Cognition and Motivation

Forging an Interdisciplinary Perspective

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Motivation in Language

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INTRODUCTION

Whether natural language is *motivated* by extralinguistic (e.g., cognitive) factors has been a controversial topic since antiquity; it is much older than the emergence of linguistics as a scientific discipline in the nineteenth century. In Plato's dialogue *Cratylus*, Socrates is asked by Hermogenes and Cratylus to act as an umpire on the problem of "truth" or "correctness" in "names", where the last category is rather vague, including proper names, common names, and adjectives (Sedley, 2003, p. 4). Cratylus's position is usually referred to as "naturalism", in contrast to Hermogenes's "conventionalism" (Sedley, 2003, p. 4). Hermogenes describes Cratylus's view, as opposed to his own, in the following terms:

I should explain to you, Socrates, that our friend Cratylus has been arguing about names; he says that they are natural and not conventional; not a portion of the human voice which men agree to use; but that there is a truth or correctness in them, which is the same for Hellenes as for barbarians. . . . I have often talked over this matter, both with Cratylus and others, and cannot convince myself that there is any principle of correctness in names other than convention and agreement. (Hamilton & Cairns, 1961, p. 422)

In modern linguistic terminology, the apparently opposing conceptions of the nature of linguistic signs can be rephrased as follows: Naturalists maintain that the relation between the form of linguistic signs and their content is motivated, whereas conventionalists contend that this relation is purely conventional and arbitrary.[1]

The term "arbitrary" as a property of linguistic signs was probably first coined, or at least widely spread, by the Swiss linguist Ferdinand de Saussure, who is credited with being the founder of structuralist linguistics in Europe. Saussure regards the linguistic sign as a mental entity (*entité psychique*)

linking a content (*signifié* or "signified") with an "acoustic image" (*signifiant* or "signifier") (Saussure, 1995, p. 99). The relation between signifier (form) and signified (content) is considered to be arbitrary (ibid., p. 100). The term *arbitraire* is somewhat misleading because it suggests that language users are free to select any signifier for any signified they intend to express. What Saussure really has in mind can be illustrated with a simple example from his *Cours de linguistique générale*: the association of the content "female sibling" with the linguistic form *sœur* is a convention of the French language, just as it is an arbitrary convention to express the same concept as "sister" in English and *sorella* in Italian. The term "arbitrary" (*arbitraire)* is thus understood as the opposite of "motivated" (*motivé).*

The principle of arbitrariness is certainly part and parcel of Saussure's semiotic theory, but it does not represent everything that the Swiss linguist had to say about the nature of linguistic signs. Importantly, Saussure differentiates explicitly between various degrees of arbitrariness/motivation. That is, he recognizes that language can and even must be "relatively motivated":

Le principe fondamental de l'arbitraire du signe n'empêche pas de distinguer dans chaque langue ce qui est radicalement arbitraire, c'est-à-dire immotivé, de ce qui ne l'est que relativement. Une partie seulement des signes est absolument arbitraire; chez d'autres intervient un phénomène qui permet de reconnaître des degrés dans l'arbitraire sans le supprimer : le signe peut être relativement motivé. (Saussure, 1995, pp. 181–182)

Which translated means: "The fundamental principle of the arbitrariness of the sign does not prevent our singling out in each language what is radically arbitrary, i.e., unmotivated, and what is only relatively arbitrary. Some signs are absolutely arbitrary: in others we note, not its complete absence, but the presence of degrees of arbitrariness: the sign may be relatively motivated" (Saussure, 1968, p. 131; translated by Wade Baskin).

Saussure realizes that the notion of (relative) motivation is relevant in the formal and conceptual analysis of complex linguistic expressions (see Radden & Panther, 2004, pp. 1–2). He observes, for example, that the French words for the cardinal numbers "ten" and "nine" – *dix* and *neuf*, respectively – are both arbitrary and conventional. Furthermore, the French language conventionally codes the number concept "nineteen" as *dix-neuf* (literally, "ten-nine"). In German, the same concept is expressed as *neunzehn* (literally, "nine-ten"). Although it is not predictable from the concept nineteen how it should be coded in natural language, both codings – ten-nine and nine-ten – are motivated. *Dix-neuf* and *neunzehn* are thus partially arbitrary, because the individual words in the compound expression are arbitrary; but they are
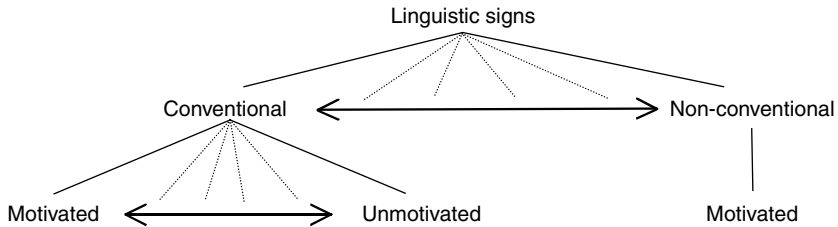
FIGURE 19.1. The conventionality and motivation scales (adapted from Panther, 2008, p. 8).

also partially motivated because it is "natural" to represent the concept nineteen by means of the concatenation of the words for nine and ten. Finally, there is again some language-specific arbitrariness in how the elementary meaning-bearing building blocks (morphemes) nine and ten are ordered. French chooses the order double digit + single digit, whereas German selects the reverse order. This example demonstrates that there exist degrees of arbitrariness/motivation (i.e., the contrast between arbitrariness and motivation is polar, rather than binary).

In this chapter, I take a theoretical perspective that integrates Saussure's insights with an aim to demonstrate that grammatical structure is (relatively) motivated. In what follows, I assume that linguistic signs are distinguished along two dimensions: conventionality and motivation. Conventional signs (simple and complex) range from unmotivated to motivated, but non-conventionally used signs must always be motivated to some extent; otherwise they would be uninterpretable. Figure 19.1 diagrams the relationship between motivation and conventionality.

The assumption that grammar is motivated is called into question in formalist theories of language (e.g., generative grammar). In this framework, it is commonly held that grammatical generalizations are purely formal; they are not shaped in any way by conceptual content, communicative function, economy of coding, and so forth (see Borsley & Newmeyer, 2009; Newmeyer, 1983, 2000).[2] However, functionalist and cognitive linguists have accumulated an impressive array of data in support of the claim that grammar is at least partially motivated. Nevertheless, some principled explanation must be given why, as Saussure already observed, not every grammatical structure is motivated. In the conclusion to this chapter, an attempt is made to provide a provisional solution to this problem.

The remainder of this chapter is organized as follows: A working definition of motivation is proposed, followed by an interlude about the theoretical status of motivation as an explanatory concept in linguistics. The section

concludes with a brief characterization of extralinguistic factors that arguably have an impact on the form and/or content of linguistic signs. Next, I consider basic semiotic relations and language-independent parameters that constitute motivating factors. Then, a classical example of a motivated relation between content and form (iconicity) is presented. The section that constitutes the core of this chapter is concerned with motivation in grammar. I focus on a typical phenomenon of English, the meaning and distribution of question tags, showing that these tags are sanctioned and constrained by a variety of language-independent factors. The final section reflects on why grammar is not fully but only partially motivated.

