactic structure to the engines themselves. It will mean that, instead of constructing one’s own examples of MT, one can use what other people have already put there. This may not favour the type of very specific analysis of individual phenomena that has been encouraged so far, but it opens up the possibility of examining more general phenomena more rapidly. The large amount of examples provides plenty of material for serious evaluation of the different systems, quite apart from, but linked to, the evaluation being asked of the users of METRA. Naturally, it will be necessary to work on the methodology to be used for these exercises, but this in itself is a subject for research.

There is also an interest in studying who uses METRA, what sort of text is being inserted for translation, and trying to estimate why people use it in the first place. Such information might help MT producers in their attempts to produce MT for specific users.
9. Conclusions

The various experiments described here started out as practical ideas for creating a teaching methodology that would use available technology to advantage. The technical result is the creation of computational tools that are user-friendly and accessible to anyone who wishes to use them. The pedagogical result has been that students find out how corpora and machine translation can be useful as tools in translation and linguistic analysis. There is no doubt that the vast majority appreciate the technology, particularly if they are encouraged to experiment with and explore these tools. It is hoped that the methodology will help them to make sense of the theory behind not just our own technology, but also of the present and future uses of commercial translation software and other digital resources. It should also serve as a basis for training translators to work with MT or to use it as a tool.

Analysing and classifying the results obtained from both the corpora and METRA develops a greater awareness of the challenges posed by general linguistics and may well lead to greater interest in the possibilities for research that brings together contrastive and computational linguistics. The research that has been made possible is already in progress, and the tools, and the logs resulting from their use, now offer an exciting amount of material for various forms of analysis.

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**Linguateca Links**

Linguateca: http://www.linguateca.pt
Poloclup of Linguateca: http://www.linguateca.pt/poloclup
Poloclup tools:

- BOOMERANG: http://poloclup.linguateca.pt/ferramentas/boomerang
- Corpógrafo: http://www.linguateca.pt/corpografo
- METRA: http://www.linguateca.pt/metra
- METRA Logs: http://poloclup.linguateca.pt/ferramentas/metralogs
- TrAva: http://poloclup.linguateca.pt/ferramentas/trava
‘Basically speaking’
A corpus-based analysis of three English adverbs and their formal equivalents in Spanish

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This chapter investigates the properties of basically, essentially and fundamentally and their formal Spanish equivalents básicamente, esencialmente and fundamentalmente, in corpora. After an initial study of the frequencies of the adverbs, I examine their collocational behaviour and show that the three English adverbs, although they share some patterns, nevertheless have distinct collocational profiles. This is also true of the Spanish adverbs, but there is much more overlap. The chapter then reports on a study of the syntactic properties of the adverbs. I investigate their positions within the clause, and make comparisons between adverbs and across languages. The results are of interest not only from descriptive and comparative perspectives, but also for language teaching and learning.

1. Introduction

Greenbaum (1969: 206), in his pioneering corpus-based study of adverbial usage in English, states that the adverbs basically, essentially and fundamentally “constitute a group of their own” in relation to their semantic classification, and that they “assert that what is being said is true in principle, despite minor qualifications that might be made”.1 If this is the basic meaning of these adverbs, then we may wonder just how they differ. Dictionary definitions tend to help rather little here, often defining the adverbs in very

1. The main findings of this study were first presented at the 4th International Conference on Contrastive Linguistics in Santiago de Compostela, Spain, in September 2005. I am grateful to participants in that conference for their valuable comments on the work. I am also indebted to Francisco Gonzálvez García for his perspicuous comments on an earlier draft. I wish to acknowledge support, during the time of writing of this chapter, from the SCIMITAR research group (http://www.usc.es/scimitar), sponsored by the Ministry of Science and Innovation of Spain, under project A comparative perspective on the Grammar-Discourse Interface in English, with special reference to Coherence and Subjectivity (HUM2007–62220).
similar terms, and even defining them in terms of one another. For example, the online version of the Cambridge Advanced Learners Dictionary (http://dictionary.cambridge.org) says that *basically* is “used when referring to the main or most important characteristic or feature of something”, and *essentially* is defined in an almost identical way as “relating to the most important characteristics or ideas of something”, while *fundamentally* is not given a definition as such, though the word as used in concrete examples is glossed with “in a basic and important way” and “in every way that is important”, and an example in which it is said of a reorganized company that *nothing has fundamentally changed/altered* is glossed with ‘its basic character has not changed’. Even the corpus-based Collins Cobuild Dictionary (2nd edition, 1995) has very similar definitions for the three adverbs, and again defines *essentially* and *fundamentally* using the word ‘basic’, though it does additionally indicate that *essentially* is used in formal English:

1. You use *basically* for emphasis when you are stating an opinion, or when you are making an important statement about something.
2. You use *basically* to show that you are describing a situation in a simple, general way, and that you are not concerned with less important details.

1. You use *essentially* to emphasize a quality that someone or something has, and to say that it is their most important or basic quality; a formal use.
2. You use *essentially* to indicate that what you are saying is basically true, although some parts of it are wrong or more complicated than has been stated; a formal use.

1. You use *fundamentally* for emphasis when you are stating an opinion, or when you are making an important or general statement about something.
2. You use *fundamentally* to indicate that something affects or relates to the deep, basic nature of something.

It therefore seemed worthwhile to undertake a detailed corpus-based study of the three adverbs in order to determine whether differences can be found in their lexical and syntactic environments. In addition, the adverbs *básicamente*, *esencialmente* and *fundamentalmente*, which are the Spanish formal equivalents, will be examined, again using corpus materials, in order to isolate similarities and differences between the two languages in this area.

2. Corpora and analytical tools

For English, the British National Corpus (henceforth BNC) was used. This consists of approximately 100 million words of British English, 90% from written texts, 10% from spoken materials. Approximately 22% of the written texts are from imaginative

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2. The version of the BNC used was the original one, not the later BNC World edition.
writing, mostly from the period 1975–1993, though with some from as far back as 1960; the remaining material is from informative texts, dating from 1975 onwards, and divided into the categories arts, belief and thought, commerce and finance, leisure, natural and pure science, applied science, social science, world affairs. About 59% of the material is from books, 31% from periodicals, with smaller amounts of other published material. The spoken material contains roughly equal amounts of informal encounters and more formal language recorded in meetings, debates, lectures, radio programmes, etc.³

For Spanish, the main source of material was the Corpus de Referencia del Español Actual (henceforth CREA). At the time of consultation (July 2004), this corpus contained 156 million words, the texts being collected between 1975 and the present day. Of the total, almost 95% consists of samples from the written Spanish of all the main hispanophone nations, divided equally between Spain and Spanish Latin America, and between books and the press. The remaining material is spoken, again split equally between Spain and Latin America, and contains material from radio broadcasts, direct recordings, telephone conversations, etc.⁴ Clearly, the BNC and CREA are fairly similar, although by no means identical, in their make-up.

In addition to CREA, two further sets of Spanish materials were used for comparison: texts from the Spanish daily newspaper El Mundo for the years 1995 and 1996 (63.8 million words), and material from the cultural section of a second Spanish daily newspaper, ABC, from the years 1991–1993 (4.4 million words), both available on CD-ROM.

Since the CREA search engine has no facility for the computation of collocations, an opportunistic sample was obtained by combining the El Mundo and ABC Cultural texts with others from the Spanish daily El País, a small selection of literary works available in computer-readable form, and two small spoken collections, the Corpus oral de referencia de la lengua española contemporánea (Oral reference corpus of the contemporary Spanish language, 1 million words, collected in the early 1990s by Francisco Marcos Marín) and the Macrocorpus de la norma lingüística de las principales ciudades del mundo hispánico (Macrocorpus of the linguistic norm of the main cities of the hispanic world) (Samper Padilla, Hernández Cabrera & Troya Déniz 1998), containing samples of oral language from cities in Spain and Latin America. The total size of this collection is approximately 89 million words, of which 98% is from written language, overwhelmingly from newspapers. Clearly the small amount of spoken material included means that we cannot draw any firm conclusions from this opportunistic sample about differences between spoken and written language.

³ For further details of the BNC, see http://info.ox.ac.uk/bnc, and for more information on the makeup of the corpus see Aston and Burnard (1998: 28–33).

⁴ Further details of CREA can be found at http://www.rae.es, where online searches of the corpus can be made.
The BNC was searched by means of WordSmith Tools, allowing the production of word lists, concordances, lists of collocations, repeated sequences of words, etc. The CREA corpus was searched using the online facilities offered by the Real Academia Española, under whose auspices the corpus was developed.

3. Frequencies of the adverbs in the corpora

Table 1 shows the frequencies of each of the 6 adverbs in the relevant corpora and text collections. Firstly, note that the overall frequencies of each set of three adverbs in the BNC and CREA corpora, normalized per million words of text, are very similar (76.2, 77.0 respectively), but that there are substantial differences, within the CREA corpus, between the peninsular (90.1) and Latin American (63.9) components.

Table 1 also reveals interesting differences between spoken and written language and between English and Spanish, which were investigated statistically by means of the chi-square test of association between variables. As a detailed example, let us examine the differences between the spoken and written components of the BNC. From Table 1 we see that in the corpus as a whole, B and E are similar in frequency, accounting for 48% and 41%, respectively, of the total count for the three adverbs, F representing only 11%. On the other hand, if we look at the spoken and written components separately, we find that in spoken English B is overwhelmingly the most frequent (81%), with E at 17% and F only 2%, while in the written language the position is reversed, with E at 57%, B 29% and F much higher than before, at 14%. Interestingly, the news sub-component of the written sample has somewhat more B than E, while F is even higher than for the written component as a whole. We can assess the statistical significance of these differences in distribution by calculating the chi-square ($\chi^2$) statistic. For the three relevant adverbs in the spoken and written components of the BNC, the value of $\chi^2$ is 1483 (df = 2, p < 0.0001), giving a negligible probability that the differences might have arisen through factors concerned with sampling rather than with the populations from which the samples are drawn. Table 2 shows the results of various comparisons, both within English or Spanish and between comparable varieties of the two languages.

5. Details of WordSmith Tools can be found at http://www.lexically.net/wordsmith.

6. In this section, the adverbs will be referred to simply by the initials B, E and F.

7. It is known that when a number of independent chi-square tests are carried out on the same data set, the risk of spurious significant results increases, so that we cannot give as much weight to the results as we could if each table were based on a separate source of data (see Woods, Fletcher & Hughes 1986: 149–150). However, the probabilities obtained in the present study are either extremely low or very high, so that they leave little room for doubt.
Table 1. Frequencies of the six adverbs in the corpora and text collections used in the study

<table>
<thead>
<tr>
<th></th>
<th>BNC Total (100m)</th>
<th>CREA Total (78m)</th>
<th>El Mundo (10m)</th>
<th>ABC Cultural (9m)</th>
<th>Spain (9.3m)</th>
<th>Hispanoamerica (38.2m)</th>
<th>El Mundo (38.2m)</th>
<th>ABC Cultural (38.2m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spoken (10m)</td>
<td>Written (90m)</td>
<td>News (9.3m)</td>
<td>Spoken (147m)</td>
<td>Written (76.4m)</td>
<td>News (78m)</td>
<td>Spoken (4.5m)</td>
<td>Written (73.5m)</td>
</tr>
<tr>
<td>B</td>
<td>3116</td>
<td>1389</td>
<td>1727</td>
<td>127</td>
<td>3036</td>
<td>250</td>
<td>2786</td>
<td>917</td>
</tr>
<tr>
<td>E</td>
<td>3639</td>
<td>292</td>
<td>3347</td>
<td>95</td>
<td>2277</td>
<td>80</td>
<td>2197</td>
<td>534</td>
</tr>
<tr>
<td>F</td>
<td>868</td>
<td>33</td>
<td>835</td>
<td>43</td>
<td>6696</td>
<td>739</td>
<td>5957</td>
<td>2053</td>
</tr>
<tr>
<td>Total</td>
<td>7623</td>
<td>1714</td>
<td>5909</td>
<td>265</td>
<td>12009</td>
<td>1069</td>
<td>10940</td>
<td>3504</td>
</tr>
<tr>
<td>%B</td>
<td>41</td>
<td>81</td>
<td>29</td>
<td>48</td>
<td>25</td>
<td>23</td>
<td>26</td>
<td>23</td>
</tr>
<tr>
<td>%E</td>
<td>48</td>
<td>17</td>
<td>57</td>
<td>36</td>
<td>19</td>
<td>7</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>%F</td>
<td>11</td>
<td>2</td>
<td>14</td>
<td>16</td>
<td>56</td>
<td>69</td>
<td>54</td>
<td>59</td>
</tr>
</tbody>
</table>

Key: B=basically/básicamente, E=essentially/esencialmente, F=fundamentally/fundamentalmente
Figures in square brackets are frequencies per million words.
Table 2. Comparison of adverb distributions

<table>
<thead>
<tr>
<th>Comparison</th>
<th>$\chi^2$ (df = 2)</th>
<th>p</th>
<th>Main features of distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>BNC spoken vs. written</td>
<td>1483</td>
<td>&lt; 0.0001</td>
<td>B very high, E and F low in spoken; E high in written, B and F rather low</td>
</tr>
<tr>
<td>CREA (Spain and Latin America), spoken vs. written</td>
<td>121</td>
<td>&lt; 0.0001</td>
<td>F high, E very low, B slightly low in spoken; E slightly high, F slightly low in written</td>
</tr>
<tr>
<td>CREA (Spain), spoken vs. written</td>
<td>33.6</td>
<td>&lt; 0.0001</td>
<td>F high, E very low in spoken; E slightly high, F slightly low in written</td>
</tr>
<tr>
<td>CREA (Latin America), spoken vs. Written</td>
<td>128</td>
<td>&lt; 0.0001</td>
<td>F high, E very low, B low in spoken; B and E high in written, F low.</td>
</tr>
<tr>
<td>CREA (Spain and Latin America) news vs. El Mundo</td>
<td>13.0</td>
<td>0.0015</td>
<td>B high, F low in CREA; F high, B low in El Mundo</td>
</tr>
<tr>
<td>CREA (Spain and Latin America) news vs. ABC Cultural</td>
<td>68.2</td>
<td>&lt; 0.0001</td>
<td>B and F high in CREA, E low; E high in ABC Cultural, B and F low</td>
</tr>
<tr>
<td>CREA (Spain) news vs. El Mundo</td>
<td>0.07</td>
<td>0.9656</td>
<td>No significant difference in distribution</td>
</tr>
<tr>
<td>CREA (Spain) news vs. ABC Cultural</td>
<td>62.4</td>
<td>&lt; 0.0001</td>
<td>B high, E low in CREA; E high, B and F low in ABC Cultural</td>
</tr>
<tr>
<td>CREA (Latin America) news vs. El Mundo</td>
<td>59.3</td>
<td>&lt; 0.0001</td>
<td>B high, F low in CREA; F high, B low in El Mundo</td>
</tr>
<tr>
<td>CREA (Latin America) news vs. ABC Cultural</td>
<td>62.0</td>
<td>&lt; 0.0001</td>
<td>B high, E low in CREA; E high, B low in ABC Cultural</td>
</tr>
<tr>
<td>El Mundo vs. ABC Cultural</td>
<td>65.8</td>
<td>&lt; 0.0001</td>
<td>B and F high, E low in El Mundo; E high, B and F low in ABC Cultural</td>
</tr>
<tr>
<td>CREA Spain vs. Latin America</td>
<td>70.7</td>
<td>&lt; 0.0001</td>
<td>F high, B low, E slightly low in Spain; B and E high, F low in Latin America</td>
</tr>
<tr>
<td>CREA (spoken) Spain vs. Latin America</td>
<td>1.73</td>
<td>0.4211</td>
<td>No significant difference in distribution</td>
</tr>
<tr>
<td>CREA (written) Spain vs. Latin America</td>
<td>114</td>
<td>&lt; 0.0001</td>
<td>F high, B and E low in Spain; B and E high, F low in Latin America</td>
</tr>
<tr>
<td>CREA (news) Spain vs. Latin America</td>
<td>53.5</td>
<td>&lt; 0.0001</td>
<td>F high, B low in Spain; B high, F low in Latin America</td>
</tr>
<tr>
<td>BNC (total) vs. CREA (total)</td>
<td>4026</td>
<td>&lt; 0.0001</td>
<td>B and E high, F very low in BNC; F high, B and E low in CREA</td>
</tr>
<tr>
<td>BNC spoken vs. CREA (Spain and Latin America) spoken</td>
<td>1488</td>
<td>&lt; 0.0001</td>
<td>B and E high, F very low in BNC; F very high, B and E very low in CREA</td>
</tr>
<tr>
<td>BNC written vs. CREA (Spain and Latin America) written</td>
<td>3126</td>
<td>&lt; 0.0001</td>
<td>E very high, B high, F very low in BNC; F very high, B low, E very low in CREA</td>
</tr>
<tr>
<td>BNC news vs. CREA (Spain and Latin America) news</td>
<td>184</td>
<td>&lt; 0.0001</td>
<td>B and E high, F low in BNC; F slightly high, B and E slightly low in CREA</td>
</tr>
<tr>
<td>BNC vs. CREA (Spain)</td>
<td>3726</td>
<td>&lt; 0.0001</td>
<td>B and E high, F very low in BNC; F high, B and E low in CREA</td>
</tr>
<tr>
<td>BNC (spoken) vs. CREA (Spain, spoken)</td>
<td>1115</td>
<td>&lt; 0.0001</td>
<td>B high, E slightly high, F very low in BNC; F very high, B and E very low in CREA</td>
</tr>
<tr>
<td>BNC (written) vs CREA (Spain, written)</td>
<td>2920</td>
<td>&lt; 0.0001</td>
<td>E very high, B high, F very low in BNC; F very high, B low, E very low in CREA</td>
</tr>
<tr>
<td>BNC (news) vs. CREA (Spain, news)</td>
<td>210</td>
<td>&lt; 0.0001</td>
<td>B and E high, F very low in BNC; F high, B and E low in CREA</td>
</tr>
</tbody>
</table>
First let us look at the results of comparisons within a given language. For English, we saw above that comparison of the spoken and written components of the BNC shows very clearly that the spoken language has a strong preference for B over E and F, while the written language tends towards E rather than the other two adverbs. On the other hand, spoken Spanish (Castilian and Latin American taken together) has a higher proportion of F than written Spanish. Very similar profiles are evident if we confine ourselves to either the Castilian or the Latin American components.

If we compare the news texts in CREA with those in El Mundo, we see that the CREA texts make more use of B and less of F than the El Mundo texts. Comparison of CREA news texts with ABC Cultural show that the main difference is in the use of E, which is much lower in CREA than in ABC Cultural, with opposite tendencies for B and F. On the other hand, the Castilian Spanish news component of CREA shows no significant differences whatever with respect to El Mundo, while with ABC Cultural the propensity of this paper to use E again leads to a significant difference in distribution. The Latin American news component of CREA differs significantly from both El Mundo and ABC Cultural: CREA is rich in B and poor in F compared with El Mundo, while it is again the high use of E compared with the other two adverbs in ABC Cultural which makes for an uneven distribution here, and also in the comparison between the two newspapers from Spain.

The comparison of the two large geographical areas represented within the CREA corpus, taking spoken and written language together, shows that the Castilian material contains a larger proportion of F than the Latin American, which in turn has more E. Separation of spoken and written components demonstrates that this effect is due to the written language: for spoken language there is no significant difference in distribution, while the written component shows identical tendencies to those revealed when medium of communication was ignored. Comparison between the Castilian and Latin American news components of CREA showed that the former had a higher proportion of F and a lower proportion of B than the latter.

Turning now to comparisons between English and Spanish, we see that the whole BNC uses a higher proportion of B and E and a much lower proportion of F than the whole of CREA, and that this is also true of the spoken components of these two corpora. Comparison of the written components again confirms the very low use of

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8. Chafe (1985) finds that a group of 8 adverb(ial)s, categorized as indicating ‘concern for statistical reliability’, and including both basically and essentially, is more common in a written American English sample consisting of personal letters and academic texts, than in a spoken sample taken from dinner table conversation and lectures. However, given that the group of adverbs was taken as a whole, and that the geographical origin and composition of the language samples are very different from that of the BNC, Chafe’s work is not comparable to that reported here.
F in the BNC relative to CREA, and also shows a much higher proportional usage of E in the BNC. Similar patterns are evident in comparisons between the BNC and the Castilian component of CREA, both in total and when the spoken and written sub-components are isolated, and also when comparing the news components of the BNC and the Castilian part of CREA.

4. Collocational analysis

4.1 Methodology

Using the Collocation tool in the WordSmith Tools suite of programs, tables of collocates were generated for the whole of the BNC and for the 89 million word collection of Spanish texts described in §2. These tables give the total frequency of each collocate within a span of 5 words to left and right of the head adverb, the summed frequencies on each side, and the frequency at each individual position, so allowing the extraction of information about the most significant patterns of collocation with respect to the adverbs under study. In the following sections I shall deal largely with lexical collocation, with the aim of discovering clear semantic groupings, rather than ‘colligation’ with clearly grammatical items. Syntactic properties will be investigated in §5. In interpreting the findings, it is important to remember that there is a strong bias towards written language in the BNC (90% written, 10% spoken), and therefore in the sample taken from it, and that 98% of the Spanish corpus consists of written language.

4.2 The English adverbs

4.2.1 Basically

The corpus evidence shows that basically is associated with the concepts of similarity and (to a lesser degree) difference. Same is a frequent collocate, with the greatest concentration at R2 (i.e., 2 positions to the right of the word we are interested in), the concordance showing that all of these latter collocations occur in the sequence basically the same, with or without a following noun (see example 1). The item similar and its opposite different also occur in the environment of basically (example 2). Also very evident is collocation with verbs representing cognitive and verbal processes or states: know, think, mean(s), said/say/saying. All of the occurrences of think and mean at the most frequent position, L1 (one position to the left of the word we are interested in), are in the formulaic expressions I mean/I think (see examples 3 and 4), and several of the occurrences of know to the left of the headword are also in a formulaic sequence, in this case you know (example 5). These findings, together with the fact that the most frequent lexical collocate of all is the downtoner just (example 6) suggest that basically is often preceded by interpersonal devices which soften the expression of the speaker
or writer’s opinion that some particular aspect of a phenomenon is its most central property. This conclusion is reinforced by the fact that in the spoken texts *basically* is quite often preceded or followed by hesitation markers (*erm/er*). Another way of interpreting these findings would be to say that *basically* is becoming ‘pragmaticalized’ to function as a downtoner.\(^9\)

1. These may vary a little in size and construction, and individual weavers may have several slightly different versions of each, but they are always *basically* the same. (BNC EX0 0306)

2. The Corrado and Calibra share a *basically* similar suspension design … (BNC A6W 0745)

3. Er but I mean *basically* at the end of the day, I mean you have to think about to what extent you can increase your sales. (BNC F7A 0410)

4. I think *basically* what I’d like to say today is that I personally agree with what Ida’s saying that it is an attack on the Health Service, and it is the greatest achievement that the Labour Party has done in history in my opinion. (BNC H4A 490)

5. I mean you have to watch things a bit, but you know *basically* it’s a good experience for them. (BNC HDY 586)

6. It’s just *basically* classroom technique I have refined because of watching the programme. (BNC HNW 0831)

4.2.2 *Essentially*

*Essentially*, like *basically*, is clearly connected with matters of similarity and difference: *same, different and similar* all appear (example 7). Although the connection with difference is stronger than for *basically*, the context is sometimes grammatically or

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\(^9\) I am grateful to Anne-Marie Simon Vandenbergen for this suggestion. The discourse pragmatic functions of *basically* are not foregrounded in the present chapter, but are examined in Butler (2008), in which it is proposed that although the core semantic meaning of *basically* itself includes an element of subjectivity, this adverb, as it occurs in informal spoken English, can project, through its core semantic meaning, further meanings which are of a more strongly subjective nature in that they serve to indicate the aims and attitudes, with regard to the interaction and to his/her co-interactants, which the speaker wishes to convey. *Fundamentally* seems not to be used in this strongly subjective way, and *essentially* displays only a weak tendency in this direction. Corroborative evidence for these claims is drawn from the present chapter as well as from new analysis. The work can thus be seen as a contribution to the rapidly expanding literature on subjectivity, seen as the study of how speakers project their own positions on to the discourse.
lexically negative, so turning the sentence into one about similarity. This is a specific aspect of a more general phenomenon: *essentially* is concerned with the inherent properties of an entity or process, occurring in the frames ‘Determiner + *essentially* + Adj + character/nature’ (example 8), and not surprisingly, some of its most frequent collocates are adjectives encoding properties, such as *political* and *social*. This characteristic of *essentially* is underlined by its occurrence in the sequence *essentially a matter of* (or occasionally *for*), usually preceded by a form of *be* (example 9). Note also the occurrence of *based* at L1, in the sequence *based essentially on*, and that of *concerned* at R1, in the sequence *essentially concerned with*, both again normally preceded by a form of *be* (examples 10 and 11): here, we are dealing with the content which defines the inherent qualities of something. The items *remained/remains/remain* are also significant collocates at L1 (example 12). Combined with the occurrence of *still* as a collocate, and also the occurrence of *unchanged* and *static* at R1, this suggests that *essentially* is frequently used in circumstances where the speaker wishes to indicate that the inherent qualities of something stay constant. Although one form of *remain* (*remained*) does occur as a collocate of *basically* in position L1, as does *still*, the frequencies are much lower, even taking into account the somewhat higher total number of occurrences of *essentially* as compared with *basically*.

(7) As such, the operation was *essentially* different from planning which involved prior political judgements about what ought to be achieved. (BNC CN9 0250)

(8) Given the *essentially* secret nature of much deviant behaviour, those involved are unlikely to be willing to be interviewed, or at least to give truthful answers, in a survey. (BNC CMF 0898)

(9) To acquire soundness of judgment is *essentially* a matter of absorbing a sense of the norms operating in the agency which guide discretion at field level. (BNC FA1 0956)

(10) Although polarization may include an element of newcomers-versus-locals, it is based *essentially* on social class, with the division occurring between the working class and the middle class. (BNC FB2 0609)

(11) They were *essentially* concerned with bartering about a price … (BNC FCC 090)

(12) Much of this writing, however, remained *essentially* the same as in earlier generations… (BNC HY5 0053)

4.2.3 *Fundamentally*

While *basically* is concerned more with similarity than difference, and *essentially* with both, *fundamentally* is associated primarily with change, as shown by its collocation with forms of *change* and *alter*, as well as with the adjective *different*, all being most
frequent at R1 (examples 13 and 14). *Fundamentally* is also associated with negative evaluations, as demonstrated by its co-occurrence with *flawed, wrong* and *opposed*, again largely at R1 (example 15). It can also be used to characterise the importance of something. Also very prominent is the occurrence of *more/most* at L1 (example 16), found only in isolated occurrences with the other two adverbs.

(13) It also **fundamentally** changed the nature of the Shah's relations with his government and people. (BNC G3R 0898)

(14) Our European colleagues' vision of Europe is **fundamentally** different from ours and a shotgun marriage would be in nobody's interests… (BNC HHV 07076)

(15) The Scottish Salmon Growers Association Ltd said the rental system, based on productivity, was **fundamentally** flawed. (BNC K5M 12047)

(16) More **fundamentally**, no one knows why sunspots should occur at all… (BNC CET 1780)

4.3 The Spanish adverbs

4.3.1 **Básicamente**

*Básicamente* has a total frequency of 1252 in the text collection used for collocational analysis. The frequent occurrence of the forms *mismo/misma* ('same', m. or f.) indicates that *básicamente*, like English *basically*, is associated with the concept of identity, a conclusion which is reinforced by strong collocation with forms of the verb *coincidir* (con), literally 'to coincide (with)', but often used with the meaning 'agree with/be the same as' (example 17). A further group of verbal collocates is made up of forms of *consistir* (en) ('to consist (of)', example 18)), *referirse* (a) ('to refer (to)'), *tratarse* (de) ('be about/be a question of'), *centrarse* (en) ('to centre (on), revolve (around)'), also *formado* (por) ('formed (by)'), all of which indicate that *básicamente* is used in relation to the content which defines the inherent qualities of something. This adverb also collocates, mainly at L1, with *debe*, all occurrences being in the form *se debe a* ('is due to'), together with the past participle *debido* (a) ('due to'), in which case reference is being made to the main cause of some consequential state of affairs (example 19). Closely linked to this is collocation with *depende* (de) 'depends (on)' and the future form *dependerá* (de) ('will depend (on)') (example 20). Forms of *dedicarse* (a) ('to devote oneself (to)', including the type of work one does) and the past participle forms *decidido/a/os* (a) ('dedicated/assigned (to)'), also occur at L1 (example 21). The spoken component of the texts used for analysis is too small to allow any definite conclusions regarding the co-occurrence of *básicamente* with interpersonal softening devices as for English *basically*, though it is perhaps suggestive that only one instance of *yo creo que* ('I think that') was found preceding *básicamente* in the material used.
(17) La portavoz de Izquierda Unida, Rosa Aguilar, coincidió básicamente con este análisis. (El Mundo naci95–1.txt)
'The spokesperson of Izquierda Unida, Rosa Aguilar, basically agreed with this analysis.'

(18) La tarea de reconocimiento consiste básicamente en la comparación de la señal de voz con los patrones de referencia almacenados en la base de datos. (ABC Cultural 91–93\file064.txt)
'The recognition task consists basically of the comparison of the voice signal with the reference templates stored in the data base.'

(19) Este cambio se debe, básicamente, a la buena aceptación del nuevo Mégane ... (El Mundo moto96–1.txt)
'This change is due, basically, to the popularity of the new Mégane ...'

(20) Esta determinación de Bruselas dependerá básicamente de que la compañía cumpla los objetivos de rentabilidad fijados para 1995 y 1996. (El Mundo econ96–1.txt)
'This decision by Brussels will depend basically on the company fulfilling the profitability objectives set for 1995 and 1996.'

(21) El primer número de «Fronteras de la Ciencia y la Tecnología» aparecerá en junio y está dedicado básicamente a temas de biotecnología. (ABC Cultural 91–93\file083.txt)
'The first issue of “Frontiers of Science and Technology” will appear in June and is devoted basically to topics in biotechnology.'

4.3.2 Esencialmente

Esencialmente has a total frequency of 920 in the text collection used, the lowest of the three adverbs, in accordance with the data for other bodies of Spanish text in Table 1. Certain aspects of the collocational behaviour of esencialmente overlap with those of básicamente, in that forms of consistir (en), deberse (a), tratarse (de) and depender (de) occur at L1 (see example 22). For this adverb, forms of basarse (en) (‘to be based (on)’) and the past participle forms basado/a/os/as, also forms of afectar (‘to affect’) occur quite frequently at L1 (example 23), whereas básicamente collocates with only a couple of isolated occurrences of these forms. The form compuesto (de) (‘composed (of)’) also occurs in this position (example 24), and recalls semantically the use of formado (por) with básicamente. Also new is the appearance of carácter (‘character’) and naturaleza (‘nature’) at L1 (example 25), mirroring the behaviour of English essentially, except of course in terms of the position, due to the differences between English and Spanish syntax. A further collocate appearing at L1 with esencialmente but not with básicamente is tan (‘so’), used in the construction ‘tan esencialmente + Adj’ (‘so essentially + Adj’) (example 26). At R1, esencialmente collocates with
adjectives characteristic of the main types of text included in the collection: político/a (‘political’), española (‘Spanish’), económico (‘economic’) (example 27).

(22) Ahora bien, enseñar a beber como enseñar, en general, a vivir consiste, esencialmente, en el aprendizaje de los hábitos apropiados … (El Mundo opin95–2.txt)
‘Now, teaching people to drink, like teaching them, in general, to live, consists, essentially, of the learning of the appropriate habits …’

(23) La nueva estrategia de González se basa esencialmente en restar margen de maniobra al próximo Gobierno. (El Mundo econ95–2.txt)
‘González’s new strategy is based essentially on restricting the next Government’s room for manoeuvre.’

(24) Los informes más recientes señalan que Júpiter está rodeado por una densa y profunda atmósfera, compuesta esencialmente de hidrógeno y helio en idénticas proporciones a las detectadas en el Sol. (ABC Cultural 91–93\file066.txt)
‘The latest reports indicate that Jupiter is surrounded by a dense, deep atmosphere, composed essentially of hydrogen and helium in proportions identical to those detected on the Sun.’

(25) La corrupción, un fenómeno de naturaleza esencialmente política, se ha convertido también en espectáculo. (El Mundo opin94–1.txt)
‘Corruption, a phenomenon of an essentially political nature, has also become a spectacle.’

(26) Muchas veces he explicado el carácter eminentemente psicológico de esta guerra, tan esencialmente sucia como todas las demás… (El Mundo opin96–1.txt)
‘Many times I have explained the eminently psychological character of this war, so essentially dirty like all the others …’

(27) Pero, como apuntábamos al comienzo, éste es un libro esencialmente político … (ABC Cultural 91–93\file076.txt)
‘But, as we pointed out at the beginning, this is an essentially political book …’

4.3.3 Fundamentalmente
Fundamentalmente has a frequency of 3674 in the texts used, much higher than for either of the other two adverbs, which agrees with the data presented for CREA and the newspaper collections in Table 1. In terms of frequent collocates to the left, fundamentalmente shares the characteristics of the other two adverbs, in that the following are all prominent at L1: forms of consistir (en), tratarse (de), basarse (en), centrarse (en), referirse (a), deberse (a), depender (de) and the past participles formado/a (por) and compuesto/a (de) (examples 28–30). Several more forms which are related to the same semantic areas (e.g., forms of constar (de) (‘to consist (of), example 31), derivar(se) de (‘to derive/arise (from)’)) also appear with lower frequencies, but because the overall frequency of fundamentalmente is so much higher
than for básicamente and esencialmente, we cannot tell whether these additional items might also have appeared with the other adverbs if an even larger set of texts had been examined. A frequent set of collocates at L1 which does not appear with the other adverbs is composed of forms of dirigirse (a) ('to head/aim (for)') and particularly the past participles dirigido/a/os/as (a) ('aimed (at)/intended (for)'), also the past participles destinado/a/os/as (a), used with much the same meaning (examples 32 and 33). These are similar in effect to the use of dedicado/a/os/as which appears with fundamentalmente as well as with básicamente.

(28) Estas propuestas se refieren, fundamentalmente, a la necesidad de una mayor apertura cultural … (El Mundo inte94–1.txt)  
    ‘These proposals refer, fundamentally, to the need for greater cultural openness …’

(29) Lo que más me gusta de él es que se trata fundamentalmente de una organización de escritores y no de intelectuales. (El Mundo cult94–2.txt)  
    ‘What I like most about it is that we’re talking fundamentally about an organization of writers and not of intellectuals.’

(30) En 1994, General Motors obtuvo unos beneficios récord de 4.900 millones de dólares (unos 600.000 millones de pesetas), debidos fundamentalmente a los buenos resultados obtenidos en sus operaciones europeas. (El Mundo moto95–2.txt)  
    ‘In 1994, General Motors obtained record profits of 4,900 million dollars (some 600,000 million pesetas), due fundamentally to the good results obtained in its European operations.’

(31) Un sistema de televisión por cable consta fundamentalmente de tres cosas … (El Mundo econ 95–2.txt)  
    ‘A cable television system consists fundamentally of three things …’

(32) Desde el pasado viernes, día 24, está abierta al público la piscina de la Ciudad Universitaria, destinada fundamentalmente a estudiantes. (El Mundo madr96–1.txt)  
    ‘Since last Friday, the 24th, the University swimming pool, intended fundamentally for students, has been open to the public.’

(33) La campaña iba dirigida fundamentalmente a particulares. (El Mundo comu95–1.txt)  
    ‘The campaign was aimed fundamentally at private individuals.’

4.4 Overall comparison

The collocational analysis presented in §§4.2–4.3 reveals that there are overlaps between the properties of the three adverbs in both languages, but that they are greater for Spanish than for English.
In English, *basically* is characterized by being more concerned with similarity than with difference, and also in collocating with various interpersonal devices for softening the effect of giving an opinion about the central features of some entity or state of affairs. *Essentially*, on the other hand, is concerned with both similarity and difference, and more generally with the inherent nature or character of entities and states of affairs, especially when the properties remain constant. *Fundamentally* differs from the other two adverbs in being concerned primarily with change and with negative properties such as being wrong, flawed, or opposed to something.

In Spanish, all three adverbs are concerned with the content which defines the inherent qualities of some entity or state of affairs, and with the concepts of cause and/or dependency. Two (*básicamente* and *fundamentalmente*) are also related to intended destinations or aims.

5. **Syntactic properties**

5.1 The English adverbs

As observed by both Quirk *et al.* (1985: 439–440) and Biber *et al.* (1999: 538), adverbs in English serve two basic syntactic functions: they may act as adverbial elements of clause structure (example 34) or as modifiers, principally, though by no means exclusively, of adjectives and other adverbs (example 35).

(34)  So *basically* you have to remove this silicon which was in this impurity. (BNC FLX 231)

(35)  It was a *basically* good design which needed further improvements to it. (BNC ADP 1351)

Quirk *et al.* (1985: 503ff.) distinguish four broad classes of clause adverbial: adjuncts, subjuncts, disjuncts and conjuncts. Adjuncts differ from the other three classes, in that they can be the focus of a cleft construction, can contrast in alternative interrogation or negation, can be focus of focusing subjuncts such as *only*, and can be elicited as answers to questions. A number of subclasses of adjunct are recognized. Subjuncts play a subordinate role compared with other clause elements, and are divided into ‘wide orientation’ and ‘narrow orientation’ types, each with subcategories based on form and/or function. Disjuncts are syntactically more detached than the other classes, and often have a scope extending over the sentence as a whole. They are divided into style disjuncts, expressing the way in which what the speaker says is to be interpreted, and comment disjuncts, expressing degrees of truth or value judgments. Conjuncts are concerned with connections between linguistic units.
Quirk et al. (1985: 621) classify *basically*, *essentially* and *fundamentally* as content disjuncts expressing the degree of truth to be assigned to the utterance, and more specifically as claiming that what is said is true in principle. In discussing the syntactic properties of disjuncts, Quirk et al. (1985: 627–629) claim that although content disjunct adverbs cannot normally appear in direct or indirect questions or in imperatives, there are a few, including the three under study here, which can occur in questions. It is also claimed that they can occur in dependent clauses, and can often be premodified. These claims were borne out by the present study. Examination of the BNC shows that there are some isolated occurrences of the adverbs in questions, an example being shown in 36 below:

(36) **Basically** does this fear of rape not itself cry out for rape? (BNC A6D 1596)

No occurrences in the imperative were noted in the corpus examples studied, while the adverbs do indeed occur in relative clauses (example 37).

(37) Huckerby, a worried-looking, balding man, had a responsible position which **basically** involved overseeing editorial expenditure and running the paper day to day… (BNC CHU 1419)

We have also noted that *fundamentally* is quite frequently premodified by *more/most*, and close examination of the concordances reveal less frequent occurrences of premodification with *more/most* for the other two adverbs as well. We have already noted the occurrence of *just* immediately before *basically*, but it is often difficult to tell whether this should be seen as a premodifier or as a separate adverbial element.

Probably the most detailed classification of the position of adverbial elements in clauses is again that of Quirk et al. (1985: 490–501) who distinguish initial, medial and end position, with four subclasses of medial (initial medial, medial, medial medial and end medial) and two subclasses of end position (initial end position, end position). It is claimed that the normal position for most disjuncts is initial, although they can appear at almost any place in clause structure. In view of the complexity of this area, it seemed worthwhile to undertake an empirical investigation of the positions of *basically*, *essentially* and *fundamentally* in the BNC. For this purpose, a reduced concordance was obtained by instructing WordSmith Tools to select randomly 1 in every N occurrences of the target word, where the value of N was such as to give roughly 200 examples for each adverb. The position of the adverb in each of these examples was then noted. It was found that no fewer than 17 categories were required to accommodate all the data. These are listed below, with an example for each.

1. Clause-initial, including after initial coordinating or subordinating conjunction, and including cases where it comes before an initial subordinate clause:

(38) It’s amazing what you learn and **basically** it’s good fun. (BNC K5M 01360)
2. Between the subject and the first verbal element (auxiliary or main verb):

(39) Erm the main difference between a non-executive director and a director basically is that the directors are added to by the shareholders and are re-elected at the annual general meetings. (BNC FUG 019)

3. Before the main verb in a conjoined clause with subject ellipsis:

(40) This grant included those territories or cities disputed between Lombardy and the pope, and basically reaffirmed arrangements made between Charles’ father, Pepin le Bref, and Rome. (BNC ALT 306)

This category was needed because otherwise it is not clear whether we should regard the adverb as clause-initial or as coming between (zero) subject and verb.

4. Between an auxiliary and a main verb:

(41) When negotiations with BR are complete and the Plc can be launched, it is basically intended to hopefully purchase land and trackwork etc. (BNC CJ6 295)

5. After a non-relational main verb (i.e., not one, such as a copula, which expresses a relation of being, having, etc.) and before another constituent (object, adjunct):

(42) The dividing line is not a clear one, but the functional departments consist, basically, of account management, planning, creative, media, and progress/production/traffic. (BNC F9D 0038)

6. After a relational main verb (be, seem, have, etc.) and before an adjective in a NP or AdjP, in a position where it could be moved to another place in the clause:

(43) In The Cloud of Unknowing he did not present the whole complexity of the Greek mystic’s vision, but dwelt upon his central belief that God is ultimately and essentially incomprehensible to the human mind… (BNC CD4 281)

Here, the conjoined adverbs ultimately and essentially could be moved to the position in front of the subject, so it is not clear whether we are dealing with a modifier of the adjective incomprehensible or with a clause adverbial.

7. After a relational main verb and before another item in a NP or nominal clause:

(44) There are basically four elements required before a system can even begin to be considered as a desktop publishing tool. (BNC G00 0096)

Again, it is not entirely clear whether we are dealing with a modifier of the cardinal number or with a clause adverbial, since we could move the adverb to the beginning of the clause.
8. After a relational main verb and before a PrepP, including ones with fronted NP (e.g., What is X about?):

(45) In the first case one asks (stage one) what it is that the scriptures (or Christianity) are essentially about? (BNC EF0 0373)

9. After a postverbal constituent, but before another constituent:

(46) So if the lady was on fire, you’d leave it basically to the Fire Brigade … (BNC FM7 0365)

10. Final in clause, including cases where the adverb was modified and so not itself absolutely final (e.g., more fundamentally than X):

(47) Thereafter the situation changed fundamentally and, despite the interference of the Corn Laws, grain came to figure high on the list of imports in years of bad harvest. (BNC HR0 1158)

11. Before an adjective in what is clearly a NP or AdjP:

(48) A good aromatherapist, whether basically intuitive (akin to a spiritual healer), clinical (advocating internal doses of essential oils) or multi-skilled, will tread the holistic path. (BNC B06 0318)

This is the clearly premodifying use of the adverbs.

