5	Shopen, language Tipology and Syntactic Description, vil. (Cambridge U.P., 1985) but writter 3 Speech act distinctions in syntax*				
-	JERROLD M. SADOCK and ARNOLD M. ZWICKY				
	The notion of sentence type I. I Uses and forms The speakers of any language can accomplish a great many communicative tasks with the sentences of their language: they can start a conversation, order someone to do something, narrate a tale, ask for information, promise to do something at some future time, report what they know or have heard, express surprise or dismay at what is going on about them, suggest a joint action, give permission for someone to do something, make a bet, offer something to someone, and so on. For some of these uses of sentences a language will have specific syntactic constructions, or even specific forms, reserved for just these uses especial particles, affixes, word order, intonations, missing elements, or even phonological alterations (or several of these in concert); when a sentence shows one of these it is to be understood as being used in a specific way. Such a coincidence of grammatical structure and conventional conversational use we call a sentence type. An illustration: the combination of verb-subject word order and rising final intonation in the following English sentences:				

- a. Have they finished installing the furnace? (1)
 - b. Are you tired of plucking penguins?

is associated with one use, that of asking a YES-NO QUESTION (a request that the person you are addressing tell you whether the proposition you have supplied him is true or not). In other words, this particular way of framing a sentence in English is associated with the particular 'pragmatic meaning' of asking a yes-no question. (For a useful discussion of speech acts, see Lyons 1977, chapter 16.)

Now any sentence with a conventionally indicated force can be put to uses other than, or in addition to, the one to which it is conventionally suited - (1a), for example, could serve as a reminder to someone to fix a furnace, particularly if it is plain to the addressee that the speaker knows

that the furnace is *not* installed. This use, though, depends on the fact that (1a) is conventionally a question of a certain kind.

When there is a regular association of form and the speaker's use of sentences, we will speak of the form—use pair as a sentence type. We have just seen instances of one of the interrogative, or question-asking sentence types in English. In addition to the yes-no question (with inversion and rising intonation), English has several other interrogative sentence types, among them the INFORMATION QUESTION:

- (2) a. Who can we turn to?
 - b. Why are you plucking penguins?

and the ALTERNATIVE QUESTION:

- (3) a. Are you going to empty the wastebaskets, or will I have to do it myself?
 - b. Did she jump, or was she pushed?

The conventional forces of these sentences share the following feature: they signal the desire of the speaker to gain information from the addressee. Furthermore, these three types have a syntactic commonality in that they all involve placing a verb before the subject (but see section 3.3).

When there is a set of sentence types with similar and related uses and with a similar syntactic form in a language, we will group them under a single heading. We will also identify sentence types of similar use (but possibly different form) in different languages, so that we will speak of languages other than English as having interrogative sentence types, for instance French, with its yes—no question types:

- (4) a. Pleut-il?
 - b. Est-ce qu'il pleut? 'Is it raining?'

1.2 Minor types

Besides the large families of sentences with basic communicative functions, languages often include a range of minor types, typically involving forms that have a variety of uses in other sentence types. Among the minor types of this sort in English are the SUGGESTIONS, with various sentential formulae:

- (5) How about getting me a beer?
- (6) What about buying a new lamp for the living room table?
- (7) Why spend your money on such trash?
- (8) Why not resign?
- (9) Let's tour the island

using the words, how, what, why, about and let, all of which have a variety of uses other than in the formation of suggestions. Minor types of this sort are often overlooked in even fairly detailed language descriptions; sometimes the only ones to be mentioned are the special locutions used for greeting, leave-taking, and other punctuation of discourse, as in the English formulae:

- (10) How do you do?
- (11) Pleased to meet you
- (12) Good morning
- (13) See you later

and perhaps a few completely fixed short interjections, like the English:

- (14) Ouch!
- (15) Damn!
- (16) Wow!

The description of a language should make mention of minor sentence types. We discuss some of the most common ones in section 2.3.

1.3 Explicit performatives

Many languages have a particular syntactic construction for performing a large number of acts. In this PERFORMATIVE construction, there is a different verb for each act:

- (17) I command you to open that trunk
- (18) I bet (you) ten dollars you can't sing 'God Save the Queen' backwards
- (19) I (hereby) christen this ship 'Titanic II'
- (20) I warn you that these pigs are flighty

Note that all of these English examples contain a first person subject and a verb in the present non-progressive form. Such sentences have been termed EXPLICIT PERFORMATIVES — explicit, because the specific act performed (commanding, betting, christening, warning) is referred to by the verb in the sentences, in contrast to ordinary declaratives, imperatives, and interrogatives, which perform their acts implicitly, without a word referring specifically to asserting, requesting, or inquiring.

English is rich in explicit performatives (see J. D. McCawley 1977 for a classification of the verbs involved and Searle 1977 for a classification of the acts performed), but not all languages are. Some (for instance, spoken Tamil, as described to us by K. Paramasivam) have nothing truly comparable to this construction in English.

In languages with explicit performatives, there is not necessarily a close fit between sentence types and performative verbs. There will be many verbs (especially those describing culture-specific acts like christening, excommunication, and marriage) that correspond to no sentence types, major or minor, and there may also be sentence types for which there are no explicit performatives. The latter is essentially the case for the English interrogative types, since most speakers cannot use the appropriate verbs in explicit performatives:

- *I ask (you) when you were born (21)
- (22) *I inquire (of you) whether lead is heavy or not

We conclude that both explicit performatives and sentence types involve a classification of sentence uses, but that the two systems are independent, with explicit performatives involving a LEXICAL classification and sentence types a syntactic classification.

From a syntactic point of view, explicit performatives show a number of features that recur from language to language. They typically have first person singular subjects and second person indirect objects, and they usually look like positive declarative sentences, as in English. As for tense and aspect, they have a neutral form whose meaning covers present time. In English this is the simple present, but in other languages the appropriate form might be one of several other forms.

1.4 Systems and characteristic forms

The task of collecting the sentence types in a language is made difficult by the fact that the expression of sentence use is closely related to, and easily confused with, other aspects of grammar, in particular negation, emphasis, subordination, modals, and adverbs. Thus, it is not uncommon for a morpheme marking sentences as questions to pattern very similarly to elements with clearly modal or adverbial meaning. For instance, in Tagalog (Schachter and Otanes 1972) the question particle ba occurs in the same place in sentences as several other particles, including some translatable as 'for a while, yet' (muna), 'only, just' (lamang/lang), 'because' (kasi) and 'too, either' (din/rin); the particles ho and po, which express respect for the person(s) addressed, also occur in this location.

In untangling sentence types from related phenomena, the following two observations are helpful:

First, the sentence types of a language form a system, in at least two senses: there are sets of corresponding sentences, the members of which differ only in belonging to different types, and second, the types are mutually exclusive, no sentence being simultaneously of two different types. 1 Thus, in English we can construct endless examples of corresponding declaratives, yes-no questions, and imperatives:

- You caught the speckled geese Did you catch the speckled geese? Catch the speckled geese!
- He will eat the beans (24)Will he eat the beans? Eat the beans!

and there is no sentence that is simultaneously of the declarative type and of the imperative type, or of the yes-no question type and of the imperative type. These facts support our classification of the imperative (lacking a subject and having an uninflected verb) as a sentence type in English, even though it also forms a system with the modals in English, the modals being mutually exclusive with one another and with the imperative:

- *He would can be kind (25)
- (26)a. *Must be kind!
 - b. *Should jump!

Notice also that the observation that sentence types form a system argues against counting English negative declaratives as a separate sentence type. They are independent of sentence type since they occur with interrogatives and imperatives, too:

- Didn't you catch the speckled geese? (27)
- Don't catch the speckled geese! (28)

This is not to say that no language could have a special sentence type for issuing denials. Indeed many languages have a special negative sentencetype that contains a special indicator of negativity, or formal features different from those of the imperative, or both (see section 3.2.2 below).

Second, sentence types show certain characteristic forms across languages (see especially sections 3.1-3). Declaratives are characteristically unmarked (without special elements in them or any special ordering); imperatives characteristically have bare verb stems, without any affixes. English declaratives and imperatives are entirely characteristic, a fact that supports our original decision to class them as sentence types. There are, of course, many uncharacteristic forms in the sentence types of the world's languages (the inversion found in English yes-no questions is not extremely common, for instance), but the characteristic forms aid us in the classification and description of new languages.

2 Overall survey

2.1 The most frequent sentence types

It 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. As a first approximation, these three types can be described as follows: The declarative is subject to judgments 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.

Despite these similarities we can find important differences in the system of sentence types in various languages. One dimension of difference has to do with the specificity of functions. In English, the declarative is quite vague in that it covers a number of acts, many of which are syntactically distinguished in some other languages. In Blackfoot (Frantz 1971) and Greenlandic (Hoijer et al. 1946), on the other hand, the formal features that distinguish the declarative are lacking in negative sentences. Onondaga (Chafe 1970a) has a very general imperative type that occurs in all persons and numbers and covers a wide range of more specific acts. Most languages have an imperative restricted to second person logical subjects that indicates the speaker's wish to influence the addressee's actions.

A second parameter that might distinguish languages involves higher-order affinities among the various basic sentence types. In Blackfoot, for example, questions and denials are both expressed in the non-affirmative mode. In English there seems to be a basic similarity between imperatives and declaratives: both have the subject before the verb – as opposed to questions, where it is usually the case that the subject is postposed. In German, imperatives, questions, and certain wishes are similar and distinguish themselves from declaratives in that the verb is in sentence-initial position.

