

2 Formal approaches to the description of English: Syntax

The study of form

As we noted in the introductory chapter, the formation of words in English is studied by a linguistic sub-discipline, morphology, and students are referred for this to their course notes. While morphology focuses mainly on the processes of lingual formation at word (lexical) level, the remainder of the study of form is conventionally related to the study of lingual structure and formation at sentence or clause level. The study of the latter is known as syntax or grammar, and the task of syntactic theory is to provide the linguist with as adequate as possible a description of whatever language is being studied.

In this section we deal with two approaches to the description of lingual phrase and clause formation in English that have, in various respects, been

influential in the development of linguistic studies. We shall merely be scratching the surface here, as it is an almost impossible task to summarize the gist of both transformational-generative grammar and systemic/functional grammar within the space of a few pages. Hence the discussion will inevitably be highly selective, focussing mostly on those features of the two approaches that have a bearing on the subsequent study of linguistics for students of English. For more detailed information on the content of each of these, students are referred to Radford (1981), which is a highly accessible source on transformational grammar, and, in the case of systemic/functional analysis, to Halliday (1985), which, though formidable in length, is very lucid in exposition.

Whatever their differences in theoretical perspective and stance, the two approaches both have this in common: they constitute attempts to describe the structure of language at the level of **form** (see introduction); they do so, moreover, in terms of abstractly distinguishable, **formal units** of language such as phrase, clause and sentence. Of the two, transformational grammar is certainly the more abstract, and will be discussed first. This syntactic theory has seen numerous versions, from the Standard Theory (Chomsky 1957) to the latest Minimalist version of this grammar (Chomsky 1995), as will be explained below. The one that is dealt with here, the Revised Extended Standard Theory, has been chosen because it is still one of the more accessible versions of this grammar.

Transformational-generative grammar

The year 1957 was, as many commentators on the history of modern linguistics have remarked, a watershed in the development of the discipline. Until then, as the editor of one book observed (Joos, 1966: v), “[d]escriptive linguistics ... seemed ... to be without a serious competitor on our scene...” So on the one hand there was Joos’s (1966) book that celebrated the then unchallenged supremacy of a school of linguistic investigation known as American descriptivism, while on the other there was Chomsky’s *Syntactic structures* (1957) setting out the embryonic ideas of what eventually became a linguistic revolution that would topple the reign of descriptivism. Transformational-generative grammar had appeared on the scene.

To understand the revolutionary impact of transformational grammar on linguistics, one must take into account its radical departure from some of the most cherished principles of descriptivism. The latter is mainly associated with descriptive studies of the indigenous (Indian) languages of North America. Through the efforts of Leonard Bloomfield to make linguistics an accurate, descriptive science (in the way that this is defined in logical positivism), this brand of American structuralism also became heavily **behaviourist** in its approach (cf. Sampson, 1980: 64ff.).

What this amounted to in the actual description of a language, was that any kind of introspection, i.e. consulting one's own intuitions about language structure, was strictly forbidden; this, to the behaviourist, would create a chaotic state of

confusion in any science. Behaviourist linguists therefore went to great lengths to prevent being influenced by any pre-scientific belief, attitude or opinion on language structure that could obscure the unprejudiced observation and subsequent scientific description of the **objective** facts of language. Sampson (1980: 65) relates the example of Charles Fries, who, in writing his grammar of English, avoids even those long-accepted lexical categories of 'noun' and 'verb', preferring rather to call them 'Class 1' and 'Class 2' words. Any **pre-scientific** interference with the uncluttered and ideally unbiased observation of the facts of language was to be immediately suppressed by behaviourist structuralism as **non-scientific** and not objective. The linguist working in this tradition felt that:

The folklorist may be interested in Englishmen's beliefs about English; the linguist must concentrate rather on how Englishmen speak when they are not thinking about their language (Sampson, 1980: 66).