12. Before a subordinating conjunction in a non-initial subordinate clause:

(49) Because the racket has a diagonal string pattern, spin shots (top spin and slice) become easier to play, basically because the strings on such a pattern are longer and therefore the ball rests on them for longer. (BNC CKM 0880)

Here, the sense is that the reason given is the basic one, so that the adverb modifies either the subordinating conjunction or possibly the whole clause.

13. Before the verb of a non-finite clause:

(50) The path would form an extremely useful link in a “quiet” route from Edinburgh to the countryside to the west, basically following the route of the old A9 from Maybury, via Turnhouse and continuing to Kirkliston and Winchburgh. (BNC HPP 0035)

14. Initially or medially in a clearly bounded phrase, but not before an adjective as in:

(51) I see art as essentially a luxury. (BNC ED7 1269)
15. Between *to* and an infinitive or gerund, or before *to* + infinitive:

(52) For most of the former, republicanism involved a commitment to **fundamentally** reforming Spanish society … (BNC CJ2 073)

16. Standing alone or just with *yes/no*:

(53) A. It’s German republic.
    B. Is it?
    C. **Basically**, yeah. (BNC KC6 1564–1566)

17. Miscellaneous, where the example could not be fitted into any of the other categories, for instance because of a change of structure:

(54) Cos I don’t, I mean I might be really putting my foot in it but I don’t think Foxy likes him that much and he said that he’s **basically** he’s a it is his bark mu his bark is much worse than his bite. (BNC KP6 0298)

**Table 3. Distribution of positions for the three English adverbs**

<table>
<thead>
<tr>
<th>Position</th>
<th>Basically</th>
<th>Essentially</th>
<th>Fundamentally</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Initial</td>
<td>73</td>
<td>29</td>
<td>27</td>
</tr>
<tr>
<td>2. Between S and first verbal element</td>
<td>17</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>3. Before main verb in conjoined clause with S ellipsis</td>
<td>1</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>4. Between auxiliary and main verb</td>
<td>8</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>5. After non-relational verb and before other constituent</td>
<td>7</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>6. After relational main verb and before NP/AdjP, but movable</td>
<td>10</td>
<td>40</td>
<td>47</td>
</tr>
<tr>
<td>7. After relational main verb and before other item in NP or nominal clause</td>
<td>38</td>
<td>62</td>
<td>15</td>
</tr>
<tr>
<td>8. After relational main verb and before PrepP</td>
<td>6</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>9. After postverbal constituent, but before another constituent</td>
<td>1</td>
<td>–</td>
<td>2</td>
</tr>
<tr>
<td>10. Absolutely final in clause</td>
<td>16</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>11. Before an adjective in NP or AdjP</td>
<td>12</td>
<td>38</td>
<td>61</td>
</tr>
<tr>
<td>12. Before a subordinating conjunction in a subordinate clause</td>
<td>3</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>13. Before the verb of a non-finite clause</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>14. Initially or medially in a clearly bounded phrase, but not before an adjective</td>
<td>4</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>15. Between <em>to</em> and an infinitive, or before <em>to</em> + infinitive</td>
<td>2</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>16. Standing alone or just with <em>yes/no</em></td>
<td>4</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>17. Miscellaneous</td>
<td>5</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>211</strong></td>
<td><strong>226</strong></td>
<td><strong>213</strong></td>
</tr>
</tbody>
</table>
Table 3 shows the distribution of the 17 positional categories for the three adverbs. In Table 4 the categories with low frequencies are collapsed into a single class, in order to conform with the requirements for the chi-square test; the values in square brackets are those which would be expected if there were no association between the variables. The value of $\chi^2$ is 159 (df = 18), $p < 0.0001$; showing that there is a highly significant degree of association between the identity of the adverbs and the positions in which they occur. Comparing the observed and expected frequencies, we see that when we look at the adverbs in relation to one another:

- **Basically** occurs more often in initial and final positions, between the subject and the first verbal element, and also in the 'miscellaneous' category, than would be expected from the null hypothesis of no association. On the other hand, it has lower frequencies than expected for the pre-adjectival, modifying position. It also has relatively low frequency after a relational verb but before a NP/AdjP, a position in which the modifying analysis is one of the two possibilities, the other being as a clause adverbial. On the whole, then, we may say that of the three adverbs basically shows a tendency towards clause adverbial rather than modifying uses, and that although its observed frequencies, like those of essentially and fundamentally, are highest overall in medial positions, it favours initial and final positions more than the other two adverbs.

- **Essentially** occurs less in initial and final positions than would be expected if there were no association (indeed, it shows up only once in final position), but occurs more

---

10. The frequencies expected on the basis of no association between variables should not be smaller than $S$. 

<table>
<thead>
<tr>
<th>Position</th>
<th>Basically</th>
<th>Essentially</th>
<th>Fundamentally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>73 [41.9]</td>
<td>29 [44.9]</td>
<td>27 [42.3]</td>
</tr>
<tr>
<td>After relational main verb and before NP/AdjP, but movable</td>
<td>10 [31.5]</td>
<td>40 [33.7]</td>
<td>47 [31.8]</td>
</tr>
<tr>
<td>After relational main verb and before other item in NP or nominal clause</td>
<td>38 [37.3]</td>
<td>62 [40.0]</td>
<td>15 [37.7]</td>
</tr>
<tr>
<td>Before adjective in NP or AdjP</td>
<td>12 [36.0]</td>
<td>38 [38.6]</td>
<td>61 [36.4]</td>
</tr>
<tr>
<td>Initially or medially in a clearly bounded phrase, but not before an adjective</td>
<td>4 [7.8]</td>
<td>15 [8.3]</td>
<td>5 [7.9]</td>
</tr>
<tr>
<td>Other</td>
<td>26 [15.3]</td>
<td>12 [16.3]</td>
<td>9 [15.4]</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>226</td>
<td>213</td>
</tr>
</tbody>
</table>
frequently than expected after relational verbs, and also in phrases other than those in which it precedes an adjective.

- **Fundamentally** also has a lower frequency in initial position than expected under the null hypothesis, but a higher frequency in pre-adjectival position, either after a relational verb or clearly within a NP or AdjP. It thus tends to favour premodifying use.

Table 5. Frequencies of the three adverbs in initial, medial and final positions

<table>
<thead>
<tr>
<th>Position</th>
<th>Basically</th>
<th>Essentially</th>
<th>Fundamentally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>73 [41.9]</td>
<td>29 [44.9]</td>
<td>27 [42.3]</td>
</tr>
<tr>
<td>Medial</td>
<td>122 [160.0]</td>
<td>196 [171.4]</td>
<td>175 [161.6]</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>226</td>
<td>213</td>
</tr>
</tbody>
</table>

The main conclusions emerge even more clearly if we group the positions into just three categories, initial, medial and final, as in Table 5 ($\chi^2 = 61.4$, df = 4, $p < 0.0001$). All three adverbs have a higher observed frequency in medial positions than in any other, but of the three it is **basically** which shows up most in initial and final positions. Further investigation reveals that the picture presented in Table 5 conceals some interesting details. Of the 16 occurrences of **basically** in final position, 12 (75%) are in the spoken part of the BNC, as is the single example of **essentially**. Given that the spoken component of the corpus is only one tenth of the whole, this represents a strong bias towards spoken language. On the other hand, all 11 of the occurrences of **fundamentally** in final position in the clause are from written language. If we look at the occurrences in more detail, we see that while final **basically** acts, in the terms of Quirk *et al.* as a disjunct, **fundamentally** has the role of adjunct, being much more clearly integrated within the structure of the clause. Consider examples 55 and 56:

(55) So Barry, Christina and David came down and we had coffee in the sunshine, and that was the start of it **basically**. (BNC AB5 0504)

(56) Thereafter the situation changed **fundamentally**, and, despite the interference of the Corn Laws, grain came to figure high on the list of imports in years of bad harvest. (BNC HR0 1158)

In 55, **basically** cannot be the focus of a cleft, interrogation, etc., as shown in 57 and 58:

(57) *It was **basically** that that was the start of it.*
(58) *Was it basically or just superficially that that was the start of it?

On the other hand, fundamentally in 56 can indeed be focused in these ways:

(59) It was fundamentally that the situation changed, not just superficially.

(60) Was it fundamentally or just superficially that the situation changed?

In connection with the use of final fundamentally as a manner adjunct, we might note that in the premodifying position which is its preferred syntactic context, there is also a strong manner component in the semantics: something which is fundamentally flawed is flawed in a fundamental way.11

Turning now to the initial position, in which we get only the disjunct use, we find that of the 73 occurrences of initial basically 31 (42%) are in spoken language and 42 (58%) in written texts. Again, taking into account that spoken and written language are present in the corpus in the proportion 1: 9, this represents a considerable bias towards spoken English. On the other hand, for essentially 25 out of the 29 occurrences (86%) are in the written component, and the proportion is even higher for fundamentally (25 out of 26, or 96%).

5.2 The Spanish adverbs

Kovacci (1999) classifies Spanish adverbs according to formal, functional and semantic criteria. She distinguishes between (i) adverbs in verbless constructions (e.g., ¡Bien! (‘Good!’), ¡Más despacio! (‘Slower!’)), (ii) ‘adverbios de predicado’ (predicative adverbs), which express meanings such as manner, time, place, quantity, and may be obligatory or optional, and (iii) ‘adverbios de marco’ (framing adverbs), which are usually circumstantial and provide a setting or frame for the rest of the clause (e.g., Mañana, ¿nos veremos? (‘Tomorrow, shall we meet?’)).

Kovacci also recognizes adverbs which are outside the ‘dictum’, or representational content of the utterance, and divides these into semantic classes: frequency, point of view, evaluative (emotive, knowledge/perception, epistemic, necessity/obligation, evaluating the subject’s action, volition). She points out some syntactic criteria which are similar to those for English adjuncts in Quirk et al. (1985). With the exception of adverbs of frequency, only those adverbs inside the ‘dictum’ can be the focus of a cleft. What she calls ‘agentive’ adverbs (e.g., tímidamente (‘timidly’)) can be the focus of interrogation if in postverbal position. Again, postverbal adverbs can be in the scope of negation.

Kovacci goes on to describe adverbs within the non-representational ‘modus’: those of modality (concerned with degrees of certainty, such as posiblemente (‘possibly’) and

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11. Once again, thanks are due to Anne-Marie Simon Vandenbergen for discussion of this point.
with restrictions on the truth value of the assertion, such as supuestamente (‘supposedly’) and those related to the speaker’s own attitude in saying something, oriented either towards the speech participants (e.g., francamente (‘frankly’) or towards the code (e.g., más precisamente (‘more precisely’)). Finally, Kovacci deals with conjunctive adverbs (e.g. consecuentemente/por consiguiente (‘consequently’), también (‘also’), which establish or make explicit a semantic link between coordinated or subordinated linguistic elements, and with adverbs of focalization (e.g., únicamente (‘solely’)) and intensification (e.g., muy (‘very’)). She does not mention the adverbs básicamente, esencialmente and fundamentalmente, and although it is clear that these would be outside the ‘dictum’, they do not appear to fall easily into any of the subclasses she establishes.

In order to study the positional behaviour of the three adverbs, and to compare it with the properties of the corresponding English adverbs, samples of approximately 200 occurrences were taken from the collection of Spanish texts used for collocational analysis, by instructing WordSmith Tools to select at random the appropriate proportion of the total occurrences. It was found that 15 categories were required for the full description of the positions in which the adverbs appear in clauses. Many of these are identical to those for English. The categories are given below, with an example of each.

1. Clause-initial, including those after any constituent which must be initial, such as a conjunction or relative pronoun:

(61) Básicamente son máquinas parecidas, pero están pensadas para realizar tareas diferentes y conectarse a sistemas muy dispares. (El Mundo comu-94–2.txt)
‘Basically they are similar machines, but they are intended to do different jobs and to connect to very different systems.’

2. Between subject and verb:

(62) Esta nueva gramática, de más de ochocientas páginas, básicamente describe el porqué del cambio y evolución de algunas palabras catalanas, en algunos casos influenciadas por la lengua castellana. (El Mundo cult94–2.txt)
‘This new grammar, of more than eight hundred pages, basically describes the reasons for the change and evolution of some Catalan words, in some cases influenced by the Castilian language.’

12. Readers may well wonder why concordances were made from the opportunistic, largely journalistic collection of texts rather than downloaded from the CREA website. The reasons are concerned with the technicalities of the CREA system, which for frequent words allows the user to take samples only by sampling the documents in which the word occurs, not the occurrences themselves. This means that the sample might be skewed because of the inclusion of particular documents with very high or very low frequencies of the search word, and also makes it very difficult to obtain samples of particular approximate sizes.
3. Between an auxiliary (ser, estar) and the main verb:

(63) *Al lado de sus retratos y paisajes, imbuidos de un cierto misterio, su obra está esencialmente compuesta por escenas de interior…* (El Mundo uve94–2.txt)

‘Beside his portraits and landscapes, imbued with a certain mystery, his work is essentially composed of interior scenes …’

4. After initial adjunct but before (subject and) verb:

(64) *El primero se refiere a las armas, y es superior al de 1970 en la medida en que, ahora, esencialmente, se incluye la coproducción armamentística.*

(El País dat257.txt)

‘The first [type of collaboration] refers to arms, and is superior to the 1970 one in as far as now, essentially, it includes the co-production of arms.’

5. After main verb and before another constituent:

(65) *El fuego afectó fundamentalmente a la zona del almacén.*

(El Mundo soci94–2.txt)

‘The fire affected fundamentally the area of the warehouse.’

6. After a relational verb (ser, estar, parecer, etc.) and before an adjective, but potentially movable:

(66) *Eso es básicamente injusto.* (El Mundo depo94–2)

‘That is basically unfair.’

7. After a relational verb and before a NP without an adjective, or a clause with nominal function:

(67) *Pero el texto es básicamente él de 1968…* (El Mundo opin96–1.txt)

‘But the text is basically that of 1968…’

8. After a relational verb and before a PrepP:

(68) *Su misión en Montecarlo es esencialmente de apoyo…* (El Mundo 7dia95–2.txt)

‘Its mission in Montecarlo is essentially one of support…’

9. Between two postverbal constituents:

(69) *Pero yo dejé el … curso básicamente por razones de trabajo.* (Macrocorpus li-06.txt)

‘But I left the … course basically for work reasons.’

10. Clause-final:

(70) *La diferencia ahora o las diferencias ahora son tres, básicamente: …*(Referencia pol\bpol047a.asc)

‘The difference now or the differences now are three, basically: …’
11. Before or after an ‘absolute’ past participle in an adjectival (reduced relative) clause:

(71) Para el Gobierno británico esos pasos son complicados, esencialmente debido a los problemas que pueden surgirles con los partidos unionistas de Irlanda del Norte. (El Mundo inte94–1.txt)

‘For the British Government those steps are complicated, essentially due to the problems which may arise for them with the unionist parties of Northern Ireland.’

12. Before an adjective in what is clearly an NP or AdjP:

(72) Siendo así, es evidente que con ese libro la poesía aleixandrina, esencialmente fiel a sí misma, entra en un nuevo periodo. (El Mundo esfe94–1.txt)

‘Being thus, it is evident that with this book Alexandrian poetry, essentially true to itself, enters a new period.’

13. Initial or medial in a phrase, but not in front of an adjective:

(73) Tienes que poseer un buen currículum académico, fundamentalmente en Ciencias, (El Mundo cine96–1.txt)

‘You have to have a good academic record, fundamentally in Sciences…’

14. Before a subordinating conjunction in a subordinate clause:

(74) González reiteró sus ya conocidas reflexiones sobre Europa, fundamentalmente para desacreditar a Aznar como interlocutor válido con la UE, y sobre el reparto del trabajo. (El Mundo naci96–1.txt)

‘González reiterated his already well-known reflections about Europe, fundamentally in order to discredit Aznar as an elected delegate with the EU, and about the distribution of work.’

15. Standing alone:

(75) Básicamente. (Le Mundo tele96–1.txt)

‘Basically.’

Table 6 shows the distribution of frequencies of the three adverbs at the various positions, and Table 7 collapses the low frequency categories into one for the purposes of chi-square analysis. The value of $\chi^2$ is 115 (df = 16, $p < 0.0001$), showing a very high degree of association between the variables. Inspection of the observed and expected values in Table 7 reveals that básicamente has a high frequency, relative to the other two adverbs, in initial position, and a low frequency in phrases, that is in modifying function. Esencialmente has a very high frequency as an adjectival premodifier compared with the other adverbs, while fundamentalmente is frequent in phrases other than those with an adjective.

The frequency of the three adverbs in final position in the clause is very low, but it must be remembered that the collection of texts used for analysis consisted almost
Table 6. Distribution of positions for the three Spanish adverbs

<table>
<thead>
<tr>
<th>Position</th>
<th>Básicamente</th>
<th>Esencialmente</th>
<th>Fundamentalmente</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Initial</td>
<td>34</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>2. Between subject and verb</td>
<td>8</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>3. Between auxiliary and main verb</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4. After initial adjunct but before (subject and) verb</td>
<td>–</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>5. After main verb and before another constituent</td>
<td>80</td>
<td>61</td>
<td>80</td>
</tr>
<tr>
<td>6. After a relational verb and before an adjective, but potentially movable</td>
<td>12</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>7. After a relational verb and before a NP with no adjective, or nominal clause</td>
<td>18</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td>8. After a relational verb and before a PrepP</td>
<td>–</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>9. Between two postverbal constituents</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>10. Final</td>
<td>3</td>
<td>–</td>
<td>4</td>
</tr>
<tr>
<td>11. Before/after ‘absolute’ past participle in adjectival (reduced relative) clause</td>
<td>20</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>12. Before an adjective in what is clearly a NP or AdjP</td>
<td>4</td>
<td>51</td>
<td>9</td>
</tr>
<tr>
<td>13. Initial or medial in a phrase, but not in front of an adjective</td>
<td>19</td>
<td>17</td>
<td>45</td>
</tr>
<tr>
<td>14. Before a subordinating conjunction in a subordinate clause</td>
<td>4</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>15. Standing alone</td>
<td>1</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>208</td>
<td>197</td>
<td>205</td>
</tr>
</tbody>
</table>

Table 7. Reduced table of frequencies of Spanish adverbs for chi-square analysis

<table>
<thead>
<tr>
<th>Position</th>
<th>Básicamente</th>
<th>Esencialmente</th>
<th>Fundamentalmente</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>34 [19.8]</td>
<td>8 [18.7]</td>
<td>16 [19.5]</td>
</tr>
<tr>
<td>Between subject and verb</td>
<td>8 [5.8]</td>
<td>3 [5.5]</td>
<td>6 [5.7]</td>
</tr>
<tr>
<td>After main verb and before another constituent</td>
<td>80 [75.4]</td>
<td>61 [71.4]</td>
<td>80 [74.3]</td>
</tr>
<tr>
<td>After a relational verb and before a NP with no adjective, or nominal clause</td>
<td>18 [15.3]</td>
<td>19 [14.5]</td>
<td>8 [15.1]</td>
</tr>
<tr>
<td>Before/after ‘absolute’ past participle in adjectival (reduced relative) clause</td>
<td>20 [17.4]</td>
<td>16 [16.5]</td>
<td>15 [17.1]</td>
</tr>
<tr>
<td>Initial or medial in a phrase, but not in front of an adjective</td>
<td>19 [27.6]</td>
<td>17 [26.2]</td>
<td>45 [27.2]</td>
</tr>
<tr>
<td>Total</td>
<td>208</td>
<td>197</td>
<td>205</td>
</tr>
</tbody>
</table>
entirely of written language, and that in English final position for basically turned out to be a feature of spoken rather than written language. In order to check whether this might be so for Spanish, all occurrences of the three adverbs in the spoken language from Spain in the CREA corpus were checked using the online search mechanism. Out of 75 occurrences of básicamente only 3 (4%) were final in the clause, and out of the 18 examples of esencialmente only one was final (3%), whereas in the 214 occurrences of fundamentalmente 25 (12%) came in final position. There are thus clear differences between Spanish and English here: fundamentalmente occurs more in final position in spoken Spanish than the other two adverbs, while for English we found that it was basically which was most frequent in final position in the spoken language. Furthermore, most of the occurrences of fundamentalmente in final position were disjuncts, whereas we saw that final fundamentally, occurring in written English, acted as an adjunct.

6. Conclusions

6.1 Frequency distribution of the adverbs

The overall frequencies of the sets of three adverbs are very similar for the BNC and CREA corpora, but the frequency is higher in the peninsular component of CREA than in the Latin American component. Spoken English, as represented by the spoken component of the BNC, has a strong preference, in quantitative terms, for basically over essentially and fundamentally. On the other hand, written English in the BNC tends towards essentially rather than the other two adverbs.

Spoken Spanish (Castilian and Latin American taken together, as represented in the spoken component of CREA) has a higher proportion of fundamentalmente, in relation to the total of the three adverbs, than written Spanish. Very similar profiles are evident if we confine ourselves to either the Castilian or the Latin American components. Comparison of newspaper texts in CREA with those from El Mundo and ABC Cultural shows that there is no statistically significant difference in the distribution of the three adverbs between the Castilian news texts in CREA and El Mundo, but that esencialmente has much higher relative frequency in ABC Cultural than in the CREA news texts from Spain or El Mundo. The Latin American news component of CREA differs significantly from both El Mundo and ABC Cultural: CREA is richer in básicamente and poorer in fundamentalmente than El Mundo, and poorer in esencialmente than ABC Cultural.

Taking spoken and written language together, the Castilian material in CREA contains a larger proportion of fundamentalmente than the Latin American material, and a smaller proportion of esencialmente. This difference is due to the written language, since there is no significant difference when only the two spoken language
samples are compared. The Castilian news component of CREA has a higher proportion of *fundamentalmente* and a lower proportion of *básicamente* than the Latin American component.

Taking the whole of the BNC and of CREA, or just the spoken components of the two corpora, there is a higher proportion of *basically* and *essentially*, and a much lower proportion of *fundamentally*, than for the parallel adverbs in the Spanish corpus. Taking just the written components, *fundamentally* again has a very much lower proportion than does *fundamentalmente* in the Spanish corpus, but *essentially* has a higher proportion than *esencialmente*. Similar patterns are obtained when comparing the BNC with just the Castilian component of CREA.

### 6.2 Collocational profiles

*Basically* is associated with the concepts of similarity and (to a lesser degree) difference. In the spoken language, it is also frequently preceded by hesitation markers, and collocates with interpersonal devices such as *I mean/I think/you know* which soften the expression of the speaker or writer’s opinion that some particular aspect of a phenomenon is its most central property. It may be becoming ‘pragmaticalized’ to function as a downtoner.

*Essentially* is also associated with similarity and difference. It is concerned with the inherent properties of an entity or process, often in terms of the content which defines it, and often in situations where the central property remains unchanged.

*Fundamentally* is associated primarily with change, and also collocates with words representing negative properties. It can also be used to characterise the importance of something. *Fundamentally* is frequently premodified by *more/most*.

*Básicamente*, like *basically*, is associated with the concept of identity, often in relation to the content which defines the inherent qualities of something. It also collocates with words indicating cause and dependency, and with items (e.g., forms of *dedicarse* (a)) concerned with the dedication or assignation of something to a particular end or purpose.

*Esencialmente* overlaps considerably with *básicamente* in its collocational associations, but also occurs with some words indicating basis or composition which do not collocate strongly with *básicamente*. Like *essentially*, it is concerned with the nature or character of things and processes. It is sometimes premodified by *tan* (‘so’).

*Fundamentalmente* shares many of its most frequent left collocates with *básicamente* in its collocational associations, but also occurs with some words indicating basis or composition which do not collocate strongly with *básicamente*. Like *essentially*, it is concerned with the nature or character of things and processes. It is sometimes premodified by *tan* (‘so’).

Thus all the Spanish adverbs are concerned with the content which defines the inherent qualities of some entity or state of affairs, and with the concepts of cause
and/or dependency. Two (esencialmente and fundamentamente) are also related to intended destinations or aims.

6.3 Syntactic properties

The behaviour of the three English adverbs in the corpus largely confirms the properties of content disjuncts claimed by Quirk et al. (1985). Empirically, 17 categories were found to be needed in accounting for the positional properties of the English adverbs in the corpus sample investigated. Basically shows a tendency towards clause adverbial rather than modifying uses, and although its observed frequencies, like those of essentially and fundamentally, are highest overall in medial positions, it favours initial and final positions more than the other two adverbs. In initial and particularly in final position, basically has a strong bias towards spoken English. Essentially occurs less in initial and final positions than would be expected if there were no association between the identity of the adverb and its position in clauses, but occurs more frequently than expected after relational verbs, and also in phrases other than those in which it precedes an adjective. Fundamentally also has a lower frequency in initial position than expected under the null hypothesis of no association between variables, but a higher frequency in pre-adjectival position, either after a relational verb or clearly within a NP or AdjP. It thus tends to favour premodifying use. The clause-final instances of fundamentally are manner adjuncts rather than disjuncts.

15 categories were required for the empirical analysis of position for the three Spanish adverbs. Básicamente, like English basically, has a high frequency, relative to the other two adverbs, in initial position and a low frequency with modifying function in phrases. Esencialmente is particularly prevalent as an adjectival premodifier. Fundamentamente is frequent in phrases other than those with an adjective. There are very few occurrences of the adverbs in clause-final position. In order to check whether this was due to the fact that the texts used were almost entirely written, all instances of the adverbs in the spoken peninsular Spanish component of CREA were checked for position. Clause-final position was infrequent for básicamente and esencialmente, but rather more frequent for fundamentamente, which mainly acted as a disjunct here as well as in other positions.

Except where otherwise specified, the findings on collocation and position summarized above should be taken as relating primarily to the written language, in view of the composition of the corpora used. More detailed analysis of separate spoken and written samples is left for future work. However, despite the limitations, the results reported in the present chapter clearly indicate the power of close corpus analysis to reveal that items which have hitherto been regarded as very similar in meaning and use may actually display patterns of difference as well as of similarity, and that subtle differences may also be detected when formal equivalents are compared across languages. Such results are of interest not only from descriptive and comparative perspectives, but also, potentially, in the context of language teaching and learning.
References


Causative *make* and *faire*

A case of mismatch

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This chapter compares the causative verb *make*, as used in verbal periphrastic causative constructions, with its intuitive equivalent in French, *faire*. Relying on a combination of comparable and parallel corpus data, it investigates the syntactic, semantic and lexical features of the English and French constructions, and examines the equivalents selected by professional translators to express the idea of causation in the other language. The analysis reveals that the apparent equivalence between *make* and *faire* is in fact deceptive. Not only do the two verbs show marked differences in their behaviour and preferences, but they are also rarely chosen as equivalents of each other in professional translations. The chapter ends with some implications for translation and foreign language teaching.

1. **Introduction**

Before the advent of corpora, contrastive linguistics mainly relied on intuition. While such an approach provided many important insights into the comparison of languages, the use of corpora has revealed, in contrastive linguistics as in other branches of linguistics, some complexities and subtleties that could not have been noticed by means of introspection alone. It has been demonstrated, among other things, that cognates and other words traditionally described as cross-linguistic equivalents can actually display major differences.

In this chapter, one such pair of words will be examined, namely the English causative verb *make* and its French “counterpart” *faire*. After explaining why these two verbs may at first sight appear to be good equivalents, we will outline the data and methodology used to compare them. The main analysis will consist of two parts. In the first part, the behaviour of the English causative construction will be investigated and compared with the behaviour of the French causative construction in original texts. In the second part, parallel corpus data will be used to determine how causative constructions tend to be translated and, through “back-translation”, what they correspond to in the source language. These two approaches will lead to the same conclusion, namely that the equivalence between *make* and *faire* is only partial and that they each have
their own peculiarities. The implications of this study for translation and foreign language teaching will be briefly discussed.

2. English and French causative constructions: Apparent equivalence

Causation can be expressed in a variety of ways – by means of a preposition (e.g., as a result of, due to), a conjunction (e.g., because, since), an adverb (e.g., consequently, thereby), a verb (e.g., cause, kill), etc. In fact, Xuelan & Kennedy (1992) have drawn up a list of as many as 130 different devices for expressing this notion in English. The device that has probably attracted the most attention among linguists, however, is the causative construction or, more precisely, the periphrastic (also called analytic) causative construction (Kemmer & Verhagen 1994). Periphrastic causative constructions are two-part configurations consisting of a verb, such as make or have in English, controlling a non-finite complement clause, e.g., Mary had John come to the meeting (see Baron 1974). They are found in several languages, as shown in (1) to (5) below:

(1) Dutch
De sergeant liet de recruten door de modder kruipen. (Stukker et al. 1999: 66)
'Vemade the recruits creep through the mud.'

(2) French
Il a fait partir Emma. (Cannings & Moody 1978: 11)
'He made Emma leave.'

(3) German
Er liess seinen Sohn den Brief abtippen. (Comrie 1976: 271)
'He made his son type the letter.'

(4) Italian
Maria fa scrivere Gianni. (Cole 1983: 115)
'Mary makes Johnny write.'

(5) Swedish
Han fick henne att skratta. (Altenberg 2002: 99)
'He made her laugh.'
Moreno (1993) notes the frequent correlation between make-verbs and the expression of causation. Thus, languages such as Korean, Tamil, Telugu, Indonesian, Jacaltec, Modern Greek and Thai all use a verb corresponding to English make to form causative constructions. This also applies to French, which, strictly speaking, has only one periphrastic causative verb, namely faire. And while in Old English do was the most common causative verb (Ikegami 1981), in contemporary English make can be regarded as the most prototypical causative (Altenberg 2002). This, in itself, is already a good argument for establishing a correspondence between causative make and faire, in the same way as it can be established for other senses of the two verbs, cf. make a cake = faire un gâteau, make a suggestion = faire une suggestion. Another similarity between the two verbs is that, when used in a periphrastic causative construction, they have little semantic content of their own apart from the idea of causation. This is to be contrasted with causatives such as persuade and order in English, or forcer and obliger in French, which all have an additional meaning besides that of causation (persuade, for example, combines the idea of causation and that of persuasion).

From a more formal point of view, the two languages present a couple of differences. First the elements making up the causative construction are normally ordered differently in English and French, as appears from a comparison of (6) and (7). While in English the causative verb and the non-finite complement are separated by a participant known as the causee (her friends in (6a) and them in (6b)), in French the causative verb and the non-finite complement follow each other directly, with the causee (ses amis in (7a) and les in (7b)) following or preceding this cluster.1

(6)  a. *She makes her friends laugh.
   b. She makes them laugh.

(7)  a. Elle fait rire ses amis.
   b. Elle les fait rire.

The second difference is that the link between the causative and the non-finite complement is stronger in French than in English. This transpires, among others, from the contiguity of the two elements in French (see above) and from the position of the clitics belonging to the infinitive. While clitics in French normally precede the verb they belong to (e.g., Je le vois ‘I him see’, rather than *Je vois le), they cannot precede the infinitive in causative constructions, cf. les in (8), but must be placed before the whole verb complex (9).

1. Structures such as the following, however, are possible: Fais-lui signer la lettre (imperative form, ‘Make him sign the letter’), Rien ne me fera vous suivre (Riegel et al. 1994: 229, ’Nothing NEG me will-make you follow’, i.e., ’Nothing will make me follow you’) or, in particular circumstances, He has made known its advantages and disadvantages.
Despite these two differences, however, English and French share the same general pattern for the periphrastic causative construction, with a causative verb followed by a non-finite complement, a causer initiating the caused event and a causee bringing about the process referred to by the non-finite complement. This formal similarity and the semantic correspondence described above seem to have been enough for a number of linguists and lexicographers to conclude that causative *make* and *faire* can be regarded as equivalents, see e.g., Tavernier (1967), who equates the two verbs, or the Collins-Robert Dictionary (Atkins et al. 1998), where they are given as first translations of each other.

The problem with these claims is that they are largely (if not wholly) based on introspection and, hence, do not necessarily reflect the reality of language, as several cross-linguistic studies on other cognates and apparently equivalent words have demonstrated (e.g., Viberg 1996, 2002; Altenberg 2001; Hasselgård 2004). This study, therefore, sets out to investigate the degree of similarity between causative *make* and *faire* on the basis of authentic language data. The investigation will use both comparable corpus data, to compare the features of *make* and *faire* in original language, and parallel corpus data, to observe the equivalence (or lack thereof) between the two verbs. The data and methodology are presented in the next section.

3. Collecting the data

The data used to investigate the degree of similarity between causative *make* and *faire* come from PLECI (Poitiers-Louvain Échange de Corpus Informatisés), a corpus consisting of fiction and journalese in English and French. Thanks to its composition, the PLECI corpus can be utilized both as a comparable and parallel corpus, as appears from Figure 1. On the one hand, since the English part and the French part contain texts of similar genres (novels and newspaper articles), one can study the features of causative constructions in original English and compare them with the features of causative constructions in original French, thus using PLECI as a comparable corpus (a). On the other hand, each text in one language is accompanied by a translation into the other language (parallel corpus), which makes it possible to examine the equivalents...
of causative constructions in the other language (b). In total, the present analysis is based on some 800,000 words from PLECI, as shown in Table 1.

![Figure 1. PLECI as a comparable and parallel corpus.](image)

**Table 1. Composition of the PLECI sample**

<table>
<thead>
<tr>
<th>Language</th>
<th>Number of words</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fiction</td>
<td>Non-fiction</td>
<td>Total</td>
</tr>
<tr>
<td>English</td>
<td>Original texts</td>
<td>83,524</td>
<td>103,395</td>
</tr>
<tr>
<td></td>
<td>Translations</td>
<td>86,277</td>
<td>109,345</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>169,801</td>
<td>212,740</td>
</tr>
<tr>
<td>French</td>
<td>Original texts</td>
<td>82,023</td>
<td>110,622</td>
</tr>
<tr>
<td></td>
<td>Translations</td>
<td>86,049</td>
<td>114,131</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>168,072</td>
<td>224,753</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>337,873</td>
<td>437,493</td>
</tr>
</tbody>
</table>

All the occurrences of a form of *make* or *faire* were automatically extracted from the corpus by means of Multiconcord (Woolls 1998). Thanks to the fact that the corpus is aligned, i.e., with each sentence in one language associated with its translation in the other language, the software is able to retrieve both the sentence containing the target item (here, a form of *make* or *faire*) and the corresponding sentence in the other language. Because the causative use of *make* and *faire* is only one of the many senses of the verbs, the automatic search had to be followed by a stage of manual post-editing in order to discard the non-causative uses of the two verbs. This left us with 109 occurrences of causative *make* and 355 occurrences of causative *faire*, as summarized in Table 2. Finally, a database was created with a number of features encoded for each causative construction extracted from the corpus, such as the nature of the text in which it occurred (original or translation), its genre (fiction or non-fiction), the nature of the causer (animate or inanimate, nominal or pronominal, etc.) or the type of non-finite complement used in the construction (volitional or non-volitional, transitive or intransitive, etc.). By querying this database, it was possible to examine and compare the conditioning factors of causative constructions in English and French.
Table 2. Frequency of causative *make* and *faire* in the PLECI sample

<table>
<thead>
<tr>
<th></th>
<th>Original texts</th>
<th>Translations</th>
<th>Total</th>
<th>/100,000 ‘w’ (for ‘words’)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causative <em>make</em></td>
<td>42</td>
<td>67</td>
<td>109</td>
<td>28.49</td>
</tr>
<tr>
<td>Causative <em>faire</em></td>
<td>185</td>
<td>170</td>
<td>355</td>
<td>90.37</td>
</tr>
</tbody>
</table>

4. Features of causative *make* and *faire* in a comparable corpus

4.1 Identity between *make* and *faire*?

Some similarities between causative *make* and *faire* have already been mentioned in Section 2. In addition to these, the analysis of the corpus data reveals at least two other similarities. On the one hand, the causer with both verbs is almost equally distributed between nouns and pronouns. On the other hand, if we describe the non-finite complement in terms of the threefold functional distinction (see Halliday 2004) between material verbs (i.e., processes of doing), mental verbs (i.e., processes of sensing) and relational verbs (i.e., processes of being), the distribution with *make* and *faire* turns out to be very similar, namely with material verbs predominating and relational verbs being the least frequent type of process. In other words, constructions such as those found in (10) are more likely to occur than those in (11).2

(10) a. *The result, Pep II, creates millions of Bs and B-bars by making electrons collide with their antimatter counterparts, positrons.* (PLECI non-fiction OE)

b. *Au moins, faites partir votre femme et vos enfants.* (‘At least get your wife and children out’, lit. ‘make leave’) (PLECI fiction OF)

(11) a. *I have made it sound bad for me, but it was not so bad as that.* (PLECI fiction OE)

b. *Je tenais particulièrement à les intéresser : je bêtifiais, je m’agitais, guettant le mot qui m’arracherait à mes limbes et qui me ferait exister dans leur monde à eux, pour de bon.* (‘I was particularly anxious to arouse the interests of the men: I tried to attract their attention by fidgeting and playing the ingénue, seizing any look or word that would snatch me out of my childhood limbo

2. The code between angle brackets indicates which part of the PLECI corpus the sentence comes from – fiction or non-fiction, and original English (OE), original French (OF), translated English (TE) or translated French (TF). The English translations of the French sentences come from the parallel corpus. When necessary, a literal translation of the causative verb and its non-finite complement has been provided.
Such similarities seem to confirm the common view according to which causative *make* and *faire* correspond to one another and are used in the same sort of environment and with identical features. This, however, takes no account of the differences that are also brought to light by the corpus analysis, as illustrated in the next sections.

### 4.2 *Make* included in *faire*?

Among the differences between causative *make* and *faire* highlighted by the corpus analysis, the most striking one is a difference in frequency. While *faire* occurs 185 times in the original texts, *make* occurs only 42 times, which represents a relative frequency of 96.03 and 22.47 per 100,000 words, respectively. Put more simply, causative *faire* is over four times more frequent than causative *make*, a difference which is statistically highly significant ($\chi^2 = 85.89, p < 0.001$).

Another difference is that *faire*, unlike *make*, can easily be used without any causee, as in (12) or (13). In English, the passivization of the subclause, involving the use of a past participle, makes the causee optional, as shown in (14) below. Causeless constructions with infinitives, however, are limited to the idiomatic expressions *make believe* and *make do* which, in the corpus, do not occur at all. In French, on the other hand, causeless constructions seem to be possible whenever the causee is indeterminate (cf. Riegel et al. 1994), as in (12), or when it constitutes given information, as in (13), where the causee clearly refers to Simon. Such constructions represent over one quarter of all the occurrences of causative *faire* (26.5%).

(12) *Les grosses limousines noires, la persistance de vieux symboles, la présence à la tête du ministère de M. Evgeny Primakov, un ancien responsable soviétique, pourraient faire croire qu’ici le temps s’est arrêté.* (‘The large black limousines seem like symbols of a bygone age. With former Soviet official Yevgeny Primakov installed as foreign minister, they strengthen the feeling that, here at least, time has stood still’, lit. ‘make believe’) (PLECI non-fiction OF)

(13) – *Je suis avocat stagiaire, reprit Simon. C’est beaucoup de travail, couché à minuit, levé à l’aube.*
– *Il est dix heures, fit remarquer Paule.*
(‘– I’m devilling for a barrister, pursued Simon. It’s a hard life: working till midnight, up at dawn … – It’s ten o’clock, Paule pointed out’, lit. ‘made notice’)

(PLECI fiction OF)

---

3. Note that this difference in frequency remains even if translations are taken into account too. Thus, the relative frequency of *make* in the whole corpus amounts to 28 per 100,000 words, against 90 for *faire* (see Table 2).
Moreover, the non-finite complement of the English construction appears to be more restricted in lexical terms, with fewer verbs recurring more often. Thus, the most frequent verb, *feel*, illustrated in (15), represents a proportion of 14%, and a cumulative frequency of 25% is reached after only four verbs (*feel, look, work and think*). In French, by contrast, the most frequent verb, *passer*, as shown in (16), represents a percentage of just 4%, and as many as 12 verbs have to be taken into account before the 25 percent threshold can be reached. In other words, the French construction seems to allow for a greater variety of verbs than its English counterpart, which displays a strong preference for a small number of words.

(15)  
*She preceded me into the house, smiling over her shoulder in a way unmistakably intended to make me feel at home.*  
(PLECI fiction OE)

(16)  
*L’Lucas sortit le premier, fit passer l’inconnu qui avait toujours son chapeau à la main et le tenait toujours devant son visage.*  
(‘Lucas came out first and then motioned out the unknown man, who was still holding his hat in front of his face’, lit. ‘made pass’)  
(PLECI fiction OF)

On the face of it, one could argue, as others have done before, that *make* is included in the field of *faire* (see Cottier 1992), as schematized by Figure 2. According to this view, *faire* is expected to have uses that cannot be expressed by means of *make* (such as the non-idiomatic causeeless construction with an infinitive or the use of certain verbs as non-finite complements) and therefore to be more frequent. The inclusion of *make* in the field of *faire*, however, would also imply that all the uses of *make* can be expressed by means of *faire*. Yet, we will see in the next section that *make* has uses which are, if not impossible, at least less likely to occur with *faire*.

Figure 2. Inclusion of *make* in the field of *faire*.

4.3  Partial overlap between *make* and *faire*

One type of construction where *make* is significantly more common than *faire* involves inanimate causers. While with *faire* such causers represent a minority of 30%, with
make they are slightly more frequent than animate causers (52%). In this case, make can therefore be said to occupy an area within the field of causation where faire is much less present. The preferences of the two verbs with respect to the nature of the causer are illustrated by (17) and (18).

(17) She wasn’t at all shy of us and what we said made her laugh. ⟨PLECI fiction OE⟩

(18) Pour certains, le président William Clinton a cherché à faire oublier l’affaire Lewinsky. (Some of them think President Clinton was trying to turn attention from the Lewinsky affair, lit. ‘make forget’) ⟨PLECI non-fiction OF⟩

Likewise, causative constructions where the non-finite complement refers to a process which is not dependent on the causee’s will (non-volitional verb), as exemplified by (19) and (20), are more likely to occur with make than with faire (71% vs. 58%). This is another area where make seems to occupy more space in the field of causation than faire.

(19) Tories pay obeisance to competition and free trade, yet huddle with Britain’s farmers to support a protectionist racket – the European Community’s common agricultural policy – that would have made Disraeli blush. ⟨PLECI non-fiction OE⟩

(20) La voix d’Anne me fit sursauter. (Anne’s voice made me jump’) ⟨PLECI fiction OF⟩

Finally, it appears from the corpus analysis that, while copular verbs are extremely improbable with faire (only one example in the data, viz. (21)), they occur with make with a proportion of almost 15%, e.g., (22). This, again, shows that make can fulfil functions which are not characteristic of faire, contrary to what the hypothesis of inclusion would predict.

