CHAPTER 1:
Special and Minor Sentence Types

1. Introduction

Starting point for our investigation is the typological survey of "speech act distinctions in syntax" by Sadock and Zwicky (1985).[1] They noted that "[i]t is in some respects a surprising fact that most languages are similar in presenting three basic sentence types with similar functions and often strikingly similar forms. These are the declarative, interrogative and imperative" (p.160).[2] (1.01) exemplifies this familiar triad.

(1.01) a. *You have read this.* [dec]
b. *Have you read this?* [int]
c. *Read this!* [imp]

Sadock and Zwicky add that "[a]s a first approximation, these three types can be described as follows: The declarative is subject to judgements of truth and falsehood. It is used for making announcements, stating conclusions, making claims, relating stories, and so on. The interrogative elicits a verbal response from the addressee. It is used principally to gain information. The imperative indicates the speaker's desire to influence future events. It is of service in making requests, giving orders, making suggestions, and the like" (p.160). The upshot of characterizations like this is that sentence types can be grouped[3] according to "sentence moods,"[4] which determine (i) specific denotation types, e.g., propositions in the case of declaratives, sets of propositions in the case of interrogatives (Hamblin 1976; Karttunen 1977) and properties (Hausser 1980; Portner 2004), modalized propositions (Kaufmann 2012), "outcomes" (Ginzburg & Sag 2000), or "actions" (Mastop 2005) in the case of imperatives, as well as (ii) (membership among) default illocution types, e.g., assertives in the case of declaratives, question acts in the case of interrogatives and directives in the case of imperatives.

Sadock and Zwicky stress that "[b]esides the large families of sentences with basic communicative functions, languages often include a range of minor types [...]" (p.156), but their discussion does not go much beyond listing examples. On the basis of the distinctions just introduced, however, we can make things slightly more precise and at the same time provisionally demarcate the objects of our study as follows: *Special sentence types* arise

[1] Related follow-up studies have been carried out by König and Siemund (2007; 2013).

[2] To put this observation into perspective, one has to note that their sample consists of a mere 32 languages (p.194). König and Siemund (2007) base their follow-up study on about 50 languages (p.278,fn.2). They also caution readers that "[a]llowance must be made for cases of overlap between two sentence types in specific contexts, as well as for cases where there is no clear formal distinction between two types at all, typically between declaratives and interrogatives" (p.283).

An online check of relevant features carried out by this author in 2013 on the World Atlas of Language Structures (WALS)(http://wals.info) yielded the following counts: 435 out of 547 languages possess morphological imperative marking. Between 327 and 382 out of 495 languages possess a prohibitive sentence type. 133 out of 375 languages have a maximal imperative-hortative system. 73 out of 319 languages show an inflectional optative. 529 out of 884 languages are taken to possess question particles for polar interrogatives and 264 out of 902 languages possess obligatorily *wh*-initial interrogatives. The classificatory criteria involved here are the responsibility of the respective section authors, of course, i.e., Johan van der Auwera and colleagues in the case of imperatives and their kin and Matthew Dryer in the case of interrogatives.

[3] The relation between form types ("Satztypen"), classes of form types ("Satzarten"), and structural meanings of such classes ("Satzmodi") is stated more carefully by Zaefferer (1987; 1989). For a proper treatment of subordination a further distinction between sentence type and clause type is useful.

[4] Alternative terms are, among others, "sentential force" (Zanuttini & Portner 2003), and "primary illocution" (Allan 2006a; 2006b).

within a particular sentence mood via modification of the form type and the illocution default. An example are non-finite *wh*-interrogatives like (1.02).

(1.02) *Where to begin?*

Here the formal shift to a non-finite clausal core goes along with a particular constraint on use. Utterances of structures like (1.02) count as "reflective," quasi self-addressed acts of posing rather than asking a(n often practical) question (cf., e.g., Lyons 1977:755; Reis 2003:3.3). Given involvement of some kind of covert modality in the semantics of such non-finite interrogatives (NFIs) (Bhatt 2006), their denotation type can equally be seen as a modification of the one of standard interrogatives. We will come back to NFIs in later chapters.

Minor sentence types possess a "non-basic" sentence mood, associated with its own denotation type and illocution default. One clear candidate are optatives, exemplified here by what constitutes a rather "archaic" type in English:[5]

(1.03) *God save the Queen!*

We will return to the illocutionary dimensions of optatives below. A proper determination of their denotation type will have to await further research.[6,7]

With these rough preliminary distinctions at hand, we can formulate a general research agenda. One overarching task will be to find (more) principled ways of organizing the "field" of sentence types. Among many other things, this will require addressing the question as to which "non-basic" sentence moods there are and, once one has identified a candidate set, reflecting on why it should be exactly these. At the same time it has to be asked whether "sentence mood" is the right notion to identify all minor types. Last but by no means least, one has to specify what kinds of "modifications" are responsible for the creation of special types.

In what follows this agenda will be pursued in two steps. Section 2 will discuss approaches to characterizing the basic sentence types and reflect on what it is that justifies their being considered basic. In particular, Section 2.1 takes the view from illocution types, Section 2.2 brings in cognition, and Section 2.3 discusses a syntactic approach. In Section 3 we will look at some ways of "deriving" special and minor sentence types. This will include the enriching of illocution types (Section 3.1), the fine structure of functional projections in syntax (Section 3.2), and phenomena arising from insubordination and truncation in Section 3.3.

2. Approaches to Basic Sentence Types

2.1 *Sentence Types and Illocution Types*

Given the above mentioned close relation between sentence mood and default illocution, one might expect the "taxonomy" of illocution types to be of help in distinguishing basic from non-basic sentence types. However, as is well-known, one of the most principled and influential classifications of illocution types, i.e., the one in terms of "direction of fit" (d-o-f)

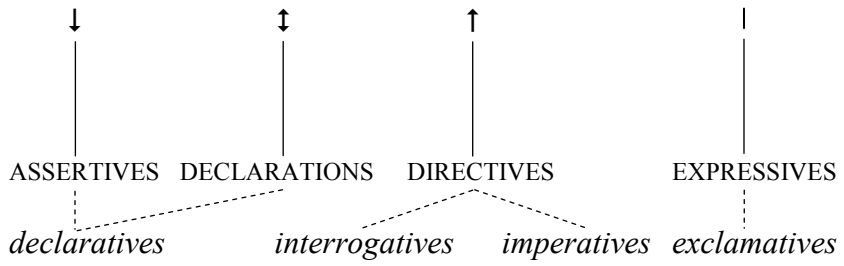
[5] Harbert (2007:5.1.2.2.1) provides some historical background on the optative in Germanic languages and its affinity to subjunctives. Van der Auwera and Schalley (2004) add some cautionary notes concerning the terminology and identificational criteria involved.

[6] For recent work, see Grosz (2012; 2013), whose analysis in terms of a covert exclamatory operator, however, is is not applied to cases like (1.03), but, among others, *if-(only-)*optatives.

[7] The combinatorics envisaged here clearly allows for specializations of minor sentence types, e.g., special optatives.

by Searle (1976), leads to significant mismatches. This is shown in (1.04) (↓ = word-to-world; ↑ = world to word; ↕ = both directions; | = no direction).[8,9]

(1.04)

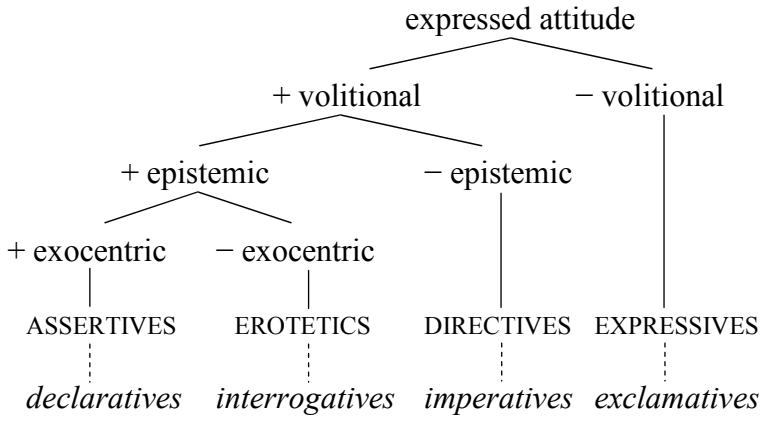


(1.04) offers the insight worth noting in the current context that the three basic sentence types are associated with unambiguous d-o-f values (↓;↑). However, the often criticized lumping together of interrogatives and imperatives stands out as in need of explication. Likewise, declarations could be expected to leave a much more significant impact on the cross-linguistic inventory of sentence types, when, if anything, they might occasionally give rise to special declaratives. Arguing such a case for English would require taking the specialized use of the simple present tense shown in (1.05) as relevant modification of the declarative form type.[10]

(1.05) *I (hereby) give you my butterfly collection.*

A detailed critique of the Searlean approach is provided by Zaefferer (2001a), who devises a system that harmonizes illocution types and sentence types. The result is shown in (1.06).

(1.06)



[8] Hancher (1979) and Rolf (2006) survey some further classifications, while Ballmer (1979) and Kissine (2013) analyze the principles underlying such classifications.

[9] For the placing of exclamatives – a term I prefer over Sadock and Zwicky's "exclamatory sentences" – , see Sadock and Zwicky (1985:162) and Vanderveken (1990:108). Their status, however, is controversial, and it has been argued that "[e]xclamatives all occur as modifications of the other five clause-types or subsentences" (Allan 2006a:1; cf. Rosengren 1992).

[10] Ideally, this would be couched within a unified analysis of "non-standard," e.g., "reportive" and "historical" (cf. Cowper 1998), uses of the simple present. Also, it would be interesting to link such an analysis to the related behavior of the Slovene imperfective (Žagar 2011).

Sadock and Zwicky (1985:157) introduce their section on explicit performatives by stating that "[m]any languages have a particular syntactic construction [...]," without providing cross-linguistic evidence. The subsequent discussion, which focuses on the performative use of verbs, fails to make a clear distinction between formal and functional criteria. Recent work by Bücking and Rau (2013) on the "virtual performativity" of German "non-inflectionals" may serve as a(nother) starting point for remedying the situation. We will briefly come back to this construction in later chapters.