The significance of these interrelationships among the various families of sentence types is not well understood. It is clear that the prosodic, morphological, and syntactic resources of language are by no means fully utilized in distinguishing different sentence types, so that there are frequently similarities among them, and it is obvious that which types are similar differs to some extent from language to language. These relationships should be noted in any description of the sentence-type system of a language.

2.2 Sentence types and attitude markers

One often needs to distinguish between forms that signal true sentence types, and another kind of form we will call an attitude marker. Lahu (Matisoff 1973) would, at first blush, seem to be a language with a much wider range of sentence types than one ordinarily encounters. On closer examination, though, Lahu appears to have extremely few sentence types and a very large number of particles that indicate attitudes, rational and emotional, toward a proposition. The expression of certain of these attitudes (mild desire, obviousness, desire for agreement, etc.) can quite naturally have the effect of a special sentence type.

For the following reasons, though, the attitudinal particles of Lahu should not be thought of as constituting a system of sentence types:

(a) They are not mutually exclusive. They may be freely combined except where the meaning would be contradictory.

As an example, the particle $m\bar{\epsilon}$ indicates polite insistence and thus can freely follow imperative, hortative, declarative, and exclamatory particles ('I insist that you/we go', 'I insist that it is (indeed) my pig', etc.), but may not follow true interrogatives (*'I insist whether he is a sham', *'I insist upon where we build the dam').

(b) They are freely embeddable to a quotative particle, in which case the attitude they signal is attributed to the person quoted and so has nothing to do with the communicative act being accomplished by the speaker.

For example, he indicates doubt about the truth of the proposition it follows. Note that it may occur either inside or outside the scope of the quotative particle ce (Matisoff 1973:379):

- (29) mâ cô-câ tù hế cê

 NEG boil-eat FUT DUBITATIVE QUOTATIVE

 'It is said that he probably wouldn't boil it to eat it'
- (30) må c3-cå tù cê hé

 NEG boil-eat FUT QUOTATIVE DUBITATIVE

 'It is probably said that he wouldn't boil it to eat it'
 - (c) Their conventional meaning does not deal specifically with speech acts, but their combination with other meaningful elements produces the effect of specifying the speech act type of the clause they occur in.

Thus interjectional \mathcal{E}^2 is 'purely interjectory' after other particles, but when used alone amounts to a 'brusque interrogative' or a 'sharp imperative'.

After eliminating these attitude markers, there remains a residue of conventional speech act indicators with surprisingly ordinary properties. There is an interrogative type, with one particle occurring only with interrogative proforms. There is a special imperative intonation, realized as sentence-final glottal stop, and a unique marker for negating imperatives. Finally, the declarative would seem to be unmarked. The particle yò (or the sequence ve yò), which occurs in the 'stylistically most neutral' sort of declarative, is not, in fact, restricted to declaratives, but also occurs with interrogatives. Thus (as is the case in some other languages we have investigated) the declarative and interrogative are a supertype and differ in that the interrogative is formed from the declarative by the addition of interrogative forms.

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2.3 Examples of some minor types.

2.3.1 Exclamations

In addition to the three major families of types, there are a number of minor types, some of which are reasonably common in the languages of the world. Most prominent of these are the EXCLAMATORY types.

The function of exclamatory sentences is much like that of declarative sentences, except that exclamations are intended to be expressive whereas declaratives are intended to be informative. Both represent a proposition as being true, but in an exclamation, the speaker emphasizes his strong emotional reaction to what he takes to be a fact, whereas in a declarative, the speaker emphasizes his intellectual appraisal that the proposition is true. Because of this close relationship, exclamatory sentences are often similar in form to declarative sentences, as in the English exclamatory type with so and such a:

- (31)That's so tacky!
- She's such a good syntactician! (32)

However, since exclamations are, like interrogatives, non-assertive, exclamatory sentences often resemble interrogative sentences in form, as in the English exclamatory type with how and what a:

- How tacky that is! (33)
- What a good syntactician she is! (34)

(Notice, however, that (33) and (34) lack the inversion found in information questions, even though they have some of the same interrogative words.) English also has an exclamatory type that resembles yes-no questions (see N. A. McCawley 1973):

- Boy, does he ever have beautiful legs! (35)
- (36)Wow, can he knit!

(Again, there are differences between (35) and (36) and questions: the exclamations have a different intonation pattern, they combine with interjections like boy and wow, and they can occur with non-temporal ever.)

The connection between exclamations and interrogatives is by no means limited to English. Elliott (1971:102-4) illustrates the connection with examples from French, Romanian, German, Mandarin Chinese, Russian, literary Japanese, and Turkish. Exclamations can also be expected to combine with a special set of interjections and to occur with some special exclamatory adverbial elements (like the Tagalog clitic pala, which expresses mild surprise, or the Chrau (Thomas 1971) sentence-final particle o'n, which expresses bewilderment or surprise).

In some languages there are special verbal forms for exclamations. So, in Kapampangan (Mirikitani 1972) there is an auxiliary verb pala expressing surprise or delight and an aspect prefix ka- that functions as an intensifier, much like English so in (31) or how in (33). And in Menomini there are two sets of verbal inflections, 'one of surprise, where the occurrence is new or unforeseen, and one of disappointment at the non-occurrence of something expected' (Bloomfield 1933:176).

Finally, in many languages exclamatory constructions may occur as dependent clauses as well as independent clauses. For instance, in English, exclamations can occur as complements to a large class of psychological predicates:

- I'm amazed at how tacky that is (37)
- It is scarcely surprising what a good syntactician she is (38)

2.3.2 Imprecatives

A second family of minor types that occur with some frequency is that of IMPRECATIVES: curses. Imprecatives, like exclamations, are expressive or emotional in tone, but unlike exclamations (whose affinities in form are to declaratives and interrogatives), imprecatives often resemble imperatives. This is true of the English minor types illustrated by the (obscene) examples:

Another source for an imprecative type is a special future tense, used by the speaker to say what terrible events will befall the addressee. Turkish has such a special future form, the (otherwise archaic) suffix -esi: 'as a finite verb it occurs only in the base-form, i.e., in the third-person singular, and is employed solely for cursing' (Lewis 1967:115):

- (40) ev-in yikil-asi
 house-your be demolished-fut
 'May your house be demolished!'
- (41) gör-mi-y-esi see-NEG-he-FUT 'May he not see!'

2.3.3 Optatives

Still another family of expressive minor types comprises OPTATIVES, expressions of the speaker's wishes. The name 'optative', however, is often applied to constructions that, properly speaking, do not constitute a separate sentence type. In Karok, for instance, there is an adverb kiri that is 'used with indicative verb forms to express wishes' (Bright 1957:361), and in Southern Paiute the combination of the emphasizing clitic -ya'a- with a verb suffix indicating unreality yields constructions described as optative (E. Sapir 1930:90, 168); but the construction can also be hortatory. That is, it can also be used to urge or suggest a course of action to be followed by the addressee. Thus it appears that this construction is not specifically an optative, but has just the more general meaning that one would expect from the meanings of the morphemes that make it up. Likewise in Karok, optative notions are expressed by the use of much more general attitude markers (see section 2.2 above).

There are several natural sources for a true optative sentence type: future tenses, conditional or subjunctive moods, and imperative moods. Any one of these might become specialized as an optative during the history of a language. Yet in few of the languages known to us has this specialization occurred. For the most part, the optative use of the relevant construction remains as one of a number of related uses, without any special mark. This is so in Latin (Hale and Buck 1966, Woodcock 1959), where a main clause subjunctive has optative force in the first or third person, but also has the force of a proposal, a suggestion, or an indirect command; and in Turkish, where the conditional base of a verb is used to express wishes (but also remote conditions), and the past form of this base expresses 'hopeless wishes relating to past time' (Lewis 1967:131) (but also unfulfilled conditions).

Greenlandic seems to have a genuine optative, distinct in form from the imperative. Both wishes and requests/commands/etc. are expressed by verb forms with a supporting vowel, but wishes have a characteristic consonant suffix -l-, whereas the imperatives lack the suffix. Maidu, too, has a distinct combination of mood and aspect suffixes for a category labeled the 'monitive optative'. This seems to constitute a genuine sentence type, but one better described as (AD)MONITIVE than as

optative, on the basis of its meaning: "possible future event of an unpleasant or undesirable nature," that is, some idea of warning or threat is usually implied' (Shipley 1964:49).

3 The most frequent types and their features

3.1 Declarative

3.1.1 The form of declarative sentences

3.1.1.1 Unmarked declaratives. There are two main ways that languages convey assertions, expressions of belief, reports, conclusions, narratives, assessment of likelihood, expressions of doubt, and the like. The most common way is to do nothing special – to use the most basic and widespread form of clause available in the language. Alternatively, some obligatory formal feature may mark clauses as declarative.

In languages of the first, or unmarked declarative, type, declarative sentences usually have the same form as some dependent clauses. This is true in English, where declarative sentences show the same word order as several sorts of subordinate clauses.