Put like this, the behaviourist position seems to be perfectly justified: linguistics, if it is to be a science, must deal with lingual phenomena that are open to observation, accessible to analytical scrutiny and of sufficient generality to be descriptively interesting; since idiosyncratic beliefs and opinions are not susceptible to sensory observation, they fall outside the purview of a linguistics so defined. Indeed, the degree of scientific rigour introduced by behaviourism into linguistic conceptualization has been one of its lasting contributions to the field.

The problem, however, as Chomsky very ably stated in a devastating review of a book by a leading behaviourist psychologist, is that by taking up the extreme position of denying the existence of the mind (since behavioural science should consider only sensorily perceptible phenomena), the behaviourist falls prey to an extremely simplistic view of language: that external stimuli are directly relatable to the output that we call language. Instead, Chomsky proposes that there is indeed a richly structured organ that we may call the human mind which, without abandoning any of the rigour demanded by behaviourist structuralism, may be subjected to linguistic scrutiny.

To illustrate his position on the richness of the mind Chomsky poses a simple scientific riddle (Cook, 1985): how is it that native speakers come to know things about their language that could not have been learnt from the samples of speech that they have heard? How, for example, will the adult native speaker be (intuitively) able to distinguish between the **grammatical** sentence

(1) Is the book which is prescribed good?

and the **ungrammatical**

(2) * Is the book which prescribed is good?

An adult speaker of English has the ability or grammatical competence, Chomsky would argue, to know that (1) is a possible sentence of English, while (2) is not. In other words, such an ideal speaker of the English language in some implicit sense knows that the 'is' that has been shifted to the beginning of a sentence comes out of the main clause ("The book ... is good") and has not been removed from the subordinate clause ("which is prescribed"). Now this 'knowledge' cannot possibly be derived from the speaker's experience of lingual stimuli, i.e. utterances he or she has heard before. Although speakers of English may conceivably have heard sentences such as

- (3) The book is good.
- (4) The book is a good one.
- (5) The prescribed book is good.
- (6) The book that is prescribed is good.
- (7) Is the book good?

and so on, none of these shows a violation of the syntactic rule, which can informally be stated as: "To change a statement into a question, move the auxiliary in the main clause to the initial position in the clause." It is only the **ungrammatical** concoction (2) that shows this violation, and it appears unlikely that the speaker would have heard this before. So the judgement of the native speaker regarding what are grammatical and ungrammatical sentences of the language cannot be based on experience, but on some property of the human mind:

... it makes sense to say ... that each person knows his or her language, that you and I know English for example, that this knowledge is in part shared among us and represented in our minds, ultimately in our brains, in structures that we can hope to characterize abstractly ... in terms of physical mechanisms. (Chomsky, 1982a: 5)

For the properties of mind that Chomsky wishes to investigate, he uses the term 'Universal Grammar'. This is a set of general principles of mind which determine the limits and parameters of any language, given the poorest of stimuli or 'triggers' to set such genetically determined 'growth' in motion (cf. Cook, 1985: 3; Chomsky, 1982a: 32ff.). In a word, Chomsky's approach is decidedly **mentalistic**, as opposed to the anti-mentalistic stance of the behaviourists. Moreover, Chomsky's position, in focussing on the possible structures of language, is overtly **rationalist**, whereas before linguistics had strong **empiricist** leanings.

Given the genetically inbuilt principles of mind that are called universal grammar, transformationalism claims also to have hit upon a way of explaining the acquisition of language by an individual. A child will, by listening to the language to which he or she is exposed, learn to fix the sentence order for that language as SVO (subject-verb-object) or SOV (subject-object-verb). In this way the environment, while being too 'poor' to provide sufficient evidence for learning a

language without the aid of an inherent grammar, does provide positive evidence to fix the parameters of the language being learned in ways specified in principle by Universal Grammar.