The essentials of this approach are explained as follows: "If the expressed attitude is not primarily volitional in the sense of some well-defined will [...], it will result in an expressive speech act. All other speech acts express a focused volitional attitude toward either a necessarily epistemic event (that some assumption be made) or another event [...]. An epistemic goal may be either primarily addressee-oriented (exocentric) or speaker-oriented (non-exocentric); in the former case it is reached in general if the addressee assumes the propositional content, i.e. the given proposition, in the latter case it is reached if the speaker assumes the maximal correct part of the propositional content, i.e. all and only the true ones from the given set of propositions. The achievement of a non-epistemic goal may [...] be required, as with the directive speech acts [...]" (Zaefferer 2001a:223).

Quite clearly, the layering of attitudes in (1.06)[11] allows bringing illocution types and sentence types into a more satisfactory correspondence. In particular, Sadock & Zwicky's basic or major sentence types are grouped under the feature [+ volitional], which means, their default association is with illocution types that express (or make manifest) "some well-defined will."[12] With the introduction of an erotetic illocution type standing in for "question acts," something earlier proposed by, e.g., Wunderlich (1976) and Katz (1980),[13] interrogatives are now on an equal footing with declaratives and imperatives in occupying a unique systemic position.[14]

In a reply to Zaefferer, Searle (2001) criticizes the resulting "illocutionary semantics" of assertion as stated in (1.07).

(1.07) *Assertion* (Zaefferer 2001a)[15]
EXPRESS(S, H, WANT(S, ASSUME(H, p)))

In particular, Searle (2001: 288) objects to this analysis because:

> it leaves out the fact that the making of an assertion is a *commitment* on the part of the speaker to the truth of the expressed proposition. Second, a speaker can make an assertion quite satisfactorily without giving a damn whether the hearer assumes what he says is true. He might even make this explicit. He might say, "I don't care whether you assume that it is raining, all the same it's raining." If Zaefferer were right, this would be a self contradiction on part of the speaker.[16]

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[11] Kiefer (1992) speaks of "basic epistemic attitudes" building on work by Bierwisch (1980). We'll come back to the issue of attitudes at various places, in particular in Sections 2.2 and 3.3.

[12] Searle's declarations – and also commissives (see below) – are taken to be derivable as indirect speech acts from assertive uses of declaratives (Zaefferer 2001a:224).

[13] Wunderlich (1976:77) assumes eight illocution types: Directives, Commissives, Erotetics, Representatives, Satisfactives, Retractives, Declarations, and Vocatives. The classification is based on "conditions on interaction" (p.56). Katz (1980:205) introduces "Erotetic Requestives" as a subtype of "Requestives" (= Directives minus "Advisives"). Austin (1962:162) subsumes the predicate "*ask* (*questions*)" under Expositives. It should be mentioned that some of the foundational issues involved are treated within a "logic of questions" or "erotetic/interrogatory logic" (cf., e.g., Prior & Prior 1955).

[14] One objection to the analysis of question acts as directives is that it hides an additional illocutionary operator required in the former case (Zaefferer 2001a:212):

(i) a. *Ask-whether*(p) ≠ *Order-that*(p)
b. *Ask-whether*(p) ≈ *Order-that*($Tell_A$-*whether*(p))

[15] Zaefferer (2001b:810) speaks of an "ich-will-dass-du-weißt-Einstellung" ('I-want-that-you-know-attitude'). His approach is closely related to the ones by Ballmer (1979) and Bach and Harnish (1984). Following Jary (2010:2.2.1.1), who bases his argumentation on work by Millikan (1984; 1989), one can consider the "informativeness" involved as part of the "functional protoype" of assertion.

[16] This reiterates a point already made by Searle (1969:46): "I may make a statement without caring whether my audience believes it or not but simply because I feel it my duty to make it." This is in line with of Searle's plea to keep perlocutionary effects out of the definition of illocutionary force (cf. Ballmer 1979:248f.).

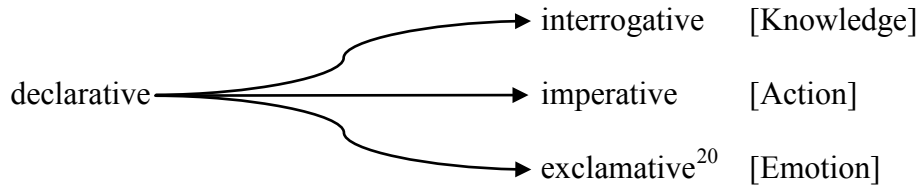
In response to this critique, Zaefferer (2006a; 2006b; to appear) revises the earlier theory by removing the "recipient specification" [± exocentric] of volitional epistemics. The resulting analysis of assertion is given in (1.08) (*BE.ASSUMED(p)* ⇔ *[ASSUME(S, p)* ∨ *ASSUME(H, p)]*).

(1.08) *Assertion* (Zaefferer 2006a; 2006b)
EXPRESS(S, H, WANT(S, BE.ASSUMED(p)))

While this answers Searle's challenge,[17] it has unwelcome consequences for the determination of sentence types via illocution types in that the distinction between assertives and erotetics underlying the one between declaratives and interrogatives is lost.[18]

2.2 *Sentence Types and Cognition*
Croft (1994) argues for a cognition-based approach to the typology of sentence types,[19] the essential structure of which is shown in (1.09)(p.470).

(1.09)



Starting point for this classification is the claim that declaratives constitute an unmarked default type,[21] while interrogatives, imperatives, and exclamatives encode specializations arising along the dimensions of knowledge, action, and emotion, respectively. Crucially, "[t]he distinction between knowledge, action and emotion found in [...] interrogative, imperative and exclamation [...] is derived from the mental division of human states and actions in the common-sense model of belief-desire-intention psychology" (p.475).

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[17] This is further discussed by Gärtner (2012), where it is shown that a variant of Searle's objection applies to Zaefferer's proposal for treating the German reportive ("evidential") modal *wollen* ('to want') in parallel with the assertion operator. In particular, I argue there that going from a counterpart of the analysis in (1.07) to a counterpart of the one in (1.08) does not help in that case.

[18] Plunze and Zimmermann (2006) point out an interesting problem that arises for the closely related "intersubjective" analysis of (the structural meaning of) interrogatives by Truckenbrodt (2004), which is devised to provide a single neutral format for standard information questions, exam questions, rhetorical question and others:

(i) a. V-in-C-*Interrogative*: *WANT(S, A, KNOW(S&A, Q))*
b. *Does Mary care?* *WANT(S, A, KNOW(S&A, whether-Mary-cares))*
"The speaker asks the addressee to bring about joint knowledge concerning the question whether Mary cares"

Consider the following minimal dialog set in a context where A enters B's taxi:

(ii) a. A: *Take me to the Norwegian embassy!*
b. B: *Where is the Norwegian embassy?*

Given A's indication that (s)he takes B to know where the Norwegian embassy is, Truckenbrodt's theory seems to predict that B's utterance will not be taken as a genuine information question.

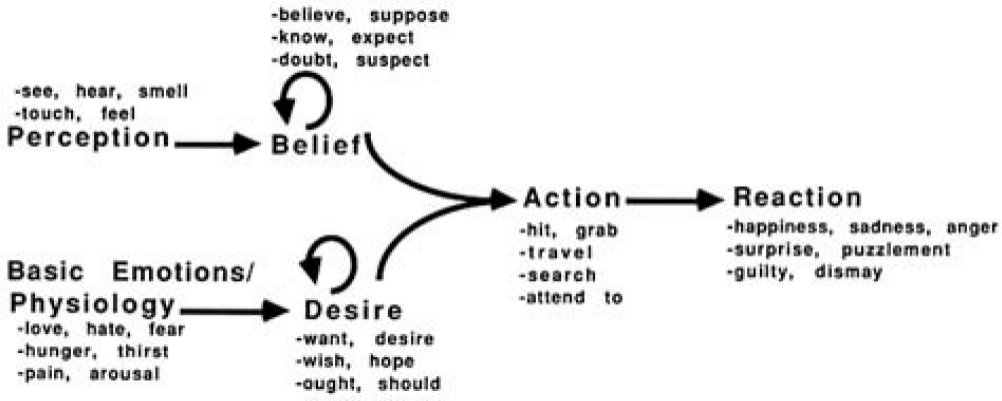
[19] Brugmann (1918) can to some extent be considered a forerunner here, since he sets out to study differences of sentential form (in Indoeuropean languages) in relation to core functions of the mind ("seelische Grundfunktionen"). However, he stresses that the (emotional and volitional) processes studied by psychology are more fine-grained than what is found expressed (structurally) in natural languages and therefore rejects close co-classifications (p.27). Highlighting "conventional forms of expression,exc" Brugmann (ibid.) lists the following functions of sentence types: exclamation, wish, request, concession, threat, defense and rejection, statement, and question.

[20] In order to maintain a clearer form-function divide, I substituted "exclamative" for Croft's term "exclamation."

[21] Panther and Köpcke (2008) consider declaratives to be "prototypical" sentences, without, however, showing any interesting specific consequences of this assumption for our current debate.

In order to get a better grasp of "belief-desire-intention psychology," we will have a look at an overview by Wellman (1990), endorsed by Croft as one of his sources (p.477,fn.15). At its core, this model is designed to capture the idea that "intentional actions are caused by beliefs and desires" (Wellman 1990:105).[22] This is sketched in (1.10).

(1.10) "*Simplified scheme for depicting belief-desire reasoning*" (Wellman 1990:100)



Now, if (1.10) is taken as grounding the functional dimensions in (1.09), it would be ideal if the latter could be mapped onto the internal components here, i.e., Belief, Action, and Desire. An obvious mismatch, however, arises with regard to the status of emotions. This has been noticed by Croft (1994:473):

> The emotions expressed by expressive sentences tend to be evaluative rather than the emotion of desire focused on by belief-desire-intention psychology, which is primarily concerned with how volitional acts originate. [...] a more elaborate model is necessary to account for the linguistic pattern, covering emotion in general rather than just desire.[23]

[22] Note that Wellman (1990:100) speaks of "belief-desire" reasoning, building on work on rationality and action causation by, e.g., Davidson (1980), Bratman (1987) and Stich (1983). Croft (1994:473) equally stresses the interdisciplinarity of "the 'belief, desire, intention' [...] model found in philosophy, psychology and artificial intelligence." One may add that work on "BDI-logic" has been done, for example, by Rao and Georgeff (1998) and Semmling and Wansing (2008).