- (42) Pigs which cannot fly are numerous
- (43) I believe that pigs cannot fly
- (44) If pigs cannot fly, then dogs cannot sing

and where neither declarative sentences nor these subordinate clauses contain any special particles or inflections. Even in Karok, which uses participial or nominalized constructions for most subordination, declarative sentences have essentially the same form as adverbial subordinate clauses. Typically, in an unmarked declarative language, sentence types other than the declarative will have forms based on the declarative construction, in the sense that the other types involve the declarative construction plus some particle (as in one type of Tagalog questions), or an alteration in the word order of the declarative (as in Kapampangan questions), or an inflection parallel to tense/aspect inflections in the declarative (as in Maidu questions, where the interrogative suffixes are parallel to the suffixes indicating tense in declaratives).

3.1.1.2 Marked declaratives. In a fair number of languages, however, declarative constructions do not serve as the basis on which other sentence types are formed; instead, the declarative involves syntactic or morphological marks entirely parallel to the marks for other sentence types. For example, in German the word order in declaratives has the inflected verb in second position in the sentence, while in interrogatives

(and imperatives) the inflected verb is sentence initial. These orders both deviate from what we may take to be the most basic word order in the language, namely that which occurs in independent clauses of several kinds; in most subordinate clauses the inflected verb comes at the end of the clause:

- (45) a. Declarative: Ich sehe zwei Papageien 'I see two parrots'
 - b. Interrogative: Sehe ich zwei Papageien?
 'Do I see two parrots?'
 - c. Subordinate: ... weil ich zwei Papageien sehe '... because I see two parrots'

More common than the use of word order to mark the declarative is the use of declarative particles (parallel to particles marking other sentence types) or declarative inflections (parallel to inflections marking other sentence types). Declarative particles may be illustrated, somewhat imperfectly, by sentence-initial y(r)/r in Welsh (Bowen and Rhys Jones 1960). This affirmative particle, absent in embedded clauses, is parallel to the negative particle ni(d) and the interrogative particle a, neither of which can co-occur with y(r)/r. However, the particle is used only with periphrastic verbs, so that although the periphrastic verbs are the most common colloquial forms, it is not true that every positive declarative sentence is marked with y(r)/r. A better, but more complex, example comes from the sentence-final declarative particles of Hidatsa. There are five such particles, indicating five different sentence uses in the declarative range (see the next section); they cannot co-occur with one another or with particles marking questions, optatives, and imperatives, and they do not occur in dependent clauses. Though there happens to be no simple particle expressing merely declarative sentence type, any declarative sentence must have one of these five particles (ski, c, wareac, rahe and toak).

Languages that mark declaratives inflectionally commonly use these same inflections in questions, but different inflections in imperatives and in dependent clauses. Sometimes negative declaratives are inflected differently from positive declaratives. These points can be illustrated by the declarative markers in Greenlandic Eskimo and Blackfoot, both of which use verbal affixes for this purpose.

In Greenlandic, both positive declaratives and positive interrogatives have the mood sign ν (p after consonants) preceding the personal suffixes. Different mood signs are found in the imperative and in dependent clauses. The declarative differs from the interrogative in

having different personal suffixes for some person and number combinations. Thus, for the verb iga 'to cook' we find,

- (46) Igavoq cook(INDIC 3SG)
 'He cooks'
- (47) Igava cook(q 3sg)
 'Does he cook?'
- (48) igammat
 cook(conjunctive mood 386)
 because he cooked

Negative declaratives and interrogatives (but again, not imperatives or dependent verb forms) have a different mood sign, l, which follows the ordinary negative marker ng:i. As with positives, the inflections of the declarative and interrogative are partially distinct:

- (49) Iganngilaq
 cook(NEG INDIC 3SG)
 'He doesn't cook'
- (50) Iganngila?
 cook(NEG Q 3SG)
 'Does he not cook?'
- (51) iganngimmat cook(NEG CONJUNCTIVE MOOD 3SG) 'because he didn't cook'

In Blackfoot, there are special inflectional paradigms for declaratives, and related (though not identical) forms appear in questions, while imperatives follow quite a different paradigm: the second person singular affix in declaratives is kit-, but in imperatives it is -t. Negative sentences have the same paradigm as interrogatives. Verbs in the ordinary declarative paradigms are not used in subordinate clauses; instead, there are quite different paradigms for dependent clauses. Compare the independent first person inclusive $-o^2p$ — with the corresponding dependent affixes $-o^2si$ and o^2ki).

3.1.2 Putative subtypes of declaratives

3.1.2.1 The Hidatsa subtypes. We have already seen, in our discussion of Hidatsa in section 3.1.1.2, that a language may lack a declarative, in

the sense that it has no single sentence type covering the full range of declarative uses. In Hidatsa the 'declarative' is really a supertype, a class of five different types that can be grouped together on the basis of their use and on the basis of their form: in optatives and imperatives the subject always follows the mood morpheme, which is then sentence initial, while in the five declarative types the mood morpheme either may or must be last in the sentence, following the verb, Hidatsa being an sov language; questions are marked prosodically rather than by a simple morpheme. Even in languages where the declarative is an ordinary type, certain subtypes may be marked in regular ways. In either case, the various types indicate different attitudes the speaker takes towards the proposition he is expressing, or different degrees of belief in the proposition, or different sources for the proposition - all of these matters that might be indicated by adverbs (like necessarily or of course), modal auxiliaries (like must), explicit complement-taking verbs (like suppose), or paralinguistically by expressive intonations or expressive modifications.

A dozen or so declarative subtypes have been suggested in one language or another. We cannot pretend to have a thorough survey of the possibilities, though we will illustrate some of them, beginning with the five in Hidatsa.

Hidatsa has an indefinite type, which comes close to a 'neutral' mention of a proposition. Described by Matthews (1965) as a 'perhaps' mood, the indefinite is used when the speaker doesn't know if the proposition is true and doesn't think the addressee knows either. A second type indicates matters of common belief, what 'everyone knows'; this mood is also used in relating narratives. A third type is reportive or quotative, used for reporting what the speaker has heard from someone else (and is not vouching for himself). The fourth type expresses the speaker's beliefs, desires, and feelings. And the fifth type reports what the speaker knows to be true from first-hand evidence.

The Hidatsa system of sentence-type morphemes must be clearly distinguished from superficially similar sets of morphemes which indicate degree of belief, attitude, emphasis, and the like, but which are not mutually exclusive. For example, Tagalog has clitics daw and raw which from their meaning could be taken to be markers of a quotative/reportive sentence type. Moreover, daw and raw are syntactically parallel to the question particle ba, all of them occurring as clitics to the first word in the sentence. But daw/raw and ba may co-occur, as in (52) (Schachter and Otanes 1972:414):

(52) Nagtatrabaho daw ba naman kayo roon?
'Do they say that you're working there instead?'

We conclude that daw and raw do not mark a genuine sentence type, but are merely adverbial modifiers. This decision is further supported by the fact that daw/raw occur in dependent clauses, where they mark indirect quotations. Thus, Tagalog is much like Lahu, discussed in section 2.2 above: there are a few sentence types, plus a variety of attitude markers.

3.1.2.2 Inferential. Closely related to quotative/reportive sentences are INFERENTIAL sentences, in which conclusions or inferences are reported. Turkish has special inferential paradigms for the verb 'to be', plus a past inferential affix for other verbs. The Turkish inferential is also used as a quotative/reportive; the mis-past 'conveys that the information it gives is based either on hearsay or on inference from observed facts, but not on the speaker's having seen the action take place' (Lewis 1967:122). It turns out, however, that the Turkish inferential inflections do not mark sentence types (in the narrow sense we are using here) but are, like the Lahu and Tagalog particles, attitude indicators. This can be seen from the fact that the inferential and interrogative inflections co-occur, as in (Lewis 1967:106):

(53) Evde miymişim house(LOC) q-miş-1sG 'Am I said to be at home?'

3.1.2.3 Dubitative. Clearly allied to quotative/reportive and inferential sentences are DUBITATIVE sentences, in which doubt or uncertainty is expressed. The relationship arises because reporting what one has heard and classifying a proposition as an inference are both indirect means of conveying the proposition; if a speaker chooses one of these indirect means instead of a straightforward assertion, he may suggest that he has doubts about the truth of the proposition (Lewis (1967:101) remarks that some grammarians have mistakenly labeled the inferential a dubitative). One language in our sample with a dubitative marker is Yokuts, which has a particle na and a verb suffix -(a)l which together express uncertainty. The morpheme patterns much like the morphemes marking imperatives and imprecatives. But, as in the last few examples, the mark of the dubitative does not exclude the mark of the interrogative (S. Newman 1944:120):

(54) Pangi? na? na?aş ha·no?uk Pama·minwa tawţa-l Q I PCL with-what them kill-DUBITATIVE 'With what could I kill them?' This example shows the dubitative -l in the last word (and the dubitative particle na?as, which always co-occurs with the dubitative verbal affix) plus the sentence-initial interrogative marker ?angi? Again, from the fact that the dubitative suffix is not mutually exclusive with the interrogative marker, we conclude that the language has an attitude marker rather than a genuinely separate sentence type.

A particularly interesting way of expressing doubt is the 'non-affirmative mode' of Blackfoot, which when used alone expresses uncertainty and also serves as the most common form for yes-no questions. (In addition, it appears in negative sentences.) Thus, Blackfoot appears to have a dubitative sentence type, parallel to and mutually exclusive with an affirmative type and an imperative type.