MOTIVATION IN CONTEMPORARY LINGUISTICS

The notion of linguistic motivation assumed in this chapter is based on the one proposed in Radden and Panther (2004, p. 4) and Panther (2008, p. 6):

(1) i. Motivation is an unidirectional relation between a *linguistic source* and a *linguistic target*.
 ii. A linguistic target is motivated if and only if at least some its properties are caused by the linguistic source, i.e. its form and/or content) and *language-independent factors* (see also Heine, 1997, p. 3).

Henceforth, I use the terms "form" and "content" instead of Saussure's terms "signifier" and "signified," respectively. I understand "content" in a rather broad sense as covering both conceptual (semantic) content and pragmatic (communicative) function. The term "form" is, for my purposes, a convenient blend of components that are usually kept apart in linguistics: syntax (i.e., rules and principles of sentence construction), morphology (i.e., the syntax of words), and phonology (i.e., sound and prosodic structure).[3] The semiotic relation between content and form can be diagrammed as in Figure 19.2.

The term "language-independent factors" in (1ii) is meant to express the assumption that the kinds of motivating forces that shape linguistic signs are found not only in language but in other semiotic and communicative systems such as gestures, traffic signs, the visual arts, and so forth, as well. In this sense, these motivating factors are not specifically linguistic, and might be called *translinguistic*. Such translinguistic motivational parameters include perceptual factors, such as iconicity, economy of coding, and cognitive factors, such as creative thinking, reasoning (e.g., conceptual metaphor, metonymy, and non-monotonic inferencing) (see Radden & Panther, 2004 for extensive discussion).
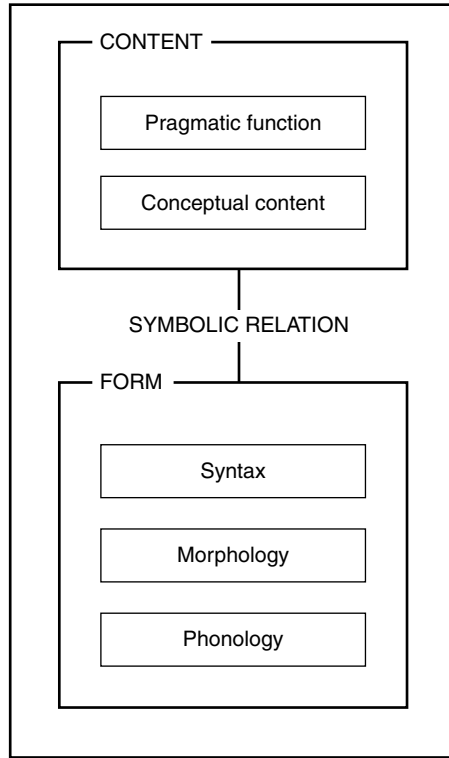
FIGURE 19.2. The symbolic relation between content and form of the linguistic sign.

Possibly under the influence of a partial misunderstanding of Saussure's conception of the linguistic sign, but especially with the advent of the formalist framework of generative grammar, the idea of motivation as an explanatory concept has been met with skepticism if not outright dismissal (e.g., Newmeyer, 1983, 2000).

One reason for the skepticism that motivational explanations have faced is that they have no *predictive* power. This is readily admitted, or at least implicitly assumed, by many functionalist and cognitive linguists (e.g., Haiman, 1985; Heine, 1997; Lakoff, 1987; Langacker, 2008). For example, with regard to the form and meaning of grammatical constructions, Goldberg (2006, p. 217) emphasizes that the motivation of some aspect of the form or content of a construction does not imply that "the construction *must* exist." The motivational link between a linguistic source and a target is "contingent, not deterministic". Goldberg emphasizes that this situation is not uncommon in other sciences (e.g., in evolutionary biology). In the humanities, including

for example historical linguistics, non-predictive explanations of linguistic change are common.

For the reason given above, generative linguists have qualms about motivation as an *explanatory* concept; that which counts as an explanation in linguistics is, however, highly theory-dependent. According to generative grammar, humans are equipped with a genetically implemented language faculty, metaphorically called a Universal Grammar (UG), which is considered a precondition for the acquisition of a human language. One important goal of generative grammar is to uncover the properties of the presumed UG and seek *explanatory adequacy* by answering the question: "*Why* do natural languages have the properties they do?" (Radford, 1997, p. 5). One of the universal properties of grammar, in particular of syntax, is its putative autonomy. Thus, Radford (1988, p. 31), among others, stipulates that syntactic rules "cannot make reference to pragmatic, phonological, or semantic information".

With regard to the supposed autonomy and non-motivated nature of syntax, the cognitive linguist George Lakoff and philosopher Mark Johnson (Lakoff & Johnson, 1999, p. 481) make an important point. For them syntax is "the study of generalizations over the distributions of … syntactic elements." Despite this somewhat unfortunate (circular) characterization of syntax, the authors have a good point in arguing that it is "an empirical question whether semantic and pragmatic considerations enter into … distributional generalizations" (p. 482). In other words, the autonomy or non-autonomy of syntax cannot be stipulated by fiat. To date, a large number of grammatical (e.g., syntactic) phenomena have been discovered, some of which have been analyzed insightfully by Lakoff (1987) and Lakoff and Johnson (1999). Their case studies and those of many other functionalist and cognitive linguists (e.g., Goldberg, 2006, 2009; Haiman, 1985; Langacker, 2008) strongly suggest that syntactic generalizations often can be formulated adequately only if conceptual and pragmatic information is incorporated into their descriptions.

Since the nineteenth century, in historical linguistics, motivational explanations have proved their worth in unraveling tendencies of linguistic change. Consider the well-documented development of grammatical morphemes/words from lexical units, a subtype of the historical process known as *grammaticalization*. For example, in their *World Lexicon of Grammaticalization*, Heine and Kuteva (2002, pp. 149–157) list myriad grammatical markers that have evolved from lexical concepts. A telling example is the grammaticalization of the concept of "giving" in various languages. Give has developed grammatical functions (e.g., affixes, prepositions, conjunctions, complementizers) with meanings, such as "benefactive" (e.g., Thai, Mandarin Chinese),

"causative" (e.g., Vietnamese, Khmer), "concern" (e.g., Zande), "dative" (e.g., Ewe), and "purpose" (e.g., Acholi).