[23] It may be argued that a revised model should be more course-grained rather than "more elaborate." The "elaborated scheme for depicting belief-desire reasoning" below (Wellman 1990:109), which further distinguishes "basic" from "cognitive" emotions, seems to make the mapping task more difficult, at least as long as Sadock and Zwicky's basic or major sentence types are the intended relata.

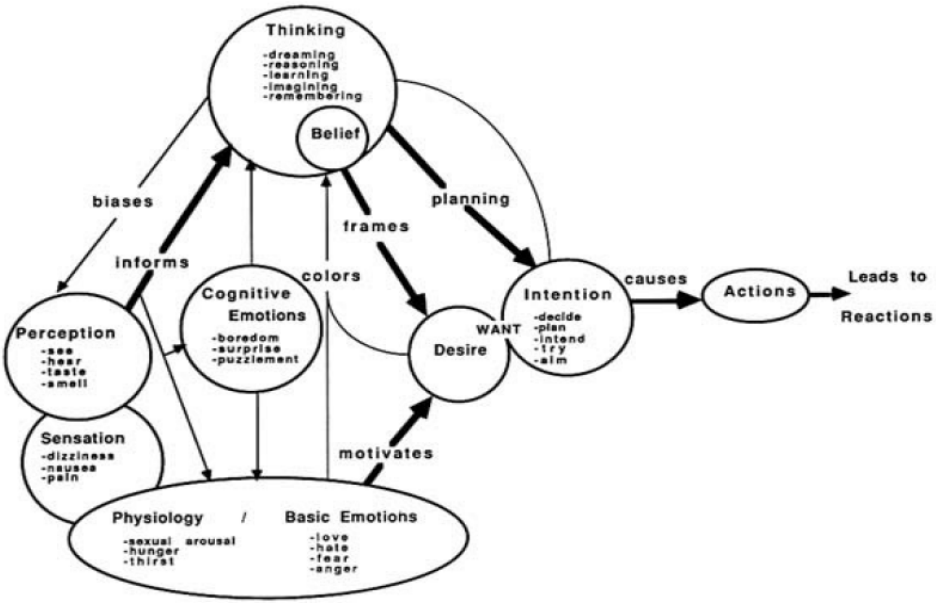
Thus, as it stands, "belief-desire-intention psychology" would seem to assign a more marginal place to "expressive sentences" in general[24] and exclamatives in particular. Wellman (1990:105f.) characterizes the core intuition behind this as follows:

> The distinction between desires (wanting to do something, wishing that something would happen) and basic emotions (hate, anger, fear, anguish) is an important but also an imprecise one. The potential confusion between specific desires and particular emotions is evident in the broad scope of the generic term *feeling*. One can "feel that something would be nice" (a desire) but also "feel hungry" (physiology) and "feel sad" (basic emotion). "Feeling that something would be nice" counts as a desire because of its intentional, propositional attitude nature. Emotions and emotional reactions such as love, pleasure, and sadness ground one's propositional desires but do not constitute desires themselves.

From the linguistic perspective, the distinction is clearly related to Searle's direction of fit: exclamatives are canonically used as reactions to states of affairs (or "stimuli") and thus (at core) "factive."[25] By contrast, what is said about desire here most directly describes the function of optatives. The following remarks by Searle and Vanderveken (1985:95) confirm this:

> Consider the English sentence "If only John would come!" or a sentence in the old optative mood "Would that John came." Utterances of such sentences function as expressions of desires, and they are therefore expressives, but they are exceptions to the general rule that the direction of fit of the illocutionary point and of the sincerity conditions are identical, since each of these expresses a psychological state with a world-to-mind direction of fit though the point of the utterance is not to bring about success of fit.

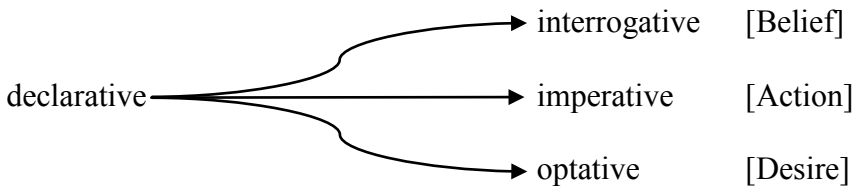
We will come back to expressives and modifications of Searle's illocution types later (Section 3.3). Here it suffices to note that "belief-desire-intention psychology" as described by



[24] See Rosengren (1994) for a critique of this notion. Note that the Reaction component contains ingredients that fit the standard use of exclamatives quite well. However, unless one wants to link reactions to perlocutions, this is must be considered orthogonal to Croft's (narrower) agenda.
[25] For discussion, see, among others, the works by Zanuttini and Portner (2003) and Abels (2010).

Wellman (1990) promotes optatives to a place next to interrogatives and imperatives and "demotes" exclamatives. (1.11) captures the implied revision of (1.09).

(1.11)



Let us turn to a more general point about using (1.09)/(1.11) as model for basic or major sentence types.[26] The geometry of the graph suggests a symmetry such that there is no privileged declarative-interrogative association, contrary to what is proposed by Zaefferer (2001a) as sketched in (1.06). Thus, no direct account can be given for the facts that "interrogatives [...] are structurally often quite similar to declaratives" (Croft 1994:467) that there is an "extremely widespread identity of indefinite and interrogative pronouns" (p.469), and that one usually finds the "same negative marker for both declaratives and interrogatives" (p.467). At the same time, the fact that both exclamatives and optatives are counted as minor sentence types by Sadock and Zwicky (1985: 2.3.1 / 2.3.3) remains obscure.

Finally, while the default relation between sentence moods and illocution types guarantees a fairly straightforward explanatory role for speech act classifications like (1.05) and (1.06), this role is less clear in the case of bdi-models such as (1.10). Here Croft (1994:473) argues that "[s]ince linguistic communication employs the mind, this model suggests that this distinction [knowledge-emotion-action/belief-desire-intention] will be reasonably well respected in the structure of language used to perform speech acts."[27] However, the bdi-model in (1.10) captures matters of individual psychology: a subject's beliefs and desires may cause that same subject's actions. By contrast, while the content of a declarative or an optative may reflect a speaker's belief or desire, the content of an imperative reflects the (prospective) action not of the speaker but of someone else, usually the addressee.[28]

2.3 *Sentence Types and Syntax*

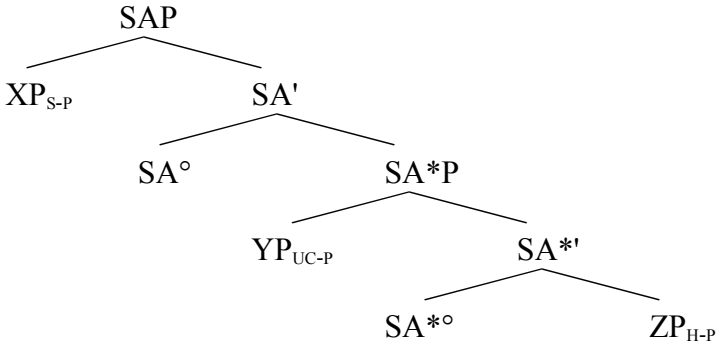
A different proposal for characterizing basic or major sentence types has been made by Speas and Tenny (2003), who take the following ("silent") functional projections to constitute the periphery of root clauses (p.320).

[26] Croft (1994:461) explicitly states his purpose to "[...] survey the empirical data for major sentence types, based on Sadock and Zwicky 1985 and other sources, and argue for a cognitive model of conversational interaction that respects the typologically most common or universal grammatical distinctions".

[27] Conversely, "[...] from the functionally oriented typologist's point of view, it [the grammatical expression of speech acts] is a source of hypotheses about human conceptual structures" (Croft 1994:460f.).

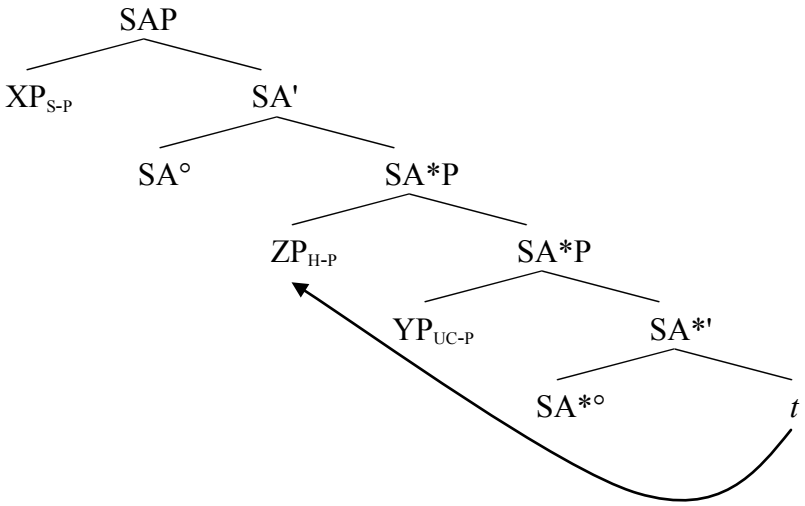
[28] More careful discussion of these matters – including critical reflection on direction of fit as generating (1.05) and layered attitudes underlying (1.06) – would lead us to far afield. Thus, in applying the category Knowledge/Belief to interrogatives one would actually have to say that their content may reflect the speaker's ignorance.

(1.12)



A layering of "speech act phrases" (SAP, SA*P) serves as host for constituents assigned the so-called "pragmatic (P-)roles" *speaker* (S-P), *hearer* (H-P), and *utterance content* (UC-P). In line with earlier approaches to speech act syntax known as "performative analyses" (cf., e.g., Ross 1970; Sadock 1974), the structure in (1.12) is motivated as (isomorphic to) the lexical projection of a ditransitive communication predicate like *tell*, *ask*, or *order*, where P-roles correspond to the more familiar Θ-roles. And, in line with standard analyses of ditransitive VPs, Speas and Tenny (2003:321) allow application of (a counterpart of) "dative shift" (or 3 ⇒ 2 "promotion") (cf. Larson 1988), i.e., $ZP_{H\text{-}P}$-shift, to yield (1.13) from (1.12).