3.1.2.4 Emphatic. A final class of sentences that writers have treated as a special declarative subtype in various languages is the EMPHATIC class. Emphasis or insistence is clearly not expressed by a genuine sentence type in the many languages that have emphatic affixes or particles that can be attached to a variety of different word classes, or that have emphatic prosodic marks that can be associated with a variety of different word classes. In such languages, the emphatic marks regularly co-occur with clear marks for sentence types, as in the English emphatic question

(55) Do you like this cake? and the English emphatic imperative

(56) Give me that cake!

Other languages have rich sets of emphatic particles acting as sentence modifiers. In Chrau, for example, there are nine emphatic assertion particles, as well as morphemes expressing surprise or bewilderment. Again the emphatic particles are not, in general, mutually exclusive with one another or with some of the other particles. In fact, we know of no language in which emphasis or insistence is truly a matter of sentence type rather than being expressed by simple attitude indicators.

3.2 Imperative

3.2.1 The form of imperative sentences

3.2.1.1 General remarks. All languages we have surveyed have one or more distinct syntactic forms that explicitly convey some subset of requests/commands/orders/suggestions/instructions/entreaties, and so on. It is not logically necessary that an imperative sentence type or types be available in a language. The effect of an imperative sentence could be

obtained by declarative sentences meaning 'I want you to ...' or 'You should/must ...' or 'You will ...', or by interrogative sentences meaning 'Will you ...?' or by other similar devices (see section 5.1). Nevertheless, the activities of requesting, commanding, and the like are so frequent in human social life, and so important to it, that no language (it seems) lacks a form dedicated to them.

There is considerable diversity in the way that this complex of speech acts is manifested. In some languages there are pre- or post-sentential particles and in some there are verbal clitics. Special verb morphology in the verb stem or a special set of personal affixes on verbs is also found. Deletion of the subject is fairly frequent, but at least one language, Yokuts (in which the imperative form is a bare verb stem, plus in some dialects a special suffix), has some special subject pronouns that occur only in the imperative sentence type, although they are not required there. At least one language, Chrau, marks imperatives by intonation.

Despite this diversity there are very striking convergences that show up regardless of genetic or typological distance. There are some very clear implicational universals to be found in the formation of imperatives and some substantive universals or near universals. We will begin with the substantive similarities.

3.2.1.2 Imperatives in ergative languages. There are languages in which some syntactic processes follow the ergative-absolutive arrangement; these processes treat the objects of transitive verbs and the subjects of intransitives in the same fashion (as 'absolutives'), whereas the subject of transitives is handled differently (as an 'ergative'). See chapter 1.2 on the major functions of the noun phrase. This suggests the possibility of an imperative construction arranged according to the ergative pattern. In a language with an ergative-style imperative, it could be the absolutive argument that would represent the addressee, whether the verb is transitive or intransitive. Thus the imperative of an intransitive verb like go would be a request for the addressee to depart, while the imperative of a transitive verb like convince would be a request for the addressee to be convinced, that is, to believe something.

Included in our sample are two languages, Dyirbal (Dixon 1972) and Eskimo, that are reputed to be among the most ergative in the world. Yet transitive imperatives in these two languages mean exactly what they do in English.

For example, the Greenlandic verb igu 'to cook' has both transitive and intransitive forms. The noun phrase that represents the one doing the cooking is in the absolutive case with the intransitive form, but in the

transitive sentence it is the thing being cooked that is represented by the absolutive case argument, while the cook is represented by an ergative.

- (57) palasi igavoq
 priest(ABS) cook(INDIC 3SG)
 'The priest is cooking (something)'
- (58) angutip palasi igavaa man(ERG) priest(ABS) cook(INDIC 3SG/3SG) 'The man is cooking the priest'

Nevertheless, the imperative of either form is a request to do some cooking:

(59) Igagit
cook(IMP 2SG)
'Cook (something)!'

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(60) Igaguk
cook(IMP 2SG/3SG)
'Cook it!'

Thus, although Eskimo is ergative morphologically, and to some extent syntactically, the imperative follows the pattern where it is always subjects that are addressees for imperatives, whether the verb is transitive or intransitive. To our knowledge, all languages follow this pattern, and the explanation would appear to be a semantic one, the fact that across languages subject position is the usual one for agents. With imperatives one does not request something of someone over which that person does not have direct control. Addressees for imperatives must be subjects, but not just any subjects. Verb forms not ordinarily understood to take agentive subjects tend not to be used in imperatives, and languages resist imperatives such as Be convinced! or Weigh 200 lb! If they are ever used, they are recognized as unusual, and there must be pragmatic factors to compensate, for example it is thought that the addressee can make himself or herself believe something or weigh a certain weight.

3.2.1.3 Reduction in affixes. Of the many varieties of signals for the imperative, by far the most common, characterizing well over half of the languages we have examined, is the use of a verb form with fewer than the normal number of affixes. Over half of the languages surveyed, in fact, employ an entirely affixless verbal base to indicate requests. Two tenses are found in one stage of Latin, but tense distinctions of any kind are extremely rare. Aspect distinctions are somewhat more frequent,

but also unusual. Differences in conjugation class are sometimes preserved and sometimes obliterated.

In Danish, for example, a verb belongs to one of several conjugation classes. One of the differences in conjugation has to do with whether a vowel intervenes between the verb and certain suffixes. Thus, $k\emptyset be$ 'to buy' has the past tense $k\emptyset bte$, but hoppe 'to hop' has the past tense hoppede. In the imperative, this difference is obliterated: $k\emptyset b$ 'buy!' hop 'hop!'. (Note that in Swedish, this difference in conjugation class is preserved in the imperative, the respective forms being $k\ddot{o}p$ 'buy!', but hoppa 'hop!'.)

The relative frequency with which these various morphological contrasts are dispensed with in imperatives is thus, to a large extent, reflective of the inherent semantics of the imperative. It is notionally future, so tense contrasts are unlikely. The subject naturally refers to the addressee, so second person inflection of the verb becomes redundant. The archetypical request is to do some task to completion, so indications of aspects are somewhat redundant. Semantic considerations cannot explain the suppression of conjugation-class distinctions, of course, but it remains a fact that this also occurs.

3.2.1.4 Subject pronouns and concord features. Languages regularly suppress subject pronouns and/or affixes that agree with the subject, at least in some parts of the imperative paradigm. Especially interesting is the fact that personal suffixes are frequently absent, even in languages that quite strictly mark features of the subject on the main verb. Languages that inflect for mood either have no mood inflection in the imperative or, more often (according to our sample), a special sign for the imperative.

Numerous languages present imperative verb forms without personal suffixes in only certain number, gender, person, and politeness combinations.

In German, the suffixes -st, -t, and -en are the usual second person concord markers for the singular familiar, plural familiar, and polite, respectively. These mark all verbal forms with the sole exception of the imperative, where there is no explicit marking for the second singular familiar. Thus compare the present, past and imperative of the verb sagen 'to say':

(61)		PRESENT	PAST	IMPERATIVE
	2SG familiar	sagst	sagtest	sag
	2PL familiar	sag <i>t</i>	sagte:	sagt
	2SG/PL polite	sagen	sagt <i>en</i>	sagen

If only some of the forms of an imperative paradigm are devoid of explicit personal markers, it appears that these will always include the second person singular, and – provided the language has such categories – the masculine familiar. Hebrew provides another example. While the four second person imperative forms, the masculine and feminine, singular and plural, are all distinct, the masculine singular is special in that it alone has no suffix: Here is the paradigm for the imperative of the verb jašav 'to sit':

(62)	MASCULINE		FEMININE
	SG	šev	švi
	PL	švu	ševna

The principles governing the suppression of personal affixes seem to be very much the same as those governing the suppression of subject pronouns, the singular, masculine, familiar being the most likely member of the paradigm not to show up explicitly. But pronouns appear to be more frequently suppressed than affixes. In several languages subject pronouns can be suppressed in cases where verbal affixes with the same features cannot. In German, for example, all subject pronouns may be omitted in imperatives, but as we have seen only the second singular, familiar verb concord is lacking.

The suppression in the imperative of what is ordinarily an obligatory feature of the subject, either a subject pronoun or a verbal concord affix, is an amazingly popular phenomenon. In our sample, only one language, Onondaga, was not described as lacking either some subjects or some concord markers in the imperative.

3.2.1.5 Dependent imperatives. Another widespread fact about imperatives is that they tend not to occur as dependent clauses. The handbooks are sometimes rather vague on points such as this, but we found no clear examples of a marker of imperativity functioning as a complementizer. Examples like the English

(63) We bid you enter

come close, but it seems to us that the resemblance is an accidental convergence. In languages with distinct imperative morphology, the imperative is excluded from dependent clauses.

3.2.1.6 Object marking. One final interesting but sporadic tendency should be mentioned. The case marking of objects of imperative sentences is often unusual. Some basically nominative-accusative lan-

guages (like Finnish and Southern Paiute) show nominative objects in the imperative. Thus in Finnish (Comrie 1975:115) we find

(64) Maija söi kalan Maija(NOM) ate fish(ACC)

but

(65) Syö kala
Eat fish(NOM)!

3.2.2 Subtypes of the imperative

3.2.2.1 Prohibitives. A striking fact about imperatives is how frequently negative imperatives are handled differently from negative declaratives. Better-known Western languages like English are, in fact, quite unusual in simply adding the marks of negation that are found in other sentence types to the imperative formula in order to convey a prohibition.

Even English, which appears to form straightforward negative imperatives, has a special form for sentences with the main verb be:

(66) Don't be stupid!