By virtue of the native speaker's **competence** in the language, Chomsky claims that such a speaker is able to distinguish between possible (i.e. grammatical, acceptable) sentences of the language and impossible ones. This does not mean that all the sentences that native speakers will produce will be perfectly grammatical; quite the contrary. But to Chomsky's rationalist frame of mind such sentences may be disregarded (cf. Lyons, 1970: 39) since we are interested only in characterizing the **ideal** speaker's grammatical competence. Various slips and errors are (empirical) **performance** factors, i.e. characteristics of the utterances that actual (and not ideal) speakers produce when they are using the language.¹ Again, Chomsky is taking up a position that runs counter to the traditional, behaviourist view of linguistics, in that he assigns a crucial role to the **intuitions** of a native speaker. Where the behaviourist is interested primarily in the development and improvement of **techniques** of linguistic analysis, moreover, the transformationalist would see the proper task of linguistics as accounting for how well a particular grammar characterizes the intuitions and grammatical knowledge of a native speaker.

A **grammar** of a language in this sense means a theoretical instrument which should **generate** all and only the well-formed, grammatical sentences of a language. By **generate** (a technical term, which should not be confused with the actual **production** of utterances) Chomsky means: able to specify in abstract, formal terms. Here a further difference with behaviourist structuralism emerges: not only should such a grammar be **observationally** and **descriptively** adequate, but it must also strive to attain **explanatory** adequacy (cf. Radford, 1981: 25f.). This means that the grammar has to characterize a language in formal terms and principles that represent psychologically plausible mechanisms of mental computation.²

The reception of Chomsky's theory, coming as it did in an environment that was entirely hostile to its basic tenets and assumptions, would not have been so overwhelmingly enthusiastic if it had not been backed up by substantial technical analyses that set out to realize the research goals of generative grammar. What follows is a very brief look at the technical details of Chomsky's theory.

1. Chomsky himself points out the parallel in distinguishing between **competence** and **performance** and the Saussurean distinction of **langue** and **parole**. The different parts of each pair refer respectively to the **norm** side and the **factual** side of concrete language. Chomsky, like all rationalists, is interested mainly in the former.

2. In much of the psycholinguistic research that was stimulated by generativism, this notion was taken up quite concretely. For example, various so-called 'click'-experiments were set up to test the psychological reality, to native speakers, of theoretically distinguishable syntactic units. Subjects were asked to listen for the 'click' sound that had been inserted somewhere on the sound-track of an uttered sentence, and to mark the position of the 'click' on a transcribed version in front of them. Even though the click was displaced, in other words not positioned on a major phrasal or clause boundary, the subjects tended to hear it on the boundary! (cf. Clark & Clark, 1977: 53f.).

As has been mentioned above, Chomsky's theories have, over the years, undergone developments and changes; his so-called Standard Theory has been succeeded first by an Extended Standard Theory, then by a modification of this known as Revised Extended Standard Theory or REST, several other modifications, and, finally, Minimalist theory. All along, though, right up to the very latest developments, the organization of his grammar has been (either implicitly or explicitly) **modular**, i.e. it is so organized that lingual phenomena are treated in separate components of the theory. Thus syntax, semantics and phonology are autonomous components. What changes from one theory to the next may be various interpretations of what should be treated under each component, but the essential modular approach has remained (cf. Radford, 1981: 12f.). One reason for adopting such an approach³ is that problems of theoretical explanation occurring in one component or module are in a sense localized. If such problems can be solved by simply making adjustments to one sub-part or component of the theory, there may be less serious implications for the others, and fewer modifications will eventually have to be made.

The Revised Extended Standard version of the theory (REST) posits two interacting systems in a **core grammar**, i.e. one of the limited number of grammars that a universal grammar would allow. There is, first, a sub-system of **rules** and, second, a sub-system of **principles** or conditions (cf. Waher, 1984: 5). For the purposes of this discussion, the sub-system of rules may be restricted to two components or modules:⁴

1. Lexicon
2. Syntax
 - 2.1 Base component (with output Deep or D-structures)
 - 2.2 Transformational component (with output S-structures)

The lexicon in a REST grammar is so organized that it contains all the words of the language being learned as entries that specify their meaning and syntactic features. The latter include the **subcategorization features** of a lexical item (Waher, 1984: 7). For example, the verb 'put' would have, as part of its subcategorization features, the specification

(8) + [_ NP - PP]

3. and there may be many reasons for adopting quite the opposite approach, hence much of the criticism of Chomskyan linguistics especially from the side of the so-called 'functionalist' perspective, which sees a rather stricter relationship between grammar and semantics. As will become clear below, the functionalist views grammar as a realization of different semantic choices, and therefore tries to explain the grammatical options chosen by appealing to semantic or functional explanations.