(1.13)



(1.12) and (1.13) form the basis of a configurational characterization of major sentence moods (Speas & Tenny 2003:320ff.) that can be summarized as follows:[29]

(1.14)	[+ finite CP]	[– finite CP]
[– $ZP_{H\text{-}P}$ shift]	*declarative*	*subjunctive/optative*
[+ $ZP_{H\text{-}P}$ shift]	*interrogative*	*imperative*

Thus, syntactic principles of encoding "lexical conceptual structure" in the sense of Hale and Keyser (2002) are taken as foundational for grammatical "speech act distinctions."

One interesting consequence of (1.14) seems to be that the imperative constitutes the most marked type among major sentence moods. This would perhaps make sense if optative/subjunctive mood were taken to stand for full-fledged "imperative-hortative" systems

[29] Arguments that imperatives are not finite can, for example, be based on work by Platzack and Rosengren (1998), who take imperatives to lack FinP.

while imperative stands for "second person specializations" thereof (cf. van der Auwera, Dobrushina & Goussev 2003; Xrakovskij 2001). At the same time, if one interprets $ZP_{H\text{-}P}$-shift as corresponding to a pragmatic shift from speaker commitment to addressee commitment wrt. the dimensions of information and action, one expects a counterpart of a commissive rather than of a "desiderative" (subjunctive/optative) to fill the upper right cell.[30]

Gärtner and Steinbach (2006) raise a number of objections to the above approach by Speas and Tenny (2003). Thus, the privileged status of dative shift over other diatheses like passives (2 ⇒ 1; 3 ⇒ 1) may be considered arbitrary. Alternative choices would, however, affect the size of the inventory of types with a concomitant loss of criteria for which to count as major and which as minor.[31] Also, the empirical basis for involving $ZP_{H\text{-}P}$-shift the way it is done may be questioned. To see this, consider the examples in (1.15).

(1.15) a. *Honestly, Mary knew the victim.*
b. *Honestly, who knew the victim?*
c. *Seriously, stay away from polemics!*

The "control" of speech act adverbials like *honestly* shifts with the change between declaratives and interrogatives from speaker to addressee (Speas & Tenny 2003:335). In (1.15a), *honestly* signals an honest claim while in (1.15b) it flags the request for an honest answer. Now, if this contrast is taken to result from $ZP_{H\text{-}P}$-shift and a closeness principle for "control," the prediction is that *seriously* in imperatives like (1.15c) should equally be anchored to the addressee. However, that is not the case. Instead, (1.15c) must be construed as conveying serious advice.

3. Toward Special and Minor Sentence Types

So far we have seen models for characterizing basic or major sentence types in the sense of Sadock and Zwicky (1985). Before going into ways of enriching such kinds of models, let us ask to what extent they already provide for special and minor sentence types in their current "pure" states. Curiously, all of the approaches above define four categories. Thus, if one accepts Sadock and Zwicky's count of three major types, special and minor types would have to be covered by the fourth category, ideally in some insightful way.

In fact, there is a split among the above models according to which of two minor sentence types they privilege. The best fit of an expressive illocution type as defined in (1.04) and (1.06) as well as of a cognitively grounded category of emotion, (1.09), seems to be the exclamative. A cognitively grounded category of desire, (1.11), and speaker anchoring of non-finite core clauses, (1.14), seems to favor optatives. As for insightfulness, we have already remarked in Section 2.1 that Zaefferer (2001a) achieves an elegant grouping of three major types as corresponding to volitionally specific and focused ("goal-oriented") illocution types ([+ volitional]). The expressive type is split off as lacking this property ([− volitional]). All the other models are rather symmetric, which would indicate that Sadock and Zwicky's count of major types may have to be revised or rejected as arbitrary.[32] Either way, it remains to be seen how to accommodate both exclamatives and optatives at the same time.[33]

[30] As it stands, the system matches desiderative vs. directive uses of German bare root infinitivals (BRIs) fairly well. See Chapters 2 and 4.

[31] Instead of configurational grounding for exactly three P-roles, standard models of communication (e.g., Shannon & Weaver 1949) that distinguish sender, message, and receiver can be invoked (Gärtner & Steinbach 2006:316).

[32] A case for "three separate communicative aspects," namely, "an informational, representational aspect," "an effective, social aspect," and "an affective, emotive aspect" has been made by Sadock (1994:397). This echoes the three dimensions of signs in the "organon-model" by Bühler (1934) and, ultimately, the metaphsical world view of the three Kantian critiques (pure reason, praxis, aesthetics). From a typological perspective it may also

In the following subsections we will have a look at various ways of enriching the kinds of models introduced in Section 2. As stated in Section 1, the aim here is to find more principled ways of characterizing special and minor sentence types. The particular steps will be to look at more elaborate models of illocution types (Section 3.1), richer functional hierarchies in syntax (Section 3.2) and forms resulting from insubordination and truncation (Section 3.3).

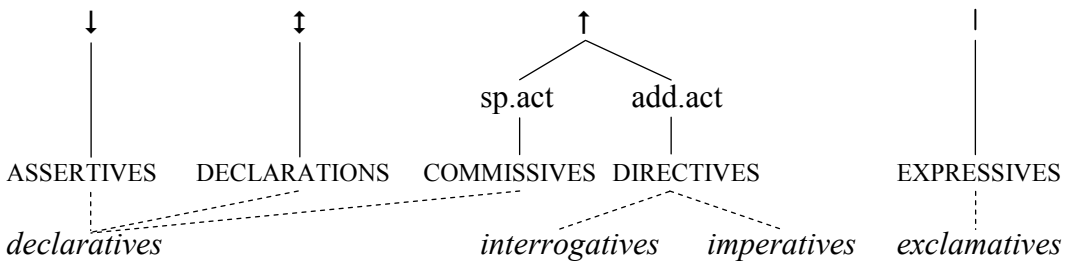
3.1 *Enriched Illocution Types: Dimensions and Dualities*

The careful reader will presumably have noticed that the rendering of the approach by Searle (1976) in (1.04) is simplified. As argued by Searle (1976:11f.), a fifth illocution type may have to be assumed:[34]

> Since the direction of fit is the same for commissives and directives, it would give us a simpler taxonomy if we could show that they are really members of the same category. I am unable to do this [...]. In order to assimilate the two categories, one would have to show that promises are really a species of requests to oneself [...], or alternatively one would have to show that requests placed the hearer under an obligation [...]. I have been unable to make either of these analyses work.

As a consequence, the world-to-word dimension (↑) of (1.04) will have to be split by parameterizing who is to act in order to bring about the desired change, the speaker (*sp.act*) in the case of the commissive illocution type and the addresse (*add.act*) in the case of directives.

(1.16)



Added just locally, the speaker/addressee parameter in (1.16) appears rather *ad hoc*. In fact, this kind of adjustment makes more sense within Zaefferer's approach, which already contains the featural counterpart [± exocentric] for distinguishing assertives from erotetics. (1.17) shows the required revision of (1.06).

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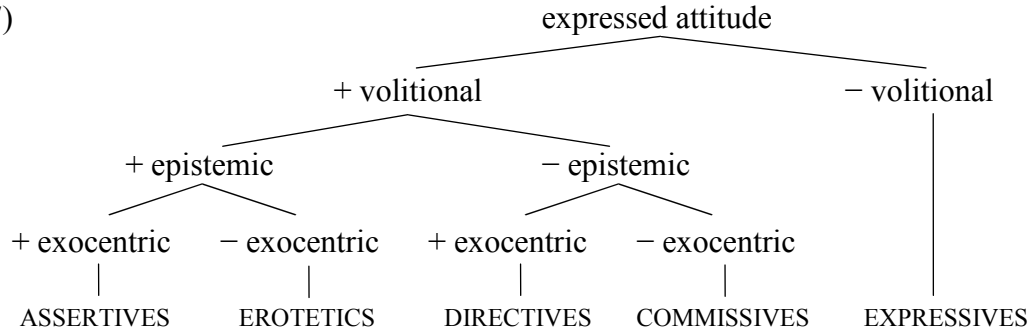
make sense to build implicational hierarchies that start with a two-way split between "propositional and behavioural basic illocutions" (Hengeveld et al. 2007).

[33] The different models come with different biases in this respect. We have already seen that Searle and Vanderveken (1985:95) envisage introducing a second dimension, i.e., "mind-to-world" direction of fit, to the model. This generates a four by four matrix of possible illocution types, where optatives are analyzed as ⟨|,↑⟩. For Zaefferer, subsumption of exclamatives and optatives under expressives makes most sense. Zaefferer (2007:209f.) includes optatives under "[e]xpressive illocution[s] (for emotion sharing)" but splits off exclamatives into a "group of hybrids. These are called expressive epistemics because they aim not only at shared knowledge but also at shared emotions." We have seen that if Croft retains the model by Wellman (1990) in (1.10), optatives correspond to the core category of desire, while exclamatives are linked to the more marginal category of emotion. The most attractive choice for Speas and Tenny seems to be to consider exclamatives a non-independent superposition over the other sentence types (cf. Allan 2006a; Rosengren 1992).

[34] A more careful discussion would have to deal with the question as to whether Searle's skepticism concerning addressee obligations as direct parts of directive illocutions can be made compatible with the commitment shift interpretation of $ZP_{H\text{-}P}$-shift given for the approach by Speas and Tenny (2003) in Section 2.3. Likewise, the idea promoted by Portner (2004) that imperatives update an addressee's "to-do list" (see below) has to be scrutinized from that perspective. Alston (2000:4.v) defends the obligation approach to directives.

(1.17)



However, heeding the default association of commissive illocutions with declarative sentences, Zaefferer (2001a:224) proposes to derive commissives as indirect speech acts from assertives (cf. Footnote 12). (1.16) shows that the Searlean approach creates yet another mismatch between illocution types and sentence types.

One caveat has to be added here though. Work by Pak, Portner and Zanuttini (2008) suggests that Korean may possess a "promissive" sentence type, (1.18a), along with an imperative, (1.18b), and an "exhortative," (1.18c).