(21) Les apparaences biologiques et les effets bien réels qu’a produits, dans les corps et dans les cerveaux, un long travail collectif de socialisation du biologique et de biologisation du social se conjuguent pour renverser la relation entre les causes et les effets et faire apparaître une construction sociale naturalisée (les “genres” en tant qu’habitus sexués) comme le fondement en nature de la division arbitraire qui est au principe et de la réalité et de la représentation de la réalité, et qui s’impose parfois à la recherche elle-même. (‘The biological appearances and the very real effects which have been produced, in people’s bodies and in their brains, by a long collective labour of socialization of the biological and of biologization of the social combine to overturn the relationship between causes and effects, and end by making them appear to be a naturalized social construction (“genders”, as sexed habituses), as the grounding in nature of the arbitrary division which is the basis both of reality and of the representation of reality, and which is sometimes to be found expressed within research itself’) ⟨PLECI non-fiction OF⟩

(22) Her words pleased me, they made me feel needed and liked. ⟨PLECI fiction OE⟩

These differences between make and faire, and the fact that make seems to have further developed certain uses, suggest that the relation between the two causatives is
not one of inclusion, with *make* being included in the field of *faire*, but one of partial overlap. While the verbs share some uses, they also have their own peculiarities and preferences, which keep them apart from each other. This situation is schematized by Figure 3.

Figure 3. Partial overlap between *faire* and *make*.

Despite this dissimilarity, it might be that *make* and *faire* are the closest equivalents one may find in language and therefore appear as prime candidates for translation of each other. This possibility is explored in the next section.

5. **Equivalence of causative *make* and *faire* in a parallel corpus**

5.1 Translation and back-translation

As already pointed out in Section 3, the PLECI corpus can also be used as a parallel corpus, allowing one to examine a word or construction in the source language and its equivalent in the translation. This additional way of investigating the degree of similarity between two words or constructions cross-linguistically will now be used as a complement to the comparison of their features in original texts.

The originality of the approach adopted here is that it is twofold, as indicated by the double arrows in Figure 1 – from originals to translations, as is the case in traditional contrastive linguistics, but also from translations to originals, in a move called “back-translation” (Ivir 1983, 1989). Not only does this twofold approach provide a broad overview of the different means of expressing causation but, as pointed out by Johansson (1998), it also makes it possible to control for translation effects (“Translationese”, cf. Gellerstam 1986) by taking into account the “inverted” equivalence.

5.2 Mutual correspondence

A good measure of the equivalence between two words or constructions cross-linguistically is their so-called mutual correspondence, or mutual translatability (Altenberg 1999),
which refers to the frequency with which the words/constructions are translated as one another. It is calculated by taking into account the number of occurrences of the items in the original texts and, among these, the number of items that are translated by the expected equivalent in the other language (see Altenberg 1999 and Gilquin 2000/2001 for further details). The resulting value ranges from 0% (if the two items are never translated into each other) to 100% (if the two items are always translated into each other).

For causative *make* and *faire*, the calculation of the mutual correspondence provides a result of 15.42%. Given that the two verbs are regularly presented as obvious counterparts of each other, this is a surprisingly low result. However, considering the differences highlighted in Section 4, the low mutual correspondence only confirms the hypothesis according to which English and French causative constructions are not as alike as a cursory inspection of the two constructions might suggest. After examining the few cases of congruence, we will turn to the alternative equivalents and see how they reflect characteristics of the English and French causative constructions in particular, and of the English and French languages in general.

### 5.3 Congruent constructions

Out of the 464 causative constructions found in PLECI, only 35 are congruent, that is, they correspond to a causative construction with *make* or *faire* in the other language, e.g.:

(23) And they had perhaps partly succeeded in making him overcome his shyness.
    = Et ils avaient peut-être en partie réussi à lui faire surmonter sa timidité.
    〈PLECI fiction OE〉

Interestingly, the cases of congruence are not the sort of constructions one would expect from the literature. Tavernier (1967), already referred to earlier, notes that causative *faire* corresponds to *make* when the meaning expressed is one of coercion, that is, equivalent to the meaning of “force somebody to do something”. Among the 35 congruent constructions, however, only 7 are of this type, e.g., (24) and (25).

(24) Hemingway *made me promise* never to sell it – his wish was that someday, when I was a lot older, I'd find a young man and pass it on to him as a symbol.
    = Hemingway *m’a fait promettre* de ne jamais le vendre – son souhait était qu’un jour, quand je serais bien plus vieux, je trouverais un jeune homme à qui je le transmettrais en tant que symbole. 〈PLECI non-fiction OE〉

(25) “Vous n’allez pas me faire ça, *me faire travailler* par ces chaleurs … ces vacances qui pourraient me faire tant de bien …”
    = ‘You’re not going to do that to me, *make me work* in this heat. These holidays could do me so much good.’ 〈PLECI fiction OF〉

In the remaining cases, no volition is involved in the caused event, and therefore coercion is ruled out, for one cannot force a person to do something that is not
dependent on their will. This is illustrated by (26), where the causee (sa petite moustache/his little moustache) is inanimate and hence devoid of will, and by (27), where the non-finite complement refers to a process that is not dependent on the causee’s will (think/penser).

(26) Il s’attendait à tout cela, évidemment, à un Coméliau nerveux et agressif, contenant avec peine l’indignation qui faisait frémir sa petite moustache.

But though the irregular shape of the great kitchen made one think of a cave there was no suggestion of damp or darkness, the sun streaming in all day saw to that, and later the light of the fire that never went out.

The small proportion of constructions expressing coercion among the cases of congruence can be explained by the fact that, generally speaking, the importance of coercion for periphrastic causative constructions has been overestimated. While it is not uncommon in the literature to find statements to the effect that make and faire express – only or predominantly – coercion (cf. Faure & Casanova 1968 or Werner et al. 1990 for English, and Cannings & Moody 1978 for French), such cases display a relatively low frequency in actual language – 17.43% with make and 14.93% with faire in the whole corpus.

It is also noteworthy that five of the congruent constructions are past participle constructions with make, as illustrated in (28) below. Given that such constructions occur only nine times in the corpus, we can deduce that there is a strong tendency for past participle constructions with make to correspond to a causative construction with faire. Example (28) suggests a possible reason for this. It will be noticed that in both the English and the French constructions, the causee is left unexpressed. In English, this is made possible by the passivization of the subclause and the resulting optionality of the agent, cf. make its voice heard [by the population]. In French, it is the possibility of having an implicit causee (see above) that is turned to good account, cf. faire entendre sa voix [à la population]. While they use different strategies to do so, the English and the French constructions, therefore, both serve the same purpose of omitting any mention of the causee, which makes them, in this particular case, good candidates for equivalence.

(28) Tüsiad, an association representing 400 leading businessmen and industrialists, who together account for 50% of the country’s GNP, wants to make its voice heard.

Tüsiad, l’association qui regroupe les quatre cents plus importants industriels et hommes d’affaires, et qui “pèse” 50 % du PNB du pays, cherche à faire entendre sa voix. (PLECI non-fiction OE)
The small proportion of congruent constructions in the parallel corpus means that, most of the time, another equivalent is used to express the meaning of causative make or faire. In the next section, we review these alternative equivalents.

5.4 Alternative equivalents

What is striking in the parallel corpus is the great variety of equivalents that are used to express the meaning of a periphrastic causative construction. Some of these equivalents are illustrated by the following sentences:

(29) *Les tracasseries permanentes des autorités israéliennes au point de passage d’Erez, seul porte d’accès à Israël, lui ont fait perdre son année universitaire et renoncer aux études supérieures.* ('made him lose')

(30) *(...) comme pour faire mieux apprécier ensuite au public le miracle de l’harmonie musicale.* (lit. 'make the audience appreciate better')

(31) *That is what the expression means: to make someone feel small.*

(32) *It often takes something really drastic, like a rape or a death threat, to make a person leave.*

(33) *Aux États-Unis, la prise en compte de ce paramètre ferait grimper de 5 % à plus de 10 % la proportion de chômeurs.* (lit. 'the taking into account of this parameter would make the unemployment rate climb')

In (29), the equivalent is a causative construction with the verb *cause*. It was pointed out earlier that *make* is the prototypical verb for a periphrastic causative construction. Other verbs, however, are possible in English, such as *get*, *have* or *cause*. As for French, while it has only one verb to form periphrastic causative constructions, it has other verbs, more precise in meaning, which can be used in a causative construction (e.g., *obliger*, *persuader*, *forcer*, etc.). The equivalent in (30) is also a causative construction, but this time with a complement different from the non-finite verb found in cases of congruence. Here, the verb *make* is followed by an adjective, *appreciative*. In French, it is normally the verb *rendre* that is used for an adjectival causative construction (e.g.,
rendre heureux, ‘make happy’). Note that nominal causative constructions are possible too, both in English and French (e.g., make it their house, en faire leur maison). Quite regularly, the causative construction corresponds to a transitive verb in the other language, as in (31). It will be referred to as a synthetic causative verb, since it makes it possible to combine the idea of causation and that of the result into one single verb (cf. make feel small = rabaisser). Equivalence may also involve nominalization, as is the case in (32), where the infinitive of the English construction, leave, corresponds to a noun in French, départ (‘departure’). Example (33) illustrates yet another type of equivalent, with the causee, la proportion de chômeurs (‘the unemployment rate’), corresponding to the subject of the sentence in English.

The equivalents of make and faire fall into the same categories, namely verbal causative construction with another verb, adjectival or nominal causative construction, synthetic causative verb, nominalization and a miscellaneous category. However, the proportions of these categories are different for English and French. Moreover, the preferences displayed by each language tend to reflect characteristics of the causative construction in this language or general characteristics of the language itself. This will be demonstrated in the next two subsections.

5.4.1 Equivalents of causative faire
Table 3 shows the different equivalents of causative faire found in the corpus, together with the proportions they represent. The most frequent equivalent, with a proportion of over 50%, is the use of a synthetic causative verb, as in (34), where faire porter (‘make focus’) corresponds to direct (see also Chuquet & Paillard 1987: 171).

(34) Outre les plus riches de ses voisins (Taïwan, Brunei, Singapour, Hongkong et le Japon), la Thaïlande veut, comme le Vietnam et pour suivre l’exemple philippin, faire porter ses efforts sur des destinations du Proche-Orient tombées en désuétude depuis la guerre du Golfe. (lit. ‘make its efforts focus on’)

= Along with its richest neighbours (Taiwan, Brunei, Singapore, Hong Kong and Japan), Thailand wants, like Vietnam, to follow the example of the Philippines and direct its efforts towards the Middle East, neglected since the Gulf war. ⟨PLECI non-fiction OF⟩

Table 3. Equivalents of causative faire in the PLECI sample

<table>
<thead>
<tr>
<th>Equivalents of causative faire</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic causative verb</td>
<td>179 (50.4%)</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>61 (17.2%)</td>
</tr>
<tr>
<td>Verbal causative construction with verb other than make</td>
<td>38 (10.7%)</td>
</tr>
<tr>
<td>Verbal causative construction with make</td>
<td>35 (9.9%)</td>
</tr>
<tr>
<td>Nominalization</td>
<td>34 (9.6%)</td>
</tr>
<tr>
<td>Adjectival/nominal causative construction</td>
<td>8 (2.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>355 (100%)</td>
</tr>
</tbody>
</table>
The predominance of this equivalent can be explained both by characteristics of the English language and characteristics of the French causative construction. First, English is described as a synthetic language, as opposed to French, which is more analytic (Van Hoof 1989). English is therefore likely to opt for a synthetic causative verb in cases where French prefers an analytic causative construction. Second, English is known as a morphologically flexible language (ibid.). Where it will turn an intransitive verb into a transitive one (35) or use a noun as a verb (36), French will very often have to resort to a paraphrase (see Paillard 2000).

(35) Rouge, le crâne poli, le menton sali d’une mousse grisâtre, bon-papa me faisait consciencieusement sauter sur le bout de son pied, mais sa voix était si rugueuse qu’on ne savait jamais s’il plaisantait ou s’il grondait. (lit. ‘made me jump’)

= Red-faced, bald-headed, his chin daubed with a prickly, frothy grey scum, grandpa used to dance me dutifully up and down on his foot, but his voice was so gruff one never knew whether he was speaking in fun or in anger. (PLECI fiction OF)

(36) Quand William Gladstone bouscula les tories en lançant l’une de ses premières grandes réformes radicales, qui consistait à donner le droit de vote aux travailleurs, sa réprimande fit taire leurs râleries aux Communes: “Vous ne pouvez pas lutter contre l’avenir. Le temps est de notre côté.”. (lit. ‘made their scoffing fall silent’)

= When William Gladstone pitched into the Tories with one of his first great radical reforms (to open up the franchise to working men), his rebuke silenced their scoffing in the Commons: “You cannot fight against the future. Time is on our side”. (PLECI non-fiction TF)

Third, it will be recalled from Section 2 that in the French causative construction, faire and the infinitive cannot be interrupted syntactically. These two elements can therefore easily be replaced by a single verb, since they already form a syntactic unit. Moreover, we have seen that the causee is often absent from the French causative construction. While a periphrastic causative construction can potentially express up to three participants (a causer, a causee and a patient, which corresponds to the direct object of the non-finite complement), the causeless construction has a maximum of two. In other words, its valency is no different from that of a simple transitive verb, which has room for two main arguments. Translating such a construction into a synthetic causative verb or vice versa, therefore, does not require any major change to fit in the various participants. In (37), for instance, the French construction has only two arguments, a causer (l’orchestre, ‘the orchestra’) and a patient (quelques sons spécialement discordants, ‘a few particularly discordant sounds’), and the causee is left unexpressed (cf. faire entendre quelques sons spécialement discordants [au public], ‘make [the audience] hear a few particularly discordant sounds’). In English, the causer and the patient become the subject and the direct object, respectively, of the transitive verb produce.
The other equivalents are much less frequent in the corpus, with the next category, the miscellaneous one, representing a proportion of 17%. Within this category, let us single out example (38), which takes advantage of the morphological flexibility of the English language, already referred to earlier.

(38) *Les villageois du côté albanaïs gagnent leur vie en montrant aux candidats à l’émigration comment passer la frontière sans se faire remarquer.* (lit. ‘without making themselves noticed’) 

= *Villagers on the Albanian side earn their living by showing would-be migrants where to slip across unnoticed.* (PLECI non-fiction TF)

The miscellaneous category also contains some cases of “Zero correspondence” (Johansson 1998: 14), where the idea of causation is no longer present, as in (39). Note that (39) also illustrates a common strategy among the miscellaneous equivalents, namely the transformation of the causee (le) into the subject of the corresponding sentence (he).

The same strategy is used in (40), where, in addition, the causer (*la chaleur, ‘the heat’*) becomes an adjunct (in the heat).

(39) *La question de Dukes le fit rougir, inconfortablement.* (lit. ‘Dukes’s question made him blush’)

= *Now he blushed and looked uncomfortable.* (PLECI fiction TF)

(40) *Le vieil homme était assis sur une caisse d’emballage dans le petit patio desséché. Il était très gros et avait le souffle court: la chaleur le faisait haleter légèrement comme après un grand effort.* (lit. ‘the heat made him pant’)

= *The old man sat on a packing-case in the little dry patio. He was very fat and short of breath: he panted a little as if after great exertion in the heat.* (PLECI fiction TF)

After the miscellaneous category come three types of equivalents, each with a proportion of some 10%, viz. a verbal causative construction with a verb other than *make*, a congruent construction with *make* and an equivalent involving nominalization. We have already dealt with the congruent construction in Section 5.3 and will therefore concentrate on the other two equivalents here. Among the verbal causative constructions with a verb other than *make*, a distinction can be made between those that use a verb with very little semantic content of its own, like *faire*, e.g., *get, have or set*, and those that use a more specific verb, such as *force, help or order*. Of the two, only the former can be said to form a periphrastic causative construction in the strict sense. In (41) *get* is preferred to *make* because it emphasizes the idea that effort is involved
in bringing about the caused event (Gilquin 2004), cf. determined. In (42) the use of the verb keep adds a durative aspect that is not expressed by faire – and would not be expressed by make.

(41)  Aujourd’hui, il y a des millions de sociétés bien décidées à nous faire mettre notre vie entière sur le Net. (lit. ’make us put’)  
= Today there are a million and one companies determined to get us all to move our entire lives onto the Web. (PLECI non-fiction TF)

(42)  Puisqu’elles ne sont pas là et qu’elles se permettent de nous faire attendre, viens danser avec ton vieux père et ses rhumatismes. (lit. ’make us wait’)  
= Since they’re not down yet, and have the cheek to keep us waiting, come and dance with your rheumaticky old father! (PLECI fiction OF)

Nominalization is illustrated by (43), where the idea of dreaming (rêver) is conveyed by the noun enthusiasm. This type of equivalent, incidentally, is somewhat surprising, given the supposed predominance of the verb in English and of the noun in French (Vinay & Darbelnet 1975 and Van Hoof 1989). It will be seen in Section 5.4.2 that nominalization is equally frequent as an equivalent of make, which suggests that the opposition between verbs and nouns in English and French is not particularly relevant here.

(43)  Les veilles d’élection sont traditionnellement favorables aux blocs installés, mais le Parti québécois, à vouloir calquer son destin sur le modèle américain, ne fait plus rêver. (lit. ’makes dream’)  
= Election fever tends to favour the established political blocs, but with the PQ staking its future on the American model, it no longer inspires enthusiasm. (PLECI non-fiction OF)

The use of a nominal or adjectival causative construction as an equivalent of faire, finally, represents a proportion of hardly more than 2%, e.g.,

(44)  Comme s’ils voulaient enfoncer le clou, les vaincus ont immédiatement fait comprendre à quel point ils ignoraient l’étendue de leur désastre. (lit. ’made understand’)  
= As if to ram the point home, Labour’s beaten men have immediately made it clear that they do not see the size of their disaster. (PLECI non-fiction TF)

(45)  En faisant accéder leur pays au rang de puissance atomique, les dirigeants indiens croient avoir entrepris le rééquilibrage des rapports de forces en Asie. (lit. ’By making their country a nuclear power’)  
= By making their country a nuclear power, India’s leaders believe that they are altering the balance in Asia. (PLECI non-fiction OF)

Note that in (44), the use of an adjectival construction makes it possible to avoid mentioning the implicit causee of the French sentence. In an active verbal causative
construction, mention of the causee would be obligatory (they made X understand that ...). As for the passive verbal causative construction with understand, it normally occurs with a reflexive pronoun (make oneself understood) or, at least, with a possessive pronoun referring to the causer (make one’s views understood), and would therefore be very unlikely here.

The great variety of equivalents available in English to convey the meaning of causative faire might be explained by the relative frequencies of faire and make. Since faire tends to be more common than make, it is only normal that English should find alternative strategies to express causation. This, however, cannot be the whole story for, as will emerge from the next subsection, French too has a wide range of equivalents that correspond to causative make. The differences between faire and make therefore seem to be more profound than a simple difference in frequency would imply.

5.4.2 Equivalents of causative make

The various equivalents of causative make and their respective proportions are displayed in Table 4. The most frequent equivalent is the congruent construction with faire (32.1%), as illustrated in (46) below. This can be related to the higher frequency of faire and the partial overlap between the two verbs.

(46) She felt a terrible appeal coming to her from him that made her almost lose her balance.
= Elle sentait venir de lui jusqu’à elle un appel terrible qui lui faisait presque perdre l’équilibre. (PLECI fiction OE)

<table>
<thead>
<tr>
<th>Equivalents of causative make</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal causative construction with faire</td>
<td>35 (32.1%)</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>32 (29.4%)</td>
</tr>
<tr>
<td>Synthetic causative verb</td>
<td>17 (15.6%)</td>
</tr>
<tr>
<td>Nominalization</td>
<td>11 (10.1%)</td>
</tr>
<tr>
<td>Verbal causative construction with verb other than faire</td>
<td>10 (9.2%)</td>
</tr>
<tr>
<td>Adjectival/nominal causative construction</td>
<td>4 (3.7%)</td>
</tr>
<tr>
<td>Total</td>
<td>109 (100%)</td>
</tr>
</tbody>
</table>

Almost equally important is the miscellaneous category, which represents a proportion of 29.4%. It is interesting to notice that these miscellaneous equivalents are often resorted to in cases where the English construction has features that are not easily transposed into French. Consider example (47). In English, the subject of make refers to an inanimate entity, the very intensity of her devotion. We saw in Section 4.3, however, that inanimate causers are relatively infrequent in French. By turning the causer into an adjunct (par excès de tendresse, ‘by an excess of tenderness’) and making
the causee, her/Lady O’Connell, the subject of the French sentence, one can therefore produce a structure that sounds more natural than a literal translation would.

(47) *It was the very intensity of her devotion that had made her* give him a softness of upbringing that was about the cruellest thing she could have given him.

= *Par excès de tendresse, Lady O’Connell l’éleva avec une faiblesses qui était bien la pire des cruautés.* (lit. ‘By an excess of tenderness’) (PLECI fiction OE)

Sentence (48), already quoted, is another case in point. The fact that copular verbs are extremely rare with *faire* may explain why another type of equivalent (*à m’entendre*, ‘upon hearing me’) is preferred in French when the English causative construction contains such a verb (*sound*).

(48) *I have made it sound bad for me, but it was not so bad as that.*

= *À m’entendre, on pourrait s’imaginer que j’en souffrais, mais en réalité ce n’était pas si dramatique.* (lit. ‘Upon hearing me’) (PLECI fiction OE)

Although it represents a smaller proportion than as an equivalent of *faire*, the use of a synthetic causative verb is still a relatively common option (15.6%). However, it has this particular characteristic that in a large majority of the cases (82%), it corresponds to a causative construction in which *make* is followed by an intransitive non-finite complement, such as *shine* in (49).

(49) *Drawings and slogans enliven the walls: “Books are bright lights that make our lives shine” and “To have a clean and beautiful environment we must cooperate”.*

= *Des dessins et des slogans animent les murs : “Le livre est une lumière qui nous illumine”. “Il faut coopérer pour plus de beauté et pour un environnement propre”.* (lit. ‘The book is a light that illuminates us’) (PLECI non-fiction TE)

This has to do with the valency of the causative construction, already alluded to with respect to French causeeless constructions. With a transitive non-finite complement, the causative construction contains, in addition to the causer and the causee, a patient, which is the direct object of the non-finite complement. Thus, (50) is a three-argument construction, with a causer, the Seven Dwarfs, a causee, Snow-White’s stepmother, and a patient, the red-hot iron boots.

(50) *Indeed, the red-hot iron boots which the Seven Dwarfs made Snow-White’s stepmother wear and the flames burning Lucifer in hell never evoked in my mind the image of physical suffering.*

= *À vrai dire, les brodequins de fer rougi dont les nains chaussaient la marâtre de Blanche-Neige, les flammes où cuisait Lucifer, n’évoquaient jamais pour moi l’image d’une chair souffrante.* (lit. ‘put shoes on Snow-White’s stepmother’) (PLECI fiction TE)

Using a synthetic causative verb to convey the same meaning in French is complex, since such a verb has only room for two main arguments, a subject and a direct object.
One therefore has to find a way to integrate the third argument somehow. In (50), for instance, the idea of the patient is expressed both by the verb *chausser* ('to put shoes on'), which includes the notion of *boots*, and the prepositional phrase *de brodequins de fer rougi* (cf. *les brodequins de fer rougi dont* …, ‘the red-hot iron boots with which …’).

If, on the other hand, the non-finite complement is intransitive, as in (49), the transposition is more straightforward: the causer becomes the subject of the synthetic causative verb (*bright lights – une lumière*), while the causee becomes its direct object (*our lives – nous*). It is no wonder, therefore, that causative constructions with an intransitive non-finite complement are more prone to correspond to a synthetic verb than causative constructions with a transitive non-finite complement.

The next two categories of equivalents, nominalization and verbal causative construction with another verb, both have a proportion of some 10%, which roughly corresponds to their proportion as equivalents of *faire* (Section 5.4.1). Nominalization is illustrated by (51), where the non-finite complement in English, *fear*, is expressed in French by means of a noun, *craintes* (*fears*). Note that some of these equivalents in French seem to have reached a status close to that of idiomatic expression, e.g., *make someone want to/feel like* = *donner envie de* (*give the desire to*); *make someone look like* = *donner l’air de* (*give the look of*), as exemplified by (52) and (53).

(51)  *He had the choleric temper that goes with ginger hair, touchingly combined with a vast patience and a superb courage, so that though his language in the face of disaster was enough to* make all the godly within miles *fear* for his immortal soul his method of dealing with it would have commended itself to the greatest of the saints.*

= *Le caractère emporté qui va de pair avec les cheveux roux se combinait en lui, de façon touchante, avec une patience inépuisable et un fier courage : devant le malheur, son langage pouvait inspirer des craintes sérieuses pour le salut de son âme immortelle, mais en revanche sa conduite était digne d’un véritable saint.* (lit. ‘to inspire serious fears’) (PLECI fiction OE)

(52)  *Her sudden gentleness after my intemperate rage* made me want to burst into tears.

= *Cette subite douceur, mon excès de violence précédent me donnaient envie de pleurer.* (lit. ‘gave me the desire’) (PLECI fiction TE)

(53)  *I bent an anxious, pleading face over her, drawing in my cheeks to make myself look like an overworked intellectual.*

= *Je penchai sur elle un visage inquiet, suppliant, en ravalant encore mes joues pour me donner l’air d’une intellectuelle surmenée.* (lit. ‘give me the look of’) (PLECI fiction TE)

The use of a verbal causative construction with a verb other than *faire* necessarily conveys a more specific type of causation than the English construction with *make*,

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since French has only one verb which, like make, merely expresses causation, viz. faire. The other verbs are more specific in meaning, e.g., obliger, pousser à, permettre. In (54), while the English sentence is indeterminate as to the means that were used to achieve the desired effect (it could imply that the causers force widows to marry them or that they act more indirectly, for example by being particularly gallant or by displaying their riches), the French sentence makes it clear that it is coercion that is used to bring about the caused event.

(54) And they make widows marry them, especially the good-looking ones.
    = Et ils obligent les veuves à les épouser, surtout quand elles sont belles. (lit. ‘oblige’) (PLECI non-fiction TE)

As was the case for the equivalents of faire, the least frequent category, with a proportion of 3.7%, is that of the adjectival or nominal causative construction, as illustrated by (55) and (56).

(55) But this sudden call of the sun made the tiling of the cafés and the aisles of the large stores seem repugnant.
    = Mais ce brusque rappel du soleil rendait odieux les carrelages des cafés et les couloirs des grands magasins. (lit. ‘render odious’) (PLECI fiction TE)

(56) True, the writer went on to explain that the sum in question was the official charge for the documents which a Cuban woman needed in order to marry a foreigner. But the ambiguously worded article made the Cuban authorities sound like some sort of pimp.
    = Certes, le journaliste expliquait après qu’il s’agissait du tarif administratif officiel pour constituer le dossier permettant à une Cubaine d’épouser un étranger, mais le texte restait ambigu et faisait du régime cubain une sorte de souteneur … (lit. ‘made the Cuban regime a sort of pimp’) (PLECI non-fiction TE)

It is interesting to note that, of the four constructions that use such an equivalent, three contain a copular verb in English (cf. seem in (55) and sound in (56)), a type of verb which, as we saw, rarely occurs in French verbal causative constructions. This, again, shows that alternative equivalents are chosen when the use of a periphrastic causative construction would produce a sentence which is not in accordance with the characteristics of the language.

6. Causative make and faire: Deceptive equivalence – and some implications

Whether we compare English and French causative constructions in a comparable or parallel corpus, the analysis of authentic data reveals that make and faire are not the perfect equivalents that they might at first sight appear to be – and that they are regularly
claimed to be in the literature. The naive conception of *make* as being included in the 
field of *faire* has also been proved wrong, since *make* has particular uses which are, if not 
impossible, at least less likely with *faire*. Although they do share some characteristics, 
*make* and *faire* are essentially different verbs and, therefore, deceptive equivalents. Con-
sequently, the causative construction in one language rarely corresponds to a congruent 
construction in the other language, as the low degree of mutual translatability shows, 
and each language has a wide range of alternatives available to express a similar mean-
ing, more in accordance with its distinctive characteristics. In fact, even in cases where 
causative *make* and *faire* correspond to each other, differences may arise which reflect 
the features of each language. Consider for instance (57), where the inanimate causer in 
English (*it*) has become an animate causer in French (*vous*, ‘you’), thus respecting the 
French preference for animate subjects in causative constructions with *faire*.

(57)  Mr Tench said gloomily, “Forty hours from now and we’d be there; The Diligencia. 
A good hotel. Dance places too. A gay town.” “It makes it seem close,” the stranger 
said. “And a ticket, how much would that be?”

= D’un air sombre, Mr Tench répondit : “D’ici, nous pourrions y arriver en quarante heures. La Diligencia : un bon hôtel. Et puis les boîtes où l’on danse. Ville 
gare.” “Vous la faites paraître toute proche. Et le billet? Combien coûterait-il?”
(lit. ‘You make it seem very close’) (PLECI fiction OE)

These findings have obvious implications for translation and the training of transla-
tors. Trainee translators’ attention should be directed towards the lack of equivalence 
between causative *make* and *faire* and, more generally, between pairs of words which 
resemble each other (and may be described as equivalents in intuition-based refer-
ence tools), but whose close investigation reveals important discrepancies. Translators 
should also be trained to choose alternatives which respect the characteristics of the 
target language, even if this implies reorganizing the structure of the sentence com-
pletely. In addition, the results of a study such as this one might be exploited in the 
domain of machine translation. Using information about the features of the elements 
making up the causative construction (e.g., animate or inanimate causer, nominal or 
pronominal causee, transitive or intransitive non-finite complement) and the likeli-
hood that a particular combination of elements will have a given equivalent in the 
target language, one might develop algorithms for the translation of causative *make* 
and *faire*, in the same vein as the rules formulated by Salkoff (1999).

The deceptive equivalence between causative *make* and *faire* also has important 
consequences for foreign language teaching. For learners, the surface similarities 
between the two constructions (see Section 2) are often enough to justify their being equated, an intuition which is confirmed by a number of bilingual dictionaries and 
traditional contrastive grammars. Because each construction has its own peculiari-
ties, however, it will not do to simply transpose the characteristics of the construction
in one’s mother tongue into the target language.\textsuperscript{4} This can only result in the incorrect use of the construction, as described by Altenberg & Granger (2001) for Swedish- and French-speaking learners of English.\textsuperscript{5} Like trainee translators, learners should therefore be made aware of the differences that exist between the two constructions and avoid drawing simplistic parallels between their mother tongue and the target language.

7. Conclusion

Using PLECI both as a comparable and parallel corpus, it has been shown that the supposed equivalence between causative \textit{make} and \textit{faire} does not stand up to close scrutiny and that, as demonstrated for other pairs of words cross-linguistically, the degree of similarity between them turns out to be smaller than one would have expected. Besides the much discussed syntactic difference (the link between the causative verb and the non-finite complement is stronger in French than in English), the two verbs appear to display different preferences in terms of (semantic and lexical) conditioning factors. These explain why \textit{make} and \textit{faire} correspond to each other in only a small proportion of their occurrences. In the other cases, each language tends to favour equivalents which are more respectful of the principles governing it.

Before the era of corpus linguistics, such a mismatch would probably have struck one as quite unexpected. Now that we have access to large amounts of authentic contrastive data, however, these results come as less of a surprise. Black and white pictures of identity vs. discrepancy between words or constructions gradually disappear and make way for more nuanced descriptions of the complex relationships that hold between linguistic items cross-linguistically. These descriptions, at the same time, shed light on each individual language and reveal a treasure trove of curiosities and idiosyncrasies. No doubt many hidden treasures still remain to be uncovered.

References


\textsuperscript{5} English periphrastic causative constructions appear to be problematic for other groups of learners too, cf. Wong (1983) and Liu & Shaw (2001) for Mandarin learners, or Helms-Park (2001) for speakers of Hindi-Urdu and Vietnamese.


PART III

Meaning and cognition
from a contrastive perspective
This study sets out to demonstrate that the NSM metalanguage of semantic primes provides a stable language-neutral medium for fine-grained contrastive semantic analysis, in both the lexical and grammatical domains. The lexical examples are drawn from “yearning-missing” words in English, Polish, Russian and Spanish, while the grammatical examples contrast the Spanish diminutive with the hypocoristic “diminutive” of Australian English. We show that the technique of explication (reductive paraphrase) into semantic primes makes it possible to pin down subtle meaning differences which cannot be captured using normal translation or grammatical labels. Explications for the Polish, Russian and Spanish examples are presented both in English and in the language concerned, thus establishing that the metalanguage being used is transposable across languages.

1. A tertium comparationis for contrastive semantics

1.1 No comparisons without ‘terms of comparison’

To describe and compare any set of things, one must have some terms of comparison which are stable and equally applicable across the entire set of things being compared, i.e., some tertium comparationis. For example, to compare the climates of different countries we rely on standardized measures of temperature, rainfall, wind speed, hours of sunlight, and so on. To work properly, these parameters have to apply equally well to the various items being compared and to work equally well under different local conditions. It would be no good to have thermometers which reacted differently at the equator and at the higher latitudes, or which only worked properly in the temperate zones.

The same applies to contrastive linguistics. It too needs descriptive parameters which are stable and language-neutral, in the sense of not depending on the
idiosyncrasies of any individual language. Of course, the analogy between climates and languages is not a perfect one, because languages are not physical systems. They have conceptual content; and though not every part of language has conceptual content (there are phonetic and phonological processes, inflectional processes, and so on, which are more or less blind to meaning), to express and convey meanings is the essential function of languages. It is part of the central mission of linguistics to portray the conceptual structures behind the words and grammar of individual languages, and – in contrastive linguistics – to identify the similarities and differences between the conceptual structures of different languages. A third desideratum, for semantics in general, is that the terms of analysis should enable the fullest and most comprehensive analysis, i.e., they should allow the maximum resolution of conceptual content.

In short, the methodological challenge for contrastive semantics is to devise terms of comparison which: (a) are stable and language-neutral, (b) can represent the conceptualization of native speakers, (c) and do so in maximum detail.

Ordinary dictionary glosses are no good for this purpose, nor are the various systems of “abstract semantic features” which have been devised in the structuralist and generative traditions, nor yet are grammatical labels such as “causative”, “diminutive”, “benefactive”, and so on. In varying ways and to varying extents, these are too language-specific to be stable and neutral across languages, too complex and/or too vague to allow an analysis down to the level of maximum detail, too abstract and remote from ordinary language to represent the conceptual reality of native speakers.

Many linguists seem to believe that meeting the three requirements just outlined is an impossible task. We disagree. In our view, contrastive linguistics can be placed on a firm foundation, at least in the semantic-conceptual domain, by adopting as its terms of comparison the set of universal human concepts which have emerged from two decades of deep semantic analysis and cross-linguistic research in the “natural semantic metalanguage” approach (Wierzbicka 1996; Goddard 1998, 2006b; Goddard & Wierzbicka eds 2002). For most of this chapter, we will illustrate how this can be done, using examples of contrastive lexical and grammatical semantics. But first, a brief outline of the history and current state of research into the natural semantic metalanguage.

1.2 The NSM metalanguage

The NSM metalanguage is described in great detail in various publications, especially in Goddard & Wierzbicka (eds 2002), which also contains six studies demonstrating that the posited semantic primes and their basic syntactic frames exist in a set of typologically and genetically diverse languages. Peeters (ed. 2006) includes comparable
studies of the main Romance languages. Studies of a range of other languages have also been carried out over the past 15 or so years, so that there is now a substantial body of cross-linguistic work on the realizations of semantic primes. Map 1, on the next page, displays some of the locations of languages which have been studied from this point of view. They include: Amharic (Ethiopia), East Cree, Ewe (Ghana), French, Japanese, Korean, Lao, [Mandarin] Chinese, Mbula (Papua New Guinea), Polish, Russian, and Spanish. For bibliographical details consult: www.une.edu.au/bcss/linguistics/nsm. The full NSM lexicon of universal semantic primes is set out, in summary form, in Table 1, using English and Spanish exponents.

Table 1. Semantic primes – English and Spanish exponents

<table>
<thead>
<tr>
<th>Substantives:</th>
<th>I, YOU, SOMEONE, SOMETHING/THING, PEOPLE, BODY</th>
<th>YO, TU, ALGUIEN, ALGO/COSA, GENTE, CUERPO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relational substantives:</td>
<td>KIND, PART</td>
<td>TIPO, PARTE</td>
</tr>
<tr>
<td>Determiners:</td>
<td>THIS, THE SAME, OTHER/ELSE</td>
<td>ESTO, LO MISMO, OTRO</td>
</tr>
<tr>
<td>Quantifiers:</td>
<td>ONE, TWO, MUCH/MANY, SOME, ALL</td>
<td>UNO, DOS, MUCHO, ALGUNOS, TODO</td>
</tr>
<tr>
<td>Evaluators:</td>
<td>GOOD, BAD</td>
<td>BUENO, MALO</td>
</tr>
<tr>
<td>Descriptors:</td>
<td>BIG, SMALL</td>
<td>GRANDE, PEQUEÑO</td>
</tr>
<tr>
<td>Mental predicates:</td>
<td>THINK, KNOW, WANT, FEEL, SEE, HEAR</td>
<td>PENSAR, SABER, QUERER, SENTIR, VER, ÓIR</td>
</tr>
<tr>
<td>Speech:</td>
<td>SAY, WORDS, TRUE</td>
<td>DECIR, PALABRAS, VERDAD</td>
</tr>
<tr>
<td>Actions, events, movement, contact:</td>
<td>DO, HAPPEN, MOVE, TOUCH</td>
<td>HACER, PASAR, MOVERSE, TOCAR</td>
</tr>
<tr>
<td>Location, existence, possession, specification:</td>
<td>BE (SOMEWHERE), THERE IS, HAVE, BE (SOMEONE/THING)</td>
<td>ESTAR, HAY, TENER, SER</td>
</tr>
<tr>
<td>Life and death:</td>
<td>LIVE, DIE</td>
<td>VIVIR, MORIR</td>
</tr>
<tr>
<td>Time:</td>
<td>WHEN/TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT</td>
<td>CUÁNDO/TIEMPO, AHORA, ANTES, DESPUÉS, MUCHO TIEMPO, POCO TIEMPO, POR UN TIEMPO, MOMENTO</td>
</tr>
<tr>
<td>Space:</td>
<td>WHERE/PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE</td>
<td>DÓNDE/SITIO, AQUÍ, ARriba, DEBAJO, CERCA, LEjos, lado, DENTRO</td>
</tr>
<tr>
<td>Logical concepts:</td>
<td>NOT, MAYBE, CAN, BECAUSE, IF</td>
<td>NO, TAL VEZ, PODER, PORQUE, SI</td>
</tr>
<tr>
<td>Augmentor, intensifier:</td>
<td>VERY, MORE</td>
<td>MUY, MÁS</td>
</tr>
<tr>
<td>Similarity:</td>
<td>LIKE</td>
<td>COMO</td>
</tr>
</tbody>
</table>
Map 1. Sample of languages other than English studied in the NSM framework.

To get a sense of what exponents of semantic primes look like in a range of languages, consider Table 2. It shows lexical exponents of a small set of primes in six non-European languages from five language families: Tai-Kadai (Lao), Austronesian (Malay, Mbula), Niger-Congo (Ewe), Sinitic (Mandarin Chinese), Semitic (Amharic).

Table 2. Exponents of select primes in six non-European languages

<table>
<thead>
<tr>
<th></th>
<th>Malay</th>
<th>Lao</th>
<th>Ewe</th>
<th>Chinese</th>
<th>Mbula</th>
<th>Amharic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Someone</td>
<td>seseorang</td>
<td>phaj3</td>
<td>ame áđé</td>
<td>shéi</td>
<td>tomtom=sa</td>
<td>and sәw</td>
</tr>
<tr>
<td>Something</td>
<td>sesuatu</td>
<td>ıang3</td>
<td>náné</td>
<td>shénme</td>
<td>koron</td>
<td>and nәgә</td>
</tr>
<tr>
<td>Think</td>
<td>fikir</td>
<td>khút1</td>
<td>súsú</td>
<td>xiăng</td>
<td>-kam=ŋgar</td>
<td>asәebә</td>
</tr>
<tr>
<td>Want</td>
<td>mahu</td>
<td>jaak5</td>
<td>di</td>
<td>yáо</td>
<td>lele=pa/ba</td>
<td>fәllәɡә</td>
</tr>
<tr>
<td>Feel</td>
<td>rasa</td>
<td>huu4.şık2</td>
<td>se le lәme</td>
<td>gänjüé</td>
<td>yamaana</td>
<td>tsәmәma-</td>
</tr>
<tr>
<td>Good</td>
<td>baik</td>
<td>dìi3</td>
<td>nyọ</td>
<td>hǎо</td>
<td>ambai</td>
<td>t’iru</td>
</tr>
<tr>
<td>Bad</td>
<td>buruk</td>
<td>bә.dìi3</td>
<td>bәdә</td>
<td>dà</td>
<td>-sama</td>
<td>mәt’fọ</td>
</tr>
</tbody>
</table>

Like other common words, exponents of semantic primes are often polysemous, and they may be polysemous in different ways in different languages. For example, querer, the exponent of want in Spanish, can also mean 'like, love'; rasa, the exponent of feel in

Malay, can also mean ‘taste’; xiăng, the exponent of think in Mandarin Chinese, can also mean ‘intend’. It is also well-known that exponents of semantic primes can be formally complex, even though they express a unitary indivisible meaning. For example, the Ewe expression se le lãme, if taken literally, would mean ‘hear in the body’ (se ‘hear’, le lãme ‘in body’), but the expression as a whole cannot be interpreted in this way (nor is its use confined to bodily feelings). It simply means feel (cf. Ameka 1994).

After some 15 years of cross-linguistic research, we know a great deal about polysemic patterns and formal complexity of exponents of semantic primes. There have also been a number of specialized NSM inquiries into particular problem areas, investigating reports or claims that “such-and-such a prime is not found in language X”. In some cases, these studies have led to adjustments to the prime inventory, but for the most part they turned out to be unfounded, often due to misunderstandings about the possibility of polysemy or formal complexity.

The NSM metalanguage comprises not only a vocabulary, but also a grammar. Each and every semantic prime has a well-specified grammatical profile, identifying the range of syntactic frames, valency extensions, and complementation options it allows. We will adduce just two examples, both using primes which are central to analyses to be considered later in the chapter – think and feel.