At least for some of these changes, a motivational explanation is natural. Consider the conceptual link between the concept of giving and the grammatical category benefactive.[4] The action of giving implies a giver and a recipient, the latter usually benefiting from the action. It is this semantic aspect of "give" that becomes part of the grammar in a number of languages. A similar analysis applies to the development of the dative case from verbs of giving. The dative typically coincides with the recipient of an action and wears the etymological motivation of its name on its sleeve (*dative* "case of giving"). In Southeast Asian languages such as Vietnamese and Khmer, the verb denoting give has developed a causative meaning. One might add here that the verb *give* in present-day English is also attested with a causative meaning: in sentences such as "This constant noise gives me a headache," the original meaning of transfer has "bleached" into a meaning that is more abstract (i.e., more grammatical than the basic sense).

The above-mentioned linguistic changes do not occur by necessity; it is not possible to prognosticate that every language that has a verb with the meaning "give" in its lexicon will develop a grammatical category "dative". However, for those languages where the route of grammaticalization from "give" to "dative", for example, has been taken, an "explanation" in terms of conceptual motivation seems natural. In conclusion, despite the non-predictability of grammaticalization processes and other types of semantic and formal change, it is hard to imagine how language change could be accounted for without some notion of motivation.

Grammaticalizations and other types of motivated linguistic change may extend beyond the lifespan of language users, so that they are often unaware of what has initially motivated shifts from lexical to more grammatical functions of linguistic units. However, motivated signs and sign complexes are also recognizable on the synchronic level, where they very well may be internalized as part of the linguistic competence of native speakers.[5] I turn to this topic in the following section.

THE MANY FACETS OF MOTIVATION

There are four basic combinatorial possibilities of how the content and form of signs may be motivationally related, which are diagrammed in Figure 19.3b–e. These are the elementary building blocks from which more complex motivational relations are assembled (see Radden & Panther, 2004, p. 15). The
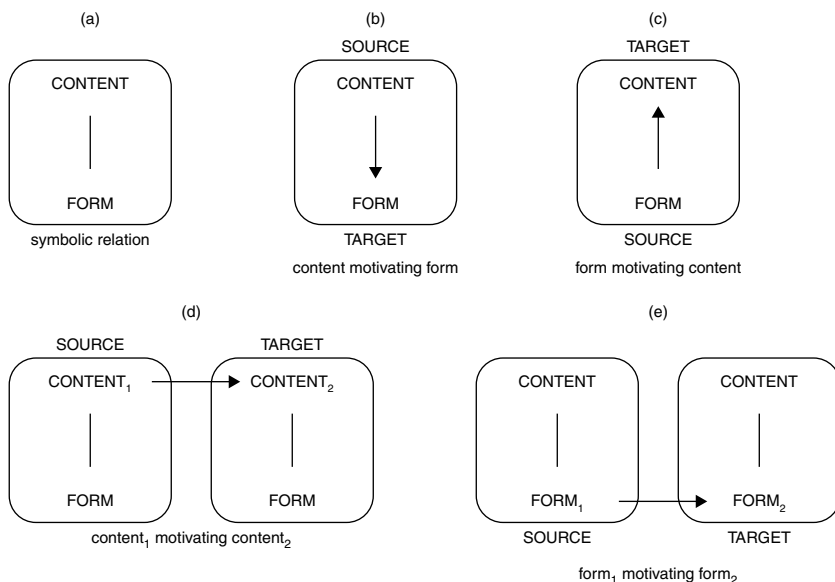
FIGURE 19.3. Basic semiotic relations (adapted from Radden & Panther, 2004, p. 15).

directionality of the motivation is indicated by means of an arrow. A simple line connecting content and form, as in Figure 19.3a, notates an unmarked symbolic relation (i.e., there is no specification as to whether it is motivated or not). Linguistic phenomena usually exhibit combinations of motivated *and* unmotivated semiotic relations.

Figure 19.4 provides a (non-exhaustive) list of motivating factors that, together with an adequate linguistic source, might trigger a motivated process. Recall that these factors operate not only in language but in other semiotic systems, as well, which is why I have termed them *translinguistic*. In Figure 19.4, motivating factors already mentioned and to be discussed in this chapter appear in bold.

In the following two sections some motivating factors are illustrated and discussed in more detail. I begin with a relatively straightforward example of motivation from content to form (i.e., iconicity – similarity of content and form), and then move on to more complex examples of interacting motivating factors such as economy, communicative motivation, metonymy, and inference.

ONOMATOPOEIC WORDS

A reasonable assumption – in line with Saussure's semiotics[6] – is that *simple signs* (i.e., signs that [roughly] cannot be analyzed into smaller meaning-bearing units [morphemes]) are typically unmotivated in the sense

Experiential motivation
(e.g., embodiment,
image schema)

LINGUISTIC UNIT:
word, construction

Perceptual motivation
(e.g., viewpoint,**similarity**,
salience)

CONTENT

Geneticmotivation
(e.g., **grammaticalization**)

Cognitive motivation
(e.g., i**nference,
metonymy**,metaphor)

FORM

Ecological motivation
(e.g., ecological niche)

Communicative motivation
(e.g., **maxims**,**economy**,**speech
actfunction**,**expressivity**)
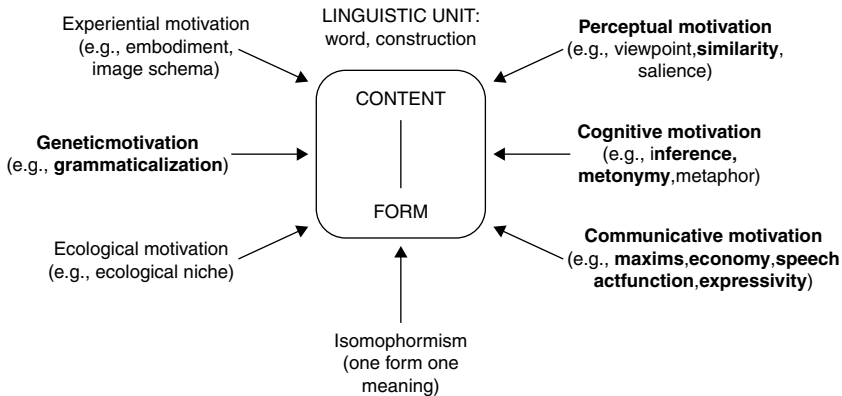
Isomophormism
(one form one
meaning)

FIGURE 19.4. Types of motivating factors (adapted from Radden & Panther, 2004, p. 24).

that no natural connection between content and form can be established. There are, however, some notable exceptions where the form of simple signs seems to be at least relatively motivated by their denotata. One such case is briefly presented below.