Here do appears, whereas it fails to in the case of corresponding negative assertions and questions:

- (67) *I didn't be stupid
- (68) *Didn't I be stupid?

Roughly half the languages we surveyed have a negative marker in sentences with imperative meaning which is not the same as the one found in other sentence types. Such languages have what amounts to a special negative imperative type, which we will refer to as the PROHIBITIVE (though some writers use the term VETATIVE).

In Yokuts, for example, the general mark of negation is bhom, but just in case the verb bears the imperative suffix -ka, another negative, $-a\cdot ni$, is used.

There are also languages in which sentences with negative imperative meaning are not of imperative form. Thus these languages also display a prohibitive sentence type, but it is not formally related to the imperative. Roughly half of our sample languages have non-imperative prohibitives. Some use a normally dependent form of the verb (an infinitive, as in Greenlandic; or a subjunctive, as in Swahili and Latin); some an indicative paraphrase meaning roughly 'cease doing ...' (as in Welsh) or 'you will not ...' (as in Hebrew: see examples (75–6) below); and some a special prohibitive adverbial occurring with indicative verb

forms (as in Karok, where the adverb xayfa i, glossed 'don't', marks the prohibitive). Some languages have both a non-imperative prohibitive and a special negative marker in the prohibitive.

Greenlandic Eskimo provides an example of the use of a nonimperative verb form. It has a negative imperative, but one used only to rescind a previous order. For general prohibitions, a negative infinitive is used. The so-called infinitive form of the Greenlandic verb is a dependent form that is used to express action simultaneous with the action in the main clause. The subject of a transitive infinitive is not marked on the verb, but the object is:

(69) Attornagu iserpoq disturb(NEG INF 3SG) come in(MOOD 3SG) 'Without disturbing it, he came in'

So also in prohibitions:

(70) Una attornagu
this disturb(NEG INF 3SG)
'Do not disturb this'

In Modern Hebrew, there is both a non-imperative verb form and a special negative element. There is a distinct imperative form in Modern Hebrew, but, for most verbs, a second person future form is ordinarily used in the colloquial language:

- (71) šev sit(IMP) 'Sit down!'
- (72) tešev
 sit(2SG FUT INDIC)
 'Sit down!' or 'You will sit down'

The ordinary negative marker is the preverbal adverbial lo', for example:

(73) Hu lo' yošev
he not sit(MASC SG PRES INDIC)
'He is not sitting'

But this negative is ungrammatical with the imperative form:

(74) *Lo' šev

And while lo' is grammatical with the second person future form, this does not produce an imperative sentence. Instead a special negative

marker, 'al, that is used nowhere else, combines with the future for the prohibitive construction:

- (75) Lo' tešev
 not sit(2sg fut indic)
 'You will not sit down'
- (76) 'Al tešev
 not sit(2sg fut indic)
 'Do not sit down!'

Similarly, in Onondaga, there is a distinct prohibitive type that makes use of the 'peremptory' verb form, rather than the imperative, and requires the special 'prohibitive particle' ahkwi.

Roughly three quarters of the languages we investigated cannot form straightforward negative imperatives, either because they use a non-imperative verb form, or because they use a special negative form, or both. We therefore regard the avoidance of such forms as a typical feature of natural languages.

3.2.2.2 Other imperative subtypes. The HORTATIVE is in some languages simply a first or third person form of the imperative, but in most languages in our sample it is formally distinct from the imperative. We might say that in the former case (as in Onondaga), there is only a hortative form – an expression of a desire – whereas in the latter case there is a separate imperative. Further subdivision is found in some languages between the first and third person hortatives. Thus English has the special first person hortative let's, but no grammatically special form for expressing desires for actions not involving the speaker or addressee.

Occasionally in some languages imperatives divide formally according to the reason behind their issuance. The action called for by a genuine REQUEST is to be performed for the benefit of the requester whereas it is in the interest of the addressee to carry out an admonition or WARNING. INSTRUCTIONS are to be followed in order to complete some task, and ORDERS OF COMMANDS demand compliance simply because of the authority that the orderer has over the recipient of the order.

Military commands in English have a special syntax (as pointed out to us by James Lindholm, personal communication). Each command has two parts, a preparatory part followed by an executive part. The system is arranged such that the executive part of the command contains only redundant information. The correct form of a command to turn right while marching is

(77) Right flank - march!

and the command to place rifles on the right shoulder is

(78) Right shoulder - arms!

There will be variation from language to language as to whether uses such as these constitute separate sentence types, and as to whether they comprise subtypes of the imperative or of some other major type. If their syntax is distinct from that of imperatives, commands should be considered a separate sentence type.

Still other distinctions are made, in a few languages, as to the conditions under which the requested action is to be carried out. Thus, Tagalog has a special construction for an 'immediate imperative', a command or request for the immediate performance of the action. And Maidu distinguishes an imperative formed with either p(i) or zero, 'used when the action of the order is to be carried out in the presence of the speaker or when there is no interest in the place of the ordered action', from one formed with pada, 'used when the ordered action is to be carried out in the absence of the speaker' (Shipley 1964:51).

Finally, we should point out that most, if not all, languages have devices for distinguishing various degrees of emphasis, peremptoriness, politeness, and formality in imperative sentences, as in the English examples:

- (79) Stand up!
- (80) Please stand up!
- (81) Do stand up!
- (82) You stand up!
- (83) Stand up!

While these distinctions need not be a matter of different sentence types in our sense (since they have to do with attitudes as well as with different uses of sentences), they deserve note. Even languages with no morphological marks of politeness or formality (like English) have ways of distinguishing these attitudes, and the full system of attitude marks in imperative sentences can be quite elaborate.

3.3 Interrogative

3.3.1 Subtypes of interrogatives

The languages we have surveyed all have some grammatical signal indicating that the purpose of a sentence that is so marked is to gain information.⁶ And we must distinguish several different information-seeking types, ones that usually have distinct syntactic or phonological properties.

Perhaps the most basic interrogative type, and the most widely

distributed, is the YES-NO (or NEXUS) question, one that seeks a comment on the degree of truth of the questioned proposition. Closely related to yes-no questions are ALTERNATIVE questions. These provide a list from which, the speaker suggests, the right answer might be drawn. But the list might consist only of a proposition and its negation:

(84) Is it raining, or isn't it?

In addition, alternative questions provide a link with information questions in that the alternatives that are suggested can be a list of propositions that differ in some way other than logical polarity. Thus in

(85) • Is it raining, or is it snowing?

the alternatives involve distinct predicates that the speaker implies are mutually exclusive. In

(86) Did Bill stay, or did Harry?

the propositions (also implied to be mutually exclusive) differ in one argument. The alternatives may also differ in more than one place. In the following example, the alternatives are completely distinct, but the idea of mutual exclusivity is still present.

(87) Is it raining, or did someone leave the sprinkler on?

Alternative questions must be distinguished from sentences such as (88) which present alternative formulations of essentially the same yes—no question. Instead of requiring the addressee to choose which alternative is true, (88) requires a yes or no answer: no if neither proposition is true, and yes otherwise:

(88) Were you ever a member of the Cub Scouts or were you ever engaged in Scouting activities?

In English, questions such as (88) differ from alternative questions in their intonation. The former have a rising intonation on the first alternative—and on all other non-final alternatives if there are any—but a falling intonation on the final one. If this intonation were delivered with (88), it would create a clash because it would signal a choice between mutually exclusive alternatives when the alternatives in (88) are in fact not so. The normal intonation for questions such as (88) is with a rise on each alternative including the last.

The third important, and very nearly universal, interrogative form is the INFORMATION OF QUESTION-WORD question. Here the alternatives are specified not in an exhaustive way by listing, but in an open-ended way by quantification:

- (89) Who suggested eating at this place?
- (90) When will we finish this paper?
- (91) How much is that kangaroo in the window?

The yes-no, alternative, and information questions we have seen so far are alike in being neutral with respect to the answer the speaker expects. But most languages have what Moravcsik (1971) calls biased questions, questions that a speaker uses to express his or her belief that a particular answer is likely to be correct and to request assurance that this belief is true. Many languages therefore have a three-way distinction among yes-no questions: neutral yes-no questions, those biased in favor of a positive answer, and those biased in favor of a negative answer, as in English (arrows indicate rising final intonation):

- (92) Was she pushed? (neutral)
- (93) She was pushed, wasn't she? (positively biased)
- (94) She wasn't pushed, was she? (negatively biased)

Just one of the languages we surveyed, Onondaga, is claimed to have only biased yes-no questions.

A few languages have a special form for RHETORICAL questions, those a speaker uses just for rhetorical effect when not only is he sure of the answer, but he judges that the listener knows that he is sure of the answer as well. It is not clear that explicitly rhetorical questions should be considered interrogatives at all, unless they bear formal relations to ordinary interrogatives. Kleinschmidt (1968:57) mentions a very restricted rhetorical form in Greenlandic, used mainly in the second person negative intransitive; it resembles an interrogative in having the second person suffix used for interrogative rather than the one used for declaratives. He describes this form as expressing a mild negative judgment, and it thus appears to be a grammaticized rhetorical question. Example (95) is a declarative, (96) a normal interrogative, and (97) the rhetorical question.

- (95) Naalanngilatit
 'You do not obey'
- (96) Naalanngilit?
 'Do you not obey?'
- (97) Naalanngippit?
 'Do you not obey?' (that is, 'You should obey')

The biased questions – by suggesting which answer is expected – can achieve this effect in languages that do not have a special rhetorical question form.