(1.18) a. *Nayil cemsim-ul sa-ma*
tomorrow lunch-ACC buy-PRM
"I will buy lunch tomorrow!"

b. *Cemsim-ul sa-la*
lunch-ACC buy-IMP
"Buy lunch!"

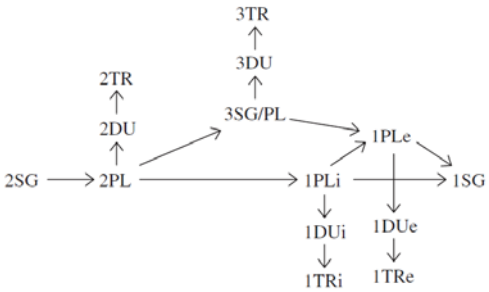
c. *Cemsim-ul sa-ca*
lunch-ACC buy-EXH
"Let's buy lunch!"

These three cases can be considered specializations of a "jussive" sentence type (Pak, Portner & Zanuttini 2008:159), where use of a jussive is interpreted as "adding a requirement to some individual's To-Do List" (in the sense of Portner 2004) (p.172). "Promissives are directed at the speaker, imperatives at the addressee(s), and exhortatives at a group containing both" (ibid.). The crucial distinctions are implemented as agreement relations between the different final particles and the (covert) subject of jussive clauses (p.173).[35]

Another modification of Searle's illocution type model may be called for if New (1988:215) is right in claiming "[...] that the existing Searlean categories cannot accommodate permissions." Interestingly, the treatment of permissions is directly addressed by Zaefferer (2001a:222):

> It is one of the advantages of the present formal account of propositional and illocutionary modalities that it predicts the existence of systematically related meanings which may or may not be encoded by systematically related forms. An especially nice example of this is the permissive usage of imperative forms.

[35] On the interpretation that Korean *la* = 2.SG & 2.PL, *ca* = 1.PL.i(nclusive), and *ma* = 1.SG, the Korean jussive would occupy the central horizontal axis in the typological "imperative-hortative map" below, suggested by van der Auwera, Dobrushina and Goussev (2003:56):

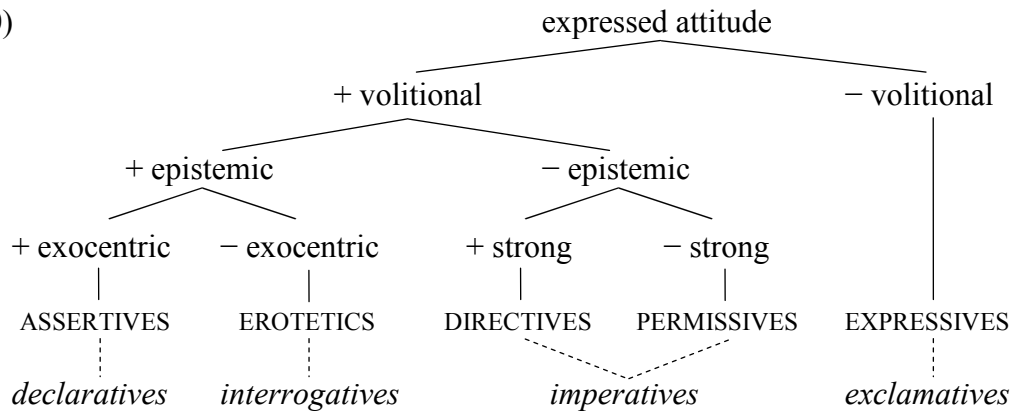


Conceiving of illocutionary operators as modalities allows Zaefferer to rely on the interdefinability ("duality") of strong and weak modal operators for relating permissives and directives. This is shown in (1.19).[36]

(1.19) a. *EXPRESS(S, H, WANT(S, DO(H, p)))* [DIRECTIVES]
b. *EXPRESS(S, H, ~WANT(S, ~DO(H, p)))* [PERMISSIVES]

In fact, the full version of (1.06) given by Zaefferer (2001a:223) already contains this additional fifth type, as shown in (1.20).

(1.20)



Of course, lack of any (obvious) additional form type corresponding to permissive illocutions might make this modification look unattractive. However, (1.20) can be seen as one of the heuristics in the search for special and minor sentence types.[37] In fact, the employment of dualities can be further generalized, since, as shown in (1.21), it makes perfect sense to consider concessives "weak assertives."

(1.21) a. *EXPRESS(S, H, WANT(S, ASSUME(H, p)))* [ASSERTIVES]
b. *EXPRESS(S, H, ~WANT(S, ~ASSUME(H, p)))* [CONCESSIVES]

"I-don't-mind-if-you-assume" concessions may arguably be expressed (non-ironically) by declaratives such as (1.22).

(1.22) *Alright, it's always warm in Reykjavík in May.*

What remains to be explored is whether languages develop (independent/root) sentential form types for the exclusive expression of concessives, either as special declaratives or in other ways.[38]

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[36] *DO* is adequate if *p* is of type "action" (cf. Mastop 2005). Alternatives are *BRING.ABOUT* or *STIT* ("see-to-it-that") (cf. Horty & Belnap 1995).

[37] Among the "Lexical Sources for Ability, Root Possibility, and Permission" surveyed by Bybee, Perkins and Pagliuca (1994: Tables 6.2 & 6.3), none of the affixes, particles or auxiliaries is used exclusively for the expression of permission. The authors later mention "the Greek particle *as* from the Ancient Greek Imperative *áphes* 'let!'" as a possible exception (p.193) (see, however, Karantzola 1995). Pak (2008:4.2.7) discusses a "permissive" form type in Korean, which she argues to be a subtype of imperatives. Aikhvenvald (2010:223) reports that "[t]he Amur dialect of Nivkh has a special permissive verb form used to grant permission to the addressee [...]." Other examples discussed by Aikhenvald either serve multiple function beyond permission or are used for "seeking permission" such as the Tuyuca particle *ma* (p.201; p.208). The issue of permission is taken up again briefly in Chapters 3 and 4.

[38] *Lassen*('let')-initial imperatives in German would be candidates. (1.22) can be rendered as *OK, Lass es in Rejkjavík im Mai immer warm sein*. Concessivity here derives from asking for something to be "allowed" to be

Of course, once the combinatorics is recognized, further potential types are predicted. Thus, the dual of an erotetic type would presumably be something like a reluctant question or a permission to tell (*OK, tell me if you must* ...). To the extent that this makes sense – one may use the [− exocentric] counterpart of (1.21b): *EXPRESS(S, H, ~WANT(S, ~ASSUME(S, Q)))* ("I don't mind knowing the answer to *Q*") – one has proven the fruitfulness of combining several of the illocution type "modifiers" (duality [± strong] and commitment shift [± exocentric]).

Let us briefly return to permissions. The Searlean approach to the challenge is given by Searle and Vanderveken (1985:202) and reiterated by Vanderveken (1990:197): "To permit someone to perform an action is to perform the illocutionary denegation of an act of forbidding his doing it." An insightful formal characterization of denegation acts is provided by Cohen and Krifka (2011:15):

> The denegation of a speech act [...] consists in a change of the input commitment space, namely in explicitly refraining from making the speech act that is denegated. [...] Either locally, the speaker refrains from making the speech act at the current point, or globally, the speaker refrains from making the speech act now or at future states

The global version of denegating an act *A* can be depicted as follows (Krifka to appear):

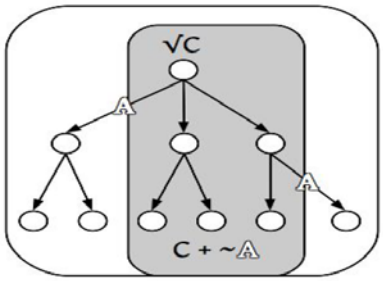

Figure 3: Denegation of commitment space with ~A.

Commitment states that can only be reached by *A* become inaccessible.[39]

However, this mechanism seems to be to weak in a state where a standing ban is lifted via permission. Here an additional revision of earlier commitments appears to be required.[40,41]

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the case. The concessive function of Latin *licet* is clearly relevant here (cf., e.g., Maraldi & Orlandini 2001). However, like the related Romance concessive futures (cf., e.g., Squartini 2012), German *lassen*-initial imperatives possess an additional conjectural function. Thus, in response to being asked the time one may utter *Lass es mal 12 Uhr sein* ('I guess it is about 12 o'clock.'; lit. 'Let it be 12 o'clock.')

[39] In line with this, Vanderveken's treatment of denegation closely resembles the analysis of □~*p* in modal logic (cf. Searle & Vanderveken 1985:153,fn.3).

[40] Thus, plausibly *I don't forbid that you go out* is not equivalent to *I allow you to go out*, since in addition to triggering a manner implicature to that effect, the former statement can be followed up by *(I don't have to) since I've already done so* (cf. New 1988:214). See Cornides (1969) for a comprehensive treatment of the background issues involved.

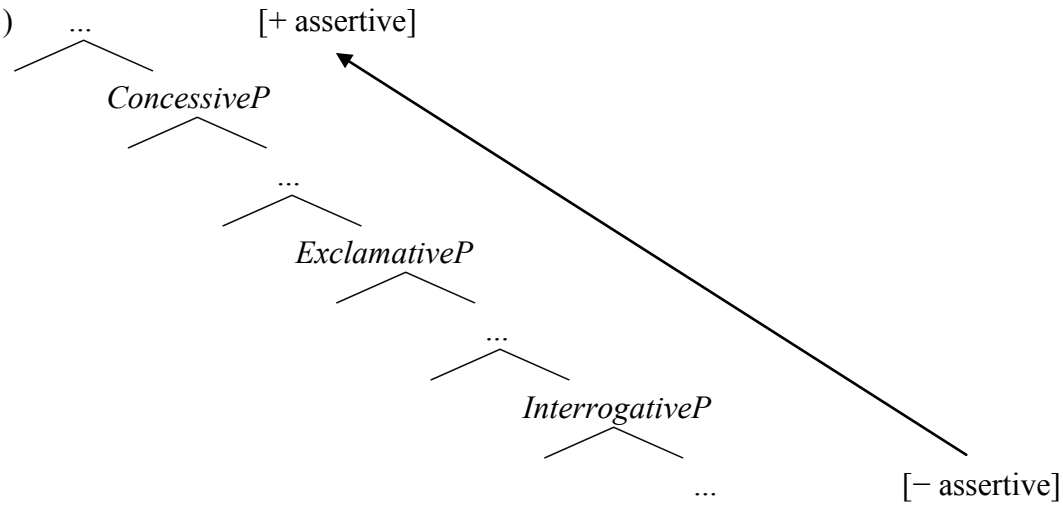
[41] For the treatment of negation and prohibitives, Croft (1994:474) invokes the model of "force dynamics" by Talmy (1988a; b):

> Applying the force-dynamic model to conversational interaction in the simplest (i.e. oversimplified) fashion, the Agonist is the addressee and the Antagonist is the speaker whose utterance affects the Agonist's knowledge and behaviour. If the Agonist is inclined towards stasis, then the Antagonist's force is towards action – this is the positive speech act which will add information (declarative) or a goal to be achieved (imperative). If the Agonist is inclined towards action, then the Antagonist's force is towards stasis – this is the negative speech act which will deny the addition of information (negative declarative) or remove a goal to be achieved (negative imperative).