This phenomenon has been known for a long time as *onomatopoeia*, words that are a subclass of *iconic* signs. Such words exemplify *perceptual motivation* (see Figure 19.4). Onomatopoeia is the (more or less) accurate linguistic imitation of sounds and noises in the extralinguistic world. Examples are English verbs such as *neigh*, *meow*, *moo*, *roar*, *crack*, *clang*, *swish*, *whoosh*, *gurgle*, and *plop*. Strictly speaking, these words are not perfect replicas of the natural sounds and noises that they denote. Cows do not really go "moo" (see Katamba 2005: 45), nor do cats go "meow," (i.e., these animals do not pronounce the initial sound [m] followed by the respective vowels and diphthongs of "moo" and "meow"). These words represent the animal sounds by means of the phonological (and graphemic) system available in a particular human language (here English). Despite this "alienation" from the original acoustic shape, there is sufficient resemblance between the original and reproduction: it is certainly more adequate to represent the sounds produced by cows as "moo," rather than, for example, "tick-tock." There is, however, some cross-linguistic variation in how natural sounds are coded, as Table 19.1 illustrates for the verbs with the meaning "meow" as well as the conventional interjections that imitate laughter, in 10 European languages:

Table 19.1 illustrates the point made above that the language-specific phonological and graphemic systems play a role in how natural sounds are coded. This is clearly the case with verbs denoting meowing, where one finds some formal variation across the 10 languages. There is more uniformity in how the interjection that imitates laughter is coded, but again some language-

TABLE 19.1. *Graphemic coding of the act of meowing and the interjection for laughter in ten European languages*

English	German	Dutch	French	Spanish	Italian	Portuguese	Swedish	Finnish	Polish
meow miaow	miauen	miauwen	miauler	Maullar	miagolare	miar	jama	naukua	miaucze
ha! ha!	haha!	Ha! ha!	ah! ah! ha! ha!	Ja	ah! ah!	ah! ah!	haha!	ha ha	Ha! Ha!

Source: Online multilingual dictionary *Mot 3.1.*
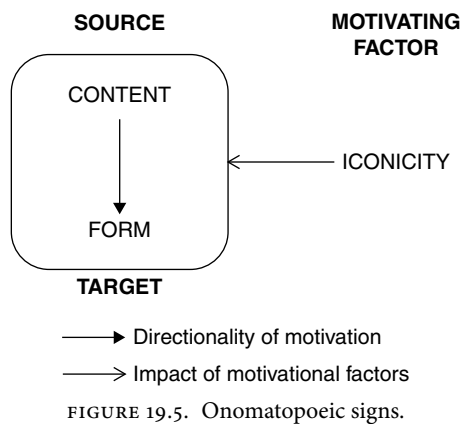
FIGURE 19.5. Onomatopoeic signs.

specific idiosyncrasies are noticeable. In Germanic languages such as English, German, Dutch, and Swedish, the letter <h> is articulated as [h], but in the Romance languages such as French and Italian, this letter is not pronounced, as these languages lack the phoneme /h/. The motivational structure of onomatopoeic words is diagrammed in Figure 19.5.

A CASE OF MOTIVATED GRAMMAR

As pointed out in Section 4, motivation on the level of elementary linguistic signs exists and is not in dispute. More intriguing and challenging are cases of motivation on abstract levels of linguistic organization, such as grammatical form.

Motivated Grammar: Question-Tagged Declarative and Imperative Sentences

Two case studies on question tags in declarative and imperative sentences are presented to provide evidence for the following claims[7]:

(2) i. The content/function and form of question tags in declaratives and imperatives are motivated by factors, such as economy of coding, metonymy, inference, and speech act function.

  ii. Idiosyncrasies (i.e., unmotivated distributional patterns) occur, but they are relatively rare.

  Question tags are, I contend, an excellent testing ground for the Saussurean thesis that grammar is relatively motivated. Sentences 3 and 4 are typical instances of the phenomena to be analyzed:

(3) Mary left, *didn't she*?

(4) Hand me that book, *will you*?

Henceforth, I refer to the declarative and the imperative clauses proper as the *host clause*, and to the italicized constituents in 3 and 4 as the *tag*. Tags have a variety of communicative functions in English, and Bolinger (1989, p. 115) notes that their use is "a typically English device" (quoted in Wong 2008, p. 89). I will not try to develop a detailed taxonomy of the different communicative functions of individual tags (see Huddleston & Pullum, 2002, pp. 851–945, 942–943). I also neglect the (crucial) role of intonation in the interpretation of question tags. My aim is more modest: I intend to show how tags are related to and motivated by the conceptual content and pragmatic function of the host clause. I also address the important question of why some expressions that are functionally and semantically compatible with the host do not appear as tags.

I begin with some possible and impossible tagged declaratives and imperatives that an adequate account in terms of motivation has to come to grips with (unacceptable tags and only marginally acceptable ones are marked with an asterisk and a superscripted question mark, respectively):

(5) Gore won the Nobel Prize,
  a. did(n't) he?
  b. right?
  c. or?
  d. *do(n't) I believe it?

(6) You are fired,
  a. *are(n't) you?
  b. *right?

(7) Pour me some wine,
  a. *do(n't) you?
  b. would you?
  c. why don't you?
  d. *why do you?
  f. shouldn't you?
  e. *must you?

The first observation about tags is that they are relatively short. This property appears to be motivated by considerations of economy or brevity (see Figure 19.3).[8] The same kind of communicative effect as with a question tag could, in principle, be achieved by means of a full interrogative clause attached to the host sentence. However, it would be highly uneconomical to render, for example, 3 as 8:

(8) ?Mary left; didn't Mary/she leave?

Analogously, the maxim of brevity will bar 4 from being rendered as 9:

(9) ?Hand me the book; will you hand me the book/hand it to me?

Brevity, is however only one feature of acceptable tags. A glance at sentences 5–7 reveals that certain tags do not pair very well with their respective host clauses. The solution to the question of why certain tags appear and others are blocked is found in the conceptual content and pragmatic function of their respective host clauses. The conceptual content and standard pragmatic function of declaratives and imperatives can be described by *speech acts scenarios* (for this notion, see, for example, Panther & Thornburg, 1998, 1999, 2003, 2007; Thornburg & Panther, 1997). The scenarios for declaratives and imperatives are presented in the following two sections.

Tagged Declaratives

Before delving into the semantics and pragmatics of tagged declarative sentences, it is crucial to review the *formal* properties of what one could call "canonical tags," as exemplified by "Mary left, didn't she?" in sentence 3 above:

(11) i. There is referential identity between the host clause subject and the tag subject, realized as an anaphoric pronoun: *Mary* is coreferential with *she*.

    ii. The host clause predicate (verb phrase) is anaphorically resumed in the tag by an auxiliary verb: *left* is resumed by *didn't*.

   iii. The positions of the tag subject and the auxiliary are inverted: the auxiliary verb *didn't* is positioned before the subject *she*.

   iv. The polarity of the host clause is typically reversed from affirmative to negative, or negative to affirmative, as the case may be: in 3, the host clause is positive, the tag is negative.

    v. The host clause and the tag are tightly linked: the tag functions as a "sentence clitic."

vi. The tag is short.

vii. The tag is "unclause-like."