The minimal frame for semantic prime think is simply ‘someone thinks about Y’, i.e., with a “topic” argument but without any accompanying substantive complement, as in (1). A substantive complement can be added however, as in (2). In a third and very productive frame, think can take a “quasi-quotational” complement introduced by ’like this’, i.e., ‘someone thinks like this: — —’, as in (3). Finally, a that-complement is possible, as in (4), if the verb is accompanied by a temporal expression, such as ‘at this time’ or ‘now’, tying it to a particular time.2

1. someone thinks about something/someone
2. someone thinks something (good/bad) about something/someone
3. someone thinks like this:“ — — ”
4. at this time (or: now), someone thinks that [ — — ]

Feel is the semantic foundation for both emotion terms (sad, angry, excited, etc.) and sensation terms (hungry, thirsty, hot, cold, etc.). Three basic frames are posited for feel, as shown in (5)–(7).

5. someone feels like this
6. someone feels something good/bad
7. someone feels something good/bad towards someone else

2. English permits the use of think in a general “opinion” sense, but this is a peculiarity of English, not shared by many other languages of the world (cf. Wierzbicka 1998; Goddard 2003; Goddard & Karlsson 2004).
These grammatical frames for think and feel, and comparable frames for other semantic primes, have been researched across a wide range of languages, and are claimed to be universal. Overall then, if we can achieve an analysis of language-specific phenomena in terms of semantic primes, we can have a high degree of confidence that the analysis will be transposable across different languages with a minimum of distortion. The NSM metalanguage of semantic primes thus resolves an opposition often drawn in linguistics between “etic” and “emic” styles of analysis. NSM provides the basis for an “etic” analysis, suitable for contrastive studies, but at the same it allows an “emic” (faithful language-internal) analysis, which can capture the “insider perspective” of native speakers.

In the remainder of the chapter we set out to demonstrate the expressive power and versatility of the NSM metalanguage with examples from both contrastive lexical semantics and contrastive grammatical semantics. In order to establish that the metalanguage is transposable across languages, explications of expressions from languages other than English will be presented in parallel versions – in English and in the language concerned.

2. “Yearning-missing” words in Polish, Russian and Spanish

Our first set of examples is drawn from the realm of the emotions. The NSM approach to emotion semantics has been developed over more than thirty years (cf. especially Wierzbicka 1972, 1999; Harkins & Wierzbicka eds 2001). The basic idea is to characterize emotional feelings, and differentiate them from one another, by linking each one to a distinctive prototypical cognitive scenario. In this section we apply this approach to a selection of culture-rich words which have often been held to be literally untranslatable.

2.1 Polish tęsknota (verb form: tęsknić)

The noun tęsknota and its verbal counterpart tęsknić are key words of Polish culture. Tęsknota is cognate with Russian toska and with similar words in other Slavic languages, but it developed its current meaning, which differs significantly from those of its Slavic cognates, after the partitions of Poland by the neighbouring powers at the end of the 18th C. There followed the subsequent national uprisings (especially that of 1830), and the resulting “Great Emigration”. Wierzbicka (1999: 33) explains:

For those forced into exile, among them the political, literary and artistic elite of the nation including the poet Adam Mickiewicz and the composer Fryderyk Szopen (Frédéric Chopin), the pain of exile became one of the dominant themes. The increasingly frequent use of the words tęsknota and tęsknić in Polish émigré poetry and prose contributed to the emergence of this new “emotional key concept”...

Some examples follow. The first is a classic literary example from the epic poem by Adam Mickiewicz, known to every Pole. The second is an everyday usage. Notice that
the verb can occur either in combination with an NP referring to a place (such as Poland or the name of one’s hometown) or to a person (such as a personal pronoun, kin term or a person’s name).

(8) Litwo Ojczyzna moja – ty jesteś jak zdrowie.
    Ile cię trzeba cenić ten tylko się dowie
    kto cię stracił.
    Dziś piękność twą w całej ozdobie
    widzę i opisuję, bo tęsknisz po tobie.
    ’Lithuania my native country – you are like good health.
    How much one should value you he only can know
    who has lost you.
    Today I see and describe all your beauty
    because I’m longing for you (bo tęsknisz po tobie).’

(9) Strasznie do Was/Polski tęsknisz.
    ’I’m missing you (pl.)/Poland terribly.’

The verb tęsknić can be explicated as shown in [A1] and [A2], for persons and places (kogoś ‘someone’, miejsca ‘place’), respectively. Parallel versions are given in Polish in [A1’] and [A2’]. Notice that there is a “dynamic” initial component ‘this someone (X) thinks about someone else (Y),’ linked with the fact the forms being explicated are verbs (cf. verb tęsknić vs. noun tęsknota).

[A1] someone (X) tęskni do kogoś (Y):
this someone (X) thinks about someone else (Y)
when X thinks about Y, X feels something very bad
like someone can feel when they think like this about someone:
    “this someone is very far from the place where I am now
    because of this I can’t be with this someone now
    when I was with this someone before, I felt something good
    I want to be with this someone now”

[A2] someone (X) tęskni do miejsca (Y):
this someone (X) thinks about this place (Y)
when X thinks about place Y, X feels something very bad
like someone can feel when they think like this about a place (some place):
    “this place is very far from the place where I am now
    I can’t be in this place now
    when I was in this place before, I felt something good
    I want to be in this place now”

3. In Mickiewicz’s poem, the preposition used with tęsknić (po ‘after’) is slightly archaic. In contemporary Polish it is do ‘to’.
[A1'] ktoś (X) tęskni do kogoś (Y):
  ten ktoś (X) myśli o kimś innym (Y)
  kiedy X myśli o Y-u, X czuje coś bardzo złego
  tak jak ktoś może czuć, kiedy myśli o kimś tak:
    “ten ktoś jest bardzo daleko of miejsca, gdzie ja teraz jestem
dlatego nie mogę być teraz z tym kimś
kiedy byłem z tym kimś przedtem, czułem coś dobrego
chcę być z tym kimś teraz”

[A2’] ktoś (X) tęskni do miejsca (Y):
  ten ktoś (X) myśli o tym miejscu (Y)
  kiedy ten ktoś (X) myśli o tym miejscu (Y), ten ktoś (X) czuje coś bardzo złego
  tak jak ktoś może czuć, kiedy myśli o jakimś miejscu tak:
    “to miejsce jest bardzo daleko od miejsca, gdzie ja teraz jestem
nie mogę być w tym miejscu teraz
kiedy byłem w tym miejscu przedtem, czułem coś dobrego
chcę być w tym miejscu teraz”

At this point, a comparison with the English concepts of homesickness and of missing someone may be helpful. Tęsknić is not the same as homesickness, because one can feel it for someone who has left one’s home, e.g., parents can tęsknić for their child who has gone off to study in a distant city, a context in which it would be impossible to feel homesick. As for English miss (in to miss someone), this word is more versatile in that it can apply both to persons and to places, but it still differs from tęsknić in two ways: first, it does not necessarily imply separation in space (for example, My grandmother passed away recently. I really miss her), and second, it does not convey the same intensity or painfullness as tęsknić. The two English words are explicated in [B] and [C] below.

[B] someone (X) is homesick:
  this someone (X) thinks about a place
  when X thinks about this place, X feels something bad
  like someone can feel when they think like this about a place:
    “I am far now from the place where I live
some people are like a part of this place, I am one of these people
when I was in this place before, I felt something good
I want to be in this place now
I know that I can’t be in this place now”

[C] someone (X) misses someone else (Y):
  this someone (X) thinks about someone else (Y)
  when X thinks about Y, X feels something bad
  like someone can feel when they think like this about someone:
    “I was with this someone before
when I was with this someone, I felt some good things
I know that I can’t be with this someone now”
Notice that in explication [C] for miss, there is no component ‘I want to be with this person now’. That is, in contrast to the other words, it is not the case that the experiencer wants something which he or she knows is impossible. This means that there is less potential for acute suffering. Comparing [B] and [C], one can also see a slight difference in the phrasing of the “feel” components: ‘I felt something good’ for homesick (a generalized or global characterization) vs. ‘I felt some good things’ for miss (suggestive of a variety of experiences, not necessarily all good but certainly including some good things).

2.2 Russian toska

Toska is a common Russian word. Indeed, it is often seen as one of the key words of Russian culture, and a key also to the Russian soul (душа). While toska is not the closest Russian equivalent to sadness (that would be grust’ or pečal’), there is certainly a link with grust’ “sadness”. Most attested examples are negative in tone, though there can be somewhat positive (if slightly ironic) connotations in artistic contexts, such as example (15). English translation equivalents include yearning, longing, boredom and ennui. Toska can be associated with the image of travelling across the endless steppes; cf. I toska beskonečnyx ravnin 'and the toska of the endless plains’ (Esenin 1933: 284).

(10) Ja molod, žizni vo mne krepka; Čego mne ždat’? Toska, toska!
‘I’m young, life is strong in me. What should I be waiting for? Toska, toska!’
(Pushkin, Eugene Onegin)

(11) Ax kakaja toska! O Gospodi! Otčego stalo tak ploxo, prosto ruki opuskajutsja.
Vse iz ruk valitsja, ne xočetsja žit’!
‘Ach, what toska! O God! Why has everything become so bad? One can’t do anything, one can’t lift a finger, one doesn’t want to live.’
(Pasternak, Doctor Zhivago)

4. As Shmelev (2005) observes: “Many foreigners who have studied Russian have paid attention to the impossibility of translation of the Russian word toska and to the national specificity of the spiritual state identified with it”. Shmelev refers in this connection to the German poet Rilke’s comments, in a letter to A. Benois, July 28, 1901. Rilke regarded toska as “the most salient feeling of my life”, and yet to his frustration, his own native language German “doesn’t have the name of this feeling”. The closest thing would be German Sehnsucht [roughly, ‘longing, yearning’ – CG/AW] but this was not close enough. Rilke wrote: “We should check dictionaries to see how to translate toska. We can find different words there, for example: ‘fear’, ‘heart pain’, everything including ‘boredom’. But you will probably agree with me that none of the ten words expresses the meaning of toska exactly. That is why a German person doesn’t feel toska, and his Sehnsucht is a very different sentimental state of the soul, which cannot result in anything good. But from toska came outstanding artists, epic heroes, and miracle men of the Russian land”.

Ja vspramila takoj-že rosovej večer na Il’inskem omute, i znakomajaj toska vnezapno stisnula serdce, – toska po našem prostij zemlje, svoem zakatam, svoem podorožnikh i skromnom soroxe paloj listy.
‘I remembered a similar evening turning pink at Il’inskij whirlpool and a familiar toska suddenly touched my heart – toska for our simple land, our sunsets, our plantain and modest rustle of fallen leaves.’

No kogda tebja odolevaet toska, to načinaeš’ skučat’ po rodomu domu, ljubimoj mame, druž’jam, i, konečno že, po svoej ljubimoj devuške.
‘When toska overpowers you, you begin to miss your home, your beloved mother, friends and, of course, your girlfriend.’

On zapil ot toski.
‘He took to drink from toska.’

U mamy – muzyka, stixi, toska, u papy – nauka.
‘Mother had her music, her poetry, her toska; father had his scholarship.’ (Tsvetaeva 1972: 29).

In The New Explanatory Dictionary of Russian Synonyms, the entry on toska (Uryson 2004: 1165–1166) includes: “unpleasant feeling that people can have when something that they want isn’t there and when they think that what they want is impossible”, and mentions the “intensity, depth, and long duration of the feeling; [which] can be thought of as a state.” Toska can occur with a prepositional object (with prepositions po or o), commonly ‘after homeland’, ‘after truth’, ‘after wife and children’, but as Mryson (2004) notes, toska “can also be without a cause: a person can feel a certain emptiness in their life” (Uryson 2004). Wierzbicka (1992: 171) says: “whether or not a specific target of toska is mentioned, something inexplicable and indefinite is always implied in this word”. The noun toska can be explicated as shown in [D] below. The parallel Russian version is given in [D’].

[D] toska:
someone feels something very bad
like someone can feel when for a long time they think like this:
“I want something very good to happen
I don’t know what it is
I know that it cannot happen
I know that it will always be like this”

[D’] toska:
ktoto čuvstvuet čto-to očen’ ploxoe
tak, kak ktoto možet čuvstvovat’, kogda on dumaet dolgoe vremja tak:
“ja xoču, čtoby slučilos’ čto-to očen’ xoroše
ja ne znaju, čto ēto
ja znaju, čto ēto ne možet slučits’ja
ja znaju, čto tak budet vsegda”
The indefinite or unknown nature of the goal (‘I don’t know what it is’) accounts for the link with English concepts such as *boredom* and *ennui*, while the desire for something wonderfully good, vague and inaccessible accounts for the link with *yearning*. The fact that the speaker knows that it is impossible (‘I know that it cannot happen, I know that it will always be like this’) accounts for the link with *sadness*.

### 2.3 Spanish and Galician *morriña*

Spanish *morriña* is a loan word from Galician (Gallego), the language of Galicia, and it is still strongly associated with Galicia and with all things Galician. From consultations with speakers of Spanish (in particular, Mónica Aznárez) and from other available information, it seems that *morriña* is like a nostalgia or longing for the land of one’s birth, for one’s village or valley, for one’s family and friends back home. It is not “pain-like”, more “sadness-like”. The *Cambridge Klett Compact Dictionary* (2002) gives *morriña* as: ‘homesickness’. The Real Academia Española describes it as: *tristeza o melancolía, especialmente la nostalgia de la tierra natal* ‘sadness or melancholy, especially nostalgia for the land of one’s birth’.

The cultural salience of *morriña* can be linked with the huge out-migration from rural Galicia (and from all over Spain, actually) in the colonial period, especially to Argentina and Chile: in 1857–1914; there were 4.6m immigrants to Argentina (from all destinations), and 3.3m to Chile. To this day, in parts of South America, e.g., Argentina, Spanish immigrants are colloquially called Gallegos, with a somewhat derogatory effect. Examples and commentaries on *morriña* follow. (Examples (16) and (17) are in Gallego (Galician) and Portuguese, respectively. The remaining examples are in Spanish.)

6. **Example (16)** is in the Gallego language (Galician). It comes from Grupo de Traballo Galego de Londres *Boletín* 6 [http://www.grupotraballogalego.uk.net/epo2no6.htm, accessed 12/09/05]. The Portuguese example (17) is from Raquel Miragaia. The Spanish examples (20)–(21) are from the Real Academia Española corpus [www.rae.es].
Siento morriña cuando mis amigos me cuentan por e-mail lo que están haciendo en San Fermín.

'I feel morriña when my friends e-mail me about what they are doing during the San Fermín Festivals.' [From a native of Pamplona; San Fermín is the big traditional festival, with its famous running of the bulls].

Mi familia me envió una foto que hicieron el día del cumpleaños de mi abuela. ¡Qué morriña!

'My family sent me a picture they took at my grandmother’s birthday. What morriña!'

También sabemos que el estar lejos de la patria lleva a valorizar ciertos recuerdos y tradiciones, y sobre todo, juntarse para hacer menos dura la morriña. Por eso se han formado muchos clubes o asociaciones de uruguayos en el exterior, así como lugares de Internet donde se encuentran.

'We also know that being far from one’s homeland tends to give value to certain memories and traditions and, especially, to get together to make the morriña less hard. That is why a lot of clubs and associations of Uruguayans have been created abroad, as well as sites on the internet where they meet.'

Cuando recuerdo mi tierra no siento esa morriña de que hablamos allá, porque han pasado tantos años y lo que me queda es poco ya. Además, volví por unos meses y todavía tengo frescas las cosas. Mi infancia no fue la de un niño muy alegre, qué va.

'When I remember my tierra (homeland) I don’t feel that morriña we talk about there, because so many years have passed, and what I have left there is little. Besides, I went back for some months, and things are still fresh for me. My childhood wasn’t precisely that of a very happy child.'

Morriña is tied up with one’s identity. It is an intimate feeling for one’s own “little country” (de mi pueblito ‘for my dear-little-village’). It is quite different to echar alguien/un lugar de menos ‘to miss someone/a place’. An explication for morriña is given in [E]. The parallel version in Spanish is given in [E’].

[E] morriña (X feels morriña):
someone (X) thinks about this place (Y)
when X thinks about place Y, X feels something bad
like someone can feel when they think like this about a place:
“I am like a part of this small place
I did many things with people there when I was a child [m]7
I felt many good things at many times when I was there

7. The word ‘child’ is not a semantic prime but a “semantic molecule”, as indicated by the notation [m]. The term “semantic molecule” refers to a complex lexical meaning which can be separately explicated into semantic primes, but which functions as a unit or “chunk” in the semantic structure of more complex concepts, cf. Goddard (2006a).
I want to be in this place now
I know that I can’t be in this place now because it is far from here"

[E'] morriña (X siente morriña):
alguien (X) piensa sobre este lugar (Y)
cuando X piensa sobre este lugar, X siente algo malo
como alguien puede sentir cuando piensa así sobre un lugar:
“soy como una parte de este sitio pequeño
hice muchas cosas con la gente allí cuando era un niño [m]
sentí muchas cosas buenas en muchos momentos cuando estaba allí
quiero estar en este lugar ahora
sé que no puedo estar en este lugar ahora porque está lejos de aquí”

2.4 Review and coda

By explicating this set of related but distinct words down to the level of semantic primes we are able to bring both their similarities and their differences clearly into view, well beyond what is possible with conventional dictionary-style explanations. At the same time, the precision of the analysis enables us to raise cultural questions and to draw cultural connections.

There is a large body of lexical semantic work in the NSM framework – more than in any other current framework of semantic analysis. Aside from emotion terms, areas covered include: moral and ethical terms, speech-act verbs, artefacts, natural kinds, mass nouns, colours and other terms for “visual semantics”, shapes, physical descriptors, verbs of physical activity, and body-parts. In many cases, NSM researchers have arrived at inductive conclusions about the general schematic structure (semantic template) of words of a particular semantic type (e.g., Wierzbicka 1985, 1996, 2006, 2007; Goddard & Wierzbicka 2007). At the same time, the way has been opened for a systematic investigation into language-specific patterns of lexicalization, as a contribution to the theory of lexical typology. Space precludes further elaboration of these observations about lexical semantics. Instead we turn now to grammatical semantics.

3. “Diminutives” in Spanish and Australian English

Grammatical labels such as “causative”, “inceptive”, “instrumental”, “adversative”, “passive”, “relative clause”, and the like, can be deceptive. Though it is widely agreed that each term makes reference to some kind of semantic or functional prototype, around which individual languages allow language-specific extensions, there is still much room for disagreement and misunderstanding about the nature of the semantic or functional prototype. Even in cases where one would imagine that the prototype is intuitively fairly clear, as with the category “diminutive”, a contrastive examination of
several languages shows that there are many semantic differences which are concealed or glossed over by the use of a single global label.

3.1 Two meanings of the Spanish diminutive

Our analysis follows and builds on that of Travis (2004). The Spanish diminutive is multifunctional and highly polysemous (quite aside from the existence of multiple forms and regional variants). Certainly it is not just a matter of literal “smallness”. As Gooch (1970: 1) remarks, diminutive morphology is frequently used “to convey those things which belong more to the warmth of the heart than to the coolness of the head”, i.e., to convey good feelings, especially in personal interaction. In our view, the diminutive in Spanish (and in many languages) is linked with children, both conceptually and in usage, i.e., one uses a lot of diminutives when speaking about children and when speaking to children. (Incidentally, diminutive morphology often derives historically from the word for ‘child’, as well as from ‘small’ (Jurafsky 1996.) We will explicate here two semantically distinct meanings expressed by the Spanish diminutive.

Most titles of children’s tales use the diminutive; for example, *Blancanieves y los 7 enanitos* (‘Snow White and the seven dwarves’), *Los tres cerditos* (‘The three pigs’). A word like *cerdito* [*pig-dim*] brings to mind two contexts of use, both linked with children; namely, when talking to a child about a pig, or when referring to a baby pig. Similarly, *abriguito* [*coat-dim*] will be used when talking to a child or when referring to a child’s coat (and also to refer to a cute coat for a woman). The meaning can be captured as in explication [F1].

[F1] _animalito/lobito:_

an animal/wolf

I think about it like this:

“this thing is something small, like a child [m] is someone small”

when I think about it like this, I feel something good

people can feel something like this when they think about small children [m]

[F1'] _animalito/lobito:_

un animal/lobo

pienso sobre eso así:

“esta cosa es algo pequeño, como un niño [m] es alguien pequeño”

cuando pienso sobre eso así, siento algo bueno

la gente puede sentir así cuando piensa sobre niños [m] pequeños

In a smaller proportion of uses, the diminutive can be used about “literal” small size. The following examples from Travis (2004) are in Colombian Spanish.8

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8. These examples are from Travis (2004), but we have simplified the transcription and layout.
Sentence (22) is about a miniature microphone being used for the recordings; (23) refers to a small bug that destroys an otherwise very strong material used to make houses; and (24) refers to small black spots that Angela sees in her kitchen that she assumes are from flies.

(22) Santi: *Eso es un micrófono? Sí.*
Angela: *Sí, eso es un microfonito.*
‘Santi: “That is a microphone? Right?”
Angela: “Yes, that is a microphone-dim.”

(23) *Claro que es que el problema de la – de la guadua es la plaga… hay un cucarroncito [escarabajo], así chiquitico, yo no sé cómo se llama.*
‘Of course, the problem with the – with the guadua (a variety of bamboo) is the plague. There’s a *beetle-dim, small-dim* like this, I don’t know what it’s called.’

(24) *Yo a veces veo unos punticos, .. negritos, en las cosas. Y yo creo que son de mosca.*
‘I sometimes see some *black-dim spots-dim*, on things. I think they’re from a fly.’

Of course, the diminutive is not the only way of referring to small size: there are the adjectives *pequeño* and *chiquito* ‘small’, for example, and this fact in itself indicates that even the “literal smallness” uses of the diminutive are not solely about smallness as such. In (23) above, *chiquito* ‘small’ is used itself in the diminutive (*chiquitico*), and the noun it modifies also takes the diminutive. Commenting on this example, Travis (2004: 263–264) says:

Thus, the diminutive appears to express something other than small size alone, namely “good feelings” on the part of the speaker. In this case, it is certainly not good feelings towards the referent (for example, the speaker does not feel good towards the bug or the spots left by cockroaches), but in thinking of the referent as something small, the speaker feels something good, in a similar way to how they feel when thinking about children.

This meaning of the diminutive can be explicated as follows:

[F2] *microfonito* (“a small thing of its kind”):
when I say this about this thing, I think about this thing like this:
“it is a small thing of its kind”
when I think about it like this, I feel something good
like people can feel when they think about small children [m]

[F2’] *microfonito* (“a small thing of its kind”):
cuando digo eso sobre esta cosa, pienso sobre esta cosa así:
“es una cosa pequeña de su tipo”
cuando pienso sobre eso así, siento algo bueno
como la gente puede sentir cuando piensa sobre niños [m] pequeños
3.2 The Australian English “diminutive”

The range of semantic variation expressible by so-called “diminutives” across languages is starkly illustrated when the Spanish diminutive is contrasted with the hypocoristic diminutive of Australian English. Its characteristic derivational diminutive (actually, a family of them) is a famous feature of Australian English, identified as such by linguists like Roly Sussex (2004a, 2004b; see quotation below), and by language commentators in the popular media. (To verify this, interested readers might like to try putting “diminutive” and “Australian English” into the Google search engine.)

[N]o other English runs Australian English even close when it comes to creativity and usage of hypocoristics, which are pushing ever more vigorously into the written language as well. (Sussex 2004a, no page number)

Examples follow. Sussex (2004a) says that they express solidarity, good mood, and familiarity. Wierzbicka (1992) says that they express “convivial good humour”. There is an important similarity with nick naming.9

(25) Chrissy prezzies (Christmas presents), brekkie (breakfast), barbie (barbecue), cozzies (swimming costume), pozzie (position, in a cinema, when parking etc.), trannie (transvestite), furies (fire-fighters), tantie (tantrum), rellies (relatives), veggies (vegetables), lippy (lipstick), footie (football), piccies/pickies (movies, or pictures of any sort), biccies/bickies (biscuits), postie (postman), sunnies (sunglasses), undies (underwear), mushies (mushrooms), kindy (kindergarten), eccies/ekkie (ecstasy tablet), salties (salt-water crocodiles), freshies (fresh water crocodiles).

The same formation extends to place names, such as Brissie (Brisbane), Tassie (Tasmania), Kossie/Kozzie (Mt Kosciuszko), Rocky (Rockhampton), The Newie (New England Hotel), and hundreds of others (Simpson 2001).

These distinctively Australian English examples are very different from the “regular” English diminutive in -ie, e.g., birdie, horsie: formally, because the regular diminutive does not involve any abbreviation, and semantically, because the regular diminutive conveys a childish effect. In relation to the latter point, note that the Australian formation can readily occur in adult sentences with a somewhat annoyed tone, as in (26a), while a comparable sentence with a regular -ie diminutive, as in (26b), would sound ridiculous.

9. A related but distinct construction does not involve truncation (abbreviation). For example, sparkie (an electrician), drinkies (as in cocktails or pre-dinner drinks), greenies (conservationists), tinnie (can of beer, from ‘tin’).
(26)  a. Those bloody magpies! [i.e., magpies – aggressive birds which attack pedestrians and cyclists in spring]

b. ?Those bloody birdies!

Far from being a feature of children’s speech, the Australian English “diminutive” is often used by men, and many of them have a “male flavour”.

(27) [O]nce I have established with a mechanically gifted friend that I know enough about a carburettor to call it a carbie, it would be inconsistent to use the full form carburettor. [comment by linguist Sussex 2004a]

(28) Instead of scunging or freebies, I might even spend whatever bucks are required to get a good pozzie [i.e., position] at Albert Park next March.

At the same time, whatever the matter being discussed, the use of an Australian English -ie form brings with it a certain lightness of touch and a sense of easy familiarity. For the speaker, things such as this are, to put it colloquially, “no big deal”. For example, the speaker venting his or her annoyance with the magpies in (26a) at the same time conveys the impression that he or she is well familiar with the problem and not too worried about it. As Sussex’s comment in (27) indicates, men who know about motor mechanics invariably call a carburettor a carbie. And the sports fan quoted in (28) conveys casual familiarity with the business of securing a good position at the match. In sharp contrast with the Spanish diminutive, there is no sense whatsoever of “endearment”.

When the term abbreviated and appended with the -ie denotes something dangerous or scary, the meaning conveyed can seem quite curious. Example (29) is about fresh-water crocodiles, found in rivers and waterholes of the Northern Territory of Australia. They are not as dangerous as salt-water crocodiles, but they are still responsible for a number of serious injuries, and the occasional death, each year. By referring to these dangerous creatures as freshies, the writer conveys a casual familiarity and a distinctly “unimpressed” quality. (Salt-water crocodiles, by the way, are referred to in the same style as salties.) As a reminder of more mundane uses, there is example (30) about mozzies (mosquitos). Both examples also show that such terms are acceptable in professional discourse.

10. Examples (28)–(30) are from the internet, as follows:

11. The colloquial Australian English verb scunge is roughly equivalent to standard English scrounge.
(29) They do not prey on people but will bite in self-defence. Since some large *freshies* take wallabies, children should always be supervised near freshwater *crocodiles*. [In an information briefing by the Environmental Protection Agency].

(30) “We’ve had quite a bit of rain during November, it’s time to clean up around the home to ensure you aren’t providing a breeding ground for *mozzies*,” Dr Dalto said.

All these observations bear on the explication given in [G] below. Notice the attitudinal component ‘it is not something big’, which conveys an “unimpressed” or “undaunted” attitude. This is followed by a component directly linked with this: ‘when I say something about it, I don’t want to say it with a big word’. In a sense this component spells out the effect of “cutting something down to size”, by using an abbreviated word rather than a ‘big word’. The next component specifies the assumed sense of ease (‘people here don’t have to think much about things like this’) due to their familiarity with the topic (‘because they know things like this well’). Notice that these properties are not specific to the speaker but are extended to ‘people here’: in this way, they include the other significant company and potentially, the hearer as well. Finally, there is a component expressing the speaker’s “good feeling”, not directed in this case towards the object or topic in question, but connected with the general easy familiar attitude just attributed to the people around.

[G] Explication for Australian English “diminutive” *barbie, pozzie, carbie, maggies, freshies, mozzies, etc.*:

something,

when I say this about it, I think about it like this:

“it is not something big

when I say something about it, I don’t want to say it with a big word

people here don’t have to think much about things like this

because they know things like this well”

when I think about it like this, I feel something good

The contrastive semantic analysis undertaken here has identified a number of similarities and differences, including a subtle but important contrast between the semantic specification ‘small’ (involved in the Spanish diminutive) vs. the semantic specification ‘not big’ (involved in the Australian English diminutive). A second difference is that the Australian English form, but not the Spanish one, conveys a distinctive kind of “easy familiarity” and a deliberate avoidance of a ‘big word’ for a familiar thing of this kind. Perhaps the central point of difference between the two is whether or not there is a prototype or reference point involving ‘child’ or ‘children’, as there is in Spanish, but not in Australian English. Both formations share expression of the speaker’s “good feeling”.
With clear and detailed semantic descriptions in hand, it becomes possible to draw out the cultural connections. Spanish culture is well-known for its emphasis on interpersonal warmth, i.e., the expression of good feelings towards other people. Spanish diminutives provide a compact and versatile grammatical means to service this need (Travis 2004, 2006). Australian (“Aussie”) culture is known for its anti-sentimentality, good-natured humour, love of informality, and dislike for ‘long words’ (Wierzbicka 1992; Goddard 2006b). The semantic content of the Australian “diminutive” is congruent with all these themes.

4. Conclusions

To identify the similarities and differences between languages in a systematic way requires a stable tertium comparationis – and ultimately, any such system must be grounded in semantics. The Natural Semantic Metalanguage provides this tertium comparationis, essentially by identifying via empirical research a set of universally translatable and universally intelligible words: semantic primes.

The semantic content of the lexicons and grammars of different languages can be revealingly explicated in terms of semantic primes. The technique can articulate complex culture-specific meanings which elude normal word-for-word translation. As we have seen, explicating meanings in semantic primes facilitates drawing connections between language and culture, and likewise it facilitates drawing connections between lexicon and grammar – since the same technique works in both realms of language structure.12

The technique opens up an “insider perspective” on culture-specific categories. It circumvents terminological ethnocentrism and the epistemological “spin” of English categories. Because the explications can be framed within the language of the people concerned, they are intuitively accessible to speakers. Empirically established universal

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12. Though it is sometimes claimed that lexical and grammatical semantics require different descriptive “toolkits”, nothing could be further from the truth. Studies in semantic typology (e.g., Goddard 1997) indicate that every single semantic prime can be seen to be grammaticalized, i.e., incorporated into the meaning of a grammatical construction or morphological formation, once a wide enough range of languages is taken into account. For example, systems of elaborate locational deixis grammaticalize primes such as above, below, near, far, on (one) side, benefactives and adversatives grammaticalize good and bad, experiencer constructions grammaticalize combinations with feel and think, switch-reference and obviation systems grammaticalize the same and other, evidential constructions frequently grammaticalize know, see, hear, and say, and so on. The same set of semantic primes is needed for grammatical semantics and for lexical semantics.
semantic primes can furnish contrastive linguistics with the bedrock tertium comparationis which is stable and language-neutral, is capable of representing the conceptual reality of native speakers, and allows maximum resolution of detail.

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Subjective construal as a ‘fashion of speaking’ in Japanese

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The chapter addresses the question of subjectivity in language, in particular, that aspect of subjectivity which is discussed under the rubric of ‘subjective construal’ in Cognitive Linguistics. It is argued that faced with a situation to be linguistically encoded, the speaker of any language can operate either with subjective or objective construal but that there is a marked difference among the speakers of different languages in the extent to which they indulge in subjective rather than objective construal. This is illustrated by referring to Japanese, whose speakers tend to prefer subjective construal (which results in subject-object merger), as contrasted with the speakers of English and probably of western languages in general, who apparently prefer objective construal (which results in subject-object contrast).

1. Introduction

Traditionally, subjectivity was not a particularly popular topic in linguistics. Lyons (1982: 103–104) summarized the state of the art in the following words:

Modern Anglo-American linguistics, logic, and philosophy of language has been dominated by the intellectualist prejudice that language is, essentially, if not solely, an instrument for the expression of propositional thought. … Many … influential works … either pay no attention at all to the non-propositional and non-assertive components of language or play down their importance. …[I]n doing so, they fail to do justice to the phenomenon of subjectivity.

The situation started to change considerably when more and more people turned to such studies as pragmatics and discourse analysis, with topics like modality and politeness being actively discussed. In my belief, however, a far more drastic change has been brought to the scene by the advent of Cognitive Linguistics. As Ronald Langacker says, meaning is not to be equated with something that resides in objective reality; it is something that is created subjectively by the speaker through the act of construing, or of making sense of, the situation to be linguistically encoded (Langacker 1991[1987]: 61). Especially interesting to me in this connection as a speaker of a non-Indo-European language is Langacker’s notion of subjective construal as contrasted with objective
construal, and this is the point with which I am going to be concerned in the present chapter. Specifically, I am going to argue that although the speaker of any language is capable of indulging in either type of construal, there is a difference among languages, or more precisely, among the speakers of different languages, in that the speakers of some languages are more readily inclined towards subjective construal than the speakers of other languages and that subjective construal is the preferred type of construal for Japanese speakers. I will also try to demonstrate that the alleged frequent omission in Japanese of the grammatical subject (and certain other sentential parts considered obligatory in western languages) is closely related to Japanese speakers’ preference for subjective construal. Subjective construal, in fact, counts in Japanese as a ‘fashion of speaking’ as discussed by Benjamin Lee Whorf in rather neglected passages in his writings on linguistic relativity:

... Concepts of “time” and “matter” are not given in substantially the same form by experience to all men but depend upon the nature of the language or languages through the use of which they have been developed. They do not depend so much upon any one system (e.g., tense, or nouns) within the grammar as upon the ways of analyzing and reporting experience which have become fixed in the language as integrated “fashions of speaking” and which cut across the typical grammatical classifications, so that such a “fashion” may include lexical, morphological, syntactic, and otherwise systemically diverse means coordinated in a certain frame of consistency.

... There are connections but not correlations or diagnostic correspondences between cultural norms and linguistic patterns. Although it would be impossible to infer the existence of Crier Chiefs from the lack of tenses in Hopi, or vice versa, there is a relation between a language and the rest of the culture of the society which uses it. There are cases where the “fashions of speaking” are closely integrated with the whole general culture, whether or not this be universally true, and there are connections within this integration, between the kind of linguistic analyses employed and various behavioral reactions and also the shapes taken by various cultural developments. (Whorf 1956: 158, 159)

As will be illustrated in the following, indices of subjective construal in Japanese culture can be found not only linguistically across diverse grammatical classifications, but also culturally across other semiological modes of representation.

2. Langacker on subjective and objective construal

Langacker’s account of subjective and objective construal is based on the assumed analogy between perceptual and conceptual relationships, the relation between the perceiver and the scene s/he perceives running parallel to the relation between the conceptualizer and the scene s/he conceptualizes. Thus in the optimal viewing
arrangement, the perceptualizer is offstage and the object of perceptualization is onstage, while in the egocentric viewing arrangement, both the perceptualizer and the object of perceptualization are onstage. These two perceptual arrangements correspond at the level of conceptualization to objective and subjective construal respectively. In other words, in the case of objective construal the conceptualizer is detached from the scene s/he construes and encodes, while in the case of subjective construal the conceptualizer is involved in the same scene s/he construes and encodes. Langacker discusses the contrast by referring to the following triplet of sentences (Langacker 1991: 326, 328):

1. Vanessa is sitting across the table from Veronica.
2. Vanessa is sitting across the table from me.
3. Vanessa is sitting across the table.

Sentence (1) represents an analogue of what Langacker calls “the optimal viewing arrangement”, in which the conceptualizer and the object of conceptualization are fully distinct. Both Vanessa and Veronica as objects of conceptualization are onstage but the speaker as conceptualizer is detached, himself not being involved in the same scene. Sentences (2) and (3), on the other hand, represent an analogue of what Langacker calls “the egocentric viewing arrangement”, in which the speaker as conceptualizer is on the same scene he construes and encodes.

But how are sentences (2) and (3) to be distinguished? According to Langacker, in sentence (2) the conceptualizer is ‘objectified’ and ‘displaced’ onto the onstage region and the ‘objectified’ conceptualizer is used as a reference point by the speaker in order to locate Vanessa. The ‘objectified’ conceptualizer is onstage, hence s/he is explicitly encoded by the word me. In sentence (3), on the other hand, the conceptualizer is ‘merged’ with the ‘displaced’ conceptualizer and this ‘merged’ conceptualizer serves as a reference point for locating Vanessa. The ‘merged’ conceptualizer is assumed to be located “either at the fringes of the onstage region or perhaps offstage altogether” (Langacker 1990: 21, 1991: 329) and hence s/he is not encoded.

There is, however, something that bothers me about the way the contrast between (2) and (3) is accounted for here. Notice, for example, the ambiguous way of defining the position occupied by the conceptualizer in the case of sentence (3): “either at the fringes of the onstage region or perhaps offstage altogether”. This ambiguity seems to derive from the fact that for the speaker of English objective construal is the norm and that even the self can readily be conceptualized as an object for construal and encoded accordingly, either in the reflexive or the simple objective form, as the case may be. From the viewpoint of a language like Japanese, where this is not the case, however, I will propose a different and perhaps a rather neater scheme to describe the contrast between subjective and objective construal.
3. Three proposals for revision

My proposed revision concerns three points.

First, I propose to consider subjective construal rather than objective construal as primary. In his initial formulation, Langacker started with the maximally objective construal as basic and proceeded to derive more or less subjective construals as involving increasing degrees of subjectification. We could, however, reverse the direction of argumentation: starting with the maximally subjective construal and proceeding to derive more objective construals as involving increasing degrees of objectification. If we compare the two definitions of subjectification by Langacker, one in 1991 and the other in 1998, we will see that Langacker himself now also tends to think that way. In 1991, subjectification is defined by Langacker as “[a] semantic extension in which an entity originally construed objectively comes to receive a more subjective construal” (Langacker 1991: 554). In his 1998 account, however, Langacker characterizes subjectification in the following words: “An objective relationship fades away, leaving behind a subjective relationship that was originally immanent in it”. Thus the maximally subjective construal is one in which the conceptualizer is totally embedded in the environment which s/he is to construe and encode. In other words, the conceptualizer is on the very scene, verbalizing what s/he directly perceives and experiences.

Second, I propose to introduce the notion of ‘ecological self’ developed by the environmental psychologist Ulrich Neisser in order to account for the zero encoding of the conceptualizer in subjective construal. The ecological self is “the self considered as an agent in the environment”; it is “the self embedded in the environment and co-perceived with the environment” (Neisser 1988: 36, 1993: 4). Through the optic flow which s/he perceives, the environmental self receives as much information on the self (called ‘expropiocceptive information’) as on the environment. If the speaker poses as the environmental self, s/he encodes what s/he perceives, but not her-/himself, because being located at the vantage point for observation, s/he her-/himself lies outside the scope of her/his own perception and hence is encoded as zero (cf. sentences like “The wall approaches”, “There is a house every now and then through the valley”). Thus “[a] linguistic parallel to the ecological self … is a zero form” (Honda 1994: 95; cf. also Ikegami 2003, 2006).

Third, I propose to assume a pair of mental operations on the part of the conceptualizer which will be termed ‘self-split’ and ‘self-projection’. In self-split, the conceptualizer objectifies her-/himself (in other words, s/he conceptualizes her/himself as the other and describes her-/himself as s/he describes the other). In self-projection, the conceptualizer subjectifies someone other than her-/himself (in other words, s/he merges her-/himself with someone other than her-/himself and describes the scene as it would be perceived by the one with whom s/he is merged). I assume that speakers of different languages may differ from each other in the extent to which they tend to one orientation rather than the other. My impression as a native speaker of Japanese is
that the speaker of Japanese is more ready to project her-/himself into the other than the speaker of a western language and that the speaker of a western language is more ready to objectify her-/himself than the speaker of Japanese.

Here follow the revised definitions of the two types of construal:

Subjective construal: the conceptualizer is on the very scene s/he is to construe and construes the scene as it is perceivable to her/him. Even if the conceptualizer is not on the scene s/he is to construe, s/he may mentally project her-/himself onto the scene s/he is to construe and construes it as it would be perceived by her/him.

Objective construal: the conceptualizer is outside the scene s/he is to construe and construes it as it is perceivable to her/him. Even if the conceptualizer is on the scene s/he is to construe, s/he may mentally displace her-/himself outside the scene s/he is to construe and construe it as it would be perceived by her/him.

A curious consequence of the above formulation is that the conceptualizer can be encoded as zero in the maximally subjective construal (because the conceptualizer locates her-/himself at the origin of the coordinates of her/his perceptual world and hence may not be perceivable to her-/himself) as well as in the maximally objective construal (because the conceptualizer is from the start located outside the scene to be construed and encoded). The result is that quite an innocent sentence like “It’s raining” can be ambiguous between the two readings. Just which of the two readings is to be preferred depends not only on the extent to which the encoded message is marked with linguistic indices of subjective construal (e.g., the word order and the tense as in “Here comes the bus”) but also on how empathetically the reader/hearer is ready to behave, i.e., how ready the reader/hearer is to displace her-/himself onto the scene to be construed and construe the scene as it would be perceivable to her/him.

4. An example

Let me discuss a concrete example. The example in question is the initial sentence of the novel Yukiguni (Snow Country) by Yasunari Kawabata (1899–1972), the winner of the 1968 Nobel Prize for Literature. The original Japanese sentence (4) is followed by four translations, one into English ((5)), two into German ((6), (7)) and one into French ((8)):

(4) Kokkyo no nagai tonneru o nukeru to boundary ’s long tunnel pass through and/when
Yukiguni de atta. snow country loc was
(literally, something like “[I] pass[ed] through [the] long boundary-
tunnel, and [I] was in/[there] was [the] snow country.”)

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(5)  The train came out of the long tunnel into the snow country. (E. Seidensticker)

(6)  Als der Zug aus dem langen Grenztunnel herauskroch, lag das Schneeland vor ihm ausgebreitet. (O. Benl)

(7)  Jenseits des langen Tunnels erschien das Schneeland. (T. Cheung)

(8)  Un long tunnel entre les deux régions et voici qu’on était dans le pays de neige. (B. Fujimori)

One point which you will immediately notice is that two of the four translations mention the train (train in (5) and Zug in (6)) but the other two do not. As I have mentioned, the sentence in question is the initial sentence of the novel, but if you continue reading a few more lines, you will notice that the hero of the novel was on the train, watching the changing scenes outside as the train went through and came out of the long tunnel into the snow-covered open areas. This is the scene to be cognitively construed and linguistically encoded. But as you can see from the English glosses appended, there is no mention of the train in the original sentence. Why, then, did two of the translators, one American and the other German, both of whom are well-known scholars in Japanese studies, find it necessary to encode the train in spite of the fact that there is no mention of the train in the original?