3.3.2 The form of yes-no questions

The most striking property of yes-no questions, one that has been observed by many researchers, is their characteristic rising final intonation contour. It has also been pointed out by several investigators that this intonation pattern is very close to, if not exactly like, that of any non-final disjunct. Nevertheless, it seems to us that this intonation pattern has in many cases become a grammatical feature marking interrogation. There are languages (for example Greenlandic) in which the special intonation is not found; Ultan (1969:54) points out that all such languages are postpositional, though this generalization does not hold in the other direction. There are languages (like Chrau) in which this intonation is in complementary distribution with some other formal marker of interrogation; and others still (for instance, Diola, J. D. Sapir 1965) where the rising intonation is found in both yes-no and information questions. Be that as it may, rising final intonation is one of the most frequently found indicators of interrogative force and is in some languages (Jacaltec, for instance, Craig 1977) the only feature that distinguishes yes-no questions from declaratives.

Other characteristics of yes—no questions—in the order of frequency in our sample—are these: a sentence-initial particle, a sentence-final particle, special verb morphology, and word order. And we have found additional phonological distinctions of a prosodic nature. In Hopi, for example, the first word of a yes—no question has special stress, and in Hidatsa, the last vowel of the last word is interrupted by a glottal stop. Many languages display several of these properties at the same time or have alternative devices in this range. In a (non-rhetorical) yes—no question, Yoruba (Bamgbose 1966) has either a sentence-initial particle, $nj\acute{e}$, or a sentence-final particle, $b\acute{e}$ or d.o., but not both.

Yiddish marks yes—no questions with three features in concert, a sentence-initial particle, a word-order change from the declarative, and final rising intonation, for example:

- (98) Mojše hot gekojft a hunt Moses has bought a dog 'Moses bought a dog'
- (99) Ci hot Mojše gekojft a hunt? Q has Moses bought a dog 'Did Moses buy a dog?'

Word-order change is frequent in European languages but uncommon otherwise. Invariably, the change is such as to place the verb at or near the beginning of the sentence and is thus impossible in a language whose basic word order has the verb first.

A few languages – good examples are Blackfoot and Greenlandic – use special verb morphology to distinguish questions from statements. In Greenlandic yes-no questions there is a special set of concord affixes when the subject is third person; see examples (46-51). Blackfoot yes-no questions are in the non-affirmative mode, manifested as a set of agreement suffixes different from those in positive assertions.

Finally, a fairly common system involves the use of a mobile interrogative clitic. When the clitic occurs on the verb, a question results that interrogates the whole of the sentence. When it occurs on some other constituent, a question results that interrogates just that constituent, with the remainder of the proposition presupposed. Latin illustrates the style very well. The clitic is -ne. It may be suffixed to nearly any word in a simplex sentence:

- (100) Estne puer bonus? 'Is the boy good?'
- (101) Puerne bonus est?
 'Is it the boy who is good?'
- (102) Bonusne puer est?
 'Is it good that the boy is?'

(The translations are necessarily rough.) Sentence (101) requires for its appropriate use that the discourse already be such as to have established that someone is good, sentence (102) that the discourse be such that qualities of the boy are at issue.

Such FOCUSED yes—no questions therefore resemble biased questions to some extent, in that they display a belief by the speaker that a proposition is likely to be true.

Indeed, in Latin (and, with differences, in Turkish), an interrogative particle associated with a negative adverb forms a positively biased yes—no question. Corresponding to English (103) is Latin (104).

- (103) The boy is good, isn't he?
- (104) Nonne puer bonus est?

In fact, negative yes-no questions are often positively biased questions (see Moravcsik 1971 and Pope 1973). But in some languages (such as Japanese, Kuno 1973) they are neutral questions about the negative proposition.

Another frequently found question-like type is the CONFIRMATIVE. Rather than having as their goal the garnering of information, these really amount to statements that carry with them the demand that the

addressee express his agreement or disagreement. They bear a close resemblance to biased questions and are probably not distinct from them in many languages. They are commonly formed by appending a tag to a declarative base, and the tag is most often, but not always, negative. Quite often, the tag also contains a predicate with a meaning like 'is' or 'true'. Thus Greenlandic has the tag ila?, literally, 'is it so?', French n'est ce pas?, literally 'is it not?', German nicht wahr?, 'not true?' and so forth.

English distinguishes biased tag questions from confirmatives in that the former have question intonation but the latter do not.

The English sort of opposite polarity tag with a copied predicate appears to be quite rare.

It is not infrequently the case that the formal indications of yes—no questions resemble those of the antecedent of conditional sentences (the clause in a conditional that is expressed in English with if). In Biblical Hebrew, for example, yes—no questions are introduced with the particle $ha \mbox{?}im$. This particle consists of an interrogative indicator, ha, and the conjunction $\mbox{?}im$, which is used to introduce antecedents of conditionals. German provides several ways of expressing conditionals, one of which involves placing the verb before the subject — just as is done in yes—no questions.

- (107) Das Buch ist rot 'The book is red'
- (108) Ist das Buch rot? 'Is the book red?'
- (109) Ist das Buch rot, so muss es mir gehören 'If the book is red, it must belong to me'

3.3.3 The form of information questions

We turn next to the second major type of question, the information question. These are formed with the use of interrogative proforms and occur either in conjunction with, or independently of, the formal markers of interrogativity in yes—no questions. Inversion and special morphology seem frequently to co-occur with interrogative words, but particles and intonation do so only rarely.

In many languages it is difficult to find any formal arguments that

would support the idea that yes-no questions and information questions form a class. Thus the German questions

- (110) Ist er krank? 'Is he sick?'
- (111) Wer ist krank? 'Who is sick?'

don't seem to have any particular syntactic similarity at all.8 The same is true in those languages where information questions differ from yes-no questions by being equational in form: 'in Tagalog and in Menomini... the [information question] is always an equational sentence, e.g. Menomini [awe:? pajiat] "who the-one-who-comes?", that is, "Who is coming?" (Bloomfield 1933:176). In contrast, special interrogative verb morphology characterizes both yes-no and information questions in Greenlandic:

(112) Piniarpoq

'He is hunting'

(113) Piniarpa?

'Is he hunting?'

(114) Kina piniarpa?

'Who is hunting?'

(*Kina piniarpoq?)

Here the two types are closely related.

A few languages (Hopi, for example) might lack information questions entirely, using instead indefinite statements ('Someone came') or indefinite yes—no questions ('Did someone come?') to achieve the same effect.

The number of question words is extremely variable, but, as Ultan (1969:53) points out, one contrast which is almost always present, even in languages that do not otherwise make use of the distinction in grammar, is that between personal and impersonal (English who and what), with Lithuanian and Khasi exceptions in not showing such a contrast. Most languages have pronominal interrogatives, many have pro-adverbial interrogatives (English when, where, how). A few have interrogative pro-verbs (Southern Paiute avan-i - 'to do what? to act how? to have what happen to one?' - and an-ia - 'to say what?') - and a few have interrogative pronumerals (Latin quot 'how many?' and quotus 'the how manyth?'). It would be theoretically possible for a language to get by with a single morpheme for information questions, a nominal modifier glossed as 'what?', so that all or nearly all information questions would involve periphrasis (what person? for 'who?', at what time? for 'when?', etc.). As it happens, the smallest system of such morphemes known to us is the Yokuts system, with three interrogative

stems (glossed 'who', 'who, what', and 'where'), while systems of a dozen or more forms are not uncommon.

As they interrogate part of a proposition, information questions always present the rest of the proposition as old or presupposed information. Thus, Who killed Cock Robin? presupposes that someone killed Cock Robin, and When did you beat your wife? presupposes that you beat your wife at some time. The new information is the request for the identity of the interrogated part of the sentence. The interrogated part of the sentence can thus be called the 'focus' of the sentence, but it is also what the sentence is about, so the term 'topic' is used as well. Interrogative proforms are often found in focus or topic position, which for many languages is sentence-initial position. In Diola, Karok, and Greenlandic, however, the interrogative occurs in the same syntactic position as a non-interrogative form. In languages with distinct positions for topic and focus, such as Hungarian, the interrogative is in the position of focus. The topic in a Hungarian sentence is initial, while the focused element (including an interrogative word) stands immediately before the verb:

(115) A teát hogy parancsolod? the your tea how you would order 'How would you like your tea?'

A number of languages stress the new information/old information dichotomy in information questions by using their cleft construction to focus the interrogated constituent, the same cleft construction used in declarative sentences. Hausa (Kraft and Kirk-Greene 1973) is like many West African languages in allowing only clefted information questions. One cannot ask Who killed Cock Robin? but only Who was it who killed Cock Robin? And in West Africa at least, it appears that languages constrained to clefted information questions allow only clefted answers to information questions as well.