Tags such as "right?" and "or?" come very close to canonical tags. They fulfill the requirement of being short, but they are syntactically less tightly linked to the host clause than "do"-tags described in 11. In the case of "right?", the content expressed by the host clause is *ellipted*, but easily recoverable. In the case of "or?", alternatives to what is asserted in the host clause are evoked, but there are no elements in the tag that are coreferential with elements in the host clause.

The standard communicative function of declaratives is to perform *assertive* speech acts, or more technically, assertive *illocutionary* acts.[9] The semantics and pragmatics of illocutionary acts can be represented by means of *conceptual frames*. The notion of conceptual frame is based on the idea that the meaning of a word "can only be properly understood and described against the background of a particular body of knowledge and assumptions" (Cruse, 2006, pp. 66–67). I assume that the frame semantic approach can be applied to the analysis of speech acts, as well, and henceforth I refer to the conceptual frames for speech acts as "scenarios." A speech-act scenario includes information about the context in which a speech act is felicitously performed (in the sense of Austin, 1962, and Searle, 1969). In Figure 19.6, a scenario for assertive speech acts is proposed.

In Figure 19.6, the assertive speech act itself is referred to as "core" (shaded in grey), the background conditions for its felicitous performance as "before," and the consequences of the performance of the speech act as "result" and "after." The lines connecting conceptual components symbolize what Linda Thornburg and I term (potential) *metonymic* links. These connections can be called metonymic because one component in a speech-act scenario may evoke other components or the whole scenario.

Depending on the components selected by the speaker, an assertive speech act can be performed more or less *directly* or *indirectly* (see Searle, 1975 for the notions of direct and indirect speech act):

(12) a. I claim that Auster wrote *The Brooklyn Follies.* (direct: sentence addresses core)

 b. I believe Auster wrote *The Brooklyn Follies.* (indirect: addresses a before component)

 c. Did you know that Auster wrote *The Brooklyn Follies*? (indirect: addresses a before (component)

 d. Do you now believe me that Auster wrote *The Brooklyn Follies*? (indirect: addresses the after)

```
                                P
                                |
                    THERE ARE GOOD REASONS
                       FOR BELIEVING P
                                |
    H DOES NOT          S BELIEVES P          P IS RELEVANT        BEFORE
      KNOW P                                     TO H

                        S ASSERTS P                               CORE:
                                                                  ILL ACT
                                |
         S IS REGARDED AS BEING COMMITTED TO P                    RESULT
                                |
                        H BELIEVES P                              AFTER
```

S   Speaker
H   Hearer
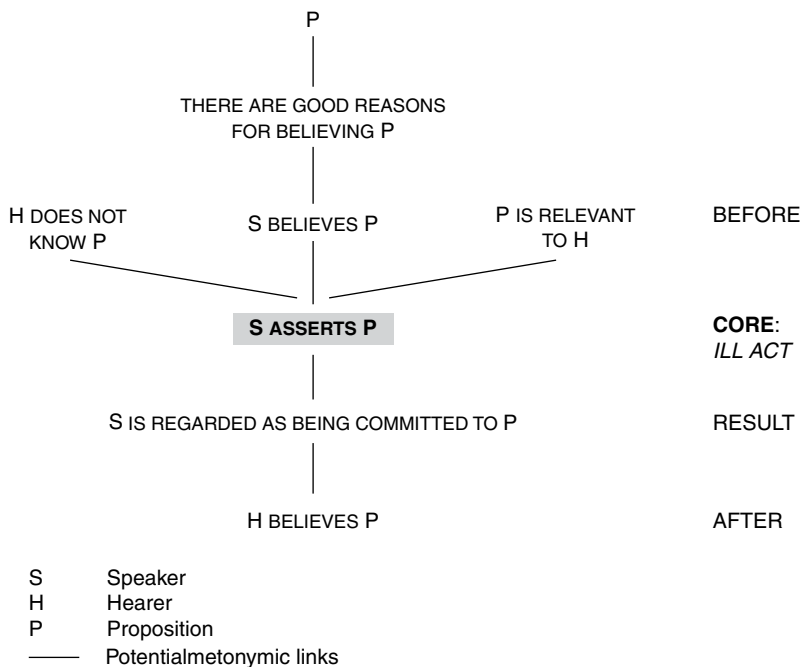P   Proposition
——   Potentialmetonymic links

FIGURE 19.6. Scenario for assertive speech acts.

Question tags, exactly as the full sentences in 12, address components of speech-act scenarios, but they do so in a shorthand and hence economical way. The main purpose of a declarative sentence is to represent a proposition P as true. Intuitively, one would thus expect *truth*-related tags to be attached to declaratives, given that the corresponding speech acts, assertives, are essentially about what the world is like. It does therefore not come as a surprise that in utterances (5a, 5b), repeated here as (13a, 13b), the tag explicitly addresses the truthfulness of the before component P:

(13) a. Gore won the Novel Prize, didn't/did he?
      b. Gore won the Nobel Prize, right/or?

However, it is also possible to address some other components of the speech-act scenario; for example, the knowledge state of the hearer:

(14) a. Gore won the Nobel, doncha know?
      b. Gore won the Nobel Peace Prize, did you hear? [*hear* stands metonymically for "know"]

Note that in this case, the tags that refer to the hearer's knowledge are formally not as tightly integrated into the host clause as in the case of tags that

address the veracity of the proposition P. The verbs in the tags of (14a, 14b), "know" and "hear," are not verbatim resumptions of the host clause verbs; nevertheless, they address an important before component of the assertive scenario and their appearance is thus motivated.

Much longer and less felicitous are tags that evoke the relevance of the asserted proposition for the hearer:

(15) a. ˀGore won the Nobel Peace Prize, do you care?
      b. ˀGore won the Nobel Peace Prize, are you interested?
      c. Gore won the Nobel Peace Prize, if you're interested.

The appended expressions in 15 are increasingly clause-like (in comparison with 13 and 14). Moreover, in 15c, the tag is conditional, not interrogative. Conditionality is conceptually related to interrogativity (English *if*, which is a cognate form of German *ob,* "whether," can be used in indirect questions), but the conditional clause in 15c does certainly not constitute a canonical tag. Finally, the tag expressions in 15 are also syntactically less tightly connected to their host clauses than in the canonical cases in 13. There are no anaphoric ties at all between the host clause subject and predicate and the elements in the tag.

The acceptability and canonicity of tags decreases even more drastically when the before component "S believes P" and "there are good reasons for believing P," and the core component "S asserts P," the result component "S is regarded as being committed to P (as an effect of asserting P)," and the after component "H believes P" are addressed. The tags become both longer and more clause-like, and most of them are downright unacceptable.

(16) a. *Gore won the Nobel, do(n't) I believe/think/assume so?
      b. *Gore won the Nobel, are there good reasons for this claim?
      c. *Gore won the Nobel, do(n't) I claim/assert/say so?
      d. *Gore won the Nobel, aren't/am I committed to the truth of this?
      e. Gore won the Nobel, (or) don't you believe me?