4. There are more, but these are omitted since they are not crucial to the exposition. For example, S-structures form the input into a phonological component, with output surface structures.

which means that it can occur only in the syntactic environment of a Noun Phrase followed by a Prepositional Phrase. This is evident when we look at

(9) The lecturer will put the books on the shelf

where 'put' is immediately followed by an NP (*the books*), which in its turn is followed immediately by a PP, and in that order, and when we consider the ungrammaticality of

(10) * The lecturer will put the books

as well as the ungrammaticality of

(11) * The lecturer will put

In examples (9), (10) and (11), it is clear that we have evidence for the lingual positioning of 'put' in line with the subcategorization rule (8). But is this enough evidence for adopting such a rule? Consider that there may be a problem in this specification of the subcategorization features of the verb 'put' in certain kinds of question in English,⁵ if one considers that these features will wrongly predict that the following are impossible (ungrammatical) sentences of English:

- (12) a. *Which books* will the lecturer put on the shelf?
 b. *Which books* does he say he will put on the shelf?

In (12) 'put' is followed in each case not by an NP, but by a PP: *on the shelf*. Before one rejects the subcategorization of 'put' as a verb that can occur only in the environment of an NP followed by a PP, one needs to consider that in other questions, specifically **echo-questions**, the feature (8) correctly predicts the grammaticality of

(13) The lecturer will put *which books* on the shelf?

and

(14) He said he would put *which books* on the shelf?

where both have the NP (*which books*) in its proper subcategorized position. Surely, in an approach that strives to achieve the greatest possible **generality**, one would prefer to have one set of subcategorization features over many. So Chomsky proposes this solution: let us assume that there are (at least) two levels of structure, D-structure and S-structure. Then, at the underlying or deep level of structure, a

5. The subsequent argument will follow roughly that of Radford, 1981: chapter 5.

sentence generated by the **base** component of the grammar would have the *wh*-element in its proper position according to subcategorization rules. What we need, subsequently, is a very simple (and eventually extremely general) **transformational** rule that would change this D-structure into an S-structure such as those (non-echo) questions that have *wh*-elements in preposed position. So from the underlying or D-structure

(15) The lecturer will put *which books* on the shelf?

we can, by moving the *wh*-element to the front (and by inverting the auxiliary and the subject noun phrase), get the S-structure

(16) *Which books* will the lecturer put on the shelf?

Movement rules are different from generative rules: they are rules not for explicating the form of sentences, but for **changing** or transforming them. As one early commentator on transformational-generative grammar, Gleason (1961: 172) had remarked, transformationalism treats "the structural relations of a pair of constructions ... as though it were a process." In terms of the distinctions introduced in the introduction, the spatial analogies within the lingual, that give content to notions of lingual sequence and position, are in transformationalist thinking made dynamic by introducing a set of kinematic analogies into the conceptualisation of structural lingual phenomena. This allows us to think about moving structural elements (such as the *wh*-element in the preceding examples) out of one sequential arrangement and into different lingual positions from their initially conceived place.

What, though, has been gained by introducing two levels of structure and a transformation rule? First, we now have an explanation for why the initial *wh*-elements in non-echo questions seem to act just like NP's occurring at some more **abstract** level, i.e. in exactly the position they would have in *wh*-echo questions such as (15); hence the position vacated by the *wh*-element leaves behind a **trace** as in the space marked $_$ in (17), thus satisfying subcategorization rules:

(17) Which books will the lecturer put $\text{NP} [_]$ on the shelf?

Second, we no longer need to treat echo and non-echo questions differently in respect of syntactic structure, since both, at some underlying level, have exactly the same structure, and we have thus gained in terms of sought-after generality.

This ability of transformational grammar to treat apparently different phenomena in the same way syntactically is one of the major achievements of the theory. We have, in very broad outline, touched on only part of what may be gained in the case of two kinds of (direct) question, but this treatment applies *mutatis mutandis* also to other types of question formation, including indirect questions.