Semantically, information questions are like alternative questions in specifying a range in which the answer is to be found. Interrogative words indicate either all by themselves, or with the help of syntactic features of the question in which they occur, which part of the proposition the asker is interested in knowing about. That is, they help to determine whether it is the subject, object, verb, or some other element of the proposition that the addressee is requested to supply so as to yield a true proposition. But interrogative words also typically limit the field that the asker expects the unknown to be part of. Thus who indicates that the asker wants the addressee to identify a person, when indicates a time, where a place, and so on. Such words as whoever,

whenever, and wherever perform these functions as well, but do not indicate interrogation. Many languages, however, do not formally distinguish interrogatives and indefinites such as these. There is also a strong tendency for interrogatives and relative pronouns to be related, or identical, or at least to overlap to a large extent, as they do in English.⁹

3.3.4 Dependent interrogatives

In a great many languages there are dependent clauses with the unmistakable form of information questions (though not necessarily with every formal characteristic of information questions). The most common functions for such DEPENDENT INTERROGATIVES are as complements of verbs of asking, saying, and knowing:

The complements in (116) clearly have the form of English information questions – they have question words in them, moreover question words located at the beginning of the clause – though they lack one property of information questions, inversion. ¹⁰

A syntactic description of a language should include some account of dependent interrogatives: whether they occur; if so, which ones occur and which syntactic contexts they occur in; and what differences there are between independent and dependent interrogatives.

Dependent yes-no questions also occur, but there are languages (like English) in which the meaning of a dependent yes-no question is supplied by a special dependent information question:

In English, neither the inversion nor the intonation of independent yes-no questions carries over to dependent clauses. Instead, there is an information-question construction related to disjunctive coordination in the language.

There are sometimes affinities between the form of dependent interrogatives and the antecedents of conditionals even when independent questions do not display them (see section 3.3.2). Thus English allows if in place of whether in sentences like (117). If, of course, is the word that introduces the antecedent clause in conditional sentences.

4 Sentence fragments

4.1 Free constituents

In English, an extremely wide range of effects can be obtained simply by uttering a noun phrase and accompanying it with any of a variety of paralinguistic effects, facial expressions, and gestures. Uttering a noun phrase like

- (118) Some whiskey
- (119) The goblins
- (120) Six of those pink ones with the little sprinkles on top
- (121) All of you with beards
- (122) Lord Threshingham

could convey a request, an order, an offer, a warning, a threat, or an expression of dismay or delight; (118), (119), (120), and (121) could be used to identify certain objects, to supply an appropriate designation for those objects, or simply to call those objects to someone's attention; (121) and (122) could be used to catch the attention of some person or persons, or to address them during a conversation; all could be used to answer a question or to express disbelief in what one has heard or doubt that one has heard correctly; and so on. Probably every language can use free noun phrases for many effects (though not necessarily the same range as in English). The question is: What is the nature of these associations between form (isolated noun phrase) and use?

The question is a very complex one, and we do not propose to give a full answer to it here. We do want to point out, however, that many of these effects are surely obtained from the nature of the context in which a noun phrase is uttered. Someone hearing something like (119) is obliged to figure out why the speaker of (119) should be mentioning the goblins at all, and to do this he uses his knowledge of where he and the speaker are, what their relationship to one another is, and what has been going on between them. Without this contextual information, there are many possible interpretations, while in some contexts only one would be reasonable. For the most part, then, we are inclined to say that (118-22) are simply noun phrases, with a variety of uses in context, and that a syntactic description of English would have to say little more than that noun phrases can appear in isolation (a related question is discussed in section 5.1 below).

In some cases, however, there is more to be said. VOCATIVE uses of noun phrases – those in which someone is called or addressed – have many special properties in English and in other languages: only certain noun phrases can be used vocatively, and these may occur either as free

constituents or in combination with other constituents, but in the latter case there are restrictions on where they can occur (Zwicky 1974). In some languages, the head noun in a vocative phrase takes a special inflectional form (Latin nominative servus '(a/the) servant', but vocative serve 'O, servant!'). While vocatives can scarcely be said to make up a special sentence type, since they are not sentences and since they combine with sentences, still they are syntactically special constructions with special uses and require description in every language in which they occur.

In another class of cases, certain free noun phrases show some evidence of syntactic specialness in association with a special use. This is so for the Greenlandic 'verbal participle', a nominal form meaning 'the one who/which...'; the verbal participle, but not other nearly synonymous noun phrases, can be used in isolation as a declarative with an overtone of wonder, pity or surprise (Kleinschmidt 1968:68). Free noun phrases in English can also function as requests, and, like requests, they can occur with a following please (see Sadock 1970:235).

- (123) A beer, please
- (124) The left shoulder, please

Here and in similar cases, a careful description of a language should note that certain sentence fragments seem to belong to one or another of the families of sentence types in the language (in Greenlandic the verbal participle construction is an exclamatory subtype of the declarative family, in English the free noun phrase is, among other things, a request subtype of the imperative family).

These matters are made more difficult still by the fact that the effects associated with free noun phrases are determined in part by the intonation patterns of those noun phrases, and it is notoriously difficult to decide which aspects are meaning-bearing in the same sense that individual morphemes like *poodle* are, and which aspects are essentially paralinguistic, conveying emotional tone or affect in a non-discrete and loose fashion. We have adopted a conservative position here, so as to avoid recognizing a large number of sentence types distinguished from one another by fine shades of meaning.

A final point to be made is that noun phrases are not the only possible free constituents, even in English. English also has free prepositional phrases used with imperative or exclamatory force, as in

- (125) Near the window!
- (126) On the stairs!
- (127) Onto the table!

and other languages can be expected to have additional examples.

4.2 Answers to questions

4.2.1 Question particles

One important class of sentence fragments that we did not discuss in the previous section is that of answers to questions (both yes—no questions and information questions). All the noun phrases in (118–22), said with the intonation of ordinary declarative sentences, could be answers to information questions. So could a number of other constituent types, for instance,

- (128) With a fish knife
- (129) Because she liked penguins
- (130) Walk all the way to Westwood
- (131) Very carefully
- (132) Standing up in a hammock

For yes-no questions in English there are two morphemes, yes and no, 11 whose primary function in the language is to serve as positive and negative answers, respectively, to such questions; hence like (118-22) they are essentially declarative in force. Of course, yes-no questions can be answered with other positive and negative adverbs, like sure, absolutely, of course, not at all, and absolutely not, as well as by adverbs and other constructions that give less than a definite answer, like perhaps, maybe, I guess, and so I've heard. But yes and no have a special status, being syntactically quite distinct from the ordinary adverbs in English. Some languages may not treat answer words as a special class. There may also be special short responses to imperative sentences, like the positive response OK in English:

- (134) That's a lovely wallaby on the porch. ${?OK \\ Yes}$ (, I agree)
- (135) Give me a dumpling tomorrow. ${ OK \\ Yes } (, I will)$

We turn now to some brief general comments on answers to questions, from a cross-linguistic point of view.

4.2.2 Yes/no and agree/disagree systems

There are basically three systems for short answers to yes—no questions: YES/NO SYSTEMS, AGREE/DISAGREE SYSTEMS, and ECHO SYSTEMS. 12 English has a typical yes/no system, with a positive particle accompanying, or standing for, a positive answer, and a negative particle accompanying, or standing for, a negative answer:

(The peculiarity of plain yes as an answer to a negative question will be treated below.) Japanese has a typical agree/disagree system, with a positive particle used when the answer agrees with the question in polarity (positive vs. negative) and a negative particle used when the answer disagrees with the question in polarity (examples from Pope 1973:482, but see Kuno 1973, ch. 23 for further complications):

(137)	Q: Kyoo wa atui desu ka? A: Hai, kyoo wa atui desu Iie, atuku wa arimasen	'Is it hot today?' 'Yes, it's hot today' 'No, it isn't hot today'
(138)	Q: Kyoo wa atukunai desu ka?	'Isn't it hot today?' [i.e., 'Is it true that it is not hot today?']
	A: Iie, kyoo wa atui desu Hai, soo desu ne.	'No, it's hot today' 'Yes, it isn't hot today'

One complication in these question-answering systems arises from the fact that questions are often biased (see section 3.3.2). Thus the English question Isn't it raining? can be used not just to ask whether it is not raining, but simultaneously to indicate that the speaker guesses that it is. A simple positive answer could be very confusing. It could either be interpreted as a positive response to the question itself ('Yes, it is not raining') or as agreement with the speaker's guess ('Yes, you're right; it is raining'). Many languages therefore provide a special positive answer that clears up this potential confusion. German doch (instead of ja), French si (instead of oui) and Icelandic ju (instead of já) all are used to signal unambiguously that a positive answer to the negatively biased question is being given, that is, that the asker's expectation is wrong.

Even in English, which lacks a special form for this duty, a simple positive answer to a negative question is not fully acceptable. Here English requires an echo answer (see section 4.2.3 immediately below) in addition to the answer word:

(139) Q: Isn't it raining? A: ?Yes A: Yes, it is 4.2.3 Echo systems

In the third type of answering system, the echo system, no special answer words are used at all. Simple positive and negative responses to questions involve repeating the verb of the question, with or without additional material that varies from language to language. Welsh has such a system (it also has a special negator, na(c), used in short answers instead of the usual negator ni(d)):

(140) Q: A welwch chwi hwy?
Q see you them

A: Gwelaf
Na welaf

(Yes) I see (them)'
(No) I don't see (them)'

An interesting recurrent phenomenon in question-answering systems is that short answers are often peculiar with respect to their phonology; that is, they are often more like paralinguistic utterances than like ordinary morphemes. English uh-hunh and unh-unh are like this. So is the Yawelmani (Yokuts) affirmative ho-ho? 'yes', which is pronounced with nasalized vowels: 'nasalized vowels are to be regarded as anomalous phonetic elements having an expressive function rather than as full-fledged phonemes in the Yokuts vowel system' (S. Newman 1944:238).