There are good reasons for the unacceptability of 16a–d. Utterance 16a is communicatively (although not logically) inconsistent. Speakers are supposed to have privileged access to their beliefs; to seek confirmation for what one believes to be true is therefore pragmatically odd. As to 16b, there is a communicative principle that requires people to assert only propositions whose truth they can back up with good arguments. To pose the question in the tag whether such good reasons exist undermines the communicative function of the host clause. Utterance 16c is unacceptable because it is pragmatically paradoxical to assert something and at the same time question whether one's own act of assertion has actually been performed. Similarly, the utterance

of 16d is infelicitous because the assertion of the content of the host clause creates the effect that the speaker is seriously committed to the truth of the asserted proposition, but it is exactly this pragmatic effect that is challenged in the tag. The only tag that is acceptable refers to the after component of the speech act. The speaker's goal in asserting something is usually to make the hearer believe that the asserted proposition is true. This aim is, however, not always achieved, and it is therefore quite natural for speakers to address the after component. Nevertheless, despite the acceptability of 16e, the tag is formally not canonical. First, it is rather long (clause-like), and, second, it is not anaphorically linked to the preceding host; neither the subject of the tag nor its verb anaphorically resumes formal elements of the host clause.

To conclude this section, a set of sentences is worth mentioning that seems to behave erratically in not admitting canonical declarative question tags:

(17) a. *I promise to be on time, don't I?
      b. *I apologize for keeping you waiting, don't I?
      c. *Passengers are requested to board immediately, aren't they? (request to board a plane)
      d. *I pronounce you man and wife, don't I? (priest performing marriage ceremony)
      e. *You're fired, aren't you? (speaker fires hearer from job)
      f. ʔI believe Gore won the Nobel Prize, don't I?
      e. *I am glad you came to my party, aren't I?

In grammatical terms, all of the above utterances are declarative sentences, but they do not allow a tag that addresses the truth value of the proposition expressed in the host clause. The host clauses in 17a–d typically serve as what Austin (1962) terms "explicit performative utterances." The verb in the superordinate clause self-referentially describes the speech act that the speaker actually performs in uttering the sentence. In these cases, the host clauses are not to be categorized in terms of truth but in terms of felicity (see Austin, 1962). The utterances 17a–c constitute a promise, an apology, and a request, respectively; the speaker cannot, in the same breath, question the performance of these explicitly named illocutionary acts.

Utterances 17d and 17e are examples of linguistic acts that are grounded in institutions. Institutionally legitimized speakers create new social, judicial, and religious "facts" as a result of performing them. The utterance of the correct words, in the right circumstances, by the right speaker has the effect that proposition P becomes "reality." It is this feature that distinguishes what Searle (1976) calls "declarations" from ordinary assertive declarative sentences, which are descriptively either true or false. Similarly, explicit performative

utterances are conventionalized social practices in a speech community. The act named by the performative verb becomes a noncontestable fact; therefore, its reality status cannot be mitigated or hedged by question tags. It therefore makes pragmatic sense that declarative tags are barred from appearing in performative utterances and declarations.

Finally, there are good reasons why tags are not felicitously used with host clauses that refer to the speaker's mental or emotional attitude, as in 17f and 17g, respectively. Speakers have privileged access to their own mental states and emotions. Therefore, it is strange to question or seek confirmation of the existence of those mind states from others.

Tagged imperatives

The number of tags that can be attached felicitously to imperative sentences is much larger than those that co-occur with declarative clauses. Tagged imperatives have the canonical structure *Modal Auxiliary (n't) + you*. Here are some examples:

(18) a. Hand me that book, will/won't/would you?
     b. Open that door for me, can/can't/could you?

The imperative tags in 18 are syntactically not as tightly linked with their host clauses as canonical declarative tags are with their hosts. First, the subject of an imperative tag (*you*) has no explicitly named antecedent in the host clause, although it refers back to an understood addressee of the imperative sentence. Second, imperative tags are not "pro-forms" for the verb phrase in the host clause in the sense that the auxiliaries *do/did* are "pro-verb" forms for the predicates in declaratives are. However, despite their looser syntactic ties to the host clause, the appearance of modals such as *can*, *could*, *will*, and *would* is, as argued below, are highly motivated by conceptual factors.

The standard function of imperative sentences is to perform *directive* speech acts (i.e., they are used to perform orders, instructions, requests, recommendations, etc.). In order to understand what licenses or constrains the appearance of imperative tags, it is necessary to consider the scenario for directive speech acts. I consider a subtype of this scenario (viz. a conceptual frame that represents requests for the transfer of an object from the hearer to the speaker) (see Figure 19.7).

A glance at Figure 19.7 reveals that the tags in sentences 18a and 18b index components of the directive speech-act scenario. Tagged imperatives combine a *direct speech act* (the host clause) with a compacted *indirect speech act* (the tag). For example, "can you?" in 18b is a condensed form of the
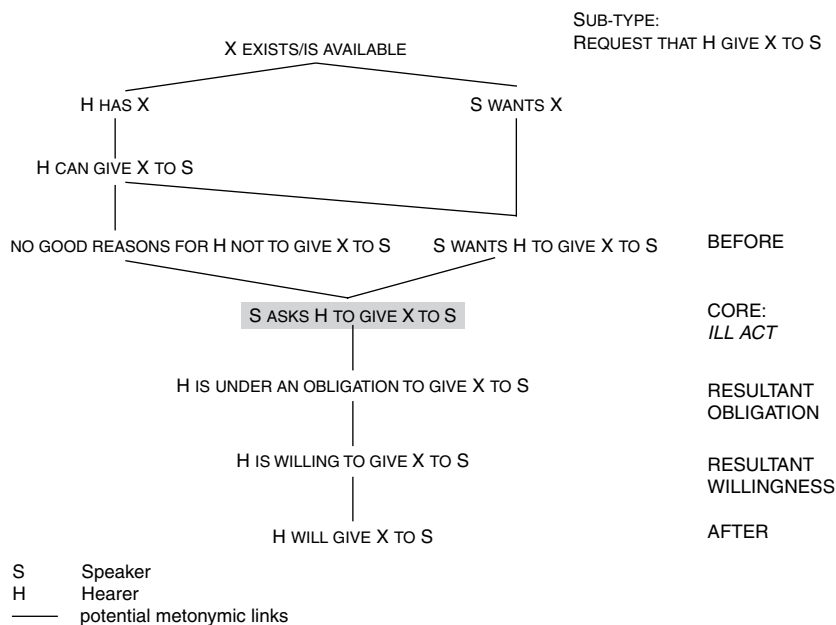
SUB-TYPE:
REQUEST THAT H GIVE X TO S