What is more, one can produce further arguments for the existence of *wh*-movement phenomena by looking, for example, at the so-called **transitive prepositions**:

- (18) a. * They are moving towards
 b. * They are moving towards to reconciliation
 c. They are moving towards reconciliation

From the possibility of (18c) and the impossibility of (18a) and (18b) the preposition *towards* may plausibly be subcategorized as

(19) + [_ NP]

i.e., it will occur immediately before an NP. We run into problems again in questions such as

(20) What are they moving towards?

(where there is no NP directly following the preposition) if we do not allow for the possibility that (20) may be the output or S-structure of a D-structure along the lines of

(21) They are moving towards_{NP} [*what*]?

which satisfies the subcategorization rule (19), viz. that the preposition *towards* has to occur in a lingual position before a noun phrase.

Nor should one consider only subcategorization arguments to include a transformational component in a generative grammar. Transformationalists argue that grammatical agreement phenomena also point to the same solution. Compare for example the grammaticality of

(22) These are the books which the lecturer said *were* on the shelf

with the ungrammaticality of

(23) * These are the books which the lecturer said *was* on the shelf

The ungrammaticality of (23) is accounted for if we allow for an empty NP in (22) that is plural in number (like *which*):

(24) These are the books which the lecturer said_{NP} [*e*] were on the shelf

since NP [*e*] can at S-level be interpreted as the subject NP of the verb 'were' in (24), which, at some underlying level, had been subject to a rule of grammatical subject-verb agreement.

Or we could take an argument from contraction facts: why is it impossible to contract *he* and *has* to *he's* in (25), i.e. why does the language allow only for the grammaticality of (26)?

(25) * the books which he's on his shelf

(26) the books which he has on his shelf

If we assume that before a constituent 'missing' at S-level as a result of the operation of a transformational rule on the output of structures at a deeper level, no contraction is possible, we have one possible explanation (there are others, too) for the ungrammaticality of (25), the S-structure of which may include a 'gap' to show that a constituent had been removed, as in

(27) the books which he has [_] on his shelf

If one now considers that the **wh-movement** rule does not move only NP's, but also PP's, AP's and AdvP's, cf.

(28) a. *To whom* has he given the books_{PP} [*e*]?

b. *How strong* is it_{AP} [*e*]?

c. *How quickly* did you say he read it_{AdvP} [*e*]?

the account appears to be more general still.⁶

What one has, in sum, are some highly abstract and at the same time very general treatments of phenomena that in most other analyses would receive disparate treatment. This is probably one of the most fascinating aspects of transformational-generative grammar, and explains some of its huge influence on linguistic theory.

Systemic/functional grammar

This school of linguistic analysis is today most closely associated with the name of Halliday, though its roots go back a long way in the history of English linguistics to scholars like Firth and Malinowski. Firth, who held the first chair of general linguistics in Britain, and his anthropologist friend, Malinowski, held the view that language can never be understood if it is isolated from the social contexts in which it is used (cf. Butler, 1985: 2ff.; Sampson, 1980: 224ff.). From them Halliday took

6. It can also be shown to apply to non-wh elements, such as NP's, in, for example, the formation of the passive (cf. Waher, 1984: 17f.).

over the idea of language as an essentially social phenomenon. It is interesting to note that, whatever other differences of approach there may be between them, this (British) school of functional linguistics, had, like the descriptivists in America, derived the first stimulus for its work from the side of anthropology.