3.2 *Enriched Clausal Peripheries: Functional Hierarchies and Continua*

Let us return to syntactic approaches to sentence types. The study by Speas and Tenny (2003) (Section 2.3) can be seen as part of a research strand initiated by Rizzi (1997), whose proposal for the "fine structure of the left periphery" envisages a functional projection labeled "ForceP" that hosts or "governs" markings relevant to what Sadock and Zwicky (1985) call "speech act distinctions."[42] In the current context, we are particularly interested in approaches that further enrich and organize the functional environment of ForceP. One case in point is the crosslinguistic study of "North-Eastern Italian varieties," which led Munaro (2011) to introduce the idea of a "hierarchy of clause types."[43] In particular, different types are identified according to verbal positions such that "each type of interpretation is triggered by the raising of the inflected verb to a different landing site inside the CP-layer" (p.160). Concretely, "the projections devoted to clausal typing are hierarchically organized in the following sequence of layers that reflects a from right to left increasing degree of assertive force" (ibid.). (1.23) reproduces an interesting subsection of this hierarchy (cf. Munaro 2011:153):

(1.23)



Now, to the extent that "assertivity" is the right dimension of ordering these functional categories in the first place, the intermediate position of exclamatives indicates that Zaefferer-style assertion is not involved: Expressives are characterized as [− volitional] while assertives belong to the [+ volitional] illocution types, as shown in (1.06).

On the other hand, Munaro (2011:153) assumes that "[i]n this sequence, each head can be seen as the syntactic encoding of the speaker's typical mental attitude with respect to the propositional content expressed by the clause containing the verb with enclisis of the

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One obvious "oversimplification" concerns the fact that positive imperatives can countervene the Agonist's inclination toward action (*Stay put!*) and prohibitives can countervene the Agonist's inclination toward stasis (*Don't just sit there doing nothing!*).

[42] Given that Rizzi's ForceP hosts illocutionary markers, mood markers, and devices for purely formal "clausal typing" (cf. Cheng 1991), the encoding of relative clauses among them (Rizzi 1997:283), it may be advisable to follow Grewendorf (2002:68) in using the more general abstract category TypeP.

[43] Closely related work has been carried out by Obenauer (2004; 2006) and Poletto (2000). Immediately relevant, for example, is the discovery of "a different landing site of *wh*-items when they occur in interrogative clauses which are not interpreted as standard questions, that is as genuine requests for information, but rather as biased questions" (Munaro 2011:155). See "Benincà (1996a) about wh-exclamatives, Munaro & Obenauer (1999) about pseudo-interrogatives, Obenauer & Poletto (2000) about rhetorical questions" (Munaro 2011:155,fn.31). For the wider picture, one may, for example, consult the collections edited by Lohnstein and Trissler (2004) and Adger, De Cat and Tsoulas (2004). The issue of clausal peripheries will be further discussed in Chapter 7 wrt. *wh*-infinitives.

pronominal subject." What this suggests is that (1.23) accommodates the predicted concessive type, (1.21b), derived via modal duality as "weak assertives" in Zaefferer's model. However, the underlying facts are more complicated. Munaro's concessives are actually dependent clauses (related to "irrelevance conditionals") placed in the specifier of ConcessiveP within a bi-clausal structure (cf. Munaro 2011:131).

(1.24) [$_{\text{ConcessiveP}}$ [$_{\alpha}$ *Whether he's rich or poor*] [Concessive° [$_{\beta}$ *I do not care*]]]

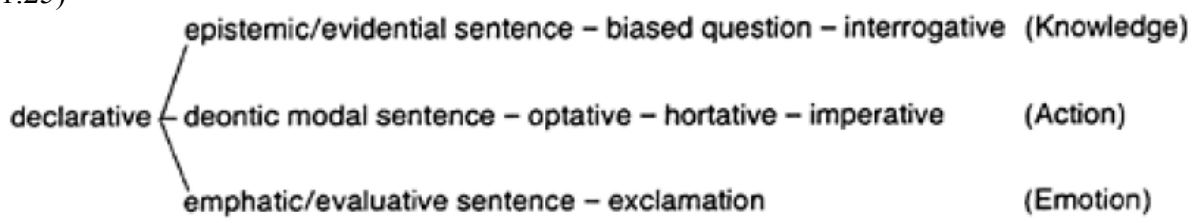
The inversion of pronominal subject and verb applies within these dependent concessives, here α, so the "speaker attitude" involved concerns the content of α. The full structure makes Concessive° a two-place conjunction whose proper interpretation could conveniently be stated within Hintikka-style "game-theoretical semantics" (cf. Hintikka & Sandu 1997) as follows: "The proponent concedes the verification game wrt the "conditional proposition" (α) and defends (≈ asserts) the "main proposition" (β). If this is on the right track, syntax points in the direction of integrating something like "rhetorical relations" (cf., e.g., Asher and Lascarides 2003) as encoded "on top of" the familiar sentence moods.

An important question to ask about structures like (1.23) is to what extent the underlying theory makes trivial vs. non-trivial claims about the "composition" of sentence moods. Thus, note that Munaro (2011:154,fn.30) envisages the possibility that "the whole set of functional layers defining this hierarchical ordering is projected in syntax even when it is devoid of content." This assumption, of course, immunizes Munaro's approach to "clausal hierarchies" against outside (semantico-pragmatic) criticism. However, what (1.23) seems to get right nevertheless is the ordering of exclamatives and interrogatives, where it has been claimed (at least) for *wh*-exclamatives (cf., e.g., d'Avis 2002) that, very roughly speaking, *exclamative = interrogative + x* while *~(interrogative = exclamative + y)*.

Another interesting aspect of (1.23) is that it incorporates an explicit discrete (partial) encoding of a Searlean strength parameter (Searle 1976:5). This opens up the possibility of exploring convergences between such formalist and various functionalist approaches. In the latter, appeal to hierarchical continua is very common. Thus, according to Allan (2006b:267) "[c]ross linguistically, there is a cline between indicative/realis/assertive at one pole and subjunctive/hypothetical/irrealis/uncertain at the other [...]." "Between the extremes [...] are strung interrogatives, imperatives, negatives, futures, and habituals [...]." Likewise Levinson (2012:13) diagnoses "subtly differing degrees of questionhood on a cline from assertion to full information question," and Brown and Levinson (1987:160) describe "four [Tamil] particles in descending order of question force."

The Searlean strength parameter is equally invoked by Croft (1994:466) in arguing that the major categories of his classification in (1.09) are actually extreme points on continuous scales. Launching a critique of the direction-of-fit model, Croft states that "this parameter [...] appears [...] to be typologically – and presumably, cognitively – *more* important than those which define commissives and declarations" (ibid.). (1.25) (p.470) shows the full proposal:[44]

(1.25)



[44] Note the position of optatives in the action dimension. In Section 2.2 we argued that they would actually be a good match for the emotion/desire categories.

> [...] functionally there is a continuum between declaratives, which firmly assert the speaker's belief and expect assent (or at least acknowledgement) from the addressee in response; biased questions, which more weakly assert the speaker's belief and invite explicit assent from the addressee; and neutral questions, which do not assert a speaker's belief and expect a 'filling' in of the indeterminate information from the addressee. [...] Moreover, the continuum described here – degree of expected response from the addressee – is, I argue, the same as the continuum between imperatives and hortatives. In the latter case, the expected response is one of action, not information [...] (Croft 1994:467).[45]

The most explicit empirical evidence for a formal continuum of sentence types is taken to be provided by the sequence of sentences in (1.26) (ibid.):[46]

(1.26)	a.	*He's going to come.*	(unhedged assertion)
	b.	*He's going to come, is he?*	(same-polarity tag, expecting confirmation)
	c.	*He's going to come, isn't he?*	(reverse-polarity tag, requesting information)
	d.	*Isn't he going to come?*	(positive-biased polarity question)
	e.	*Is he going to come?*	(unbiased polarity question)

However, a focused look at the form side here suggests that the point has been overstated. Thus, there is a change from mono- to bi-clausal structures, (1.26a)>(1.26b), and back, (1.26c)>(1.26d), and the negative marker comes, (1.26b)>(1.26c), and goes, (1.26d)>(1.26e). These are symptoms of non-monotonicity rather than "continuous transition." Equally, the emergence of subject-auxiliary inversion (SAI) in the main clause, (1.26d)>(1.26e), would be counted as an important change in form type by many grammarians.

Likewise, according to Croft (1994:467) "[...] the employment of the same negative marker for both declaratives and interrogatives may represent the grammatical manifestation of a continuum between assertion and request of information" (p.467). If that is so, the frequently found non-identity of negative markers for declaratives and imperatives would count against a continuum on the action axis. As already mentioned in section 2.3, the perfect symmetry of dimensions in (1.09)/(1.25) can be questioned.[47]

On a more positive note, (1.25) can be seen as another kind of heuristic in the search for sentence types where the basic or major ones constitute dimensional extremes (in a sense to be established), while special and minor sentence types occupy intermediate positions in the resulting type space. Also, to repeat, one senses a certain amount of convergence between "cartographic" models of clausal peripheries (cf., e.g., Rizzi 2004) and pragmatico-functional approaches sentence moods,[48] but a lot of work needs to be done to work out satisfactory "bridge principles."