X EXISTS/IS AVAILABLE

H HAS X   S WANTS X

H CAN GIVE X TO S

NO GOOD REASONS FOR H NOT TO GIVE X TO S   S WANTS H TO GIVE X TO S   BEFORE

S ASKS H TO GIVE X TO S   CORE:
                                                ILL ACT

H IS UNDER AN OBLIGATION TO GIVE X TO S   RESULTANT
                                                OBLIGATION

H IS WILLING TO GIVE X TO S   RESULTANT
                                                WILLINGNESS

H WILL GIVE X TO S   AFTER

S   Speaker
H   Hearer
———   potential metonymic links

FIGURE 19.7. Scenario for directive speech acts.

full-fledged indirect request "Can you open that door for me?" The latter is called indirect because it can be used to achieve the same purpose as the corresponding direct request "Open that door for me." A second important feature of well-formed imperative tags is that they are *metonymically* linked in a part-whole relationship to the directive speech-act scenario. The tag selects one aspect (component) of the speech-act scenario, which then metonymically evokes other parts of the speech-act scenario or the whole scenario. It has often been observed that indirect speech acts are politer than direct speech acts (Brown & Levinson, 1987; Searle, 1975), and many of the imperative tags (although not all) serve the purpose of mitigating the impositive force of the host clause.

The task remains to check which parts of the scenario can be verbalized as imperative tags and why.

Before: availability, possession of x
(19) a. ʔPour me some Rioja, is there any?
      b. ʔPour me some Rioja, do you have any?

The components "availability of x" and "possession of x" are not exploitable as "ideal" tags because they are clause-like (i.e., similar to interrogative

sentences). Furthermore, questioning the availability of Rioja in the tag is pragmatically not consistent with the assumption conveyed in the host clause that Rioja is available.

Before: H can give X to S

(20) a. Pour me some Rioja, can/can't you?
  b. Pour me some Rioja, could/couldn't you?
  c. *Pour me some Rioja, are you able to/do you have the ability to?

The addressee's ability to perform the requested action is a central condition of felicitous requests. Asking someone to pour some Rioja is pointless if, for some reason, the hearer is unable to carry out this action. Conveniently, in English, a short modal – *can* – is available so that the tag can be economically coded. There is an interesting pragmatic difference between the affirmative and the negative form of the tag, the latter having a more demanding and aggressive effect. The interpretation of negative tags requires some pragmatic inferencing on the part of the hearer. The tag "can't you?" like the corresponding full-fledged sentence "Can't you pour me some Rioja?" is typically used in situations in which it is crystal clear that the hearer *can* carry out the requested action; hence, the challenging overtone of "Pour me some Rioja, can't you?" The puzzling occurrence of negated *can* is thus highly motivated, a kind of motivation that might be called *inferential motivation*. The term "inferential" is not supposed to suggest that inferential work has to be carried out every time a hearer encounters a negative modal tag. It means that the original motivation of the negative tag is inferential even though the interpretation of such tags is spontaneous and effortless for the native speaker.

My last observation in connection with the ability component concerns the impossibility of using tags such as "are you able to?" or "do you have the ability to?" which are rough paraphrases of "can you?" Why they do not occur is readily explained by the economy principle or the Gricean maxim of manner "Be brief."[10]

Before: no good reasons for H not to give X to S

(21) a. Pour me some Rioja, why don't you?
  b. *Pour me some Rioja, why do you?

The tag "why don't you?" in 21a is perfectly good, although it is longer and more clause-like than canonical tags. The tag is appropriate in a context where it is clear to the speaker that there are in fact no reasons why the request should not be complied with. It is thus not expected (and pragmatically odd) for the hearer to come up with negative reasons why she cannot carry out the desired action. In contrast to "why don't you?" the tag "why do you?" is very

bizarre, given the goal of the speaker (compliance with the request). For communicative reasons, such a tag is completely unmotivated and will therefore not appear.

> Before: S wants H to give X to S
> (22) *Pour me some Rioja, do I want you to/would I like you to?

The tags in 22 refer to what in speech act theory is known as a sincerity condition. To question this component is pragmatically odd because speakers should know their own wishes. An analogous constraint holds for assertive tags that question the speaker's belief in the proposition P (see Section 5.2).

> Core: S asks H to give X to S
> (23) *Pour me some Rioja, do(n't) I ask you to?

As in the case of assertive tags (see Section 5.2), the illocutionary act, more precisely, reference to the speaker and act of asking, cannot be compacted into a well-formed tag. The reason is clear: such a tag creates an illocutionary paradox because the speech act is accomplished in uttering the host clause, and at the same time, questioned in the tag.

> Resultant obligation: H is under an obligation to give X to S
> (24) a. *Pour me some Rioja, must you?
>   b. *Pour me some Rioja, should you?
>   c. *Pour me some Rioja, mustn't you?
>   d. Pour me some Rioja, shouldn't you?

The positive tags in 24a and 24b are pragmatically odd because they create – similar to the illocutionary tag in 23 – a paradoxical situation. In uttering the host clause, the speaker introduces an obligation for the hearer, but the immediately adjacent tag suspends this obligation. In contrast, utterance 24d is felicitous. Here, the negative tag pragmatically implies the existence of a host's normally willingly undertaken social commitment (cf. "Shouldn't you pour me some Rioja" [as you're the host]?). The negative form of the tag is thus inferentially motivated. Yet 24c, with the negative tag "mustn't you?" seems less felicitous, if not infelicitous. The reason might be that, unlike *should*, *must* often implies an externally imposed obligation complied with only reluctantly, if not unwillingly.

> Resultant willingness: H is willing to give X to S
> (25) Pour me some Rioja, would you like to/be willing to/mind?

The tags in 25 are acceptable (but not canonical) because they are more clause-like and thus do not abide by the principle of economical coding.

After: H will give X to S

(26) Pour me some Rioja, will/won't/would/wouldn't you?

The tags in 26 are perfect in all respects. They are conveniently short, they are tightly linked to the host clause (cf. the tags referring the hearer's ability in 20a and 20b), and they metonymically access a central aspect of the directive scenario: the compliance with the request. As noted above, there are inferentially derived pragmatic effects associated with negative tags. The tag "won't you?" just as its full-fledged counterpart, "Won't you pour me some Rioja," evokes a context in which the corresponding affirmative proposition "You will pour me some Rioja" is already established. Hence, as in the case of "can't you?" a connotation of aggressiveness is conveyed.

In summary, the functions of imperative tags are as follows:

(27) i. Imperative tags usually serve the function of mitigating the impositive force of the host.

 ii. They achieve this mitigating function in metonymically accessing components of the directive scenario to perform condensed indirect speech acts.

iii. The most systematically exploited imperative tags are those that refer to the hearer's ability to carry out the desired action (before) and those that refer to the performance of the requested action (after).

Among the constraints on the use of imperative tags, the following appear to be the most significant:

(28) i. Tags that are pragmatically incompatible with the meaning of the host clause are avoided.

 ii. Speaker-referring tags are avoided.

iii. Hearer-addressed tags are preferred.