Now imagine yourself on the train, looking out of the window and watching the successive scenes as they fly past you. And imagine yourself reporting what you see – what is directly perceived by you. Since you are in the train and are moving with the train, the train is part of your expanded self, so to speak. You don't have to, and actually can't, see the train (that is, in its entirety, to be more precise). The train is not an object of your perception. Hence the train doesn't have to be encoded. This, in fact, is a subjective construal. The conceptualizer-speaker (here, the hero of the novel) is embedded in the environment and he sees his environment but not himself; hence he is encoded as zero. The translators of (7) and (8) were fully aware of the subjective construal in which the original Japanese sentence was encoded and obviously tried to reproduce the feature in their translations. The translators of (5) and (6) behaved differently. They let the hero of the novel in the train undergo a self-split, one part of him stepping out of the train and perceiving from the outside the train carrying his counterpart. This is an objective construal.

An interesting consequence deriving from the difference in construal is that the original sentence in Japanese can be read as a piece of an internal monologue by the hero in the train reporting what he saw and experienced. The same reading can apply to translations (7) and (8), which do not mention the trains, but obviously not to (5) and (6). These latter two sentences encode the train – which means that the train was within the visual scope of the narrator, hence the narrator was outside the train. The hero mentally undergoes a self-split, one part of him stepping out of the train and
observing his counterpart left in the train. There is absolutely no such self-split involved in the original sentence in Japanese. It rather invites the reader to empathize with the hero in the train, to mentally merge with him and to undergo the same experience as the hero did. The reader can displace her-/himself temporally as well as spatially. By merging her-/himself with the hero, the reader undergoes the same experience as the hero at the very moment of her/his reading.

At this point, the agglutinative auxiliary ta at the end of the Japanese sentence comes to bear a subjective tone. It is no longer an equivalent of the past-tense marker of western languages; it now bears a more modal colouring, implying that the speaker has just become aware of a state of affairs which was already in existence, in short, the speaker’s confirmation of a fact – not unlike wari in Hopi, which corresponds either to *He is running* or to *He ran* in English, as discussed by Whorf (1956: 213, 217) and explained as a ‘statement of fact’. Note that the same auxiliary ta appears in Japanese in the same context in which the English speaker, using the present-tense form, would say, “Here comes the bus.” The corresponding Japanese sentence, Basu ga kita (where ga is a nominative marker and kita is a contracted form of kuru (‘come’) + ta) is a statement of fact, which corresponds to ‘A/The bus came’ as well as ‘Here comes the/a bus’. The latter half of the Japanese sentence by Kawabata now reads literally ‘(it) is/was a snow country’. This is, however, not an objective statement of a fact; it is rather a subjective statement of something perceived and confirmed as a fact, without the perceiver himself being encoded because he is located at the origin of the coordinates of his perceived world. Notice that the non-encoding of the perceiver helps to make possible either an objective reading (‘I was in the snow country’) or a subjective reading (‘It is/was a snow country (as I perceive(d) it)’).

5. Further examples

The example discussed in the previous section is a literary one and hence involves some degree of complexity. In order to show that subjectivity is an immanent feature of the Japanese speaker’s construal, let me give a few more examples which illustrate the contrast between the Japanese speaker’s slant towards subjective construal as contrasted with the slant towards objective construal observable in speakers of western languages.

(9)  (asking the way in a strange place)

a. Where am I?

b. Koko wa doko desu ka?
   (word-for-word: ‘HERE TOPIC WHERE IS QUESTION’; literally, ‘WHERE IS HERE?’ OR ‘WHAT PLACE IS THIS PLACE?’)
The objectivity of the English sentence is marked by the explicit use of the first-person pronoun referring to the speaker. The Japanese sentence is based on a subjective construal, with the speaker being not encoded.

(10) (a piece of the speaker’s monologue in an empty room)

a. Dare mo inai.
   (word-for-word: ‘ANYBODY TOPIC/EMPHATIC NON-EXISTENT’; literally, ‘NOBODY IS (HERE)’)

b. Es ist niemand da (außer mir).
   (Nobody is here (except me).)

The Japanese speaker doesn’t encode her-/himself. The German speaker could construe objectively, her-/himself looking at her-/himself.

(11) (in a telephone conversation)

a. “May I speak to Mr. Jones?” “This is he.”

b. “Jones-san to ohanashi dekimasuka?” “Watakushi desu.”
   (word-for-word: “JONES-MR.WITH SPEAK(HONORIFIC) CAN(HONORIFIC)”
   “I AM”; literally, ‘MAY (I) SPEAK WITH MR. JONES?’ ‘I AM’ OR ‘(IT) IS ME’)

The English speaker readily objectifies her-/himself. A sentence encoded in the same way would sound extremely bizarre in Japanese.

(12) (Little Red Riding Hood knocks on the door and then the following conversation ensues between her and her grandmother)

   (“Who’s there?” “Little Red Riding Hood, who brings you cake and wine.”)

b. “Dare desuka?” “Akazukinyo. Keki to wain o motte kita wa”. (word-for-word: “WHO IS (HONORIFIC)” “RED-HOOD CONFIRMATORY PARTICLE. CAKE AND WINE OBJECT-MARKER HAVING CAME-FEMALE CONFIRMATORY PARTICLE”; literally, “WHO IS (IT)?” “(IT’S) LITTLE RED RIDING HOOD. (I HAVE BROUGHT CAKE AND WINE.”)

In the German sentence the speaker objectifies herself in relation to the addressee. In the Japanese sentence, the speaker adheres to the egocentric slant, herself being encoded as zero.

Checking example sentences in English-Japanese dictionaries, an English lexicographer pointed out that sentence (a) (listed in an English-Japanese dictionary published in Japan) wouldn’t sound natural enough in English. She suggested sentence (b) as a more “natural” English sentence:

(13) a. The car is easy for me to drive.

b. I find this car quite easy to drive.
The first sentence encodes only what is being cognized about, the cognizer being encoded as zero. The second sentence encodes the objectified cognizer as well.

Such examples can readily be multiplied. In all these examples, however, there are two points in particular that will easily be noticed, namely (i) that Japanese speakers do not usually encode themselves explicitly in terms of first-person pronouns (or their equivalents) – in other words, they usually encode themselves as zero and (ii) that Japanese speakers consistently avoid encoding themselves in terms of third-person pronouns (or their equivalents) as Western speakers sometimes (cf. (11a) and (12a) above) do, especially when engaging in a dialogue without being directly seen by their interlocutor(s) – in other words, they can objectify themselves and encode themselves as others.

One remarkable grammatical feature reflecting the different stances of Japanese and English speakers in this respect is that there is a strong constraint in Japanese as to the grammatical person of the subject noun phrase that can combine with ‘psychological predicates’ (i.e., predicates encoding such ‘private’ processes as sensations, feelings and emotions), as shown below:

(14)  a.  English: I am cold/sad.
       Japanese: (Watashi wa) samui/kanashii. [(i am) cold/sad.]

b.  English: You are cold/sad.
       Japanese: *Anata wa samui/kanashii. [you are cold/sad.]

c.  English: He/She is cold/sad.
       Japanese: *Kare/Kanojo wa samui/kanashii. [he/she is cold/sad.]

Thus Japanese predicates referring to private psychological processes can co-occur with first-person subject nouns but not with second- or third-person subject nouns. It is quite apparent, however, that the constraint here is not really to be formulated in terms of grammatical persons, but in terms of the contrast between ‘ego’ (i.e., first-person) and ‘non-ego’ (i.e., second- and third-person) (cf. Ikegami 2004). Private psychological processes are directly accessible only to the person in question (i.e., ‘ego’) and not to others (i.e., ‘non-ego’). Thus the person restriction on psychological predicates in Japanese is well motivated. You can naturally apply a subjective construal to your own psychological processes but not to others (unless, that is, you behave with sufficient empathy or on the assumption that you are an omniscient author or god-like being). Notice also that having the subjective construal applied to them, psychological processes are most naturally encoded with a zero subject noun.

But what happens then in English, where no such person restriction seems to apply? Two accounts are conceivable – one in terms of empathy and the other in terms of objectification. Thus if the English speaker is empathetic enough always to be able to have full access to the private psychological processes of other persons or alternatively if the English speaker is able to readily objectify her-/himself as well as s/he does other
persons, then in either case the contrast between 'ego' and 'non-ego' (as seen in Japanese) can very well be neutralized. In consideration of the marked predominance of objective construal in English speakers, we can safely conclude that the latter is really the case. Cf. Ikegami (2005: 135–138).

It is indeed tantalizing to know how this contrast is distributed across different languages. For the moment, all I can say is that there does appear to be quite a salient contrast between English and Japanese in this respect, one preferring objective and the other preferring subjective construal.

6. Perceiver-less sentences

Comparing original English texts with their Japanese translations, Uehara (1998: 285) observes that the English first person pronoun referring to the perceiver of an event is “not just unexpressed (i.e., zero subject), but totally non-existent” in Japanese translations. He gives the following examples:

(15)  a. Then I saw a big lady standing there.

    b. Futotta obasan ga ita no.
       fat woman nom was conf
       (literally, ‘A FAT LADY WAS (STANDING THERE)’)

(16)  a. I heard the wind.

    b. Kaze no oto ga kikoeteita wa.
       wind gen sound nom was heard conf
       (literally, ‘THE SOUND OF THE WIND WAS BEING HEARD.’)

Many similar examples can readily be found out by comparing original English texts with their Japanese translations or original Japanese texts with their English translations. We have here in fact a typological contrast between two types of language – one whose speakers will prefer to say (17) and the other whose speakers will prefer to say (18):

(17)  When I came out of the house, I saw the moon shining brightly.

(18)  When I came out of the house, the moon was shining brightly.

While English speakers seem to prefer saying (17), Japanese speakers are markedly inclined to say (18). It is easy to see that in saying (18) the perceiver-speaker poses as an ‘ecological self’ in Neisser’s sense, as already discussed in section 2.

Uehara (1998: 297) further points out that ‘perceiver-less’ description can be transferred through empathy from first person to third person and quotes an example in which the original English sentence, “When Sue woke from an hour's sleep the
next morning, she found Johnsy with dull wide-open eyes standing at the drawn green shade” is translated into a Japanese sentence which literally goes ‘NEXT MORNING, WHEN SUE AWOKE FROM AN HOUR’S SLEEP, JOHNSY WAS STARING AT THE DRAWN GREEN SHADE WITH DULL WIDE-OPEN EYES.’

Here is one more example, illustrating the same discrepancy between the original Japanese text and its English translations:

(19)  a.  Mazu takadachi ni noboreba, Kitakamigawa, Nambu yori nagaruru taiga nari. (Basho 1689) (literally, FIRST CLIMBING UP TO TAKADACHI, RIVER KITAKAMI, (WHICH) IS (A) BIG RIVER FLOWING (DOWN) FROM NAMBU.)

b1.  We first climbed up to Palace-on-the-Heights, from where we could see the Kitagami, a big river that flows down from Nambu. (Keene, tr. 1996)

b2.  We climbed up to the Takadachi, … and saw below us the great Kitagami River which flows from Nambu Province. (Britton, tr. 1974)

b3.  First, we climbed up to the Takadachi and saw the Kitagami was a large river flowing from Nambu. (Sato, tr. 1996)

b4.  As I climbed one of the foothills called Takadate, … I saw the River Kitakami running through the plains of Nambu in its full force. … (Yuasa, tr. 1966)

b5.  … we first went up Takadate, … . Just below the castle flows the Kitakamigawa, which is a large stream coming from Nambu. (Isobe, tr. 1933)

The original piece of text in Japanese (19a) is taken from Oku no Hosomichi, a well-known poetic account of a journey undertaken in 1689 by the haiku master Basho together with one of his disciples, Sora. We have five English translations, two by native speakers of English ((b1) by Keene and (b2) by Britton), one by a second-generation Japanese American ((b3) by Sato), and two by native speakers of Japanese ((b4) by Yuasa and (b5) by Isobe). The original Japanese sentence by Basho (19a) consists of a subordinate clause, followed by a main clause. There is no grammatical subject in the subordinate clause, but we can safely infer that the zero subject refers to either Basho or Basho with his disciple Sora who accompanied him (hence the discrepancy between (b1), (b2) and (b3) with a singular first-person subject, on the one hand and (b4) with a plural first-person subject, on the other). The predicate verb in the subordinate clause is nobor- but the verb form does not contain a tense-marker. Thus, if translated fairly close to the original Japanese wording, the subordinate clause in (19a) can be rendered in English as something like ‘WHEN CLIMBING UP TO TAKADACHI’. The main clause in (19a) has two noun phrases, Kitakamigawa ‘River Kitakami’ and Nambu yori nagaruru taiga ‘from-Nambu-flowing-big river’ followed by nari, a copula, and the intended meaning is presumably something like ‘(THERE) WAS/LAY (THE) RIVER KITAKAMI, (A) BIG RIVER FLOWING (DOWN) FROM NAMBU’. Combining
the two clauses, we get a sentence which reads ‘on climbing up to takadachi, there lay the river kitakami, a big river flowing down from nambu’. As an English sentence, this does not sound quite right (although it does in Japanese). We infer that the implied subject in the subordinate clause is the person(s) on the journey and that the same person(s) saw the river mentioned in the main clause. The original Japanese sentence, however, is ‘perceiver-less’: it simply describes the scene which came to the sight of the person(s) on the journey. Quite predictably, four of the five English translations supply the verb saw (or could see), making it explicit that the described scene was actually perceived by the same person(s) who climbed Takadachi. Translation (b5), by contrast, retains more of the features of the original Japanese text. The act of climbing up and the scene as perceived by the climber(s) are encoded in separate sentences with different tenses – the former in the past and the latter in the present. Such a mixing of tenses is, in fact, quite common in Japanese narrative texts due to the subjectivity factor, as we will see in the next section. It is, however, by no means a recommendable stylistic feature of English.

I have no extensive data as to how languages whose speakers tend to use ‘perceiver-less’ sentences are distributed over the world. I am interested, however, to learn that Czech and English are contrasted in this respect. Mathesius (1975: Ch. VII) refers to cases of contrasts between English and Czech like the following: English “At home he was helped by his father, whenever he found the task too difficult” – Czech “at home he was helped by his father, whenever the task was too difficult”, English “When I came to my senses, I found myself lying in a hospital” – Czech “when i came to my sense, i was lying in a hospital”. According to Mathesius, the use of the perception verbs in these English sentences is motivated by such factors as a preference for having one and the same grammatical subject through two component clauses of a sentence and de-agentivizing the grammatical subject with the implication that what happened to the subject is something beyond his control. In terms of the favourite type of construal, the Czech speaker, at least in certain points, seems to behave subjectively in a way close to the Japanese speaker and in contrast to the objectively-oriented English speaker. One may wonder if the Czech language manifests further subjectivity-prominent features such as are found in Japanese (cf. Ikegami 2005). To check this, however, is beyond my linguistic competence.

7. Subject-object merger: A philosophical implication

Subjective construal is, as we have already seen, a type of construal in which the cognizer-speaker is involved, either physically or mentally, in the very scene he is to construe and encode. This is contrasted with objective construal, in which the cognizer-speaker
is detached, either physically or mentally, from the scene he is to construe and encode. The two types of construal correspond respectively to the two types of epistemic stance which may be termed 'subject-object merger' and 'subject-object opposition'.

The novelist Yasunari Kawabata, to whom reference has already been made, discusses the two types of contrast in the following words:


(There are only three ways of seeing this lily, and only three kinds of feeling when one's attention is drawn to the lily: Am I within the lily? Is the lily within me? Or do the lily and I exist independently of each other? These questions are some of the problems in a philosophical theory of perception and consciousness the details of which I shall not discuss here. Rather, I should like to ponder these matters, simplifying somewhat, from the viewpoint of literary expression. If I describe the lily and myself as though they existed independently of each other, that would be to use a naturalistic style of writing. That represents the old principle of objectivity. We could say that this is the principle that has determined every form of literary expression to this day. However, the power residing within the subject is no longer content with this. I am within the lily. The lily is within me. These two sentences are ultimately indistinct. The fundamental aim of the neo-subjectivist approach is to express things through just such feelings. The most remarkable example of this approach is German expressionism.)

Kawabata starts by positing three possible types of construal in describing a lily: (i) 'I am inside the lily', (ii) 'The lily is inside me', and (iii) 'The lily and I exist independently of each other.' He argues that (i) and (ii) are ultimately not to be distinguished from each other and concludes by contrasting two types of approach: 'neo-subjectivist' and 'naturalist.' Underlying these two types of approach are the subjective and the objective construal respectively. It goes without saying that Kawabata opts for the neo-subjectivist approach.
The subjective construal which underlies Kawabata’s neo-subjectivist approach involves a merger between the subject (or the author) and the object (or the lily), while the objective construal underlying Kawabata’s naturalist approach entails opposition between the subject (or the author) and the object (or the lily). These two contrasting stances are beautifully illustrated in relation to literary interpretation by the following story deriving from the 17th century. The point of the story concerns the right interpretation of a piece of haiku poetry. (Haiku is an indigenous Japanese genre of classical poetry, whose form is alleged to be the shortest in world literature, consisting of three parts with 5, 7 and 5 syllables respectively.) The haiku poem in question reads as follows:

(20)  

Iwabana ya kokoni mo  
rock-nose, i.e., rock protruding over a cliff  
exclam  here  also  
hitori tsuki no kyaku.  
one (person) moon’s guest  
(literally, ‘A protruding rock! Here is another one – a guest of the moon.’)

The poem narrates what happened on a brightly moonlit night. One of the best disciples of Basho, the haiku master, offered the following interpretation: “The moon was so beautiful in the night sky. I (the author of the piece) went out and looked for a place where I could watch and admire the bright moon. Finally I found a very good place – a protruding rock overhanging the cliff. I hurried there only to find out someone already sitting there watching and admiring the moon!” On hearing this account, Master Basho intervened, saying that a stranger as a guest of the moon was a poor choice and that the guest of the moon was to be none other than “me”, the author himself. In the interpretation offered by the disciple, the author (or “I”) is the subject and “a guest of the moon” is the object. What we have here is a composition involving the subject-object opposition, and the whole piece looks like a description of a scene. In the haiku master’s interpretation, the composition we have involves a subject-object merger and the whole piece now sounds like an internal monologue uttered by the author.

How will an average speaker of Japanese react to the two interpretations? Most probably s/he will first offer the same interpretation as the disciple’s, taking the piece as a description of an objectively construed scene. Being told, however, of the master’s alternative interpretation, s/he will readily admit that it is also a possible interpretation – an interpretation which is not as readily available to the layman’s mind and is for that reason much more interesting and exciting than the interpretation s/he her-/himself first came up with.

It may be added that the subject-object merger characterizes other modes of representational art than linguistic encoding. It is known that the technique of ‘perspective’ was generally not practised in Japanese painting until its introduction from the West. In the sixteenth century, two of the most popular themes for painting were the
scene of a famous battle and a bird’s-eye view of the capital city, and a number of paintings on these themes are known to exist on the shoji (or sliding paperdoors) and folding screens in large castles. In the picture of a battle scene, for example, we find the friendly soldiers situated near (usually painted in the lower part) and the enemy soldiers situated in the distance (usually painted in the upper part) drawn in virtually the same size, the distance that separates the two groups being implicitly represented by some streaks of cloud drawn in between them. Similarly, in the picture of the capital, we see the roofs of the houses painted nearly in the same size, whether they are located nearby or far away. What happens here is that the painter, instead of locating himself fixedly at a definite vantage point, moves around. He (psychologically) moves close to the object he is going to paint, irrespective of whether it is located near him or far away from him. The result is a picture with no perspective.

8. Tense alternation

One notable aspect of the speaker-cognizer’s mental operation of self-projection involved in subjective construal is that it can take place across temporal as well as spatial distances. Self-projection of this kind is all the more notable because it leaves rather explicit traces in the text – namely tense alternation, typical examples of which are found in narratives recounting past events.

Traditionally, such tense alternation has been discussed by grammarians under the rubric of ‘historical present’, defined as “the present tense … to describe events in the past to make them seem more real” (Longman Dictionary of Contemporary English) and thus generally understood to be a rhetorical device employed by the narrator. Several features characterizing the use of the historical present have also been identified (cf. Wolfson 1979; Schiffrin 1981; Silva-Corvalán 1983, also Sakita 2002). Thus, as to the frequency of its use, it is pointed out that it hardly ever goes beyond 30% of all the predicate verb forms in an entire text, although the use of the verb say in the historical present may exceptionally cover more than 60% of its occurrences in a text. Also, a switch from the past tense form to the historical present tense form or vice versa does not normally occur in one and the same sentence. When it does occur, it occurs between two coordinated clauses, but not between a subordinate clause and a main clause or between two coordinated predicate verbs in the same clause.

None of these constraints, however, seems to apply to tense alternation in Japanese text. Here are some sample texts discussed in Ikegami (1987). These texts are approximate English translations of the original Japanese texts. Notice that the predicate verb forms in the texts are in bold, with those given in small capitals being in the present tense in the original Japanese texts.
Thus the grasshopper became a guest at the ants’ nest. The winter for that year was a delightful one for the ants, too. It is as if a jukebox had been installed. Whenever a request is made, the grasshopper plays the tune on his violin for the ants.

The grasshopper, being an artist, has no lack of imagination. While looking around the ants’ storing places, he found out that the long-stored food deep in the hole had yeasted and turned into alcohol. He says to the ants, ‘It’ll be a pity if you just let it alone. Why don’t you taste it?’ The ants, hesitantly tasting it and then being quite pleased, appreciate the taste of alcohol. When they have songs and alcohol, dancing comes naturally to them. This is more delightful than hard work. During this year’s hibernating period, the traditional moral principles of the ant family crumbled down completely. (From a short-short story intended as a parody of one of Aesop’s well-known fables)

I was fast asleep. Beside me, Sister and Daddy are also sleeping. Mummy, rushing in, shouted in a loud voice, ‘Wake up, everyone! Fire!’ When I open my eyes, it was fiery red all over in the room. A lot of smoke came in. A strange smell. Something is cracking. Daddy was shouting loudly. Mummy was saying something like crazy. I don’t understand what they are saying. Daddy, carrying me on his back, took me downstairs. We were all safely downstairs, but then Sister starts going upstairs again. Daddy went rushing in again to bring her back. (A composition by a first-grade pupil in elementary school)

Getting on the vehicle and followed by a hundred heavenly inhabitants, Lady Kaguya mounted skywards. After this, the Old Man and the Old Woman are so grieved, but nothing can be done. They have the letter left by the celestial princess read to them, but saying, “We are weary of life. It is vain to try to help others,” they take no medicine and soon took to their bed, without ever getting up. The captain of the Emperor’s army, coming back with his warriors, reports in detail how he was unable to prevent Lady Kaguya from going back to the sky. He presents the Emperor with the elixir bottle and the letter left by the celestial princess. Opening and reading the letter, the Emperor, being so sad and taking no food, was in no mood to play. … The Emperor gives the letter, together with the elixir bottle, to the messenger … and tells him to take them to the summit of a mountain in Suruga. He tells him what to do with them there. He tells him to place the letter beside the bottle and burn it there. The imperial messenger, followed by a number of warriors, climbed the mountain, which they named Fujinoyama. (Taketorimonogatari, a 9th century narrative)

The frequencies of occurrence of the present tense forms as against all the predicate verb forms are approximately 75%, 43% and 62% for texts (21), (22) and (23) respectively — much higher than the claimed maximum occurrence of 30% for historical present forms. We also find cases in which tense alternation takes place between two clauses in one and the same sentence or even between two predicate verbs with one and the same subject,
Subjective construal in Japanese

It is now sufficiently clear that the frequent occurrence of present-tense forms in Japanese narratives of past events is not to be accounted for in terms of the historical present. What is involved here is rather the subjectivity factor – the Japanese narrator is quite ready to displace her-/himself onto the scene of the past he is describing and construes it subjectively as if s/he her-/himself were actually on the scene, being directly involved in what is taking place there. S/he can also project her-/himself into someone who was on the scene, fully empathizing with her/him and usurping the latter's viewpoint. Thus a passage from an English novel which reads “Angela’s cold thin voice irritated Pete. He felt like a fool.” is rendered subjectively in a Japanese translation, as “angela’s cold thin voice irritated him. i felt like a fool.” From the English point of view, the translation would sound simply wrong grammatically, unless the second sentence is explicitly provided with quotation marks and the speaker identified. The Japanese speaker would have few scruples about a sentence sequence like this. It somehow comes to her/him so naturally – putting her-/himself in someone else’s place – being merged, rather than contrasted, with the object of her/his encoding.

The characteristic way the Japanese speaker behaves in construing and encoding may remind one of the ways the novelist behaves with the encoding technique called ‘stream of consciousness’ (defined in Oxford Advanced Learner’s Dictionary as “a continuous flow of ideas, thoughts, and feelings, as they are experienced by a person; a style of writing that expresses this without using methods of description and conversation”). The author fully empathizes with the protagonist, merges her-/himself with the latter and thus with maximal subjectivity construes and encodes what the protagonist is supposed to experience. As a literary device, the stream of consciousness is considered to have entered novelists’ practice and critics’ attention mainly in Europe, at the beginning of the twentieth century. There is, however, a real sense in which one can say that a similar practice had long existed in the Japanese tradition of story-telling, although, quite understandably, it had never been either consciously pursued or systematically applied. It was rather part of the natural encoding technique inherent in speakers of Japanese. What troubled Japanese authors and translators when they first encountered the naturalistically biased style of western novels was how to render their thorough-going objectivity in construal in Japanese, an inherently subjectivity-prominent language. Faithful to the linguistic feature of the original western texts, some authors and translators tried using the supposedly past-tense auxiliary ta at the end of every sentence. But this was judged to produce rather irritating monotony. It is interesting to note that how to come up with a style maximally characterized by objective construal was a more challenging task for the Japanese novelists of the early twentieth century than was how to work with internal monologue based on maximally subjective construal for western novelists.

e.g., ‘When I open my eyes, it was fiery red all over in the room’, ‘We were all safely downstairs, but then Sister starts going upstairs again’, ‘… they take no medicine and soon took to their bed, …’
9. Speaker-writer responsibility vs. listener-reader responsibility

John Hinds, an American Japanologist, once proposed a typology of languages whose speakers behave on the basis of speaker-writer responsibility and languages whose speakers behave on the basis of listener-reader responsibility. According to him (Hinds 1987: 143, 144):

... in some languages, such as English, the person primarily responsible for effective communication is the speaker, while in other languages, such as Japanese, the person primarily responsible for effective communication is the listener. ... The desire to write or speak clearly in English permeates our culture. This point of view has even been made into an aphorism for public speaking: “Tell 'em what you’re going to tell 'em, then tell 'em what you told 'em.” In Japan, perhaps in Korea, and certainly in ancient China, there is a different way of looking at the communication process. In Japan, it is the responsibility of the listener (or reader) to understand what it is that the speaker or author had intended to say.

As a native speaker of Japanese, I fully concur with what Hinds says here. Let me add in this connection that this focus on listener-reader responsibility for successful communication is culturally further correlated with a linguistic ideology which assumes that language is essentially inadequate – inadequate for conveying the full extent of what the speaker/writer has in his mind.

Now the idea that language is essentially something imperfect can be found across different cultures, but interestingly, the corollaries that are derived from this premise can be quite different. In some cultures, the realization of the inadequateness of language motivates people to work on their language so that it may become a better means of communication – in short, an untiring search for the perfect language (cf. Eco 1995 [1993]), in which an encoded message, in any context, conveys exactly what the speaker/writer intends and allows the hearer/reader to receive no more and no less information than what is intended. In such cultures, the responsibility for successful communication will reside with the speaker/writer who produces the message. In other cultures, the realization of the inadequateness of language leads people to accept language as such and motivates them to focus on what the speaker/writer may have intended to convey over and above what the produced message may mean literally. The hearer/reader is expected to try to infer what the speaker/writer may have had in mind. In such cultures, responsibility for successful communication will reside with the hearer/reader who interprets and makes sense of the received message.

It is interesting to note that in the western tradition we from time to time find instances of an attempt to improve on language, ultimately to construct the “perfect language”, being undertaken by people ranging from rigorous philosophers to simple “lunatic lovers of language” (Yáguello 1991). Remarkably, similar attempts seem to be totally absent in the Japanese tradition. Here kotoba (language) is assumed to be
inherently imperfect; people are encouraged to turn themselves instead to the *kokoro* (mind/heart) of the person who has produced the linguistic message. Thus in contrast to the cultural tradition of the West, where language has often been discussed in relation to questions of logic, language in the cultural tradition in Japan has generally been discussed in relation to questions of ethics – something related to the persons who use language.

It will by now be quite clear that the idea of listener-reader responsibility is also closely related to subjective construal. Recall that it has been pointed out that maximally subjective construal may end up producing exactly the same message as does maximally objective construal. Sentences like “It’s raining” and “The sun is rising” are such examples. As pieces of linguistic message produced through objective construal, these two sentences refer to the currently ongoing events of rainfall and sunrise, respectively, and this is also the information the listener/reader is expected to retrieve from the messages. As pieces of linguistic message produced through subjective construal, this is clearly not an adequate interpretation. A subjectively-construed message presupposes the presence of the speaker/writer on the scene and implies his direct involvement in what is taking place there. The same sentences do not simply refer to the two events in an impersonal way. They refer to them rather in a distinctively personalized way, so to speak; the events referred to are fully charged with personal thoughts and emotions of the speaker/writer who witnesses the event. These thoughts and emotions are naturally heavily context-dependent. They may not, however, be explicitly encoded and it is thus the listener’s/reader’s responsibility to infer what they may possibly be.

We may well be struck at this point by the idea that the situation we have here is not unlike our engagement with a poem. A poem, in fact, is a piece of internal monologue based on subjective construal. Its meaning is of course not simply the sum of the meanings of its constituent words; it goes far beyond that. The thoughts and emotions encoded in a poem can only be inferred by a positive involvement on the part of the reader.

We sometimes have linguistic clues indicating the presence of the unencoded author. Consider the following piece of imagist poetry by an eighteenth-century Irish poet:

(24) Four ducks on the pond,
    A grass-bank beyond,
    A blue sky of spring,
    White clouds on the wing;
    What a little thing
    To remember for years –
    To remember with tears! (W. Allingham)

Leaving the last three lines out of consideration for the moment, we have here a series of scene descriptions. We can be pretty sure, however, that these are not just scenes
objectively construed, but subjectively construed – in other words, as actually perceived by the author. We infer this from the way the four scenes are arranged in the poem; they are arranged from near to far. This arrangement suggests the presence of the author, whose glance is moving from something near him to something far away. By empathizing with the poet, we can imagine ourselves undergoing the same experience as the poet did and think about how the poet felt and also how we ourselves would have felt if we had been there in the poet’s place. The poem does sound very much like a piece of traditional Japanese poetry, haiku – only the last three lines could very well have been left unsaid. It is said that some imagist poets in the West took their creative hints from haiku. In haiku, however, the feelings and emotions elicited by the poet’s experience need not be explicitly encoded. They can be left for the reader of the poem to imagine. In fact, it is only through the assumed active involvement on the part of the reader that so short a poetic piece as haiku can have any literary impact. Thus even in interpreting an encoded message, the Japanese speaker activates himself in the same way as he does in the encoding process based on subjective construal.

A cultural correlate of the way the Japanese reader engages with a piece of classical poetry is found in the notion of utamakura. Utamakura (literally, ‘poetry-pillow’) refers to places about which poems were composed by well-known classical poets. Even in the present age these places are favourite tourist attractions. People visit these places as if on a pilgrimage, stand on the same spots where the classical poets may have stood and composed their famous pieces, and take immense pleasure in vicariously experiencing what those poets may have experienced. If talented, they may compose poetic pieces themselves, trying to emulate the success of their predecessors. (By the way, makura (‘pillow’) in utamakura is used, poetically, in a metaphorical sense of ‘something which serves as a cue for composing a poem.’) Thus a parallelism can readily be noticed between the way the Japanese reader behaves linguistically in relation to a poetic piece of composition and the way the Japanese visitor behaves culturally in relation to utamakura.


Subjective and objective construal are the two alternatives offered to the speaker engaging in linguistic encoding. We have started by positing that subjective construal is a favourite choice for Japanese speakers and have illustrated and discussed the point with a number of examples of their behavioural as well as linguistic features at the performance level. It has also been shown that subjective construal characterizes not only their linguistic encoding but also other genres of representational art, e.g. painting, that its egocentric (and hence monologic) orientation is complemented by the
language ideology of listener-reader responsibility and that it finds its homological correlate in the philosophy of subject-object merger.

Now questions of the kind discussed in the present chapter concern what we may call 'linguistic intuition'. We know that linguistic intuition may differ across speakers of different languages and that turns of expression which are accepted as 'natural' by speakers of one language may be judged 'unnatural' by speakers of other languages. Since linguistic intuition is something so deeply ingrained in us and is part of our 'implicit knowledge', we are mostly incapable of explaining in explicit terms why certain turns of expression sound natural and certain others do not. Even linguists are very shy about dealing with questions involving linguistic intuition except in very broad terms.

It is thus so much the more surprising for me to find that in an article contributed to the linguistics journal *Wörter und Sachen* 19 (1938), Heinrich Herrfahrdt, professor of economics (N.B. not linguistics) at Marburg University, claims essentially the same point about Japanese as is made in the present chapter in terms of 'die innere Sprachform' ('the inner form of language'):


(I should like to capture the decisive difference between the nature of Japanese and that of Indo-European in the following statement: Japanese is a naturally
evolved language of experience; Indo-European is a logically formed language of assertion. The main types of linguistic expression encountered in all languages are the imperative (Come!), the experiential sentence (It is raining, It is cold), and the assertive or judgmental sentence (The dog is a mammal). We can surely regard the imperative and the experiential sentence as the most primitive forms of linguistic utterance: they share the property of – in the simplest case – expressing one single concept in an individual, indivisible word. The assertive sentence, by contrast, consists of at least two elements: the subject as the topic of the assertion and the predicate as the content of the assertion. … We may observe a fundamental difference between experiential and assertive sentences in language history: Japanese is based on simple expressions of experience and has retained this form of expression where it has advanced to assertive sentences, having developed no special forms which reveal the logical connection between subject and predicate. The entire grammatical construction of Indo-European, however, is geared to the assertive sentence; it expresses the connectedness of the subject and the predicate by requiring that the predicate should agree in person, number and gender with the subject, and transfers this principle, which is appropriate for the assertive sentence, to the experiential sentence (and partially to the imperative as well) by feigning a subject-predicate relationship there too. In the sentence It is raining as a simple expression of an experience, there is in truth no subject; the experience could be most simply rendered by the word Rain!)

What particularly interests me about the author of this article is his suggestion that while the Indo-European language is characterizable as a ‘logically formed language’, Japanese is to be characterized as ‘naturally evolved language of experience’. In the latter, the prototypical sentence is one which reports what the speaker is directly experiencing at the moment – a sentence like ‘It’s raining’ (which the author considers functionally equivalent to a one-word sentence like ‘Rain!’).

Herrfahrdt’s ‘experience sentence’ here is equivalent to the sentence encoded on the basis of subjective construal. Interestingly, a greater part of the sentences in Herrfahrdt’s sense of ‘experience sentence’ correspond to the special kind of sentences called genshobun (‘phenomenon sentence’) in traditional Japanese grammar – sentences like ‘Ame ga futteiru’ (‘rain is falling’), ‘Kaji da!’ (‘fire!’), ‘Densha ga kita’ (‘here comes the train’) (Mio 1948: 83–89). Notice that genshobun (‘phenomenon sentence’) is here contrasted with handanbun (‘judgement sentence’), just as ‘Erlebnissatz’ (‘experience sentence’) is contrasted with ‘Aussage-(Urteils-)satz’ (‘assertion (judgment) sentence’) by Herrfahrdt. Clearly, however, the term ‘experience sentence’ connotes more appropriately the subjective character of what it refers to than the term ‘phenomenon sentence’.

One of the Japanese examples discussed by Herrfahrdt is the following:

    blossom PfV (v.) blossom PfV (v.) cherry-tree(s) nom blossom PfV
This short text can be read as an objectively construed description of an event – an
event of cherry-tree(s) coming into full blossom. As a piece of Japanese text, it is not.
It rather tells us about an unencoded speaker's experience – his noticing the cherry-
tree(s) in full blossom. The whole text can thus be read as an utterance of an admiring
speaker and can hence be put between quotation marks. What we have here is not a
series of assertion sentences which say something about the cherry-tree(s); they rather
report the blossoming as it is perceived by the speaker.

Herrfahrdt assumes that the ‘experience sentence’ is a more primitive
(‘ursprünglich’) form of linguistic expression than the assertion sentence. It may well
be so. In the sense that the ‘experience sentence’ encodes what the speaker directly
perceives and experiences, language is here still closely integrated with the body. By
contrast, language is more alienated from the body in the case of the ‘assertion sen-
tence’. The ‘experience sentence’ concerns something private and is hence essentially
monologic in character, while the ‘assertion sentence’ can function publicly as a means
of dialogic interaction. As a scenario of the functional evolution of language, the develop-
ment from ‘private/monologic’ to ‘public/dialogic’ and from ‘integrated with the
body’ to ‘alienated from the body’ is a plausible one. Hopefully, further research will
throw more light on this evolutionary path of language.

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Grammatical metonymy within the ‘action’ frame in English and Spanish

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On the basis of Cognitive Model Theory, this chapter develops a number of explanatory tools – in the domains of conceptual prominence and of constraints on conceptual mappings – that prove useful in dealing systematically with similarities and differences among related grammatical phenomena, both within and across languages. The adequacy of these tools is particularly evident in the contrastive study of the different variants of the English inchoative and middle constructions and corresponding forms of the Spanish reflex passive. The analysis reveals that some of the different conceptual strategies in the two languages are the result of general grammatical features that place constraints on conceptual structure and thereby cue different forms of metonymic activation capable of conveying a comparable range of meaning implications. The chapter thus claims that high-level metonymy is a motivating factor for linguistic structure and realization strategies and that accounting for the intricacies of such strategies would be impossible without an adequate understanding of some of the central features of cognitive modelling.

1. Introduction

The present chapter explores the way in which Cognitive Model Theory (CMT), especially metonymy theory, can be used effectively in order to deal in a systematic and unified way with similarities and differences among related grammatical phenomena both within and across languages. CMT is a powerful framework of semantic analysis originally propounded by George Lakoff and his associates within the general context of Cognitive Linguistics (CL; see Lakoff 1987, 1993; Lakoff & Johnson 1980, 1999; Lakoff & Turner 1989). Central to CL is the assumption that the study of language is a part of the study of human cognition. As a consequence of this assumption, linguistic

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research in CL is bound to what Lakoff (1990) has termed the cognitive commitment, which is understood as the requirement of linguistic descriptions to be in agreement with – or if possible derive from – findings in experimental psychology and the brain sciences (Lakoff 1990).

At the core of CMT is the notion of idealized cognitive model (or ICM). This notion is fully consonant with the cognitive commitment. The term idealized cognitive model (cf. Lakoff 1987) refers to any cognitive structure that represents aspects of our experience of the world in an internally coherent way. CL distinguishes four types of ICM: frames, which have been described by Fillmore (1985: 223) as "specific unified frameworks of knowledge, or coherent schematizations of experience" (e.g., the 'buying' frame, which contains a buyer, a seller, merchandise, the market, a transaction involving money, etc.); image schemas, which, according to Johnson (1987), are preconceptual topological (or spatial) representations (e.g., the container schema, as in We saw the bird perching in the tree, where we focus on the three-dimensional space created by the overall configuration of a tree, with its branches and leaves); metaphor, which is defined by Lakoff (1987, 1993) as a cross-domain conceptual mapping (i.e., a set of correspondences) between a source and a target domain, where the former allows us to reason about the latter (e.g., Look how far we have come correlates progress in an activity, from the target, with movement forward along a path, from the source, and it also correlates success in achieving one's goals, from the target, with closeness to the destination at the end of a path, from the source); metonymy, which is a one-correspondence domain-internal mapping where the source gives access to the target (e.g., 'the piano', which stands for the 'piano player' in The piano is in a bad mood today). Domains are constructed by deriving conceptual structure from either frames or image schemas.

Over the last two decades, the different branches of CL have developed a number of analytical tools that have shown their ability to account in systematic ways for an impressively large number of linguistic phenomena both within and across languages (see Ruiz de Mendoza & Peña 2005a, and Dirven 2005, for overviews). Among some of the most recent developments, we shall consider the notion of grammatical metonymy, a form of generic or high-level metonymy that has consequences in terms of morphological and/or syntactic structure. The notion was initially formulated by Ruiz de Mendoza & Pérez (2001) on the basis of previous work by Panther & Thornburg (1999, 2000), who accounted for the impact of some metonymies on grammatical structure. For example, Panther & Thornburg (2000) postulated the metonymy result for action in order to account for the grammaticality and full range of meaning implications of such an apparently odd phenomenon as the use of an imperative verb, which normally requires an action predicate, with stative predicates (e.g., Be quiet, but *Be tall). Imperatives can be used in such a construction provided that the stative predicate expresses a resultant state that derives from an implicit action. Thus, Be quiet can be paraphrased as 'act in such a way that as a result you will be quiet', but a similar paraphrase is impossible for *Be tall.
In previous work carried out by Ruiz de Mendoza & Díez (2004a), it has been postulated that grammatical metonymy is the cognitive principle of organization behind a number of related English constructions such as the inchoative/causative alternation (*The door opened/John opened the door*), the middle construction (*This bread cuts easily*), and the characteristic property of instrument construction (*This knife cuts well*) within the area of transitivity (cf. Levin 1993). The same study argues that grammatical metonymy also underlies the Spanish counterparts of these English constructions, among them the different varieties of the so-called reflex passive, renamed and divided into the end-point prominence (*Se abrió la puerta ’refl-opened the door’) and internal attribute (*Este pan se corta bien ’This bread REF-cuts well’) constructions by Maldonado (1999).