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[45] Interestingly, we find here another – interaction based – variant of a speaker/addressee parameter, confined to the dimensions of knowledge and action. Thus, counterparts to Zaefferer's [− exocentric] epistemic volitionals (interrogatives *qua* being erotetics), (1.06)/(1.20), and Searle's addressee-oriented world-to-word types (imperatives *qua* being directives), (1.16), are replicated in Croft's system.

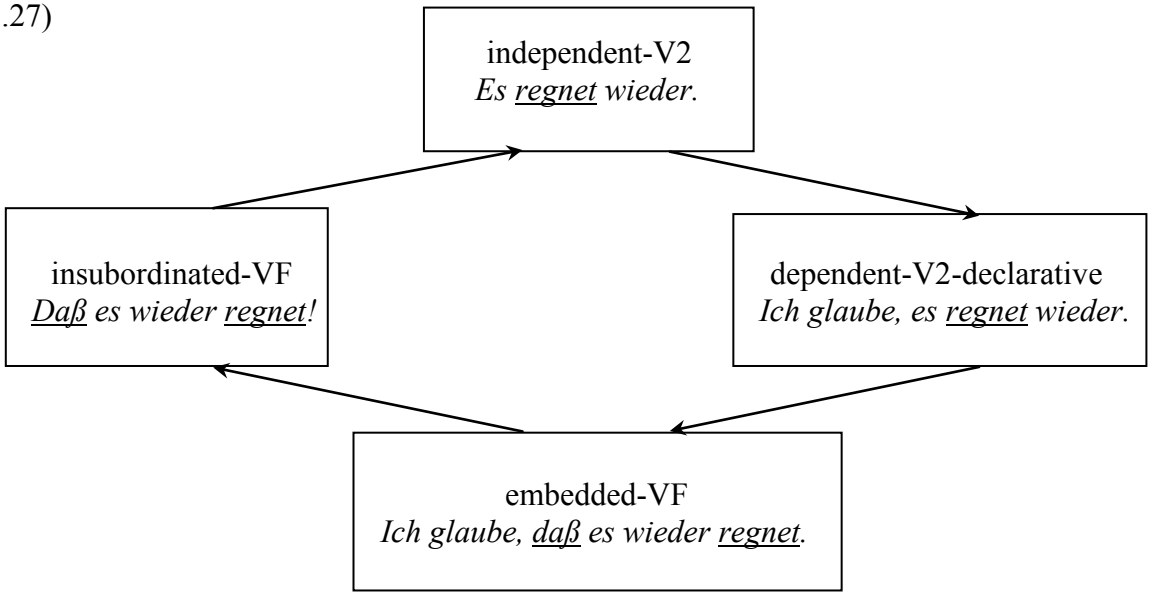
[46] (1.26) is part of a larger so-called ""squish" or cline from questions through to assertions" (Levinson 2012:15) attributed to Bolinger (1977) and reproduced by Levinson (2012:16).

[47] It is certainly not easy to follow the assessment by Croft (1994:467) that "[t]hese continua demonstrate that attempts to draw a sharp distinction between declaratives on the one hand, especially declaratives combined with evidential, deontic or attitude markers, and interrogatives, imperatives and exclamations on the other hand are pointless from a formal grammatical point of view [...]."

[48] Further convergences concern the possibility of modeling lexical items, e.g. modals, as covering stretches of functional tree structure (Ramchand & Svenonius 2014) and/or semantic maps (van der Auwera & Plungian 1998). Polysemy and change can be modeled by "movements" and "contractions" etc. (Cinque 1999; Roberts & Roussou 2003) corresponding to notions of "bleaching" and "(inter)subjectification" (Traugott & Dasher 2002).

3.3 *Emergence of New Sentence Types: Insubordination and Truncation and their Modeling*
For a better understanding of the inventory of sentence types it is useful to study how new forms emerge. Two mechanisms that have been discussed repeatedly are insubordination and truncation. Let us begin by looking at what can be called "Insubordination-Dependent.Root-Cycle" in (1.27) (cf. Andersson 1975:218) (V2 = Verb Second; VF = Verb Final).

(1.27)



The top and bottom positions in (1.27) are occupied by canonical independent root declaratives displaying V2 and canonical embedded VF declaratives. These are linked by intermediate forms: (i) Dependent V2 declaratives, which belong to the class of "embedded root phenomena" (Hooper & Thompson Heycock 2006; 1973; Reis 1997).[49] (ii) Insubordinated VF declaratives, which belong to the class of insubordination phenomena (Evans 2007; König & Siemund 2013: Section 4). The latter are wide-spread among Germanic languages and especially their German specimen have engendered intensive debate (cf., e.g., Oppenrieder 1989; Truckenbrodt 2013; Weuster 1983).[50] Subtle arguments have been provided – involving, among other things, prosody and modal particles – for the assumption that, in general, a synchronic analysis of insubordination in terms of ellipsis is problematic. This point becomes particularly clear if one takes into account forms for which proper subordinate counterparts are lacking. Swedish *så*-exclamatives like the one in (1.28) (Delsing 2010:22) are a case in point:

(1.28) *Så du säger!*
so you say
"How (inappropriately) you express yourself!"

Let us have a closer look at one case, German *ob*(-*wohl*)-VF-interrogatives. Like the root *wh*-infinitives we have seen in (1.02), *ob*(-*wohl*)-VF-interrogatives encode "reflective question acts," which means their use lies in what Lyons (1977:755) calls "posing a question" rather than "asking it" (cf. Reis 2003; Truckenbrodt 2004; 2006a; Zimmermann 2013). Consider, to reiterate one of the familiar examples, a situation at an information desk. Proper

[49] An assessment of some current approaches to the distribution of dependent V2 declaratives and pointers to further references are provided by Gärtner and Michaelis (2010).
[50] *Daß es wieder regnet!* would typically be used as an exclamation expressing dismay. Otherwise, *daß*-VL-declaratives are commonly used as directives.

information seeking requires use of a V1-interrogative, (1.29a). Use of the VF variant, (1.29b), is odd because it gives the impression that one is talking to oneself and/or taking the person at the information desk to be lacking an answer.

(1.29) a. *Geht heute noch ein Flug nach Akureyri?*
"Will there be a flight to Akureyri today?"
b. #*Ob heute wohl noch ein Flug nach Akureyri geht?*

Now, formally we are clearly dealing with a special interrogative, displaying VF instead of what is expected for Germanic indenpendent clauses, i.e., V2 or V1 ("V_{fin}-in-C"). At the same time, the illocution default of interrogatives, i.e., conveying a standard erotetic (question act), is modified. The issue that is of main interest to our concerns is whether there is any insightful way of getting from standard erotetics to reflective question acts. To answer this, we will briefly review two approaches.

In their "Foundations of Illocutionary Logic," Searle and Vanderveken (1985: Section 6.III) define "principal operations on illocutionary forces," e.g., "[t]he addition of preparatory/ sincerity conditions" (6.III.2/3). For reflectives, however the removal of preparatory and/or sincerity conditions would be required: on a directive analysis of question acts, this affects the following conditions (PC = preparatory condition; SC = sincerity condition):[51]

(1.30) a. (S believes) H is able to do A [PC1 – Request]
b. (S believes) H knows the answer [PC – Question]
c. S wants H to do A [SC – Request]

An alternative analysis has been developed by Farkas and Bruce (2009) for the closely related Romanian *oare*-interrogatives and Hungarian *vajon*-interrogatives (cf. Gärtner & Gyuris 2012:3.2).[52] Crucially, their discourse model, dubbed the (conversation) "table," contains a "projected set" (PS) of accessible future common grounds (cg). As shown in (1.31a) and (1.31b), the distinction between erotetics and reflective question acts boils down to a difference in PS update:

(1.31) a. *Update by (polar) interrogatives with erotetic question force*:
$PS = \{ cg_1, ..., cg_n \} \rightarrow$
$PS' = \{ cg_1 \cup \{p\}, cg_1 \cup \{\sim p\}, ..., cg_n \cup \{p\}, cg_n \cup \{\sim p\} \}$
b. *Update by (polar) interrogatives with reflective question force*:
$PS = \{ cg_1, ..., cg_n \} \rightarrow$
$PS' = \{ cg_1 \cup \{p\}, cg_1 \cup \{\sim p\}, cg_1 \cup \varnothing, ..., cg_n \cup \{p\}, cg_n \cup \{\sim p\}, cg_n \cup \varnothing \}$

When a (polar) interrogative is "put on the table," each possible future ("projected") common ground gets updated with the possible answers. Updating with sets of propositions creates disjunctions, which means, due to increased uncertainty, the overall discourse state gets more "unstable." "Clearing the table" will be required to remove uncertainty. Now, crucially, in states induced by erotetics this can only be done by giving an answer, which accounts for the "answer expectation" and, arguably, the directivity of erotetics. States induced by reflective

[51] (1.30b) has been stated by Brown and Levinson (1987:156), (1.30a)/(1.30c) by Searle (1969:66). In fact, the essential condition needs revision too: "Counts as an attempt to get H to do A, i.e., an attempt to elicit this information from H." Presupposing the directive approach, one cannot consider reflective question acts "question acts."

[52] An analysis of "conjectural questions" in Amerindian languages has recently been developed by Littell, Matthewson and Peterson (2010).

question acts, on the other hand, allow – and by Gricean reasoning strongly invite – leaving things open, i.e., keeping the original common grounds (PS' = { $cg_1 \cup \emptyset$, ..., $cg_n \cup \emptyset$ }).[53]

The two sketches of how to model "reflective question acts" allow us a brief glimpse into major mechanisms of generating (functions for) special sentence types. Starting from a classical Searlean speech act analysis, try out (combinations of) modifications of the condition sets.[54] Working within a discourse framework like the "table model" by Farkas and Bruce (2009), try out the definable operations on the discourse structures.[55] Among the constraints on the resulting types, we expect (Neo-)Gricean pragmatics to play an important role.