These results are tabulated in Table 19.2, which ranks the conceptual components of directive speech-act scenarios according to their suitability to be coded as tags. In addition, the components are classified as to whether they are speaker-oriented, hearer-oriented, or exhibit no specific orientation.

The Motivated Structure of Tagged Declaratives and Imperatives
The overall results of the two case studies on tagged declarative and imperative sentences are diagrammed in Figure 19.8.

The content and form of question tags involve content-to-content and form-to-form motivation. The translinguistic factors that guide these processes include speech act function, metonymy, inferences, and economy of

TABLE 19.2. *Availability and acceptability of components in directive speech-act scenarios for tag formation*

Directive Scenario COMPONENT	ORIENTATION	TAG
H can give X to S	H-oriented	+++
H will give X to S	H-oriented	+++
No good reasons for H not to give X to S	H-oriented	++
H is under obligation to give X to S	H-oriented	++
H is willing to give X to S	H-oriented	++
X exists/is available	neutral	+
H has X	H-oriented	+
S wants H to give X to S	S-oriented	*
S asks H to give X to S	S-oriented	*

+++ fully acceptable and natural.
++ acceptable.
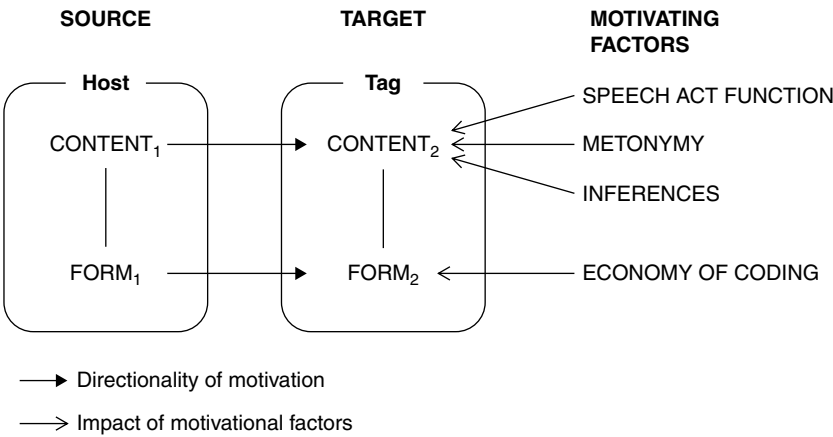+ barely acceptability.
* unacceptable.

FIGURE 19.8. Motivated structure of tagged declaratives and imperatives.

coding.[11] The content of the host clause has an impact on the content of the tag in that the tag metonymically selects one suitable conceptual component from the speech-act scenario of the preceding host. The tag functions as a condensed indirect speech act in imperative tags, and it focuses on the truth of the proposition in declarative tags. Routinized inferential processes are involved in the interpretation of, for example, negative tags such as "can't you?" and "won't you?" The tags are preferably coded as economically as possible.

CONCLUSIONS

In this chapter, I hope to have made the case for motivation as a key concept in linguistic theorizing. In particular, I have tried to substantiate Saussure's claim that although elementary linguistic signs are – with notable exceptions – arbitrary, language as an instrument of expressing thoughts and performing communicative acts must, to a certain extent, be motivated. I have shown that grammatical phenomena – question tags attached to declarative and imperative sentences – are licensed and constrained by a variety of motivating factors. Tags are found in many other languages, but what kinds of tags appear in a specific language cannot be predicted. It is a fact about English that it has motivated canonical tags such as "did she?" "can you?" or "will your?" and their negated counterparts. It is also a fact that German and French lack literal equivalents of these English tags.

A final problem remains to be addressed very briefly. Why are linguistic structures often only partially, or in Saussurean terms, relatively motivated? Ariel (2008, p. 123) proposes an interesting answer. She points out that motivation is, in logical terms, not a transitive relation. If some source *x* motivates a target *y*, and *y* serves in turn as a source for motivating *z*, the result of this chaining is not necessarily a recognizable motivational relationship between *x* and *z*. Motivated chains of this sort are very common in the history of languages, and the results of such diachronic processes often, from a synchronic perspective, appear to be unmotivated linguistic phenomena.

Notes

1. The conventionalist theory of linguistic signs is also propounded by Aristotle in his treatise *De Interpretatione*. Aristotle holds that the relation between a linguistic expression and its content is conventional; that is, "no name exists by nature, but only by becoming a symbol" (quoted in Crystal, 1997, p. 408).
2. For example, in a recent discussion of Adele Goldberg's book *Constructions at Work* (2006), which explicitly embraces the thesis that grammatical constructions are partially motivated, Borsley and Newmeyer (2009) argue that purely formal syntactic generalizations exist, one of them being the rule of "Auxiliary–Subject Inversion." The authors argue that the constructions that undergo this rule are semantically heterogeneous (e.g., interrogatives, exclamative sentences, counterfactual conditionals) but they all fall formally under the same generalization (i.e., the auxiliary is placed before the subject).
3. Langacker (e.g., 2008), the leading figure in the branch of cognitive linguistics referred to as Cognitive Grammar, assumes throughout his work that linguistic signs (simple and complex) exhibit a symbolic relationship between the semantic pole and the phonological pole. Syntax and morphology are not considered to be independent levels of linguistic organization.

4. Radden and Panther (2004, p. 10) suggest that the use of "give" as a grammatical category "benefactive" in Ewe can be accounted for as the result of abductive reasoning.

5. The Saussurean term *synchronic* refers to the linguistic system "at one point in time" and is opposed to *diachronic* – "the evolution of language through time."

6. Throughout the *Cours de linguistique générale* Saussure uses the term *sémiologie,* whereas in English the term *semiotics* (introduced by the American philosopher C. S. Peirce) is preferred.

7. Parts of this section originated in talks that were prepared and delivered with Linda Thornburg at conferences at Josip Strossmayer University in Osijek, Croatia, and the University of Bielsko-Bia**ł**a, Poland, in September 2007 and October 2008, respectively. My sincere thanks go to Professors Mario Brdar and Bogusław Bierwiaczonek for their kind invitations and hospitality. Suggestions and constructive criticism from the audiences at these conferences are gratefully acknowledged.

8. Grice (1975) lists "Be brief" as one of the conversational maxims subsumed under the Cooperative Principle that guides rational communication.

9. The term "illocutionary act" (what is done "in speaking") was coined by the Oxford philosopher John L. Austin in the 1960s, and further developed by the American philosopher John Searle (1969). It is the latter's notion of illocutionary act that is assumed here. In what follows, I use the terms "speech act" and "illocutionary act" interchangeably.

10. See Panther and Thornburg (2006) for the motivated behavior of manner scales such as <*can, be able to, have the ability*>.

11. On the role of metonymy as a motivating factor of grammar, see the collection of articles in Panther, Thornburg, and Barcelona (2009).

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