In the present chapter we will expand on the analysis carried out by Ruiz de Mendoza & Díez (2004a) significantly. We will do so by arguing that many aspects of transitivity in grammar are essentially a matter of cognitive operations on elements of a high-level propositional model that we will call the action frame. Our analysis will take advantage of some relevant developments discussed in Ruiz de Mendoza (2005, 2007) on conceptual prominence and external constraints on metonymic processes. We will thus explore in what ways such principles and processes allow us to capture and systematize differences and similarities among the transitivity constructions mentioned above and other related transitivity constructions and constructional alternations in English and Spanish. Our analysis will thus lend support to the idea that when applied to the exploration of apparently disparate phenomena within or across languages, the analytical tools developed in CL are capable – to a large extent - of providing a unified explanatory framework for them. The resulting account will thus have a desirable degree of explanatory adequacy, which we believe is related to the sensitiveness of our analytical tools to the cognitive commitment, as will be evident in the ensuing sections.

Bearing all the previous observations in mind, we shall devote sections 2 and 3 to a discussion of some of our own results on metaphor and metonymy, with a special focus on the contrastive study of high-level metonymic processes in English and Spanish in section 4, where we will compare the different variants of the English inchoative and middle constructions with corresponding forms of the Spanish reflex passive from the point of view of their metonymic motivation.

2. **Metaphor and metonymy**

As mentioned in the introductory section, in CL metaphor is generally defined as a cognitive mapping across discrete conceptual domains, while metonymy is seen as a domain-internal mapping where one of the domains involved provides a point of
access to the other (cf. Kövecses & Radden 1998). These definitions are under constant revision (cf. Ruiz de Mendoza 2000; Barcelona 2003, 2005; Panther 2005, among many others). However, it is not our purpose to go into the definitional controversy but rather to clarify other issues that we find more relevant for our study, especially those connected to the notions of domain, mapping types, conceptual prominence, and the kind of cognitive operations involved in metaphoric and metonymic activity. Such a clarification is necessary for a better understanding of the two phenomena.

In Cognitive Linguistics, initially following Lakoff (1987) and later Lakoff & Johnson (1999) and subsequent developments such as the Neural Theory of Language (Feldman & Narayanan 2004), metaphor and metonymy are regarded as ways of modelling our knowledge of the world on a par with propositional (or frame) structure (Fillmore 1985) and with topological or image-schematic structure (Johnson 1987). However, while the original emphasis was on finding metaphorical and metonymic systems, describable by means of useful labels such as love is a journey (e.g., We are at a crossroads), people are plants (e.g., She withered), for metaphor, and ruler for army (e.g., Napoleon lost at Waterloo), company for workers (e.g., Chrysler is on strike), for metonymy, a lot of recent work has been focusing its attention on the nature of metaphorical meaning as grounded in bodily experience and on building a biologically plausible model of how metaphor is understood (Narayanan 1999). This work is being carried out in a very elegant way that combines insights from brain-imaging experiments and some of the central assumptions of CL. For example, the Neural Theory of Language (NTL) argues that all understanding is based on simulating and enacting the appropriate bodily experience. Thus, the meaning of the word grasp involves the subconscious simulation of the motor action of grasping. In the case of metaphor, the use of grasp in the sense of ‘understanding’ the same simulation is stipulated to take place, which carries over to a computational implementation where the same system is used to respond to direct sensory-motor input or to linguistic prompting. This practical application finds support in neurobiological experiments that argue for the general idea of simulation and suggest that metaphorical uses of action words may activate brain areas related to physical action (see Feldman & Narayanan 2004, for a review).

While Lakoff and his associates take important steps in the direction of a neural theory of language, some cognitive linguists have been moving forward in a complementary direction that investigates metaphor and metonymy essentially on the basis of linguistic data or of the connections between such data and fields of research other than neural biology. The study of either metaphor or metonymy has thus been undertaken by some cognitive linguists in connection to psychology (Gibbs 2005 and the references therein), pragmatics (Ruiz de Mendoza & Pérez 2003; Panther 2005; Ruiz de Mendoza 2005, 2007), and typology (Brdar-Szabó & Brdar 2004). One of the directions of recent research is the connection between CL and grammatical description.
Some preliminary attempts may be found, especially in the area of metonymy, in work by Kövecses & Radden (1998), Panther & Thornburg (1999, 2000), Ruiz de Mendoza & Pérez (2001), and Brdar-Szabó & Brdar (2003, 2004), Barcelona (2004), and Ruiz de Mendoza & Diez (2004a). We will return to this issue later. The following subsections will summarize the essential theoretical elements needed in order to understand the impact of metonymy on grammatical analysis.

2.1 Domains and mappings

Since conceptual domains derive their structure from frames and image schemas, in order to understand the role of domains in conceptual mappings, it is first necessary to understand the nature of these two kinds of ICM. According to Lakoff (1987) frames make use of propositional structure (e.g., the relationships between participant entities in the ‘buying’ frame) and image schemas make use of topological structure, i.e., conceptual structure capturing abstract spatial arrangement (e.g., the container schema has an interior and an exterior, plus a number of logical implications, which have been discussed in detail in Peña 2003). Metaphor and metonymy, on the other hand, do not have an underlying structuring principle of a comparable kind. In fact, metaphor and metonymy work on the basis of either frames or image schemas (e.g., I won’t buy that!, meaning ‘I’m not going to believe that’, for the buying frame, and I’m in trouble for the container schema). Ruiz de Mendoza (2005) has captured this relevant qualitative difference between metaphor and metonymy, on the one hand, and frames and image schemas, on the other, by referring to the former with the label operational models and to the latter with the label non-operational models. The latter are the natural outcome of a structuring principle, while the former are structuring principles that have the peculiar quality of creating stable knowledge constructs. Thus, the result of a metaphorical operation (e.g., correlating evaluative and olfactory experience) is a metaphorical model (bad is stinky) that is realized linguistically through a metaphorical expression (e.g., This whole business stinks).

Operational models work on the basis of conceptual domains. A conceptual domain is a cognitive structure that captures relevant material from a non-operational ICM within a context of use in readiness for a cognitive operation of some sort. Since metaphor and metonymy are conceptual mappings, it is only natural to regard them as evident examples of operational models. However, metaphor and metonymy are themselves reducible to more basic cognitive operations, which have been discussed in some detail in Ruiz de Mendoza & Peña (2005b): for metaphor, we have correlation and resemblance, a distinction based on Grady (1999); for metonymy, we distinguish between domain expansion and domain reduction (see Ruiz de Mendoza 2000, and further elaborations in Ruiz de Mendoza & Diez 2002; and Ruiz de Mendoza 2005).
Correlation or primary metaphors are based upon experiential co-occurrence or conflation of experience, such as the connection between evaluative and olfactory experience mentioned above, or between affection and warmth (which paves the way for metaphors like *a warm embrace, a cold smile*), between quantity and quality (e.g., *prices rise*), and between importance and size (e.g., *He is a big wheel in the company*), among many others (see Lakoff & Johnson 1999 on primary metaphor). Resemblance metaphors, in contrast, are based on finding common structure or similarities between source and target domains, as is the case with image metaphors (e.g., *A horse with a mane made of rainbows*) and ontological metaphors (e.g., *Achilles is a lion*).

Domain expansion is a cognitive operation whereby a conceptual domain serves as a point of access to a larger amount of conceptual material, which thus becomes available for further cognitive activity (see Ruiz de Mendoza & Díez 2004b, Ruiz de Mendoza & Peña 2005b, for discussion of related cognitive phenomena such as anaphoric reference, counterfactuality, etc.). A straightforward case of domain expansion is the metonymy *instrument for player* (e.g., *The sax has the flu*), where the instrument is part of our knowledge frame for player. Ruiz de Mendoza & Díez (2002) have found that domain expansion is a frequent process in the construction of the source domain of situational metaphors. For example, in order to process the sentence *He ran away with his tail between his legs*, the partial scene of a dog running away with its tail between its legs is to be developed into the richer scene – which we term a matrix domain – in which a dog is beaten and running away in the specified manner is seen as a sign of fear and humiliation. This richer structure is then metaphorically mapped onto the comparable real situation in which a person avoids conflict after being humiliated. Domain reduction, in contrast, consists of reducing the scope of the initial point of access. This reduction is achieved through a highlighting operation of the kind identified by Croft (1993). Highlighting is the cognitive process whereby a non-central domain is raised to primary status. For example, in the common expression *Tie your shoes*, “shoes” stands for shoelaces, a secondary conceptual characterization of the notion ‘shoes’ (we can have shoes without shoelaces). We process this metonymy by giving prominence to this non-central characterization, a process which results in the reduction of the amount of conceptual material necessary to process the object of the predicate ‘tie’ (since only the shoelaces are within its scope).

**2.2 Metaphor, metonymy and cognitive prominence**

Croft’s (1993) notion of highlighting is only useful to a limited extent since it applies exclusively to cases of what we have identified as metonymies based on domain reduction. Nothing is said about metonymies based on domain expansion or about metaphor. In Ruiz de Mendoza (2007) the concept of highlighting is regarded as part of a broader view of cognitive prominence according to which a conceptual characterization
may receive either primary or secondary focus. Primary (or default) focus is defined as the relative prominence of a conceptual characterization acquired by virtue of its intrinsic centrality in terms of its associations with other elements of the domain to which it belongs. Secondary focus is the degree of prominence given to a non-central characterization through a highlighting operation.

The degree of centrality of a characterization is in turn determined by assessing the extent to which the characterization in question is necessary for a conceptual item to be understood as such. Thus, we can understand a container without contents, but we cannot understand a container without shape or size. The latter items are thus central characterizations of our notion of ‘container’. The notion of centrality has nothing to do with typicality but rather with contingency. Think about a company and some of the items that we usually associate with it, such as employers, employees, manufacturing facilities, and doing business. The degree of centrality of each of these items is determined by the extent to which the notion of ‘company’ is contingent on each of them. The contingency criterion suggests that doing business (the purpose of a company) is more central than having employees, and having employees more central than, for example, having a supply storehouse. If this analysis is correct, the best candidate for default focus when dealing with the notion of ‘company’ is ‘business activity’. Other items are less central and therefore natural candidates for receiving secondary focus when required.

The distinction between primary and secondary focus is of consequence in understanding some metaphorical and metonymic processes. Consider again the contrast between domain expansion and domain reduction operations. In Ruiz de Mendoza (2000) metonymy is classified from the point of view of the nature of the mapping system into source-in-target, where the source is a subdomain of the target, and target-in-source, where the target is a subdomain of the source. What matters is the correlation between expansion operations and source-in-target systems, on the one hand, and between reduction operations (through highlighting) and target-in-source systems, on the other hand. Evidently, since secondary focus is associated with domain reduction operations, it correlates with target-in-source metonymies. In source-in-target metonymies, however, where there is no highlighting operation, the only relevant cognitive prominence phenomenon is the default focus received by the source. For example, in the oft-quoted metonymy order for customer (e.g., *The ham sandwich is waiting for his check*) the source receives primary focus (the notion of ‘customer’ is contingent upon the notion of ‘order’). Compare this situation with what is the case in metonymic expressions that fall under the label company for workers (e.g., *Barclays will not venture so much of its capital on Asian markets*). Here the source domain (‘Barclays’) is not contingent on the target domain (‘the people in charge of making investments for Barclays’), which receives secondary focus through highlighting.

Consider now the connection between metaphor and cognitive prominence. Ruiz de Mendoza (1998, 2000) has argued that some metaphorical systems are structur-
ally more complex than others and has correlated structural complexity with different cognitive activity and communicative effects. The basic distinction, from this point of view, is between one-correspondence and many-correspondence systems. An example of the former is the ontological metaphor *Achilles is a lion*, roughly meaning that Achilles is courageous in the same way that a lion is thought to behave courageously. Lakoff & Turner (1989) argue that in fact this metaphor consists of two metaphors which cancel each other out, one in which courage (a human characteristic) is attributed to lions and another in which a lion’s ‘courage’ is attributed to humans. They further argue that attributed courage is a quintessential feature of lions, which we map onto Achilles. While this description is essentially correct, we believe that it is possible to refine it a bit further. When we say that Achilles is “a lion” what we actually do is map a form of animal behaviour onto a corresponding form of human behaviour, not a lion’s attributed courage onto human courage. Thus, the metaphorical expression is not actually the result of the activity of two metaphors that cancel each other out. There is only one mapping in which Achilles’ behaviour is determined on the basis of the way in which the lion behaves in certain contexts where its fierceness, aggressiveness, and determinacy are evidenced, as is the case of the lion fighting another animal or chasing its prey. A similar form of behaviour is to be found in Achilles in comparable contexts (e.g., in battle) and it is only after we have performed the metaphorical mapping that we associate these behavioural features with ‘courage’, which is thus but a convenient (but poor) label to summarize a more complex cluster of features. This observation is important for us to understand the full range of meaning implications of the metaphor: what is in question is not understanding Achilles’ courage in terms of the lion’s courage but rather understanding Achilles’ behaviour in the context of a battle with a lion’s behaviour in a comparable context.

Second, what Lakoff & Turner call a ‘quintessential attribute’ is but what we term a ‘central’ feature (note that human nature is contingent on behaviour), which exhibits primary or default focus, and acquires its status by cultural convention, which is often experientially grounded. If this is the case, interpreting the metaphor *Achilles is a lion* is exclusively a matter of primary focus and there is no highlighting process.

In the many-correspondence metaphor *investigating a problem is exploring a landscape*, a problem is seen as a landscape, investigating the problem is exploring the region in search of a hidden object, which is in turn seen as the solution to the problem; finding the solution to the problem is discovering the place where the object is hidden, and evidence of truth is a guide in the search. In a structurally more complex metaphor like this, there are central and non-central correspondences. The most central correspondence in terms of contingency is that between investigating and looking for an object (investigating a problem is contingent upon the actual goal of finding the solution to the problem), which correlates with the fact that this correspondence has direct experiential grounding (i.e., our experience of looking for
hidden objects conflates with our goal of finding out where they are). Some realizations of the metaphor exploit the central correspondence, as in *We’ll keep searching for a solution to the problem*. In cases like this, there is no highlighting process, much in the same way as is the case with one-correspondence metaphors. Other realizations, however, may focus on a non-central correspondence. Consider in this regard the sentence *We had no clue where the solution was*. Here, prominence is given to the non-central correspondence between the evidence of truth in research and the physical clues that guide people searching for an object; the non-central correspondence thus receives secondary focus.

2.3 Constraints on metaphor and on metonymy

In this section we will briefly discuss some of the principles that apply in determining whether a metaphor or a metonymy are possible. This is an issue that has in various ways been directly or indirectly treated by other linguists, since it has to do with definitional and classificatory criteria (cf. Barcelona 2002 and Dirven 2002). In a sense, drawing clear boundary lines between metaphor, metonymy, and other cognitive processes is a form of finding criteria to decide whether a conceptual connection is metaphorical, metonymic, or neither. For example, if we were to postulate, with Croft (1993), that an essential property of metonymy, in contrast to metaphor, is that the former makes use of domain highlighting, i.e., giving primary status to a secondary subdomain within a broader domain, all our examples of what we have called source-in-target metonymies would not be metonymies at all. The application of the notion of domain highlighting to the definition of metonymy indirectly translates into a proposal to impose restrictions on metonymic production. As will be evident to the reader, we believe that Croft’s handling of conceptual prominence is insufficient to explain metonymy. Our own proposal in this respect, which considers prominence as operating differently depending on certain formal properties of metaphor and metonymy, also puts constraints on metaphor and metonymy, but of a different kind. In our application of this proposal, we cannot have a metonymy of the source-in-target kind where the target is not contingent on the source (which thus has default focus) or a target-in-source metonymy where the target (which needs to have secondary focus) is a central characterization of the source. For example, a worker’s weight (a central, contingent characterization of the worker) cannot stand for his working activity, but a hand can (the notion of working is contingent on the instrument used to carry out the action), as in *We will hire some more hands*. On the other hand, it is possible to use the term “window” metonymically to stand for a ‘window pane’ (e.g., *He broke the window*) but not for an opening in the wall since this feature is central to the corresponding notion in terms of contingency. Note in this respect that ‘window’ in *He came in through the window* is not metonymic but literal (cf. Ruiz de Mendoza 2000).
However significant definitional and typological criteria may be in placing constraints on metaphor and metonymy, they are not sufficient. For example, there is nothing in the definition of metonymy that prevents us from producing the (generally) infelicitous mapping *The stick shifts will not attend the Union meeting to refer to taxi-drivers in the context of a public transportation strike. Thus, the notion of ‘stick shift’ belongs to the same experiential domain as the notion of taxi-driver and there is no clear reason why the former may not stand for the latter. Or consider how the part-whole relationship can be used metonymically in some cases but not in others within the same domain. Compare *I would like to ask for your daughter’s hand in marriage with *I would like to ask for your daughter’s head/arm/leg etc. in marriage. We have similar problems with some metaphors. Take the sentence *He is myopic and cannot see how I feel in contrast to the less felicitous sentence ??He is far-sighted and cannot see how I feel, or to ??He has a squint and cannot see how I feel. Here, it is evident that it is necessary to pin down some aspects of the vague definitional criterion for metaphor as a cross-domain conceptual mapping where the source allows us to understand and talk about the target (Lakoff 1993). We need to have the right source domain elements to produce the intended meaning effects.

These and other issues may be solved – at least partially – on the basis of three principles: the Extended Invariance Principle, the Correlation Principle, and the Mapping Enforcement Principle. These principles were originally formulated in connection to metaphor in Ruiz de Mendoza (2005), but Ruiz de Mendoza & Mairal (2007) have extended them to metonymy. The Extended Invariance Principle is a refined version of Lakoff’s (1990, 1993) well-known Invariance Principle. According to Lakoff’s proposal a metaphorical mapping may not violate the image-schematic structure of the target domain. Thus, if we see physical attributes of an animal’s face in terms of corresponding attributes in a person’s face, the relative position of facial components has to be preserved in such a way that eyes will map onto eyes, ears onto ears, the snout onto the nose, and so on. The Extended Invariance Principle reformulates Lakoff’s original proposal to make it cover all cases of generic-level structure preservation. For example, a person’s robustness, which is not a matter of image-schematic structure, may find an appropriate correlate in the strength of a tree or of any other object, such as the bodywork of a car. In its application to metonymy, the Extended Invariance Principle works to preserve the generic-structure configuration of domain-internal relationships. Our previous example about the taxi-drivers is based on the controller-controlled relationship, which would license a metonymic expression like *The taxis will not attend the Union meeting, but not *The stick shifts will not attend the Union meeting, since it is the taxi as a whole, rather than just the stick shift, that is controlled by the taxi-driver.

Interestingly enough, it would be possible to do partial violence to the controller-controlled relationship by finding a context in which ‘stick shifts’ are a relevant source domain for taxi-drivers, for example one in which some of the taxi-drivers that work
for a taxi-service provider use automatic cars while some others drive non-automatic cars, and only the latter decide not to attend the Union meeting. The prevailing relationship in this case would be one of (functional) part-for-whole configuration. This would happen in obedience to the Correlation Principle, which – in its application to metonymy – regulates the selection of the most relevant source domain in terms of its potential to afford adequate access to the intended target domain. It is this principle that explains why we choose the hand as the most relevant source domain in “asking for a lady’s hand”, since the hand is experientially (and thereby conventionally) related to courtship activities (e.g., lovers hold hands).

The Correlation Principle was first formulated by Ruiz de Mendoza & Santibáñez (2003) to account for constraints on the selection of metaphoric source elements on the basis of the shared implicational structure of source and target. Thus, myopia or near-sightedness, which is the inability to see clearly objects that are far away, is a better correlate for lack of understanding than far-sightedness or a squint. This is so because a squint hardly affects vision and far-sighted people can see objects in the distance, which does not map well onto the idea of lacking perspective on somebody’s feelings, since perspective usually improves the greater the distance from the viewer.

Finally, the Mapping Enforcement Principle is responsible for cases of metaphor-metonymy interaction (exhaustively investigated in Ruiz de Mendoza & Díez 2002) and of what Barcelona (2002) aptly calls metonymic chaining, a phenomenon that was first discussed by Ruiz de Mendoza (2000) and Ruiz de Mendoza & Pérez (2001) under the label of double metonymy. However, in view of our present data, as discussed later (section 3.2), which suggest the possibility of more complex mappings, we find Barcelona’s term more adequate. In the case of metaphor, The Mapping Enforcement Principle is responsible for the preservation of as many source and target items as possible, even if this requires the activity of further complementary cognitive operations, provided that these operations allow the hearer to derive the full range of meaning implications that were intended for the metaphorical expression. In this connection, consider the expression *He gave John a kick*, where an action is seen as a transfer of possession. Lakoff (1993) argues that the Invariance Principle constrains this mapping in such a way that the possession element from the transfer schema in the source has to be discarded, since there is no corresponding target element: in real life, the person who receives the kick does not have it afterwards. However, as Ruiz de Mendoza (2007) argues, it is possible to develop the target domain of the metaphor further by means of a target-in-source metonymy from ‘kicking’ to the ‘effects of kicking’. This additional mapping allows us to find a target element for the possession ingredient of the source and to account for some of the meaning implications of the expression, which would otherwise be lost (the person who receives the kick has the effects of the kick) (see Figure 1).

In the case of metonymy, the Mapping Enforcement Principle is responsible for explaining why we do not discard as being impossible to process expressions like
It is not difficult to find Shakespeare on the web, where ‘Shakespeare’ stands for the medium of presentation (a number of web pages) of his literary work. We first map ‘Shakespeare’ onto his ‘works’ and then onto their ‘medium of presentation’. We may compare this example with Shakespeare is not very difficult to read, which is based on just one mapping from the author to his literary production.

![Figure 1. An action is a transfer of possession.](image)

### 3. Levels of description and grammatical metonymy

The question of description levels has been addressed in detail in Ruiz de Mendoza (2007). In that article it is argued that it is possible to find a unified framework for inferential and grammatical description by distinguishing between high and low levels of description, on the one hand, and situational and non-situational cognitive models, on the other. Thus, so-called pragmatic implicature is seen as the result of metonymic activity on low-level situational models; illocutionary meaning, in turn, takes place by applying metonymic expansion operations to partial structure from high-level situational models (so-called illocutionary frames or scenarios; see Pérez & Ruiz de Mendoza 2002, and Ruiz de Mendoza & Baicchi 2006). Interestingly enough, many grammatical processes also seem to be inferential in nature, which calls for an explanation of their semantic import in terms of metonymic operations on high-level cognitive models (low-level models do not produce grammatical meaning effects). In the next two sections we give some examples of high-level metonymic activity resulting in single and double grammatical metonymies.

#### 3.1 Grammatical metonymy: Single mappings

We will now study some single high-level metonymic mappings that underlie four different kinds of grammatical process: categorial conversion, subcategorial conversion, enriched composition, and parametrization. Let us consider each of them in turn.
3.1.1 Categorial conversion

The metonymy which lies at the base of *He hammered the nail into the wall* is instrument for action. The hammer, which is the instrument, stands for the whole action frame in which the hammer is involved. The expression could be paraphrased as ‘He drove a nail into the wall with a hammer’. From a grammatical point of view, the metonymy licenses the conversion of the noun *hammer* into a verb (meaning ‘to hit an object with a hammer’) that captures all the relevant elements of the action frame. It may also be illuminating in this connection to discuss the metonymy action for result, as schematized in Figure 2. By way of illustration, take one of its linguistic realizations: *He had a deep cut in his knee* (cf. Kövecses & Radden 1998), which involves the recategorization of the verb ‘cut’ into a noun. By means of this metonymy the word *cut* encapsulates relevant elements from the action frame (e.g., actor, object, instrument) into a single conceptual whole that is further treated as an object on the basis of an additional metaphor. The implicit elements may be recovered and exploited discursively (cf. *He had a deep cut in his knee. Who made it and using what?*).

![Figure 2. Action for result.](image)

3.1.2 Subcategorial conversion

In examples like *The door opened* the agent of the action is not made explicit in syntactic terms. However, from a conceptual point of view we assume that someone must have carried out the action of opening the door. This is an instance of grammatical metonymy since it involves the recategorization of a predicate and has consequences for the syntactic configuration of the sentence. The metonymy underlying this example is process for action (see Figure 3 below), and provides the cognitive motivation for the grammatical process that Dik (1997: 8–15) called quantitative valency reduction.
Figure 3. Process for action.

There are other examples of subcategorial conversion that can be related to **metonymy**. Consider the sentence *There is a lot of America in what she does*. In order to account for its full semantic import we need to postulate the target-in-source metonymy an entity for one of its properties whereby America stands for American stereotyped values. This metonymic operation licenses a grammatical count-mass transformation, in which the relevant feature or property is seen as a substance. A different conversion process takes place in the expression *There were three Johns at the party*, where the metonymy an individual entity for a collection including that entity makes it possible to convert a proper (uncountable) noun into a common (countable) noun.²

³.1.³ **Enriched composition**

Some predicates, which typically subcategorize an action but can grammatically occur with non-actional complements, have been discussed as cases of what Jackendoff (1997: 61) calls enriched composition, where the hearer is required to look into his world knowledge and find the missing action predicate. For example, in *He began/enjoyed the beer*, the hearer is required to supply the predicate ‘drinking’. However, an explanation of enriched composition in terms of the grammatical metonymy **object for action** (in which the object is involved) allows us not only to find the cognitive motivation for this phenomenon, but also to study it as part of a more generic cognitive pattern whereby a relevant element within the action frame may stand for the whole frame, as was the case with **instrument for action**, which we related to

². For more details about the mass-count transformation see Peña & Ruiz de Mendoza (to appear).
categorial conversion. If this analysis is correct, it is possible to see at least some cases of categorial and subcategorial changes as different grammatical manifestations of the same underlying phenomenon. The analysis we suggest has the additional advantage of allowing us to capture relevant meaning implications of the constructional pattern in question, as evidenced by the following paraphrase: ‘He began to perform a (contextually relevant) action in which the beer was involved’.

3.1.4 Parametrization
The expressions *do the carpet* and *do the dishes* in *This week, he’ll do the carpet and I’ll do the dishes* are cases of the ‘do + (typically) non-actional NP’ construction (Ruiz de Mendoza & Pérez 2001: 342). The verb *do* selects for an activity. In this kind of construction, the agent performs an activity that would normally be expected of someone in a given context. If the complement of *do* leaves the activity unspecified, it is necessary to find a value for *do* which will provide us with the relevant specification. For instance, the common default values for *do the carpet* and *do the dishes* are ‘clean the carpet’ and ‘wash the dishes’ respectively. But there may be other possible values depending on contexts of use. The parametrization process that results in the different values is regulated by the metonymy generic for specific.

3.2 Grammatical metonymy and metonymic chains
In section 2.3 we argued that metonymic chaining is a fairly common phenomenon that takes place as a result of the activity of the Mapping Enforcement Principle. Postulating metonymic chains is a useful way to account for subtle similarities and differences in meaning between some related constructions that exploit high-level cognitive models such as the action frame. Consider the following alternations in the grammatical domain of transitivity:

(1)  a.  This bread cuts easily.
     b.  This soap powder washes whiter.

Sentence (1a) is a stock example of the middle construction. Sentence (1b), on the other hand, illustrates the characteristic property of instrument construction (cf. Levin 1993). The meaning implications of each construction are different, as may be evidenced by the impossibility of paraphrasing (1b) along the same lines as (1a):

(1’)  a.  It is easy to cut this bread.
     b.  *It is whiter to wash with this soap powder.

However, there are two significant similarities between (1a) and (1b): the verb has been intransitivized and an evaluative element is obligatory:

(2)  a.  *This bread cuts (cf. This bread cuts easily/well).
     b.  *This soap powder washes (cf. This soap powder washes well/whiter).
Ruiz de Mendoza & Mairal (2007) have proposed the double metonymy process for action for result (see Figure 4 above) in order to account for the similarities between (1a) and (1b) and also in order to capture the obvious relationship between the two constructions in question here and other cases of quantitative valency reduction, such as the inchoative construction, which is based on the metonymy process for action. Both in (1a) and (1b), just as in inchoatives, we think of an action as if it were a process, which thus has primary focus. The agent and other action frame elements (e.g., the instrument for the inchoative and middle constructions) remain implicit but they are discursively recoverable, as in This bread cuts well if you use a sharp knife, The door closed when he pressed the button, This soap powder washes whiter if you use it with warm water. However, in (1a) and (1b), there is secondary focus on the result of the action, which in (1b) is evaluated explicitly. In (1a), in contrast, it is the process that is assessed explicitly, i.e., the scope of the manner adverb easily is the initial subdomain in the metonymic chain.

It is interesting to note that there are uses of the middle construction that are midway between (1a) and (1b). A case in point is This bread cuts well, where the adverb well assesses the result of the implicit action (not the explicit process). This is evidenced by the impossibility of paraphrasing the sentence in the same way as (1a) above: *It is well to cut this bread. The sentence This bread cuts well highlights the result of the action, just like the characteristic property of instrument construction in (1b). Both assess the ‘result’ part of the metonymy, but while the former bases its assessment on the properties of the object of the action, the latter focuses on the instrument of the action.

In our view, the analysis presented in this section has the clear advantage of emphasizing the characteristics that the middle and characteristic property of instrument constructions share. It also provides us with the groundwork to attain our second
aim, i.e., to show the power of these aspects of CMT for contrastive analysis between languages. We will address this issue in the following section.

4. Contrastive analysis: The case of Spanish reflex passives

The previous section has applied the concepts of high-level representation, conceptual prominence, cognitive constraints, and metonymic chaining to the analysis of the English inchoative, middle, and characteristic property of instrument constructions, all of them within the area of transitivity. In this section, we will examine the power of these theoretical tools to account for the meaning implications of the closest Spanish counterparts of these English constructions. Our account will contrast the two languages in this area of enquiry in an explanatorily adequate way.

4.1 The English inchoative vs. the Spanish reflex (passive) construction

The meaning effects conveyed by the reflex passive construction in Spanish, as illustrated by the sentence *La puerta se abrió* (‘The door itself-opened’), are comparable to those derived from the English inchoative construction. The construction, which makes use of the Spanish (unstressed) pronominal form *se*, has a controversial status and different authors hold different views about the way it has to be treated in grammar. Let us first study some of the proposals for the sake of illustration. Then we shall proceed to contrast them with our own.

Seco (1972) makes a two-fold distinction between the reflex passive (transitive verb and non-human patient) and *se-impersonal sentences* (transitive/intransitive verbs, human patients):

(3) *Se alquila piso.*  
**refl-pass rent.prs.3sg flat.m.sg**  
‘flat for rent.’

(4) *Se vive bien aquí.*  
**refl live.prs.3sg well here**  
‘One can live here well.’

According to Gili Gaya (1961), the scope of the reflex passive is narrower since it only covers cases where there is no human agent, as shown in (5):

(5) *La pared se hundió.*  
**def.f.sg wall.f refl sink.pst.3sg**  
‘The wall sank.’

Alarcos (1980, 1994) has offered a radically different view. He contends that the so-called reflex passive has no inherent feature that makes it essentially different from other
reflexive uses. According to him, the reflex passive is merely an instance of the reflexive construction (note that the reflexive pronoun for the third person in Spanish is se):

(6) \[ \text{Juan} \_ \_ \_ \text{se} \_ \_ \_ \text{peinó}. \]
\[ \text{Juan} \_ \_ \_ \text{himself} \_ \_ \_ \text{comb.pst.3sg} \]
'John combed his hair.'

(7) \[ \text{La puerta} \_ \_ \_ \text{se} \_ \_ \_ \text{abrió}. \]
\[ \text{def.f.sg} \_ \_ \_ \text{door} \_ \_ \_ \text{itself} \_ \_ \_ \text{open.pst.3sg} \]
'The door opened.'

Alarcos states that se in (7) is not a clitic but a reflexive pronoun that is co-referential with the subject, which makes the reflexive sentence in (6) and the reflex passive in (7) comparable instances of the same phenomenon. This proposal has the advantage – over previous ones – of bringing together under the same descriptive label apparently disparate constructions. Additionally, it serves as a fitting starting point for our own proposal, as will be seen below.

Within Cognitive Linguistics, Maldonado (1999) has stated that se constructions do not possess the features which characterize the passive voice and that these cases are instantiations of what he calls end-point prominence constructions. The following features are attributed to the passive voice: (a) it requires a high degree of dynamism, (b) it involves the existence of an intentional agent and (c) it does not cause the simplification of an action but a shift of prominence. In contrast, the end-point prominence construction displays the following features: (a) the focus is on its end-point as a result of simplifying the action and (b) the agent can only be schematically represented. Sentences like (7), unlike true passives as in (9), lend further support to this view since they do not usually take an agentive complement:

(8) \[ *\text{Se abrió la puerta por Juan}. \]
\[ \text{itself} \_ \_ \_ \text{open.pst.3sg} \_ \_ \_ \text{door} \_ \_ \_ \text{by John} \]
'The door opened by John.'

(9) \[ \text{La puerta fue abierta por Juan}. \]
\[ \text{def.f.sg} \_ \_ \_ \text{door} \_ \_ \_ \text{be.pass.pst.3sg} \_ \_ \_ \text{open.pst.ptcp} \_ \_ \_ \text{by John} \]
'The door was opened by John.'

The oddity of (8) is related to the fact that la puerta already has an agentive quality (is seen as the imaginary doer of the action), which makes the agentive complement redundant. But “la puerta” is actually the affected entity. The reason why the same conceptual item has two different roles is to be found in the underlying metonymy (unreal) reflexive action for result for (actual) non-reflexive action (see Figure 5). This metonymy captures the essential features of the 'end-point prominence' construction:
1. There is a decrease of the level of control that is matched by the exclusion of the real agent in the initial source domain of the double metonymy.

2. End-point prominence constructions place major emphasis on the change of state. Similarly, the metonymy gives prominence to the final stage of the action that has been selected to construct the initial source domain.

3. In end-point prominence constructions the inductive force is schematically represented; in the metonymy the agent is only retrieved through the double metonymic mechanism (i.e., the agent remains as implicit conceptual material).

![Diagram](image)

*Figure 5. (Unreal) reflexive action for result for (Actual) non-reflexive action.*

It may be noted that Maldonado’s account places a lot of emphasis on cognitive prominence issues. However, no distinction is made between primary and secondary focus. We believe that introducing this distinction is a useful way to better understand a relevant part of the semantic import of expressions based on the reflex passive. Thus, in *Se abrió la puerta*, the initial matrix domain (i.e., the unreal reflexive action of the door opening itself) has primary focus, while the resultative target (the idea that the door is open) carries secondary focus through highlighting. The final matrix domain, which is accessed by domain expansion, has no conceptual prominence. This explanation is consonant with Maldonado’s account but adds to it the insight that both the reflexive action and the result have different forms of prominence. Note that unless we highlight the resultative target to put it on an equal footing with the reflexive action, we will
incorrectly construe the event as non-telic (i.e., unfinished). This way of understanding the cognitive process underlying the reflex passive allows us to account for simple reasoning schemas such as the following one:

(10) The door opened (itself) > Somebody (or some force) opened the door > The door is open.

What is more, highlighting the resultative element makes it an appropriate element to further map onto the expanded real action matrix. Recall that for a source-in-target metonymy to take place, the source needs to be conceptually prominent, either on the basis of a default procedure (as in simple metonymies, where it is the linguistic construction that gives the characterization its degree of centrality) or by a non-linguistic, therefore secondary procedure involving highlighting.

The double metonymy we postulate responds to the requirements of the Extended Invariance, Correlation, and Mapping Enforcement Principles. First, without the activity of the Mapping Enforcement Principle, we would lose the relevant idea that there is an implicit agent. Then, the two other principles co-operate to preserve the overall structural configuration of the action frame while selecting the resultative element as the best potential source domain to afford access to the non-reflexive (real) action frame where someone or some force opens the door.

4.2 The English internal attribute construction vs. the Spanish evaluative reflex construction

Take the following examples:

(11) a. *El pan integral se corta fácilmente.*
    
    def.m.sg bread.m.sg wholemeal refl cut.prs.3sg easily
    ‘Wholemeal bread cuts easily.’

    b. *Estas ropas se lavan bien.*
    
    these.f clothes.f refl wash.prs.3 well
    ‘These clothes wash well.’

Examples (11a) and (11b) have traditionally been considered instantiations of the reflex passive. In fact, they are not thought to differ from expression (7) (*La puerta se abrió*). However, (11a) and (11b) place emphasis on the result of the action, although each in a slightly different way. Note that (11a) assesses the process of cutting while (11b) assesses the result. That this is so is captured by the impossibility of paraphrasing (11b) in the same way as (11a):

(11) a’. *Es fácil cortar el pan integral.*
    
    be.prs.3sg easy cut.inf def.m.sg bread.m.sg wholemeal
    ‘It is easy to cut wholemeal bread.’
We will address the difference in terms of multiple metonymic chaining (i.e., triple versus double metonymy) below. But first consider the way Maldonado (1999) treats these constructions. According to this scholar, examples like (11a) and (11b) are cases of the internal attribute construction, which is characterized by the following features:

1. There exists an implicit agent that carries out the action.
2. The result of the action is determined by the intrinsic features of the affected entity rather than by those characteristics of the agent.
3. A modal adverb follows the action. This adverb expresses the degree of difficulty inherent in the action to be performed.

On the basis of Maldonado’s analysis, we may regard the internal attribute construction as instantiating the metonymy \((\text{UNREAL REFLEXIVE}) \ \text{ACTION FOR} \ (\text{ASSESSED}) \ \text{PROCESS FOR RESULT}\) (see Figure 6), whose shared ‘result’ component (a highlighted element of the second source domain) reflects the greater emphasis of the construction on the result of the action, with its second matrix domain reflecting the implicit nature of the agent.

Figure 6. (Unreal) reflexive action for (Assessed) process for result.

However, the situation is a bit more complex. First, we prefer to use the label \(\text{evaluative reflex passive}\) construction, which, in our view, captures the commonalities and contrasts with the Spanish reflex passive, on the one hand, and the English middle construction (cf. Levin 1993), which we will rename the \(\text{middle evaluative}\)
construction, on the other. Second, we need to account for the difference between (11a) and (11b). We believe that this difference resides in the activity of the evaluative ingredient of the construction. In the case of (11a) it is the process of ‘getting cut’ that is assessed, while in (11b) it is the result that is assessed. We thus need to postulate two different metonymic processes that have relevant core structure in common: **unreal (reflexive) action for (assessed) process for result for actual (non reflexive) action**, for (11a) (see Figure 7); and **unreal (reflexive) action for (assessed) result for actual (non reflexive) action**, for (11b) (see Figure 8).

The metonymic chains that we postulate allow us to understand the similarities and differences between (11a) and (11b) as cases of the evaluative reflex passive construction, and between these two examples and examples of the reflex passive. Thus, (11b) shares with the reflex passive the focus on both the unreal reflexive action and the result of such an action, the difference being that in (11b) the resultative element is explicitly assessed. (11a) shares with the reflex passive most of its basic structure, but it requires an additional intermediate mapping whereby the (unreal) action is seen as an assessed process, which is linguistically cued to receive primary prominence (by the evaluative adverb). The assessed process is thus ready for a second metonymic shift that places secondary prominence on the resultative element, which in this process becomes available for a final metonymic mapping by domain expansion to the actual action matrix domain. The similarities and differences are captured by figures 7 and 8 below.

![Diagram](image-url)

**Figure 7.** (Unreal) reflexive action for (Assessed) process for result for (Actual) non-reflexive action.
Obviously, as with the reflex passive examples, the Mapping Enforcement Principle underlies the full range of metonymic shifts in an attempt to ensure that the two constructional variants are feasible. The Extended Invariance and Correlation Principles, in their turn, allow for the correct selection of source and target correspondences. For example, the Correlation Principle determines that in the case of (11a) and (11b) the evaluative adverbs may not be dropped without creating an important oddity (cf. *El pan integral se corta ‘Wholemeal bread refl-cuts’; *Estas ropas se lavan ‘These clothes refl-wash’). Thus, in (11a) the adverb cues an assessed process that is compatible with a construal of the overall event where the process figures prominently (through highlighting) and the agent of the actual action is backgrounded. In (11b) the emphasis is on the result of the action, which is also compatible with the same event-structure construal. Note that, without the adverbs, we would tend to interpret the sentence as an ordinary reflex passive. This interpretation would require us to conceive of non-assessed actions like cutting and washing without an agent, which is obviously more difficult than with ‘opening’ or ‘closing’ for which we may have an invisible agent. So, in both of our examples of the evaluative reflex passive the assessed element supplies the best possible source for the double or triple metonymic shift **UNREAL (REFLEXIVE) ACTION** for **(ASSESSED) RESULT** for **(ACTUAL NON-REFLEXIVE) ACTION** to take place.

Figure 8. (Unreal) reflexive action for (Assessed) result for (Actual) non-reflexive action.
4.3 Instrument-subject evaluative constructions in Spanish and English

Finally, we will briefly consider non-reflexive instrument-subject constructions where the instrument is evaluated. These constructions share features with the other evaluative constructions studied in section 4.2. Consider the examples in (12):

   this.m.sg  knife.m.sg  cut.prs.3sg  better
   ‘This knife cuts better.’

   b. *Este detergente lava más blanco.
   this.m.sg  soap.powder.m.sg  wash.prs.3sg  more white.m.sg
   ‘This soap powder washes whiter.’

Sentences (12a) and (12b), where there is no reflexive pronoun, are realizations of the metonymy process for action for (assessed) result (see Figure 9). These sentences parallel realizations of the middle construction in English where the instrument of the action takes the subject position thus giving it a place of privilege in the clause (example (1b) in Section 3.2 above). Spanish seems to be reluctant to impose valency reduction of the second argument position (thus giving rise to se-reflexive constructions to express inchoative meaning; cf. La puerta se abrió ‘The door itself opened’ vs. *La puerta abrió ‘*The door opened’). But in the case of the instrument-subject construction the use of the reflexive se is ruled out for two reasons: first, the second argument position is optional; second, unlike what is the case with reflex passives, the reflexive pronominal form could not possibly be co-referential with the subject (*Este cuchillo se corta mejor ‘This knife itself cuts better’) since the instrument may not be conceived as acting on itself.

Figure 9. Process for action for (Assessed) result.
4.4 Metonymy and contrasts

The metonymic processes for the sentences in (11) and in (12) capture the similarities and differences in meaning between the two constructions in Spanish. Thus, one point of similarity between (11) and (12) is the focus on the result of the action, an element which is highlighted in both metonyms. A crucial difference, however, is the fact that the instrument-subject evaluative construction has primary or default prominence of the initial source domain (a process), which is not the case in the se-evaluative construction (where only the result element has prominence through highlighting).

In turn, the metonymic processes underlying English so-called inchoative and middle constructions, if contrasted with the metonymic processes underlying the corresponding Spanish realizational patterns, also reveal essential similarities and differences in meaning:

1. The English inchoative construction finds metonymic support in the process for action metonymy, and the middle construction in the process for action for (assessed) result metonymy. In Spanish, the corresponding structures respond to the conceptual requirements of (unreal) reflexive action for result for (actual) non-reflexive action, for the English inchoative, the (unreal) reflexive action for result, for the English middle construction, and the process for action for (assessed) result, for the related characteristic property of instrument construction.