Interesting further questions are raised by the "orphan theory of German verb-final root clauses" (Zaefferer 2006b:344) according to which "[t]he different force potentials of German verb-final root clauses derive from the semantics of some former matrix structures with speech act participant subject" (ibid.). On this approach, (1.29b) would be derived diachronically via omission of a matrix like *ich frage mich* ('I wonder'). What is left open here, however, is the issue of how to prevent serious overgeneration. Thus, why isn't *Es ist mir egal, ob ...* ('I don't care whether ...') a licit matrix for insubordination (cf. Truckenbrodt 2006b:390). To the extent that we are dealing with grammaticalization, the issue of granularity coarsening from lexical input to grammatical constructions has to be taken into account.[56] The "big question" therefore arises whether anything substantial can be said about the inventory of grammatically relevant attitudes. Again, reflections by Searle (1976:4) can lead the way:

> If one tries to do a classification of illocutionary acts based entirely on differently expressed psychological states (differences in the sincerity condition) one can get quite a long way. Thus, *belief* collects not only statements, assertions, remarks and explanations, but also postulations, declarations, deductions and arguments. *Intention* will collect promises, vows, threats and pledges. *Desire* or *want* will collect requests, orders, commands, askings, prayers, pleadings, beggings and entreaties. *Pleasure* doesn't collect quite so many - congratulations, felicitations, welcomes and a few others.

Recall that the sincerity conditions are explicitly formulated by Searle (1976) as *B(p)* for assertives, *W(H does A)* for directives, *I(S does A)* for commissives and *∅(p)*, i.e., lack of a sincerity condition, for declarations. As it stands, this remains within the bounds of the model by Wellman (1990), (1.10), underlying the sentence type classification by Croft (1994), (1.09)/(1.11), that we studied in Section 2.2. And, we have seen how limited layering of

[53] Note that German possesses the response particle *tja*, appropriate in exactly such cases where answering by *ja* ('yes') or *nein* ('no') is avoided (cf. Métrich & Faucher 2009:854). This is presumably related to the "express[ion] of hesitation and resignation" described by Aijmer and Simon-Vandenbergen (2003:1153) for the homophonous Dutch and Swedish counterparts of *tja*.

[54] For applications of this kind of method in the study of question types, see, for example, Kiefer (1981) and Truckenbrodt (2004). It remains to be seen whether recasting the Searlean conditions in the format of "action frames," as proposed by Panther and Köpcke (2008), yields any interesting further insights and predictions.

[55] Among the earlier applications of this kind of model belongs the treatment of "rising declaratives" by Gunlogson (2003; cf. Poschmann 2008 for further discussion). Here, a richer representation of both individual and joint commitments has been proposed. Thus, the model contains a proviso for "agreeing to disagree." The wholesale critique of update models by Levinson (2012:18f.) for neglecting such distinctions is therefore misguided. Among the several models to be studied along the same lines, the ones by Ginzburg (2012) and (Cohen and) Krifka (Cohen & Krifka 2014; Krifka 2014; to appear) stand out as already including substantial insights from varying the input sentence types. For an interesing earlier implementation of "negotiation states," see Merin (1994).

[56] Zaefferer (2001a) discusses this with regard to lexicalized vs. grammatical modalities. Mismatches between the inventories of speech act verbs and speech acts (cf., e.g., Meibauer 1982) must equally be kept in mind.

attitudes can provide some fine tuning, as in (1.06). However, as is well-known, the analysis of expressives threatens to open a serious gap. Consider (1.32).

(1.32) *Expressives* (Searle 1976:13)
E ∅ (P) (S/H + property)

> Where E indicates the illocutionary point common to all expressives, ∅ is the null symbol indicating no direction of fit, P is a variable ranging over the different possible psychological states expressed in the performance of the illocutionary acts in this class, and the propositional content ascribes some property (not necessarily an action) to either S or H.

Obviously, it has to be clarified what the values of *P* are, i.e., how many and which states can get encoded?[57] In characterizing the subclass of expressives they call "acknowledgments," Bach and Harnish (1984:3.4) mention sympathy, gladness, pleasure, gratitude, hope, and appreciation. Basing herself on work in psychology, Marten-Cleef (1991) states that "on the assumption that there are only between 10 and 12 clearly distinguishable emotions, one can conjecture that the number of speech act types expressing emotions is equally limited" (p.65).[58] A candidate set of categories is provided in (1.33) (p.63).

(1.33) a. "pro-emotions": *happiness*, *desire*, *favor*, *sympathy*, *longing*
b "con-emotions": *worry*, *dislike*, *aggression*, *sadness*, *embarrassment*, *envy*, *fear*

So, in fact, even if research into the relation of emotions and expressives hasn't been pursued as intensively as would be necessary to judge the issue properly,[59] it does not seem unreasonable to assume that some upper bound or "envelope" can be put on or around the expressive options for natural languages in the domain of expressive illocutions, too.[60]

The topic of truncation will come up repeatedly in the subsequent chapters, so here we can concentrate on bare essentials. Both insubordination and truncation have to do with structural omission (at some level of abstraction), such that modifications of the function/illocution type can be associated with covert operators filling the void. However, the former leaves the insubordinated clause itself in tact, while the latter arguably leads to genuine clause structural impoverishment.

One group of phenomena that has lent itself to analyses in terms of truncation are root infinitivals. Early proposals by Haegeman (1995) and Rizzi (1993/94) concern the root infinitive stage in language acquisition. The evidence for truncation in adult counterpart structures will be reviewed in later chapters, in particular Chapter 4 and Chapter 7. Here we just consider one example from German (cf. Chapter 4) concerning the distribution of modal particles in "bare root infinitives" (BRIs).

Gärtner (2013)(cf. Chapter 2) undertakes a more systematic exploration of the inventory of modal particles in root infinitivals. This builds on work by Coniglio (2006; 2011), who adapts the technique of establishing adverbial hierarchies promoted by Cinque (1999) to the domain of modal particles. In particular, given the affinity of BRIs and imperatives, a simple comparison of hierarchies has suggested itself, the result of which is shown in (1.34) and (1.35).

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[57] Likewise it has to be asked whether E and ∅ impose effective constraints on candidate states.
[58] The translation is mine, HMG.
[59] See Fries (1994; 1996) for some relevant discussion.
[60] If – as suggested by Bach and Harnish (1984: Chapter 6) – all "conventional illocutionary acts" can be subsumed under "effectives" and "verdictives," proliferation of institutions and accompanying cross-cultural and historical relativity as sources of an infinity of (functions for) sentence types might be kept "under control."

(1.34) MP-hierarchy (IMP-compatible) (cf. Coniglio 2006:80)
doch > *halt* > *DOCH* > *nur (nicht)* > *bloß (nicht)* > *ruhig* > {*mal,JA*}

(1.35) MPs acceptable in ⟨I–Z±N–W⟩-RIs (cf. Gärtner 2013:224)
~~*doch*~~ > ~~*halt*~~ > *DOCH* > *nur (nicht)* > *bloß (nicht)* > *ruhig* > {*mal,JA*}

Evidence for the diagnosed gap is provided in (1.36) and (1.37).

(1.36) a. *Leg die Bücher doch auf den Tisch!* ⟨IMP⟩
put.IMP the books MP on the table
"Put the books on the table, will you!"
b. *Die Bücher (* doch) auf den Tisch legen!* ⟨BRI⟩[61]
the books MP on the table put.INF
"Put the books on the table!"

Doch in (1.36) signals that the speaker is generically taking into account and ready to overrule reasons in conflict with the addressee complying with the request.

(1.37) a. *(OK,) Bring den Tisch halt zum Sperrmüll!* ⟨IMP⟩
bring.IMP the table MP to.the bulky.waste
"(OK,) Take the table to the scrap yard, if you must!"
b. *(OK,) Den Tisch (* halt) zum Sperrmüll bringen!* ⟨I–Z–N–W⟩
the table MP to.the bulky.waste bring.INF
"(OK,) Take the table to the scrap yard!"

The use of *halt* in (1.37) marks unassailability or inevitability, and thus contributes to the concessive move performed by means of an imperative in (1.37a).

Now, one way of interpreting the contrast between (1.34) and (1.35) is that impoverishment in the case of BRIs is due to truncation of a top sequence of functional projections in an articulate phrase structure of the kind defended by Cinque (1999). This will be discussed further in Chapter 4. A second aspect of the contrast between imperatives and BRIs concerns the different range of speech act values. If, as in most studies of child language (cf., e.g., Blom 2002), BRIs are taken to be hosts of some covert modality the absence of concessive uses of BRIs can be accounted for by an impoverished modal structure (Chapter 4).

Finally, root infinitivals raise extremely interesting questions concerning our understanding of special and minor sentence types as sketched in Section 1. As already implied there, we have substantial evidence for believing that "*Wh*-infinitives" (WRIs) like (1.02) are special interrogatives in the sense of instantiating a modification of interrogative mood (cf. Bhatt 2006; Reis 2003). For BRIs, an attractive approach would be to assimilate them to imperatives as analyzed by Kaufmann (2012), i.e., as declaratives headed by a particular kind of covert performative modal. This would make root infinitivals (very) special declaratives. Alternatively, the covert modality involved here is actually conceptualized as a sentence mood, which would make BRIs exponents of a minor sentence type.[62] Unfortunately, we are

[61] This judgment is shared by Fortuin (2003:36) and van Olmen (2009:148) for Dutch *toch*.
[62] Such a perspective seems to be most in line with the constructionist approach by Jacobs (2014). Grosz (2013:147f.) considers desideratively used variants of BRIs "infinitival optatives," which is suggestive of treating them as special exclamatives. As discussed in Chapters 2 and 3, Reis (1995; 2003) argues for deriving the covert modality of root infinitivals by pragmatic inference. This would seem to require a grammatical analysis of BRIs as mood-less fragments.

not in a position at this stage to decide this issue. However, it is hoped that the following chapters provide further tools for working out a proper solution eventually.[63]

4. Outlook

It goes without saying that this first chapter is meant as nothing more than a general frame within which to place the subsequent studies of root infinitivals and non-finite interrogatives. And, taken in its entirety, this work is meant as making some initial steps "Toward a Theory of Special and Minor Sentence Types." Firmer conclusions will have to be left for a later occasion.

[63] Although highly relevant, the issue of fragments, which has engendered important controversies about the division of labor between grammar and pragmatics (cf., e.g., Progovac et al. 2006; Stainton 2005), has to be left for another occasion. Ginzburg (2012) is a good source for studying what their incorporation into a formal model implies.

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