No language that we know of lacks short answers to questions. Even the echo systems involve reduction of the answers. On the other hand, reduction may be obligatory in some languages, Icelandic for example:

Here we may be dealing with the grammaticization of a cultural prohibition against undue prolixity (see the next section).

5 Indirect speech acts

5.1 Conventionality

It is possible to use nearly any sentence type with the effect of nearly any other, under appropriate circumstances. Thus either of the following could easily function — and be intended to function — as a means of getting an addressee to do something (such as mow a lawn).

- (142) The grass hasn't been mowed in two weeks
- (143) Is it your turn to mow the lawn?

Should these sentences be classed along with imperatives? In this case the answer is no, for three reasons.

First, the success of using (142) or (143) to get the hearer to mow the lawn quite clearly depends on the fact that the form we find in (142) is conventionally associated with the making of statements and that the form of (143) is conventionally used for posing questions.

Second, although (142) and (143) can, on occasion, be used to get across roughly what an imperative does, this fact interacts in no way with the grammar of English. That is, there do not seem to be any features of these sentences used in this way that could properly be called formal. If (142) and (143) were actually ambiguous between an imperative sense and some other sense then we would expect the formal properties of these sentences to reflect their dual nature. For instance, the fact that Chomsky's famous example

(144) The boy decided on the boat

is ambiguous is amply demonstrated by the fact that the passive

(145) The boat was decided on by the boy

is unambiguous. But rules of grammar do not seem to be sensitive to the range of uses that (142) and (143) allow. As far as the grammatical conventions of English are concerned, (142) and (143) are the same, regardless of the use to which they are put. So while (142) and (143) might resemble imperatives in use, they are not distinct from declaratives and interrogatives (respectively) in form.

Third, the means by which uttering (142) or (143) comes to have the contextual import of a request do not seem to be language-specific. Equivalent forms in other languages are likely to be just as effective in getting requests across and would succeed for exactly the same reasons. Thus it seems proper to say that (142) and (143) are respectively a declarative and an interrogative from the point of view of the grammar of English, but their force may be exploited to achieve the kinds of effects that are conventionally associated with imperatives.

The indirect use of one sentence type for effects that properly belong to another can, however, become conventionalized to a greater or lesser extent, and when this happens, a new sentence type can develop. Sometimes, indeed, the historical origins of a sentence type are visible in its synchronic form. For these reasons it is often quite difficult – and sometimes impossible – to tell when a particular indirect form has become conventionalized to a sufficient extent to deserve being called a sentence type. Especially vexing is the fact, stressed by Morgan (1978), that while a strategy for obtaining a particular end might be conventional, this is quite a different matter from the case where a particular form

is arbitrarily connected by convention with a particular effect. Cultures (rather than languages per se) may differ in what conventional strategies for indirection are available without there being any strictly grammatical differences between them. For example, the institution of leave-taking in one culture might conventionally require the expression of wishes for long life, happiness, or the like – without specifying exactly what form this sentiment must be cast in. In another culture, the convention might call for an expression of a desire to see the traveler again – also without specifying the words that are to be used in framing this expression.

But the boundaries between culture and language are never precise. Perfect mastery of a language is not really possible without extensive knowledge of the culture in which it is embedded, and, conversely, a culture cannot be fully understood without knowledge of the language in which it is carried on.

5.2 Some examples of indirection

Indirection usually serves a purpose in that it avoids – or at least gives the appearance of avoiding – a frank performance of some act that the speaker wishes to perform. For this reason certain sorts of effects are more likely to be targets for indirect accomplishment than others. Most cultures find requests somewhat objectionable socially and these are therefore frequently conveyed by indirect means. Southern Paiute uses the modal of obligation -ywa- (roughly 'should') to form 'mild imperatives'. Numerous languages use some typically subordinate clause form, a free-standing infinitive or subjunctive, for example, as a circumlocution for the imperative. Greenlandic uses one sort of participle (e.g. 'you who are standing up') for a mild imperative, and so on. Another strategy is to ask a question, the obvious answer to which implies that one of the conditions on the appropriate issuance of requests is met. English has

(146) Can you do X?

Hebrew has a form meaning approximately 'Are you ready to do X?' and many other languages provide similar examples.

Certain questions and certain assertions may also be considered impolite and may therefore become targets for indirect achievement. In the United States,

(147) How much do you make?

is an impolite thing for a neighbor (but not the tax man) to ask and would likely be replaced by some circumlocution like

(148) Do you mind my asking . . .?

(149) Would it be too impolite of me to ask ...?

The statement meaning 'I am hungry' is an insulting thing for a guest to say to an Eskimo host. The conventional way to get fed is therefore to use a form that suppresses contrasts of person and means something like 'Someone is hungry', 'There is hunger'.

Often indirect forms become highly specialized. We find that in Maidu '... the intentional ... [I'm/we're going to ...] ... is used with demonstrative or interrogative words to form questions requesting instructions' (Shipley 1964:50). Also in Maidu, the future indicative serves 'as a kind of directive or mild imperative (with the second person only)' (Shipley 1964:47). But notice the English

(150) You will take out the garbage

is more like an imperious order than a mild imperative.

Sometimes a total replacement of one sentence type by a formerly indirect form takes place. When the historical origins of some sentence type from an indirect form are still clear, it may be difficult to say whether or not the sentence type still exists. In Tzotzil (Cowan 1969), the ordinary yes—no question looks just like an independent if-clause, and in Karok, like an elliptical disjunction of indicatives ('It's raining, or ...'). There is some interest in the question of whether or not Tzotzil and Karok should be considered to have a distinct sentence type for yes—no questions. But in any case, the way one gets questions across in these languages deserves mention since this function is indispensable to speakers of the languages.

NOTES

* Our generalizations are based on a survey of the sentence types in a sample of twenty-three languages, chosen because of the availability of usable descriptions and because they represented a wide range of language families and linguistic areas (an asterisk marks languages with which one or both of the authors have first hand acquaintance): Blackfoot, Chrau, Diola-Fogny, Dyirbal, *German, *Greenlandic Eskimo, Hausa, *Hebrew (Modern), Hidatsa, Hopi, Kapampangan, Karok, Lahu, Latin, Maidu, Onondaga, Swahili, Tagalog, Turkish, Tzotzil, *Welsh, Yokuts (Yawelmani), and Yoruba. To this original sample we have added data from *Danish, *English, *French, *Icelandic, Jacaltec, Japanese, Southern Paiute, *Swedish, and *Yiddish, plus references to several other languages in material from existing surveys of topics related to ours. We have followed the transcriptions in our sources, altering only a few opaque or difficult symbols.

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- 1 The statement that no single sentence can simultaneously belong to two sentence types does not exclude the possibility of speech act ambiguity. Thus questions and exclamations are generally distinct How pretty is she versus How pretty she is but can fall together through ellipsis: How pretty. But this last example is not both a question and an exclamation; rather, it is either a question or an exclamation. Similar situations obtain in other linguistic systems as well. The case system of German, for example, is organized such that no noun phrase is simultaneously nominative and accusative, though there are cases of genuine ambiguity as we find in the phrase das Mädchen, which is either nominative or accusative.
- 2 In English, the strategy of postposing the subject of a question comes into conflict with the strategy of preposing the question word in an information question (see section 3.3.3) just in case the question word is the subject. Here it is the question-word strategy that wins out, the subject remaining before the verb even in the question: Who shot Bill?

Echo questions (see section 4.2.3) will also fail to show inversion of verb and subject just in case the utterances they echo were not inverted: You bought a Cadillac?

- 3 'If ... we attempt a purely notional classification of utterances, without regard to their grammatical form, it seems natural to divide them into two main classes, according as the speaker does not or does want to exert an influence on the will of the hearer directly through his utterance' (Jespersen 1924:302).
- 4 While agentivity might not be of much significance elsewhere in the syntax of certain ergative languages, it is always important in the formation of imperatives (see Schachter 1977).
- 5 Or optatives, as they are sometimes misleadingly called.
- 6 Again, it is not logically necessary that an interrogative sentence type or types be available in a language. The effect of a yes-no question could be obtained by a declarative sentence meaning 'I want to know: X or not' or by an imperative sentence meaning 'Tell me: X or not' (see section 5.1). As in the case of imperatives, the activity of trying to gain information is so frequent in human social life, and so important to it, that no language (it seems) lacks a form dedicated to it.
- 7 The negatively biased Latin question is formed with a different particle, num, which is sentence initial.
- 8 Example (110) involves inversion of subject and verb; (111) does not. While it is true that inversion does occur in German information questions in which a constituent other than the subject is questioned, inversion also occurs when any item other than the subject occurs sentence initially:

- (i) Was hat Fritz gegessen? 'What did Fritz eat?'
- (ii) Eine Wurst hat Fritz gegessen 'It was a sausage that Fritz ate'
- 9 See Keenan and Hull (1973) for a development of this idea.
- to There are dialects of English in which inversion is allowed in subordinate clauses just in case the clause really represents a question. Thus, many English speakers can say,
 - (i) I wonder where did he go when they mean to ask a question. As far as we know, though, there are no dialects in which the following sentence is grammatical, because it can never be used to ask a question:
 - (ii) *I realize where did he go
- It There are also stylistic variants of yes and no, for instance yeah, nope, uh-hunh, and unh-unh.
- 12 The first two terms are due to Pope (1973), to whom we owe some of the following discussion as well.