2. The English inchoative and its Spanish counterpart differ substantially since in Spanish the unreal reflexive action receives primary focus and the result of the action has secondary focus (i.e., is highlighted). They coincide, however, in suggesting actual action by way of implication. The (evaluative) English middle construction coincides with the Spanish subject-instrument evaluative, but the standard inchoative differs substantially from the Spanish se-evaluative, though both share an emphasis on the resultative ingredient. This difference is captured by the contrast between primary focus in the Spanish and English constructions: the former receives primary prominence in the (unreal) reflexive action component, while the latter has primary focus on the process component.

The selection of source domains in both the English and the Spanish examples is carried out in accordance with the Correlation Principle, i.e., the source is the domain that affords the best possible access to the intended target. However, source domain selection also obeys general syntactic constraints. Thus, the fact that English syntax is prone to valency reduction of second argument positions, while Spanish is not, affects the selection of the metonymic source – and consequently the whole metonymic pattern – in cases where a controlled dynamic event is to be presented as if uncontrolled. In English this requires the intransitivization of a transitive verb, which results in a
non-literal formulation where an action is envisaged as if it were a process. Spanish, which is reluctant to impose such an intransitivization process, uses a different strategy to convey lack of control: it presents the object of the action (or undergoer) as if it were an agent acting upon itself. In both the English and the Spanish strategies, the actual actor remains latent and is to be derived by means of a metonymic operation.

Table 1. Metonymic motivation of some covert-agent constructions in English and Spanish

<table>
<thead>
<tr>
<th>Construction type (English)</th>
<th>Construction type (Spanish)</th>
<th>Metonymic motivation (English)</th>
<th>Metonymic motivation (Spanish)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inchoative (The door opened)</td>
<td>Reflex passive (Se abrió la puerta)</td>
<td>PROCESS FOR ACTION</td>
<td>(UNREAL REFLEXIVE) ACTION FOR RESULT</td>
</tr>
<tr>
<td>Internal attribute (middle evaluative) (This bread cuts easily)</td>
<td>Reflex passive (evaluative) (El pan integral se corta fácilmente)</td>
<td>PROCESS FOR ACTION FOR (ASSESSED) RESULT</td>
<td>(UNREAL REFLEXIVE) ACTION FOR (ASSESSED) PROCESS FOR RESULT</td>
</tr>
<tr>
<td>Characteristic property of instrument (middle subject-instrument evaluative) (This knife cuts better)</td>
<td>Instrument-subject evaluative (Este cuchillo corta mejor)</td>
<td>PROCESS FOR ACTION FOR (ASSESSED) RESULT</td>
<td>PROCESS FOR ACTION FOR (ASSESSED) RESULT</td>
</tr>
</tbody>
</table>

5. Conclusion

This chapter has provided evidence for the claim that it is possible to develop Cognitive Model Theory in a fruitful manner by making use of purely linguistic criteria. Thus, we have explored – on the basis of linguistic data – a number of analytical tools, such as the notions of primary and secondary focus, and three constraints on metaphor and metonymy (the Extended Invariance, Correlation, and Mapping Enforcement Principles), and have discussed their application at the low and high levels of description. We have argued that these analytical tools offer a useful way to deal with similarities and differences among related grammatical phenomena, both within and across languages, in a systematic manner. This thesis has been sustained through the study of some cases of English and Spanish constructions based on high-level metonymy that have similar meaning implications in the two languages. The analysis has revealed that some of the different conceptual strategies in the two languages are the result of general grammatical features that place constraints on conceptual structure and thereby cue different forms of metonymic activation capable of conveying a comparable range of meaning implications. At the same time, it has become clear that
high-level metonymy (including metonymic chains) is a motivating factor for linguistic structure and realization strategies. Understanding the intricacies of such strategies would have been impossible without an adequate understanding of some of the central elements of cognitive modelling.

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Grammatical metonymy in English and Spanish

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Towards a constructionist, usage-based account of secondary predication with *verba dicendi et declarandi* in English and Spanish* 

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To Neil McLaren, who deserves a special place in the University Hall of Fame as a most enthusiastic teacher

Drawing on data extracted from the British National Corpus and the Corpus de Referencia del Español Actual in conjunction with elicitation data from native speakers, this chapter constitutes a first step towards a constructionist, usage-based analysis of secondary predication with *verba dicendi et declarandi* (e.g., *say, declare, decir* 'say', *declarar* 'declare') in English and Spanish. Within this environment (the "declarative subjective-transitive" construction), at least three lower-level (i.e., item-specific) configurations can be posited in the light of coercion via a reflexive pronoun, an imperative form and the passive voice in both languages. While there is a considerable degree of similarity regarding the inventory of matrix verbs as well as the specific combinations attested in these three environments in English and Spanish, the symmetry is nonetheless far from perfect, thus corroborating the language-specific nature of constructions (Croft 2003).

1. Introduction

This chapter is basically concerned with the distribution and semantico-pragmatic import of depictive (i.e., non-resultative) instances of secondary predication (Aarts 1995; *Financial support for the research presented in this paper has been provided by the Spanish Ministry of Science and Innovation, and the ERDF, grants HUM2007–62220, HUM 2004-05947-C02-01/FILO. In addition, this research is part of more wide-ranging work in progress undertaken within the research group “Grupo de Gramática Contrastiva” (PAI HUM 0269). I am most grateful to the editors of this volume as well as to Chris Butler for their extremely valuable suggestions on an earlier version of this chapter. All remaining deficiencies are, of course, entirely my own responsibility.
As a first approximation, this label is taken to refer to a sequence involving an NP (i.e., “me” and me ‘me’ in (1) and (2) respectively) in conjunction with a predicative complement (e.g., “Frankenstein”, el huracán saharaui (‘the Saharawi hurricane’) that encodes a property of the NP in the object slot (XPCOMP henceforth).

Thus, consider, by way of illustration:

(1) They called me a Frankenstein (…) (BNC CH0 1835).

(2) Y en África me llaman el huracán saharaui.

More specifically, according to Aarts (1995: 75), the XPCOMPs reproduced in (1)–(2) qualify as instances of object-related depictive secondary predicates. First, their secondary predicate status can be justified on the following grounds: (i) the NPs “me” and me ‘me’ in (1)–(2) can be analysed as the direct object of call and llamar (‘call’), the NPs in question functioning in turn – from a logico-semantic viewpoint – as the subject of the XPCOMP, and (ii) there is a covert intensive or copular relationship between the NP and the following XPCOMP (i.e., ‘In their opinion, I am a Frankenstein’) (see also Quirk & Greenbaum 1973: 167, among others). Second, the XPCOMPs in (1)–(2) belong to the depictive subtype (or, more exactly, a depictive attribute in Halliday’s terminology), since they characterize the NP in the object slot in relation to the process denoted by the verb, “but as a concomitant, not a result, of the process” (Halliday 1967: 63). Third, the “object-related” status of “a Frankenstein” or el huracán saharaui (‘the Saharawi hurricane’) in (1)–(2) captures the fact that the property in question is attributed to the direct object of the matrix clause (i.e., “me” and me ‘me’).

To round off this preliminary delineation of the construction under examination here, mention must be made of the fact that the XPCOMPs in this configuration are obligatory (or “lexically-selected”, to borrow Demonte & Masullo’s 1999: 2471 terminology) on both syntactic and semantic grounds, as shown among other things by the fact that their omission invariably yields a dramatic meaning change from an evaluative sense (i.e., to consider someone/something (to be) X) to a declarative sense without any evaluation component (i.e., in the case of the predicate call present in (1) and (2) to ask someone/something to come quickly to a particular place by shouting, speaking loudly or even telephoning). Thus, consider (3):

(3) a. They called me ≠ They called me a Frankenstein.

b. Me llaman ≠ Me llaman el huracán saharaui.

‘They are calling me.’ ≠ ‘They call me the Saharawi hurricane.’
In line with the Construction Grammar (CxG henceforth) framework and the Goldbergian strand in particular, where the semantico-pragmatic motivation of grammar is taken to be of paramount importance (Goldberg 1995: 223–224, 2003a: 219, 2006: 38), González García (2003, 2006) treats the cases of secondary predication in (1)–(2) above under the general umbrella of the subjective-transitive construction. For current purposes, the general meaning of this construction can be characterized as follows: the subject/speaker (NP₁) expresses his/her involvement with a given thing or person (NP₂) in a personal, direct and categorical (i.e., forceful) way. The label of the construction is meant to reflect the importance of subjectivity as the overall determinant of the semantico-pragmatic import as well as the distribution of the configurations in (1)–(2) above, while also lending credence to Scheibman’s (2002: 15) contention that “speakers primarily use language subjectively, to express their points of view – not to present unmediated descriptions of the world”. Specifically, the term “subjectivity” should be understood here as referring to “the way in which natural languages, in their structure and normal manner of operation, provide for the locutionary agent’s expression of himself and his own attitudes and beliefs.” (Lyons 1982: 102; see also Stein & Wright 1995 as well as Scheibman 2002: 1–16 for further details on the different definitions proposed for this concept).

The main focus of the present chapter is to argue the case for the existence of a dynamic intersection between constructional polysemy (cf. Goldberg 1995: 73–81) and coercion (Michaelis 2003, 2004) in shaping the semantico-pragmatic hallmarks of secondary predication after *verba dicendi et declarandi* all the way down from general, fully productive configurations to item-specific or lexically-bound ones. Before proceeding further, let us briefly dwell on the notions of constructional polysemy and coercion.

The existence of polysemy fits neatly into the non-classical conception of categorization revolving around prototypes and extensions from those prototypes, rather than objective truth conditions, invoked in cognitively-oriented strands of CxG (e.g., Goldberg 1995, 2003a, b, 2006; Croft 2001, 2003, among others). Moreover, it is agreed that “[p]olysemy is a phenomenon that exposes the multiple relations and connections between syntax, semantics and pragmatics, and between language, cognition and social interaction” (Nerlich & Clarke 2003: 16). In addition, given that CxG sanctions a continuum instead of a strict division between grammar and the lexicon (Goldberg 1995: 31, 2003: 219; Croft 2001: 17 ff, 2003: 54), it then follows that constructions (i.e., form-function pairings), in much the same fashion as lexical items, may well exhibit polysemy effects. Thus, the same form – a word or a

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1. The reader is referred to Taylor (2006) for a review of different approaches to polysemy.
construction – may be associated with different though semantically related senses.\(^2\)

In fact, as Goldberg (1995: 31) explicitly reminds us, “[c]onstructions are *typically*
associating with a family of closely related senses rather than a single, fixed abstract
sense” (emphasis added to the original). Thus, for instance, the ditransitive con-
struction (e.g., “Chris kicked Pat the ball”, Goldberg 1995: 34) qualifies as a case of
constructional polysemy, and from its central sense (i.e., successful transfer of an
object to a recipient, with the referent of the subject agentively causing this transfer),
a number of metaphorical extensions can be established, as detailed in (4):\(^3\)

\[(4)\]
\[\text{a. } \text{‘}X \text{ causes } Y \text{ to receive } Z\text{’ (central sense).} \]
\[\text{Example: Joe gave Sally the ball.}\]
\[\text{b. } \text{Conditions of satisfaction imply ‘}X \text{ causes } Y \text{ to receive } Z\text{’.} \]
\[\text{Example: Joe promised Bob a car.}\]
\[\text{c. } \text{‘}X \text{ enables } Y \text{ to receive } Z\text{’.} \]
\[\text{Example: Joe permitted Chris an apple.}\]
\[\text{d. } \text{‘}X \text{ causes } Y \text{ not to receive } Z\text{’.} \]
\[\text{Example: Joe refused Bob a cookie.}\]
\[\text{e. } \text{‘}X \text{ intends to cause } Y \text{ to receive } Z\text{’.} \]
\[\text{Example: Joe baked Bob a cake.}\]
\[\text{f. } \text{‘}X \text{ acts to cause } Y \text{ to receive } Z \text{ at some future point in time’.} \]
\[\text{Example: Joe bequeathed Bob a fortune.}\]
\[(\text{Taken from Goldberg 1995: 75, emphasis in original})\]

The term coercion, originally due to Pustejovsky (1991), is taken in CxG to refer to
“the phenomenon whereby one unit forces a change in the specification of a unit with
which it combines” (Taylor 2003: 589; see also Michaelis 2003: 265 for a similar defini-
tion). Thus, by way of illustration, consider examples (5) and (6):\(^4\)

\[\text{2. Differences exist, however, among the different formulations of CxG regarding the question whether a global or local version of parsimony should be adopted in the treatment of constructional polysemy. Thus, for instance, Kay (2002a) advocates a relatively more conservative and restrictive view of constructional polysemy than the Goldbergian one invoked here.}\]

\[\text{3. The ditransitive construction is by no means the only example of constructional polysemy. See further Goldberg (1995: 76) for how this notion applies to the caused-motion construction (e.g., “He sneezed the napkin off the table”, Goldberg 1995: 9). In addition, as noted by Croft (2003: 54), further evidence for the motivation of constructional polysemy can be found in e.g., Michaelis & Lambrecht (1996) and Jackendoff (1997).}\]

\[\text{4. From now on the elements subject to coercion effects are represented in bold.}\]
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(5) a. We are content to acknowledge ourselves beings which sense their surroundings like the animals, but with the power of reason to criticize and to guide the senses (BNC CB1 184).

b. #We are content to acknowledge the citizens of the world beings which sense their surroundings like the animals but with the power of reason to criticize and to guide the senses.\footnote{In keeping with the standard practice in the Goldbergian strand of CxG (Goldberg 1995, 2006), the # sign is taken here to mean that the sentence is marginally acceptable (i.e., not altogether acceptable, but possibly OK in an adequate supporting context).}

(6) a. (…) ruég-a-le que los que dec-imos amig-o-s de Dios lo say-PRS.1PL friend-M-PL of God DEF.N SG

sea-mos de veras y a tod-a-s la-s hora-s. be.PRS.SBJV 1PL of truth and at all-F-PL DEF.F-PL HOUR-PL

(CREA, 1986, José María Escrivá Balaguer, Surco)

‘Pray to her that those of us who call ourselves friends of God be truly so and at any time.’

b. *Ruég-a-le para que a es-o-s pray.IMP-2SG-3SG.ACC for that OBJ DIST-M-PL

hombre-s que dec-imos amig-o-s de Dios no les man-PL REL SAY-PRS.1PL friend-M-PL of God NEG 3PL.ACC

falt-e nunca la fe. lack-PRS.SBJV 3SG never DEF.F SG faith

‘Pray to her that those men whom we call friends of God are never found lacking in faith.’

The relevance of coercion in the above examples can be illustrated as follows: The matrix verbs \textit{acknowledge} and \textit{decir} (‘say’) are only felicitous in the secondary predicate frame if coerced via a reflexive pronoun, that is, if the object slot is realized by a reflexive pronoun instead of a full lexical NP. From a CxG perspective, the crucial fact is that the matrix verbs in question, when coerced \textit{via} the reflexive pronoun into the secondary predication frame, are construed as \emph{consider}-type verbs, in consonance with the constructional semantics of the \textit{subjective-transitive} construction (see further section 2 below), thus conveying a personal, categorical judgemental stance on the part of the subject/speaker. In other words, coercion ultimately shows that constructional meaning wins out over the lexical meaning of the matrix verbs in
question and thus, together with constructional polysemy, constitutes very strong support for a constructionist approach.

In the case of *verba dicendi et declarandi*, as we shall have occasion to see at a later stage in this chapter, coercion may occur not only *via* a reflexive pronoun, but also *via* the passive voice or an imperative verb form, as exemplified in (7) and (8) respectively:

(7) a. Informix Software Inc has opened an office in Prague, Czechoslovakia: others *are said* likely to follow in Poland, Hungary and CIS (BNC CTJ 383).

   a’. *Experts say* others likely to follow in Poland, Hungary and CIS.

   b. *La exposición aludía mostraba los* argumentos del desarrollo de una *disciplina tradicionalmente* apegada en exceso al material y al modelo, cuyo énfasis vanguardista, en nuestro siglo, se admite posterior al de la pintura.

   (CREA, ABC Cultural, 15/11/1996: manual de escultura del siglo XX)

   ‘The above-mentioned exhibition showed the arguments for the development of a discipline traditionally excessively attached to the material and to the model, whose avant-garde emphasis in our century is admitted to be posterior to that of painting.’

   b’. *Algunos críticos admiten este modelo posterior al de la pintura.*

   ‘Some critics admit this model to be posterior to that of painting.’

(8) a. *Call* me a fool, *call* me a dreamer –; I was hoping it would all be beautiful (BNC FYV 896).

   a’. *Say/*declare/*state* me a fool, *say/*declare/*state* me a dreamer (…).
b. *Admit-e-me  inocente o imbécil,
               admit-IMP-2SG-1SG.ACC  innocent or imbecile
               admit-e-me  ingenu-o o estúpid-o,
               admit-IMP-2SG-1SG.ACC  naïve-M.SG or stupid-M.SG
               admit-e-me  sentimental o incongruencia del
               admit-IMP-2SG-1SG.ACC  sentimental or incongruity of.DEF.M.SG
               siglo XX.
               century 20
               Admit me innocent or imbecile, admit me naïve or stupid, admit me sentimental
               or incongruous with the twentieth century.

It is my contention that coercion via these three elements emerges as a powerful
mechanism for shaping a number of families of constructional schemas at varying
levels of specificity in the secondary predication frame in English and Spanish. In
other words, the configurations illustrated in (5)–(8) above can be aptly regarded
as lower-level (i.e., item-specific) configurations of the higher-level (i.e., general)
subjective-transitive construction, as exemplified in (1)–(2), among other things
because they all qualify as instances of lexically-selected secondary predicates. How-
ever, while the higher-level configurations in (1)–(2) above are quite regular and
relatively unconstrained, those exemplified in (5)–(8) are highly constrained, their
idiosyncrasies being largely due to coercion. Crucially, a non-monotonic version of
CxG à la Goldberg (1995, 2001, 2003, 2006), by placing the focus on an inheritance
network of constructions can provide a satisfactory account of the ‘special’ (i.e., non-
predictable) properties (including the coercion effects in question) of the lower-level
configurations in question (see the acceptability results in (5)–(8) above), while also
capturing the commonalities with the higher-level construction, especially in relation
to the semantico-pragmatic restrictions exhibited by the XPCOMP s and the NP in the object slot. This, it must be emphasized, is a non-trivial point for constructionist approaches, which place heavy emphasis on the construct-i-con, understood as a massive network of constructions featuring “a highly structured lattice of interrelated information” (Goldberg 1995: 5, 2003: 3).

Furthermore, coercion can be argued to provide independent justification for the need to incorporate categorial information (i.e., the category label of the subject, object and/or XPCOMP) when stating subcategorization (i.e., the number and types of arguments with which a given lexical item co-occurs) and argument linking (i.e., generalizations concerning the relation between semantic role types and overt syntactic expression) (Newmeyer 2003) in the anatomy of constructions. However, while conceding that morphosyntactic information is important, I should like to venture the hypothesis that the explanatory power of the anatomy of a construction can be further maximized if the existing morphosyntactic restrictions are mapped onto relevant semantico-pragmatic restrictions in as delicate a way as possible. Thus, consider, by way of illustration, the acceptability results reproduced in (9)–(10):

(9) Call me a fool/a dreamer/#a plumber/#the man who is right there now, if you like.

(10) Llám-a-me tont-o/ soñador/ #fontanero/ #el hombre que est-á ahí, si quier-es.

‘Call me a fool, a dreamer, a plumber, the man who is right there now, if you like.’

In order to explain the otherwise puzzling acceptability results illustrated in the imperative instances of secondary predication reproduced above, it will not suffice to claim that the XPCOMP must be an NP. A much more robust generalization can be made if we take into account how this morphosyntactic information is mapped onto the

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6. The term “monotonic” is taken here to refer to a constraint-based representational system in which syntactic and semantic information is represented within a single feature structure (in the format of an attribute-value matrix or AVM for short). Crucially, while attributes may be n-ary, each attribute can have at most one value, and what is perhaps more important, within this representational system, any pair of AVMs can be combined to license a particular expression with the proviso that there is no conflict on any attribute (cf. Kay 1997: 124; Fillmore & Petruck 2003: 359, among others). The cases of coercion examined here qualify as cases of conflict and thus cannot be captured under a monotonic representational system of the type invoked in the CxG variant of Fillmore & Kay (1995) and Kay (2002b). However, it must be emphasized that specific scholars affiliated with this strand of CxG such as Laura Michaelis invoke a monotonic, unification-based formalism which shares with the Goldbergian formulation of CxG the acceptance of overrides to account for, say, cases of coercion. The interested reader is referred to Gonzálvez García & Butler (2006) for further details.
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The semantico-pragmatic profile of the XPCOMP. Thus, NPs are allowed in the XPCOMP slot in configurations of this type with the proviso that these encode an evaluative characterization, rather than an identification, by the subject/speaker of the entity/person referred to in the NP in the object slot.

Crucially, evidence from coercion in the secondary predication frame can also be seen to lend further credence to the existence of both verb-class-specific constructions and verb-specific constructions in English and Spanish (Croft 2003). Before proceeding further, a brief exemplification of these two concepts is in order here. In the case of depictive secondary predicates, at least two verb-class-specific constructions are relevant for current purposes, namely, those involving *verba cogitandi* and *dicendi/declarandi*, as in (11)–(12), respectively:7

(11) A.  \[[Sbj consider\_verb Obj XPCOMP]\] [personal, categorical (i.e., forceful), direct evaluation].

   a.  I consider her a model of feminine beauty and virtue (BNC H8A 441).

   b.  *Quer-ía salu-dar-le – me*
       want\_pst\_ipfv.1sg greet\_inf\_2sg.acc 1sg.acc
       *dij-o – porque encuentr-o*
       say\_pst\_pfv.3sg because find\_prs.1sg
       *maravillosa-s sus intervencion-es,*
       wonderful\_pl poss.2sg intervention\_pl
       *son extraordinari-a-s.*
       be\_prs.3pl extraordinary\_f\_pl

      (CREA, 1983, Carlos Fisas, Historias de la Historia)
      ‘I wanted to greet you – he said to me – because I find your interventions wonderful, they are extraordinary.’

(12) B.  \[[Sbj call\_verb Obj XPCOMP]\] [verbalization of the assignment of a property].

   a.  it’s like why do you call him honey? (BNC KPG 5695).

   b.  *Actualmente en Cataluña si dic-es ¡Viv-a España!*
       at\_present in Catalonia if say\_prs.2sg live\_sbj.3sg Spain
       *te llam-an fasci-st.*
       2sg.acc call\_prs.3pl fascist

      (CREA, La Vanguardia, 08/04/1994: La hora catalana)
      ‘At present in Catalonia if you say “long live Spain”, they call you a fascist.’

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7. The formalization of the verb-classes reproduced above is taken from Croft (2003: 56–57), who in turn follows the format of Langacker (1987).
Verb-specific constructions, on the other hand, as their name suggests, refer to representations which specify each verb that occurs in the construction in question. In the case of the secondary predication frame, two further compelling pieces of evidence can be established for the convenience of positing verb-specific constructions. First, there is no perfect symmetry with respect to which matrix verbs are eligible for occurrence in a given configuration in the two languages under scrutiny here. Thus, consider, by way of illustration, the examples reproduced in (13)–(14):

(13) a. (En un-a reciente entrevista)
   In recent interview
   *Salma Hayek se dice amante de
   Salma Hayek 3SG.REFL say-PRT.3SG lover of
   los perr-o-s.
   DEF.M.PL dog-M.PL
   'In a recent interview, Salma Hayek declares herself fond of dogs.'
   (El Pais, 02/02/2004)

   b. *In a recent interview Salma Hayek says herself fond of dogs.

(14) a. The cause of that sinking must be a peril insured i.e., when a vessel is reported sunk by heavy weather and the weather conditions do not indicate severe storm then the claim should be very carefully scrutinised (BNC HB4 456).

   b. *Un barco se ha inform-ado
   ship PASS AUX.PRT.3SG inform-PRT.
   hund-id-o esta mañana.
   sink-PRT-M.SG PROX morning
   'A ship has been reported sunk this morning.'

Thus, in order to capture the asymmetries illustrated above regarding the potential of specific members of the class of verba dicendi et declarandi to occur in e.g., reflexive and passive instances of secondary predication in English and Spanish, the following verb-specific constructions would need to be posited, as in (15) and (16) respectively:

(15) [[Sbj decir refl.obj XPCOMP]]/(personal, categorical (i.e., forceful) self-evaluation by saying).

(16) [[Sbj be.reported XPCOMP]]/(direct, categorical (i.e., forceful) ascription of a property/state by reporting).

A second piece of evidence in favour of the notion of verb-specific construction concerns frequency and/or productivity. Thus, for instance, passive instances of secondary predication are considerably more frequent with decir (‘say’) in Spanish (cf. (17) below) than with say in English, as in (18):
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(17) **Continúa el misterio de Agustina Izquierdo,** continue-prs.3sg def.m.sg mystery of Agustina Izquierdo
**es-a escritor-a fantasma que se dice hij-a**
dist-f writer-f ghost rel pass say-prs.3sg daughter-f
**de exiliado-s español-es.**
of exiled-pl Spaniard-pl

‘There still remains the mystery of Agustina Izquierdo, that ghost writer who is said to be the daughter of exiled Spaniards.’
(CREA, 1996, ABC Cultural, 08/03/1996: El amor puro)

(18) Informix Software Inc has opened an office in Prague, Czechoslovakia: others are said likely to follow in Poland, Hungary and CIS (BNC CTJ 383).

In particular, the high degree of frequency and therefore also of entrenchment of configurations of the type in (17) is a sufficient condition to posit it as a verb-specific construction in Spanish, as in (19) below, even if some of their syntactic and semantico-pragmatic properties are predictable from the verb-class-specific construction (see further González García 2006).

(19) [[[sbj se dice XPCOMP]]] (endorsement of a forceful general statement by saying).

Finally, this chapter builds on the importance of subjectivity as well as the distinction between characterization (‘a is an attribute or property of x’) and identification (‘a is x’) in particular (Halliday & Matthiessen 2004: 219–229). Specifically, these two notions are shown to be crucial in explaining otherwise perplexing asymmetries shared by all three lower (i.e., imperative, reflexive and passive) configurations of the subjective-transitive construction, regarding both the morphosyntactic realization and the semantico-pragmatic profile of the XPCOMP (i.e., the predicative complement encoding a property or attribution of the entity/person referred to in the NP in the object slot).

The remainder of this chapter is structured as follows: Section 2 outlines the relevance of constructional polysemy for the subjective-transitive construction in English and Spanish. Section 3 is concerned with a constructionist analysis of the three types of coercion observable in the subjective-transitive construction in English and Spanish, *via* (i) a reflexive pronoun in the object slot (see examples (5)–(6), and (13) above), (ii) an imperative verb form (see examples (8)–(10)), and (iii) the passive voice (as in examples (7), (14) and (17)). Finally, section 4 highlights a number of theoretical and descriptive advantages of a constructionist account of grammar drawing on the interaction between constructional polysemy and coercion. The Spanish data utilized in this chapter has been taken from the Corpus de Referencia del Español Actual (CREA henceforth, see further the Real Academia Española website listed in the bibliographical section), with the exception of example (13). The English data has been
extracted from the original edition of the *British National Corpus* (henceforth BNC, see further Burnard 1998 for the source of the examples cited), except for example (30), taken from British component of the International Corpus of English.8

2. **Constructional polysemy and the subjective-transitive construction in English and Spanish**

Gonzálvez García (2003) contends that all depictive instances of secondary predication in English and Spanish (e.g., *Encontré la silla bastante incómoda* ‘I found the chair quite uncomfortable’) can be adequately handled under the rubric of the subjective-transitive construction (the term ‘construction’ being understood as a (learned) form-function pairing, see further Goldberg 1995, 2006), whose general skeletal meaning can be glossed as follows: X (NP₁) expresses a direct, personal and categorical (i.e., forceful) involvement over Y (NP₂ XPCOMP).

The term “subjective” should be primarily understood in the present chapter in at least a threefold sense, as in (a)–(c) below:

a. as referring to the main clause subject/speaker and the degree of involvement implicit in his/her stance towards the proposition encoded in the clause;

b. as being connected with the semantico-pragmatic notion of subjectivity as the expression of speaker’s attitude, viewpoint or beliefs (see further Lyons 1982: 102; Stein & Wright 1995; Scheibman 2002: 1–16, De Smet & Verstraete 2006; *inter alios*);

c. as being connected with evidentiality as in e.g., Chafe & Nichols (1986), in particular with the distinction between direct and ‘hearsay’ evidence, respectively.

Although the three senses of the term “subjective” outlined above are relevant for our purposes here, the notion of subjectivity, as in (ii) above, provides the general background against which the use of the term “subjective” in this chapter should be understood.

Specifically, the subjective-transitive construction can be seen as an instance of constructional polysemy (see e.g., Goldberg 1995: 73–81). In other words, the general constructional meaning of the secondary predication frame, namely, the expression of a direct, personal and categorical (i.e., forceful) stance by the subject/speaker, is modulated by the lexical semantics of matrix verbs belonging to at least four distinct semantic

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8. The reader is referred to Gonzálvez García (2006) for a more detailed account than can be afforded here of the methodology used in the selection and extraction of the data on which this chapter draws.
classes (i.e., verbs of sensory/cognitive perception, calling, volition and preference), thus yielding the four specific constructional senses of the construction listed in (20)–(23):

(20) X (NP₁) expresses a direct, personal, categorical (i.e., forceful) evaluation of Y (NP₂ XPCOMP) (EVALUATIVE SUBJECTIVE-TRANSITIVE CONSTRUCTION).

(21) X (NP₁) expresses a direct, personal, categorical (i.e., forceful) verbalization of Y (NP₂ XPCOMP) (DECLARATIVE SUBJECTIVE-TRANSITIVE CONSTRUCTION).

(22) X (NP₁) exerts a strong, direct/indirect, target-oriented manipulation of Y (NP₂ XPCOMP) (MANIPULATIVE SUBJECTIVE-TRANSITIVE CONSTRUCTION).

(23) X (NP₁) expresses a general preference/choice concerning Y ((NP₂ XPCOMP) in definite, categorical (i.e., forceful) terms (generic subjective-transitive construction).

A necessarily brief characterization of each of these four senses of the subjective-transitive construction in English and Spanish is in order at this stage (see further González García 2003, 2006).

The evaluative subjective-transitive construction obtains with verbs of cognition (i.e., believe, consider, think, find, suppose, know, assume, etc.) and sensory perception (i.e., see) in English and Spanish (i.e., creer (‘believe’), considerar (‘consider’), pensar (‘think’), juzgar (‘judge’), estimar (‘estimate’), encontrar (‘find’), sentir (‘feel’), ver (‘see’), notar (‘feel’), etc.). This sense of the construction serves to convey a categorical (i.e., forceful) rather than tentative assessment regarding the entity or person encoded in the NP in the object slot. In other words, the subject/speaker is fully committed to the truth of the state of affairs expressed in the NP₂ XPCOMP. Moreover, these configurations also imply a direct experience by the subject/speaker of the state of affairs/process encoded in the NP XPCOMP sequence. Finally, configurations of this kind convey an original (i.e., personal) assessment by the subject/speaker of the state of affairs/process in the NP XPCOMP sequence. Thus, consider, by way of illustration, examples (24)–(25):

(24) I found Ika a kind and gentle young man (BNC AMC 1619).
   a. (#but in fact I do not personally think that Ika is kind or gentle at all).
   b. (#although I haven’t actually had any direct experience with him, nor have I met him in person – this is just an inference that I have drawn on the basis of what people say about him).

(25) Esta noche te encuentras más excitante
    y más atractiva que nunca.
    ‘Tonight I find you more exciting and more attractive than ever’
    (CREA, 1986, Oral, Esta noche pedro, 06/06/1986; TVE 1)
a. (#pero personalmente no creo que seas
but personally NEG think-PRS.1SG COMP be. PRS.SBJV-2SG
ni excitante ni atractiva.
nor exciting nor attractive-F
(#‘but I personally do not think that you are exciting or attractive’).

b. (#pero nunca te he conocido ni te he visto).
but never 2SG.ACC aux.1SG meet-PTCP nor 2SG.ACC
aux.1SG meet-PTCP
(#‘but I have never met you or even seen you’).

A direct semantico-pragmatic consequence of the categorical (i.e., forceful) involvement inherent in this construction is the fact that those XPCOMPs with an overwhelmingly characterizing value denoting subjective/evaluative matters of judgement occur more felicitously in the secondary predication frame than those denoting empirically verifiable or neutral matters of fact (Borkin 1973, 1984). In order to exemplify this contrast, consider the examples reproduced in (26):

(26) a. #A Juan lo encontré (un) fontanero.
obj Juan 3SG.ACC find-PST.PFV.1SG INDF.M.SG plumber-M
#‘I found John a plumber.’

b. A Juan lo encontré un fontanero
obj Juan 3SG.ACC find-PST.PFV.1SG INDF.M.SG plumber-M
muy eficiente.
very efficient
‘I found John (to be) a most efficient plumber.’

The acceptability differences reproduced above can be accounted for as follows. Being a plumber is a condition that can be objectively verified and thus falls outside the domains of personal assessment. However, whether one is an efficient plumber or not is indeed a matter of opinion and therefore a state of affairs prone to being construed in subjective, evaluative terms by the subject/speaker, hence its acceptability in the subjective-transitive construction. By the same token, those NPs with an overwhelmingly identifying value which do not lend themselves to a judgmental stance by the subject/speaker are invariably unacceptable in the XPCOMP slot in this construction. A case in point is that of proper nouns which are not likely to be construed in metonymic terms (i.e., as standing for a historical character, a celebrity, and so forth) (see further Williams 1997 for a similar position). Thus, consider the acceptability results reproduced in (27):
a. #I consider him Jack Smith.9
b. *Lo consider-o Juan Martínez.
   3sg.acc consider-prs.1sg Juan Martínez
c. I consider her Cinderella (but she’s not of course Cinderella, what I mean is that she evokes the Cinderella-type of character).

The declarative subjective-transitive construction occurs with verba dicendi et declarandi, such as call, name, label, declare, pronounce, diagnose, etc. in English and llamar (‘call’), denominar (‘label’), decir (‘say’), declarar (‘declare’), etc. in Spanish. Combinations of this type express the (ritualized or non-ritualized) verbalization of the assignment of a property by the main clause subject/speaker to the (human or non-human) entity encoded in the NP in the object slot. In much the same vein as the evaluative subjective-transitive construction, the subject/speaker expresses a direct, personal and categorical (i.e., forceful) stance regarding the entity in the object slot. Thus, consider (28)–(29):

(28) His critics call him a charlatan (BNC AHA 291).
   a. (#but they do not really think he is a charlatan at all).
   b. (#but they do not have any first hand evidence for calling him so).

(29) Los marxista-s ten-ian toda la razón al denomin-ar burguesa-s a la-s democracia-s representativa-s occidental-es.
    (CREA, 1995, PRENSA, LA VANGUARDIA, 30/12/1995: LLUIS FOIE)
    ‘Marxists were completely right to call those representative Western democratic systems bourgeois.’
    a. (#pero ellos no cre-ian de verdad que dicha-s democracia-s fues-en burguesa-s).
    such-pl democracy-pl be.pst.sbjv.ipfv-3pl bourgeois-pl
    (#’but they did not really think that these democratic systems were bourgeois at all’).

9. Note incidentally that some proper nouns may be interpreted subjectively given an adequate supporting context. Thus, for instance, if Jack Smith were some film star, sentence (27)(a) would then be adequate to capture the fact that the person referred to as “him” looked like this Jack Smith.
As in the case of the evaluative-subjective transitive construction, these configurations very often select as XPCOMPps predicate nominals and predicative adjectives encoding the attribution of a value to the entity/person in the object slot by the subject/speaker (e.g., “old-fashioned”, “ordinary”, “selfish”, “a stupid bitch”, ingenuo 'naive', estúpido 'stupid', tonto 'silly', etc.) (cf. Dixon 1977, 1991). The subjective, unambiguous evaluative semantico-pragmatic profile of the XPCOMP in these configurations qualifies as an instance of covert subjectivity on the part of the subject/speaker (cf. Scheibman 2002; also Fernández Leborans 2000). Specifically, within predicate nominals, particularly frequent (90% of the cases) are nicknames and proper names construed in subjective, evaluative terms by the subject/speaker, especially via a comparison or metonymy, as illustrated in (30)–(31) for English and Spanish:

(30) a. And, and my friends call me Sandy (BNC CD8 1096).
   b. The Tsarina Catherine … some call her the Great, like Peter (BNC ALL 69).

(31) a. Me llaman el brujo, me llaman el profeta, me llaman el viejo, macondo, pastor Peralta, me llaman Jacinto.
   b. En Italia lo llaman el Paul Newman de los entrenador-es, obviamente por su belleza.

A common feature of the XPCOMPps reproduced in (30)–(31) is that they all convey an expression of “speaker’s attitude towards what is said” (cf. Traugott 1995: 32), be it through explicit comparisons with a laudatory or pejorative tone – as in (30)(b) and (31)(b) – or through more or less affectionate forms of acceptance, as in (30)(a) and (31)(a).
An important difference, however, between instances of the declarative subjective-transitive construction and the evaluative sense of the construction exemplified in (24)–(26) above concerns the fact that the implicature of the former – but not of the latter – can be conversationally suspended in both English and Spanish. Thus consider examples (32)–(33):

(32) \textit{Me llam-ó Frankenstein, pero en realidad no want-pst.ipfv.3sg say-inf dist.n}
\textit{quer-ía dec-ir eso.}

'\textit{She called me a Frankenstein but in actual fact she did not mean it.}'

(33) \textit{Me consider-aban un Frankenstein, pero en reality neg pens-aban eso de mí.}
\textit{Frankenstein but in reality neg think-pst.ipfv.3sg dist of 1sg.obl}

'\textit{They considered me a Frankenstein, but in actual fact they did not really think of me that way.}'

The cancellation of the conversational implicature is feasible with verba dicendi et declarandi in the secondary predication frame, among other things because one may, on a particular occasion (e.g., out of anger), attribute a property to a person or a thing without being fully committed to it or even meaning it. However, verba cogitandi encode a relatively more permanent stance within the universe of perceptions of the subject/speaker which cannot be provisionally modified on a specific situation.

The manipulative subjective-transitive construction obtains with a number of verbs of volition and causation in English (e.g., \textit{want}, \textit{order}, \textit{need}, \textit{require}, etc.) and Spanish (\textit{querer} (‘want’), \textit{ordenar} (‘order’), \textit{necesitar} (‘need’), etc.). These configurations convey a strong, direct/indirect, categorical, target-oriented manipulation by the main clause subject/speaker of the process/action/state of affairs contained in the complement clause.\textsuperscript{10} This furnishes a ready explanation as to why only those XPs denoting controllable properties by the subject/speaker can felicitously occur in this frame (cf. (34) below). Pragmatically speaking, these are equivalent to imperatives (Borkin 1973: 52 ff, Gramley 1987: 17 ff), and may therefore yield an unacceptable result if cancelled (cf. example (34)(a) below). An additional distinctive

\textsuperscript{10.} The feature target-oriented is meant to capture the fact observed by Langacker (2000: 348) that with verbs of causation, volition, preference, and some verbs of official communication with a performative use (e.g., \textit{pronounce}, \textit{name}, etc.), the entity encoded in the NP occupying the object slot is the target of communication, since it is subject to the control of the main clause subject. In the case of verba cogitandi, by contrast, the conceptualizer assumes some stance or attitude (rather than exerting some control or manipulation) over the entity encoded in the intervening nominal.
pragmatic hallmark of these configurations is that the property encoded in the XPCOMP must be goal-directed, that is, it should have some positive or negative import for the subject/speaker (cf. (36)).

(34) I want him back here (BNC KP5 1933).
   a. (#but it’s OK if he decides to take the day off).

(35) a. Tod-o-s los padre-s que sient-en la carencia de un hij-o y decid-en adopt-ar uno lo quier-en recién
   adopt-INF one 3SG.ACC.M want-PRS.3PL recently
   nacid-o, san-o, guap-o y sonrosad-o. born-M healthy-M cute-M and rosy-M
   ‘All those parents who feel the lack of a son and decide to adopt one want him newly born, healthy, cute and with rosy cheeks.’
   (CREA CORPUS 1988; INFORME SEMANAL, 11/06/88, TVE 1)
   b. #Tod-o-s los padres que decid-en adopt-ar un hij-o lo quier-en abogad-o/
      INDF.M.SG son-M 3SG.ACC.M want-PRS.3PL lawyer-M
      suspicaz/ trabajador/ timid-o
      ‘All those parents who decide to adopt a son want him a lawyer/suspicious/hard-working/shy.’

(36) Bosses/#Students/#Teachers want employees weak (Example adapted from Andersson 1985: 108).

Finally, the generic subjective-transitive construction, as its name suggests, conveys a general preference/choice on the part of the subject/speaker in definite, categorical terms, as in (37)–(38):

(37) They are wishing me dead (ICE-GB, W2F-006–215).
   a. (#but, of course, they wouldn’t want me dead).

(38) El vino nos gust-a blanco y en su punto, [y] la carne poco hech-a.
   point and DEF.F.SG meat little do.PTCP-F
   (CREA, JAVIER PÉREZ DE SILVA, PEDRO JiméNEZ HERVÁS, LA TELEVISIÓN CONTADA CON SENCILLEZ)
   ‘We like the wine white and cool and the meat rare.’
Unlike the **manipulative subjective-transitive** construction, these configurations do not have the pragmatic force of directives, at least from a conventional point of view, as illustrated in (37)(a) above. However, from a conversational perspective, they can be interpreted as such, given an adequate supporting context. Thus, for instance, example (38) may well be intended by, say, dissatisfied customers as a complaint to the waiter so that s/he will serve them the wine cool and the meat rare.

As the reader will have observed, the four constructional senses of the **subjective-transitive construction** are in actual fact the basis of what Croft (2003: 56–59) calls “verb-class-specific constructions” (or Boas 2003 refers to as ‘miniconstructions’). For current purposes, these constructions can be spelled out for English and Spanish as in (39):

\[
(39) \quad \begin{align*}
A. & \quad [\text{Sbj Consider/Considerar.verb Obj XPCOMP}] \quad \text{[personal, categorical (i.e., forceful), direct evaluation].} \\
B. & \quad [\text{Sbj Call/Llamar.verb Obj XPCOMP}] \quad \text{[personal, categorical (i.e., forceful), direct verbalization].} \\
C. & \quad [\text{Sbj Want/Querer.verb Obj XPCOMP}] \quad \text{[strong, direct/indirect, target-oriented manipulation].} \\
D. & \quad [\text{Sbj Like/Gustar.verb Obj XPCOMP}] \quad \text{[direct, personal, categorical preference].}
\end{align*}
\]

Given that the focus of this chapter is on **verba dicendi et declarandi**, it is around the sense of the construction that combines with these matrix verbs, namely, the **declarative subjective-transitive construction**, that the remainder of this chapter will revolve. Before proceeding to an examination of a number of item-specific instances of secondary predication involving **verba dicendi et declarandi**, a necessarily brief observation is in order regarding the desirability of mapping in as delicate a way as possible categorical (i.e., morphosyntactic) information onto semantico-pragmatic information in the anatomy of a construction.

Building on the acceptability differences regarding the semantico-pragmatic profile of the evaluative- and declarative-subjective transitive configurations illustrated in (9)–(10), (26)–(27), (30)–(31) above, a robust generalization which emerges is that only those categories which can be somehow construed in subjective terms (i.e., as conveying an attitude or personal stance on the part of the subject/speaker), most notably predicate nominals (e.g., “a dreamer”/*un soñador*) and predicate adjectives (e.g., “old-fashioned”/*anticuado*) encoding an evaluative characterization are felicitous in the XPCOMP slot. In addition, those proper names likely to occur as nicknames (e.g., “Sandy”/*Kiko*) or to receive a metonymic interpretation (e.g., “the new Marlon Brando”/*el Paul Newman de los entrenadores*) are also deemed acceptable in this slot, since they express a subjective stance by the subject/speaker. By the same token, PPs with a literal locative meaning (e.g., “in London”/*en Londres*), -ing participles with a prominent verbal and/or dynamic character (e.g., “taking an exam
tomorrow”/examinándose mañana), adverbial phrases (e.g., “there”/allí) and truly identifying NPs without a subjective construal of any kind (e.g., “the man who is right there now”/el hombre que está justo ahí ahora) are systematically ruled out in this slot in both English and Spanish. By way of illustration, consider the acceptability results illustrated in (40) for English:

(40)  
a.  *I call her in London.  
(pp with a literal meaning as XPCOMP)  
b.  *I call you taking an exam tomorrow.  
(dynamic -ing clause as XPCOMP)  
c.  #I call him Martin Peterson.11  
(identifying proper noun as XPCOMP)  
d.  *I call him the man who is right there now.  
(identifying NP as XPCOMP)  
e.  I call him Nicky.  
(characterizing proper noun as XPCOMP)  
f.  *I call the problem there.  
(adverbial phrase as XPCOMP)  

An interesting generalization emerging from the examination of the acceptability contrasts reproduced above is that categorial (i.e., morphosyntactic) information alone does not suffice to capture the restrictions exhibited by the XPCOMP in the subjective-transitive construction. Thus, in order to account for the priority of semantico-pragmatic factors in general and subjectivity in particular in determining the acceptability of the XPCOMP, categorial (i.e., morphosyntactic) information needs to be mapped onto semantico-pragmatic information in as delicate a way as possible. This is particularly necessary in the case of NPs, which must be characterizing and evaluative in order to be compatible with the constructional meaning of the secondary predication frame, as described in section 2 above.

3. Coercion within the declarative subjective-transitive construction

Thus far I have been concerned with presenting a fine-grained picture of the ‘regular’ (i.e., fully productive) instances of the subjective-transitive construction as a case of constructional polysemy. However, as Goldberg (2006: 11) reminds us, constructionist approaches aim to account for both generalizations and the idiosyncratic

11. See further footnote 9.
particulars. It is with these “special particulars” of the subjective-transitive construction after *verba dicendi et declarandi*, as these are revealed through coercion, that the remainder of the chapter is concerned.

### 3.1 Some preliminaries regarding coercion

According to Michaelis (2003: 264; 2004), coercion is taken within CxG to be the resolution of a conflict between constructional and lexical denotata. Specifically, in light of the Override Principle, the relevance of coercion to a constructionist approach can be stated as follows: “If a lexical item is semantically incompatible with its syntactic context, the meaning of the lexical item conforms to the meaning of the structure in which it is embedded” (Michaelis 2003: 268). Moreover, it must be emphasized, coercion is essential to those cognitivist and/or constructionist approaches subscribing to the usage-based model (e.g., Cognitive Grammar, Goldberg’s strand of CxG and Croft’s Radical Construction Grammar, *inter alios*, see further Butler & Gonzálvez García 2005; Gonzálvez García & Butler 2006). In particular, Gonzálvez García & Butler (2006: 82–83) suggest that the concept of a usage-based model can be broken down into the following four components: (i) taking usage, synchronic variation and diachronic change as being intimately connected, (ii) having communicative competence, and not just grammatical competence, as a goal, (iii) allowing for redundant generalizations involving (highly) frequent configurations (e.g., I love you/Te amo), even if these are fully compositional and can thus be predicted from higher-level or more general constructions (e.g., the transitive construction), and (iv) making use of extensive real data rather than invented examples (see also Barlow & Kemmer 2000; Bybee & Hopper 2001). Of these four components, feature (iii) is the one that needs to concern us here. These cognitivist and/or constructionist models take very seriously the characterization of the full inventory of item-specific constructions in a given language, with special focus on (highly) frequent ones. They do so in the belief that “lower-level schemas, expressing regularities of only limited scope, may on balance be more essential to language structure than high-level schemas representing the broadest generalizations” (Langacker 2000: 3, emphasis added to the original).

This section is concerned with providing empirical evidence that *verba dicendi et declarandi* in both English and Spanish are subject to three types of coercion via (i) a reflexive pronoun, (ii) an imperative verb form, and (ii) the passive voice, as detailed in 3.2–3.4 below.

### 3.2 Coercion via a reflexive pronoun

Examples (41)–(44) below illustrate a case of coercion via a reflexive pronoun in the secondary predication frame insofar as there is *prima facie* a conflict between the
lexical semantics of the matrix verbs in question and the constructional meaning of
the frame. Specifically, most of these matrix verbs (i.e., PROFESS, CONFESS, RECONOCER
‘acknowledge’), encode the revealing or acceptance of a fact rather than the forming of
an original assessment by the subject/speaker, which explains their systematic unac-
ceptability in the higher-level DECLARATIVE SUBJECTIVE-TRANSITIVE construction
(cf. (41)(b), (42)(b), (43)(b)). However, these matrix verbs may felicitously occur in
this frame with the proviso that the element in the object slot is realized by a reflexive
pronoun, as shown in (41)(a), (42)(a), (43)(a) and (44)(a). The reflexive pronoun then
coerces the lexical semantics of these verbs into the expression of direct, categorical
(i.e., forceful) self-evaluation (cf. (41)(c), (42)(c), (43)(c), and (44)(c)), which explains
their acceptability in the secondary predication frame:

(41)  a.  (…) although Cora-Beth had cried out once in momentary pain, she had
professed herself entirely happy and not in the least guilt-ridden by their
union (BNC FS1 2527).
  b.  *She had professed her sister entirely happy.
  c.  (#but she didn’t really think she was happy at all).

(42)  a.  This prospect is pleasing to me but I have seen Mr Landor and confess
myself alarmed (BNC ADS 877).
  b.  *I confess Mr Candor alarmed.
  c.  (#but he did not really believe that he was alarmed at all).

(43)  a.  (…) se reconoc-e incapaz de
3SG.REFL acknowledge-PRS.3SG incapable of
interes-ar-nos a tod-o-s los demás.
interest-INF-1PL.ACC OBJ all-M-PL DEF.M.PL else
(CREA, 1990, ÁLVARO POMBO, EL METRO DE LATINO IRIDIADO)
‘He acknowledges himself incapable of getting the rest of us interested.’
  b.  *reconoc-e al conferenciante incapaz de
acknowledge-PRS.3SG to.DEF.M.PL lecturer incapable of
interes-ar-nos a tod-o-s los demás.
interest-INF-1PL.ACC OBJ all-M-PL DEF.M.PL else
‘He acknowledges the lecturer incapable of getting the rest of us interested.’
  c.  (#pero realmente no pens-aba que fues-e
but really NEG think-PST.IPFV.3SG COMP PST.IPFV.SBJV-3SG
incapaz de interes-ar-nos a tod-o-s los demás)
incapable of interest-INF-1PL.ACC OBJ all-M-PL DEF.M.PL else.
(‘but he didn’t really think that he was incapable of getting the rest of us
interested.’)
Secondary predication in English and Spanish

The semantics of this lower-level configuration of the subjective-transitive construction can, for current purposes, be characterized as follows:

**The reflexive subjective-transitive construction:** The subject/speaker expresses a (non-cancellable) direct, personal, categorical (i.e., forceful) judgemental stance about himself/herself (see further Gonzálvez García 2007).

Let us briefly deal with each of these features in turn. Since the reflexive pronoun sanctions, by definition, a co-referential relationship between the subject and the entity in the object slot, this inevitably results in the judgmental stance encoded in the XPCOMP being unambiguously the by-product of firsthand evidence by the subject/speaker (i.e., through some kind of introspection). Moreover, the property conveyed by the XPCOMP must somehow convey an original assessment on the part of the subject/speaker, which signifies that those states of affairs not likely to be construed in evaluative terms will yield an unacceptable result in this configuration, as shown in (45):

(45) a. She professes herself happy/*in London/*doing well/#Barbara Smith.

b. Se reconoc-e buen lector/ un
re fl. 3 s g acknowledge - pr s. 3 s g good reader indf. m. sg
Casanova/ " en Londres/ " jug - ando al tenis/
Casanova in London play - ger to. def. m. sg tennis

"Antonio Fernández.

Antonio Fernández [name]

‘He acknowledges himself a good reader/a Casanova/in London/playing tennis/Antonio Fernández.’
The distribution of *verba dicendi et declarandi* which may be coerced into the secondary predication frame *via* a reflexive pronoun in English and Spanish are represented in Tables 1 and 2 below, respectively:

**Table 1. Distribution of English reflexive pronouns in asymmetrical instances of secondary predication in the BNC (listed in alphabetical order)**

<table>
<thead>
<tr>
<th>Verb</th>
<th>Rate %</th>
<th>Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGE</td>
<td>42.8</td>
<td>3</td>
</tr>
<tr>
<td>CONFESSION</td>
<td>100</td>
<td>9</td>
</tr>
<tr>
<td>PROFESSION</td>
<td>100</td>
<td>13</td>
</tr>
</tbody>
</table>

**Table 2. Distribution of Spanish reflexive pronouns in asymmetrical instances of secondary predication in the CREA (listed in alphabetical order)**

<table>
<thead>
<tr>
<th>Verb</th>
<th>Rate %</th>
<th>Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONFESAR</td>
<td>36.2</td>
<td>92</td>
</tr>
<tr>
<td>DECIR</td>
<td>100</td>
<td>55</td>
</tr>
<tr>
<td>DECLARAR</td>
<td>97.7</td>
<td>311</td>
</tr>
</tbody>
</table>

A number of important considerations emerge from the examination of the inventory of matrix verbs eligible for occurrence in this construction in English and Spanish. First, it should be noted that not every verbum *dicendi et declarandi* is acceptable in this construction. In fact, the evident restrictions applying to the matrix verbs which may occur here provide supporting evidence for the item-specific nature of this construction, as illustrated in (46):

(46)  a. She professes/*says/*announces/*admits/*states herself happy.

b. Se *dic-e/* anunc-ia/*admit-e/*refl.3SG say-prs.3SG announce-prs.3SG admit-prs.3SG

*pronunci-a/*afirm-a amante de los *perr-o-s.

pronounce-prs.3SG affirm-prs.3SG lover of def.m.pl dog-m-pl

‘He says/announces/admits/pronounces/affirms himself a lover of dogs.’

Second, while all three English *verba dicendi* attested in this asymmetrical reflexive construction (i.e., *acknowledge*, *confess*, *profess*) involve the revealing or acceptance of a state of affairs on the part of the subject/speaker, the Spanish counterparts include in addition to matrix verbs of this kind (i.e., *confesar* ‘confess’, *declarar* ‘declare’) a general *verbum dicendi* such as *decir* (‘say’). A further semantico-pragmatic difference among the matrix verbs attested in this construction is that they encode varying degrees of commitment on the part of the subject/speaker towards the property encoded in the XPCOMP (i.e., the object-related predicative phrase), with some
verbs implying a higher degree of commitment (e.g., 

CONFESEAR ('confess') than others (e.g., DECIR 'say').

Third, while the inventory of matrix verbs occurring in this construction coincides to a high degree in the two languages, the symmetries are far from perfect. Thus, by way of illustration, the most productive matrix verb attested in this construction in Spanish (i.e., DECIR 'say') does not find a parallel in the English counterpart, which lends further credence to Croft’s (2003) contention that argument structure is by and large both language-specific and construction-specific.

At a higher degree of delicacy, the most productive combinations of this lower-level configuration after the verbs under scrutiny here are reproduced in Table 3 below:

**Table 3. Distribution of most frequent collocates in the asymmetrical reflexive subjective-transitive construction in English and Spanish in the BNC and the CREA (listed in alphabetical order)**

<table>
<thead>
<tr>
<th>Verb</th>
<th>Combination</th>
<th>Rate %</th>
<th>Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONFESEAR ('ACKNOWLEDGE')</td>
<td>Confesarse culpable</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>'to acknowledge oneself guilty'</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Confesarse autor de algo (e.g., crimen, fraude, muerte)</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>'to acknowledge oneself the perpetrator of X (e.g., a crime, fraud, murder)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>DECIR ('DECLARE/CALL')</td>
<td>Decirse dispuesto a hacer algo</td>
<td>55.55</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>'to declare oneself willing to do something'</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Decirse católico-a</td>
<td>55.55</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>'to call oneself a Catholic'</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>DECLARAR ('PROFESS')</td>
<td>Declararse dispuesto a hacer algo</td>
<td>59.45</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>'to profess oneself willing to do something'</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Declararse en huelga</td>
<td>40.54</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>'to declare oneself on strike'</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>PROFESS</td>
<td>Profess oneself satisfied with X</td>
<td>60</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Profess oneself pleased with X</td>
<td>40</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>RECONOCER ('ACKNOWLEDGE')</td>
<td>Reconocerse incapaz de X</td>
<td>100</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>'to acknowledge oneself incapable of X'</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
The inventories of specific combinations of matrix verbs and specific XPCOMPs in the two languages reveal even more striking differences. The properties or states encoded in the XPCOMPs in Spanish may have a positive (e.g., *católico* ‘Catholic’) or negative import (*autor de algo* ‘the agent of X, i.e., a crime, fraud, murder’), while the English combinations attested in our data invariably convey a positive value (e.g., “satisfied”, “pleased”). In addition, some of the collocates attested in our data are more flexible with respect to the choice of the matrix verb than others, which are lexically-bound, as illustrated in (47)(a)–(b), respectively:

(47) a. \textit{dec-ir-se}/ \textit{declar-ar-se}/ \textit{confes-ar-se/}
\textit{say-INF-REFL} \textit{declare-INF-REFL} \textit{confess-INF-REFL}
\textit{reconoc-er-se} \textit{dispuesto a hac-er algo}
acknowledge-INF-REFL willing to do-INF something
‘to say/profess/acknowledge oneself willing to do something’

b. \textit{declar-ar-se}/ \textit{*dec-ir-se}/ \textit{#confes-ar-se/}
\textit{declare-INF-REFL} \textit{say-INF-REFL} \textit{confess-INF-REFL}
\textit{reconoc-er-se} \textit{en huelga}
acknowledge-INF-REFL in strike
‘to declare/say/profess/acknowledge oneself on strike’

The frequency of the collocates reproduced in Table 3 may at least in part be explained in terms of subjectivity, and in particular in relation to “the kind of things human beings talk about and the way they choose to structure their communications” (Bybee 2003: 622).

3.3 Coercion via the imperative

A second type of coercion observable in the secondary predication frame in both English and Spanish is that activated by an imperative form. Most \textit{verba cogitandi} as well as \textit{verba dicendi/declarandi}, when used in the secondary predication frame to express judgement or evaluation on the part of the subject/speaker, disallow or resist a dynamic interpretation, which explains their incompatibility with imperative verb forms (cf. (48) (a)–(d) below). By contrast, their primary predication counterparts, which encode a pure process of cognition or saying with no evaluation on the part of the subject/speaker, are perfectly acceptable in the imperative, as illustrated in (49)(a)–(f):

(48) a. \textit{#Think your brother fortunate.}
b. \textit{#Believe this the cause of the problem.}
c. \textit{#Call your mother regional.}
d. \textit{#Encuentra esta novela un obra maestra.}
\textit{find.IMP-2SG PROX novel INDF.F.SG work master}
‘Find this novel a masterpiece.’
e. #Cree a tu herman-o un buen escritor.
   think.imp.2sg obj poss.2sg brother-m.sg indef.m.sg good writer
   ‘Think your brother a good writer.’

f. #Llam-a a tu profesor egoísta.
   call.imp.2sg obj poss.2sg teacher selfish
   ‘Call your teacher selfish.’

(49) a. Think about it, Miss Thorne, think about it (BNC AD1 2618).
b. Believe me, I do sympathize (BNC ANY 978).
c. (…) call the police immediately (BNC ARA 395).
d. Tú piéns-a-lo bien, Jean Leroy.
   2sg think.imp-2sg-3sg.acc well Jean Leroy[name]
   (CREA, 1987, Mayra Montero, La trenza de la hermosa luna)
   ‘Think about it carefully, Jean Leroy.’

e. Continú-a en la búsqueda, encuéntr-a-te y cré-e-lo y acépt-a-te
   continue.imp-2sg in def.f.sg search find.imp-2sg.refl and
   descúbr-e-te y una vez hecho esto, discover.imp-2sg-2sg.refl and one time do-ptcp prox.n
   cré-e-lo y acépt-a-te aun believe.imp-2sg-3sg.acc and accept.imp-2sg-2sg.refl even
   cuando no te gust-es.
   when neg 2sg.refl prs.sbjv.2sg
   (CREA, 1994, Mauricio Puerta R, Astrología, un camino para regresar)
   ‘Continue your search, find yourself and discover yourself and once
   you have done this, believe it and accept yourself even if you don’t
   like yourself.’

f. (…) Llam-a a tu amig-o (…).
   call.imp-2sg obj 2sg.poss friend-m.sg
   (CREA, ABC, 18/05/1982: Hoy se entrenarán en Valencia, tras el viaje)
   ‘Call your friend.’

However, a number of verba dicendi et declarandi such as call, llamar (‘call’) and
decir (‘say’) can be coerced into the secondary predication frame via the imperative
form. In this case, coercion obtains because the lexical semantics of the matrix verbs
in question ends up conforming to the imperative secondary frame, thus shifting from
the expression of the ascription of a property involving no control on the part of the
subject/speaker to some sort of invitation or request by the Speaker to the Hearer, as
in (50)–(53):

(50) Call me a fool, call me a dreamer –; I was hoping it would all be beautiful (BNC
FYV 896).
Call it the spirit of the times, call it the public mood, call it peer-group pressure; it is a powerful, often irresistible, influence on the way we behave (BNC AKM 18).

Sí, sí, di-me prostituta, si prostituta
yes yes say.imp.2sg-1sg.acc prostitute, if prostitute,
es la mujer que sient-e.
be.prs.3sg def.f.sg woman rel feel.prs.3sg

(CREA, 1986, MIGUEL MURILLO GÓMEZ, CUSTODIA Y LOS GATOS, TEATRO)
'Ok, fine, call me a prostitute, if a prostitute is a woman who has feelings.'

Llám-a-me cabrón, hij-o puta, mal padre,
call.imp.2sg-1sg.acc motherfucker son-m bitch bad father
beat-o, puerc-o, papá, di-me algo
sanctimonious-m pig-m daddy say.imp.2sg-1sg.acc something
hija, pero di-me-lo
daughter but say.imp.2sg-1sg.dat-3sg.acc

(CREA, 1982, JOSÉ LUIS ALEGRE CUDÓS, MINOTAURO A LA CAZUELA, TEATRO)
'Call me motherfucker, son of a bitch, a bad father, sanctimonious, a pig, daddy, call me whatever, daughter, but say it to me.'

In all the cases above, what motivates the occurrence of these verbs in the secondary predication frame is that the Speaker anticipates, at least in principle, a direct, personal, categorical (i.e., forceful) stance on the part of Hearer either about him/her or a deictic entity (i.e., it/lo) with a topic status in the discourse flow. Thus, consider (54)–(55):

a. Call me a fool, call me a dreamer [You may think me a fool or a dreamer].

b. Llám-a-me inocente o imbécil, llám-a-me
call.imp.2sg-1sg.acc innocent or imbecile call.imp.2sg-1sg.acc
ingenu-o o estúpid-o, llám-a-me sentimental o
naive-m.sg or stupid-m.sg call.imp.2sg-1sg.acc sentimental or
incongruencia del siglo XX, pero es
incongruence of.def.m.sg century 20 but be.prs.3sg
lo que sient-o, (...).
def.n.sg rel feel.prs.1sg

(CREA, 1995, JORDI SIERRA I FABRA, EL REGRESO DE JOHNNY PICKUP, NOVELA)
'Call me innocent or imbecile, call me naive or stupid, call me sentimental or incongruous with the twentieth century, but that's what I feel.' [You may consider me innocent, imbecile, naive, stupid, sentimental or incongruous with the twentieth century].

a. Call me/#my mother/#George Bush/#somebody a fool.

b. Call it/#something/#these/#those the spirit of the times.
c. *Llám-a-me/ #a tu amig-o/ #a alguien inocente.*
   call.IMP-2SG-OBJ.1SG OBJ POSS.2SG friend-M OBJ somebody innocent
   ‘Call me/your friend/somebody innocent.’

d. *Llám-a-lo/ #esa-s cosa-s/ #aquello desidia.*
   call.IMP-2SG-OBJ.1SG DIST-PL thing-PL DIST negligence
   ‘Call it/those things/that negligence.’

Moreover, this lower-level construction involves varying degrees of Speaker commitment towards Hearer (see further Takahashi 1994). Those combinations featuring a nickname in the XPCOMP involve a high degree of Speaker commitment, mainly due to politeness reasons, as shown by their potential to co-occur with ‘please’ or *por favor* (‘please’). By contrast, the other combinations involving a characterization of the entity in the object slot (be it the Speaker or the topical deictic entity) may involve a high or low degree of Speaker commitment. Therefore, depending on the degree of Speaker commitment, the directive forces associated with this construction may range from warnings (high degree of commitment) to instructions or invitations (low degree of commitment). Thus, consider (56):

(56) a. Please call me Harry, except when on duty (BNC HTG 3915).

b. *[Por favor] (...) llám-a-me Paco.*
   For favour call-IMP-OBJ.1SG Paco
   ‘Please call me Paco.’

c. Please don’t call me sentimental.

d. #Please call me a dreamer.

e. *Por favor, no me llam-es ingenu-o.*
   For favour NEG 1SG,ACC call.IMP-2SG naïve-SG
   ‘Please, don’t call me naïve.’

f. #*Por favor, llám-a-me optimista.*
   for favour call.IMP-2SG-1SG,ACC optimistic
   ‘Please call me optimistic.’

The constructional semantics of this lower-level configuration can be established as follows:

**The imperative subjective-transitive construction:** Speaker directs Hearer towards a prospective cognitive mode (ranging from a warning to an invitation or

---

12. The material in brackets has been added by the author for the sake of clearer argumentation.
instruction, etc.), anticipating a direct, personal, categorical (i.e., forceful) judgemental stance on the part of Hearer either about Speaker or a deictic entity with a topic status in the discourse flow.

A final observation is in order here regarding the importance of subjectivity in determining the degree of acceptability of the element in the XPCOMP (i.e., the object-related predicate phrase). As in the case of the higher-level declarative subjective-transitive construction, the XPCOMP must encode a judgemental stance on the part of the subject/speaker regarding the entity in the object slot in order to ensure compatibility with the constructional meaning, as is the case with characterizing predicate nominals (e.g., “a fool”, tonto) – including nicknames (e.g., “Pete”, Paco) – and predicate adjectives (e.g., “sentimental”, estúpido ‘stupid’). By contrast, those categories such as PPs (e.g., “in London”/en Londres) and Adverbial Phrases (e.g., “there”/allí) with a literal locative meaning, gerund clauses with dynamic reading (e.g., “wasting my time”/perdiendo mi tiempo) and NPs with an identifying referential value (e.g., “the man who is right there now”/el hombre que está ahí ahora) invariably yield an unacceptable result in this construction. Thus, consider (57):

(57) a. Call me sentimental/a fool/Pete/*in London/*wasting my time/#the man who is right there now/*there.

b. Llám-a-me tont-o/ Pedro/ #en Londres
call.imp-2sg-1sg.acc silly-m pedro in London
#perd-iendo mi tiempo/ el hombre que
waste-ger poss.1sg time def.m.sg man rel
est-á ahí ahora /#allí.
be-prs.3sg over.there now there
‘Call me a fool/Pedro/in London/wasting my time/the man who is right there now/there.’

The distribution of verba dicendi occurring in this lower-level configuration in English and Spanish is reproduced in Table 4 below:

Table 4. Distribution of verba dicendi in the imperative subjective-transitive construction in English and Spanish in the CREA and BNC (listed in descending order of relative frequency)

<table>
<thead>
<tr>
<th>Verb</th>
<th>Rate %</th>
<th>Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLAMAR (‘CALL’)</td>
<td>33.33%</td>
<td>30</td>
</tr>
<tr>
<td>CALL</td>
<td>26.40%</td>
<td>146</td>
</tr>
<tr>
<td>DECIR (‘SAY’)</td>
<td>0.59%</td>
<td>3</td>
</tr>
</tbody>
</table>
As in the case of the asymmetrical reflexive \textit{subjective-transitive} construction, the cross-language coincidence of the matrix verbs eligible for occurrence here is far from perfect. Thus, while both \textit{call} and \textit{llamar} (‘call’) are acceptable here, the Spanish matrix verb \textit{decir} (‘say’) may also occur in this construction, unlike its English counterpart. Therefore, the choice of the matrix verb in this construction is highly constrained in English and to a lesser extent in Spanish, too, as illustrated in (58):

(58)  
\begin{itemize}
  \item[a.] Call/*Say/#Declare/*Announce me old-fashioned if you like.
  \item[b.] \textit{Llám-a-me}/ \textit{Di-me}/ *\textit{Admit-e-me}/
  \textsc{call.\textit{imp-2sg-1sg.\textit{acc}}} \textsc{say.\textit{imp-2sg-1sg.\textit{acc}}} \textsc{admit.\textit{imp-2sg-1sg.\textit{acc}}}
  *\textsc{Reconóc-e-me}/ *\textsc{Acéptame tont-o}
  \textsc{acknowledge.\textit{imp-2sg-1sg.\textit{acc}}} \textsc{accept-\textit{imp-1sg.\textit{acc}}} tont-o
  \textit{si quier-es}.
  \textit{if want-prs.2sg}
  ‘Call/say/admit/acknowledge/accept me silly if you want.’
\end{itemize}

However, unlike the reflexive \textit{subjective-transitive} construction, no specific representative collocates can be discerned from the data examined here. This fact, together with the high degree of fixity of the object slot in this construction, can be taken to suggest treating these configurations as being partially filled in verb-specific constructions with the XPCOMP as an open slot (see further Bybee & Eddington 2006), as in (59):

(59)  
\begin{itemize}
  \item[a.] Call me XPCOMP.
  \item[b.] Call it XPCOMP.
  \item[c.] \textit{Llám-a-me} XPCOMP.
    ‘Call me XPCOMP.’
  \item[d.] \textit{Llám-a-lo} XPCOMP.
    ‘Call it XPCOMP.’
  \item[e.] \textit{Di-me} XPCOMP.
    ‘Say me XPCOMP.’
\end{itemize}

3.4 Coercion \textit{via} the passive voice

A third type of coercion involves passive constructions in the secondary predication frame of the type illustrated in (60)–(63) (see further González García 2006):

(60)  
\begin{itemize}
  \item[a.] Informix Software Inc has opened an office in Prague, Czechoslovakia: others are said likely to follow in Poland, Hungary and CIS (BNC CTJ 383).
  \item[b.] *Informix Software Inc says other offices likely to follow in Poland, Hungary and CIS.
\end{itemize}
(61) a. If any one should think that the women’s earnings are stated too low in these accounts, he will be convinced that they are not, on considering that these women commonly begin the world with an infant, and are mere nurses for ten or twelve years after marriage, being always either with child, or having a child at the breast; (...) (BNC HXC 1159).

b. #If one thinks that John Jefferson states the women’s earnings too low in the statistical account presented in this report, he will be convinced that they are not, (...).

(62) a. Mr John Spencer no era lo que se Mr John Spencer neg be.pst.ipfv.3sg def.n.sg rel pass dic-e un hombre intachable.
say-prs.3sg indef.m.sg man irreproachable
‘Mr John Spencer was not what you might call an irreproachable man.’
(CREA, 1980, ANÓNIMO, LOS TRIPULANTES DE OVNI

b. *Mr John Spencer no es lo que la Mr John Spencer neg be.prs.3sg def.n.sg rel def gente dic-e un hombre intachable.
people say-prs.3sg indef man irreproachable
*‘Mr John Spencer is not what people say an irreproachable man.’

c. #pero la gente en general lo consider-a but def.f.sg people in general 3sg.acc consider-prs.3sg un hombre intachable.
indf.m.sg man irreproachable
‘but people in general consider him an irreproachable man.’

d. #pero yo personalmente lo consider-o un but 1sg personally 3sg.acc consider-prs.1sg indf.m.sg hombre intachable.
man irreproachable
‘But I personally consider him an irreproachable man.’

(63) a. Continúa el misterio de Agustina Izquierdo, continue-prs.3sg def.m.sg mystery of Agustina Izquierdo es-a escritor-a fantasma que se dic-e hij-a dist-f writer-f ghost rel pass say-prs.3sg daughter-f de exiliado-s español-es.
of exiled-pl Spaniard-pl
‘There still remains the mystery of Agustina Izquierdo, that ghost writer who is said to be the daughter of exiled Spaniards.’
(CREA, 1996, ABC CULTURAL, 08/03/1996: EL AMOR PURO)
b. #Continú-a el misterio de Agustina Izquierdo, esa escritora fantasma que algunos dicen hija de exiliados españoles.

‘There still continues the mystery of Agustina Izquierdo, that ghost writer whom some say the daughter of exiled Spaniards.’

The examples reproduced above illustrate a prima facie conflict between the lexical semantics of the matrix verbs in question and the secondary predication frame in which they occur. From a lexical point of view, these verbs (i.e., state, say, and decir (‘say’)) do not encode the idea of judgement or evaluation per se. However, they may be coerced via the passive voice into the orbit of secondary predication, thus conveying a direct, categorical (i.e., forceful) judgemental stance on the part of the subject/speaker. Moreover, it must be emphasized that the acceptability of these verba dicendi in the secondary predication frame is restricted to the passive voice, as shown in (60) (b), (61)(b), (62)(b) and (63)(b).

Before proceeding further, a number of considerations must be made clear regarding the constructional meaning of the passive voice. Instances of the passive with verba dicendi involving non-finite complements of the type in (64) below are taken to be a construction in their own right, namely, the so-called “passive of opinion” (Wierzbicka 1988: 47).

(64) Mary is rumoured/said to be a Mormon.

(Examples taken from Wierzbicka 1988: 47)

Moreover, it is also agreed that while actives highlight the involvement of the subject/speaker towards the content of the clause, passives by contrast de-emphasize such involvement in favour of a semblance of impersonality and/or objectivity. In view of this, it comes as no surprise that the personal involvement inherent in the secondary predication frame in the active voice (cf. the subjective-transitive construction) is replaced in the characterization of passive instances of secondary predication by an impersonal stance. This general characterization also fits in nicely with the observation that se-passives in Spanish are well-suited for the expression of a general statement (see further Fernández Ramírez 1987: 410–429; Sánchez López 2002: 52–53, among others). However, the direct, categorical (i.e., forceful) features associated with the subjective-transitive construction are inherited and thus in the passive present instances of secondary predication. Thus, in the light of such a constructional characterization, the examples reproduced in (60)–(63) above can, under normal circumstances, be interpreted as expressing the speaker’s endorsement of a forceful general
statement and/or judgement about the entity (a person or a thing) encoded in the preverbal NP functioning as the grammatical subject of the passive construction, as illustrated in (62)(c)–(d) above.

With the above observations in mind, the constructional semantics of this configuration can be characterized as follows:

**The impersonal subjective-transitive construction:**

X (NP₁) attributed (Y XPCOMP) by Z (NP₂) in a direct, categorical (i.e., forceful) way.

The distribution of *verba dicendi et declarandi* in this lower-level configuration in English and Spanish is detailed in Tables 5 and 6, respectively, below:

**Table 5. Distribution of *verba dicendi* in the impersonal subjective-transitive construction in English in the BNC (listed in descending order of relative frequency)**

<table>
<thead>
<tr>
<th>Verb</th>
<th>Rate %</th>
<th>Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATE</td>
<td>13.33%</td>
<td>4</td>
</tr>
<tr>
<td>REPORT</td>
<td>3.33%</td>
<td>1</td>
</tr>
<tr>
<td>SAY</td>
<td>3.33%</td>
<td>1</td>
</tr>
<tr>
<td>CONFIRM</td>
<td>3.33%</td>
<td>1</td>
</tr>
</tbody>
</table>

**Table 6. Distribution of *verba dicendi et declarandi* in the impersonal subjective-transitive construction in Spanish in the CREA (listed in descending order of relative frequency)**

<table>
<thead>
<tr>
<th>Verb</th>
<th>Rate %</th>
<th>Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>decir</td>
<td>52.31%</td>
<td>566</td>
</tr>
<tr>
<td>afirmar</td>
<td>0.46%</td>
<td>5</td>
</tr>
<tr>
<td>reconocer</td>
<td>0.38%</td>
<td>3</td>
</tr>
<tr>
<td>anunciar</td>
<td>0.27%</td>
<td>3</td>
</tr>
<tr>
<td>alegar</td>
<td>0.09%</td>
<td>1</td>
</tr>
</tbody>
</table>

The inventories of verbs occurring in this construction in both languages are again far from being identical. Thus, for instance, the English matrix verbs *report* and *confirm* do not find parallels in the corresponding Spanish construction, since *informar* (‘report’) and *confirmar* (‘confirm’) invariably yield an unacceptable result in this construction. By contrast, Spanish allows *reconocer* (‘acknowledge’), *anunciar* (‘announce’) and *alegar* (‘allege’) to occur in this frame, while the corresponding English counterparts are barred from this construction. In order to capture these asymmetries, the corresponding verb-specific constructions would need to be posited in these two languages.
As in the case of the reflexive subjective-transitive construction, some of the verba dicendi eligible for occurrence here may convey the acceptance or revealing of a state of affairs on the part of the speaker (e.g., CONFIRM, INFORM, RECONOCER ‘acknowledge’), while this nuance is absent in the other verba dicendi attested here.

(65)  a. Other conditions are stated/#announced/#affirmed/#alleged different.

b. Mr John Spencer * se dic-e/#afirm-a/ Mr John Spencer pass say-prs.3sg affirm-prs.3sg
#anunci-a/#inform-a/#confirm-a announce-prs.3sg report-prs.3sg confirm-prs.3sg
un hombre intachable.

‘Mr John Spencer is said/affirmed/announced/reported/confirmed an irreproachable man.’

Finally, a necessarily brief observation is in order to illustrate the relevance of subjectivity (i.e., the expression of a judgmental stance on the part of the subject/speaker) in determining which categories may occur in the XPCOMP (i.e., the object-related predicative phrase) in this construction. Thus, characterizing predicate nominals (e.g., “an irreproachable man”, un hombre intachable) and predicate adjectives (e.g., “different”, tenso ‘tense’) are acceptable here. By contrast, those categories such as PPs (e.g., “in London”/en Londres) and Adverbial Phrases (e.g., “there”/allí) with a literal locative meaning, gerund clauses with dynamic reading (e.g., “living in the USA”/viviendo en EEUU) and NPs with an identifying referential value (e.g., “the man who is right there now”/el hombre que está ahí ahora), including also proper names of all kinds (e.g., “Pete” – Pedro), invariably yield an unacceptable result in this construction, as illustrated in (66):

(66)  Es-a escritor-a fantasma se dic-e hij-a de
dist-f writer-f ghost pass say-prs.3sg daughter-f of
exiliado-s/# viv-iendo en EEUU/# en Londres/
exiled-pl live-ger in USA in London
#allí/ *Agustina Izquierdo.
there Agustina Izquierdo[name]

‘That ghost writer is said daughter of exiled Spaniards/living in the USA/in London/there/Agustina Izquierdo.’

With the microscopic view of the three lower-level (i.e., item-specific) constructions in the secondary predication frame in English and Spanish in mind, a number of interesting generalizations can be seen to emerge. First, coercion interacts in a number of non-trivial ways with constructional polysemy in shaping a considerable number of
lower-level (i.e., item-specific) configurations, thus being an indispensable construct
in shaping the construct-i-con, understood as a massive network of constructions of
varying degrees of complexity and/or idiomaticity. Thus, within the constructional
sense of the subjective-transitive construction that combines with verba dicendi et
declarandi in English and Spanish, namely, the declarative subjective-transitive
construction, at least three lower-level (i.e., item-specific) constructions can be posited,
namely, the reflexive subjective-transitive, imperative subjective-transitive
and impersonal subjective-transitive constructions. Second, the asymmetrical
instances of these constructions via coercion illustrate how constructional mean-
ing wins out over lexical meaning insofar as a number of verba dicendi et declarandi
which encode no evaluation at all end up conveying a judgmental, direct, categorical
(i.e., forceful) stance on the part of the subject/speaker, in conformity with the inher-ent constructional meaning of the secondary predication frame. Third, subjectivity
(i.e., the expression of speaker’s involvement or attitude) is crucial to explaining the
restrictions on the XPCOMPs all the way down from the general and more productive
declarative subjective-transitive to the more idiosyncratic, item-specific con-
structions analysed in this section. Thus, by acknowledging the existence of an inter-
section between constructional polysemy and coercion via a reflexive pronoun, an
imperative form and the passive voice, it is possible to capture the commonalities
and idiosyncratic particulars of those instances of secondary predication with verba
dicendi et declarandi in English and Spanish. Thus, consider, by way of illustration,
(67) for decir (‘say’):

(67) a. Me dic-en Frankenstein.
   1SG.ACC say-PRS.3PL Frankenstein
   (DECLARATIVE SUBJECTIVE-TRANSITIVE)
   ‘They call me a Frankenstein.’

b. Ese sindicato se dic-e democrátic-o.
   DIST trade.union 3SG.REFL say-PRS.3SG democratic-M
   (REFLEXIVE SUBJECTIVE-TRANSITIVE)
   ‘That trade union calls itself democratic.’

c. Di-me tont-o si quier-es.
   say.IMP.2SG-1SG.ACC silly-M if want-PRS.2SG
   (IMPERATIVE SUBJECTIVE-TRANSITIVE)
   ‘Call me a fool if you like.’

d. Se dic-e hij-a de exiliad-os españoles.
   PASS say-PRS.3SG daughter-F of exiled-M-PL Spaniards
   (IMPERSONAL SUBJECTIVE-TRANSITIVE)
   ‘She is said to be the daughter of exiled Spaniards.’
An overview of the intersection of coercion and constructional polysemy within the declarative subjective-transitive construction is presented in Figure 1 below:

Figure 1. An overview of the intersection between constructional polysemy and coercion in the Declarative Subjective-Transitive construction

4. Some closing remarks

The major findings emerging from the previous discussion can be summarized for current purposes as follows:

i. This chapter has argued for treatment of the secondary predication frame in English and Spanish as a case of constructional polysemy (i.e., the association of a given construction with different though nonetheless semantically related senses). Moreover, within one of the senses of this construction, namely, that which combines with verba dicendi et declarandi, the so-called declarative subjective-transitive construction, three types of lower-level (i.e., item-specific) constructions have been identified under the influence of coercion (i.e., a conflict between the lexical meaning of the matrix verb and the constructions in which these verbs are found) via a reflex-
ive pronoun (the reflexive subjective-transitive construction), the imperative form (the imperative subjective-transitive construction) and the passive voice (the impersonal subjective-transitive construction). The three types of coercion dealt with in this chapter provide unambiguous and compelling evidence for a construction-based view of grammar (Michaelis 2003, 2004) insofar as the matrix verbs eligible for occurrence in these lower-level configurations are invariably construed as consider-type verbs, that is, as conveying a direct, personal, categorical (i.e., forceful) judgmental stance on the part of the subject/speaker, despite the fact that their inherent lexical semantics encodes no evaluation at all.

ii. The symmetry regarding the inventory of verbs coerced via a reflexive pronoun, an imperative form and the passive voice in the secondary predication frame is far from perfect, since there are specific matrix verbs which may occur in a given construction in one language but not in the other. Thus, for instance, decir (‘say’) may occur in the reflexive subjective-transitive, the imperative subjective-transitive and the impersonal subjective-transitive constructions in Spanish, while its English counterpart say occurs only in the impersonal subjective-transitive construction, albeit in a marginal way. There is even greater variation regarding the specific types of collocates (i.e., combinations of specific matrix verbs and XPCOMPs) which are acceptable and/or productive in a given lower-level configuration in the secondary predication frame in English as contrasted with Spanish, thus corroborating the language-specific nature of constructions (Croft 2003). Thus, by way of illustration, within the reflexive subjective-transitive construction, the XCOMP dispuesto a hacer algo (‘willing to do something’) is particularly frequent with decir (‘say’) and declarar (‘profess’) in the secondary predication frame in Spanish, while this collocate is not attested, or even likely to occur, with, say, the English matrix verb profess, which selects predicative phrases such as “satisfied with X” and “pleased with X” instead.

iii. Coercion provides evidence for the view that morphosyntactic information alone does not suffice to explain the restrictions impinging on, for example, the realization of the XCOMP (i.e., the object-related predicate phrase) in the secondary predication frame in English and Spanish. Rather, morphosyntactic information needs to be mapped onto the semantico-pragmatic profile of the XCOMP (i.e., the object-related predicative phrase). Subjectivity in general and the distinction between characterization and identification in particular is crucial in accounting for the existing restrictions on the realization of the XCOMP in all three lower-level configurations of the subjective-transitive construction examined here.

In the preceding pages, I hope to have demonstrated that the interaction between constructional polysemy and coercion not only lends further credence to the descriptive and explanatory adequacy of a constructionist account of grammar but also underscores the priority of semantico-pragmatic considerations over morphosyntactic ones in shaping the inventory of lower-level (i.e., item-specific) configurations in a given language.
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