There are some important contrasts between the work of Halliday and Chomsky. While Chomsky would claim that the study of language is part of psychology and, ultimately, of biology (cf. Chomsky, 1982a: 185ff.; 1982b: 30), Halliday's views tend to see it as part of sociology (Halliday, 1978: 39). Where Chomsky is interested in the individual's capacity for learning a language, Halliday, in the tradition of English linguistics, is much more concerned with practical matters, i.e. with the functions that language fulfils in a social community. Chomsky adopts what Halliday (1978: 10) calls an **intra-organism** perspective, where he would take an **inter-organism** one. Coming as he does from a scientific tradition where rigour is the watchword, Chomsky would insist on the **autonomy** of syntax, conceding only that if the grammatical system interacts with other systems, such interaction would be "more or less on the periphery" (Chomsky, 1982b: 115). Halliday, like all functionalists (see note 3, above), sees a much more fluid relationship between the different levels of linguistic analysis (Butler, 1985: 3). Central to his thought is the notion that the 'meaning' is encoded in the 'wording', or, in technical terminology, that each level of language contributes to the expression or realization of meaning, the highest stratum in the hierarchy:

The relation between the semantics and the grammar is one of realization: the wording 'realizes', or encodes, the meaning. The wording, in turn, is 'realized by' sound or writing. (Halliday, 1985: Introduction, p. xx)

Halliday (1978: 128) thus distinguishes three levels or **strata** that constitute the linguistic system:

- (a) Semantic (the meaning)
- (b) Lexicogrammatical (the wording, i.e. syntax, morphology and lexis)
- (c) Phonological (the sound)

At the semantic level, Halliday distinguishes three components:

- (i) ideational (further subdivided into experiential and logical parts)
- (ii) interpersonal
- (iii) textual

Any realization of the 'meaning' in the 'wording', in other words any concrete instance of actual language use, will, according to Halliday, be a simultaneous encoding or expression of all three semantic components in the lexicogrammatical stratum. At the lexicogrammatical level we therefore find the

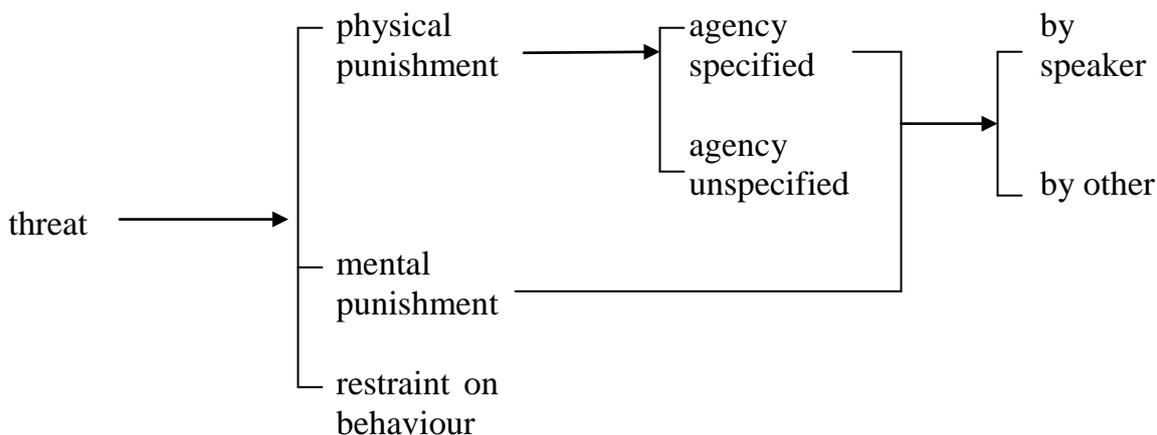
meaning of language 'constructed' or realized in the **simultaneous** selection of options (cf. Butler, 1985: 48).

Here another fundamental difference between a functionalist perspective and the Chomskyan approach can be seen. In the latter, Halliday claims, language is viewed as a system of **forms** to which meaning is then attached, a claim which is true in respect of Bloomfield's work, and perhaps the Standard Theory of transformational-generative grammar. In Halliday's perspective, however, the opposite tack is taken: language is seen as a system of **meanings**, accompanied or expressed by the forms through which they are realized (Halliday, 1985: Introduction, p. xiv).

The **systemic** part of Hallidayan linguistics attempts to show what grammatical **choices** or **options** have been chosen in any particular instance of text by the speaker to realize his or her expressive goals. To characterize the following utterances (grammatical options) by a speaker (in this case a mother, speaking to a naughty child - Butler, 1985: 61f.)

- (29) a. I'll smack you
 b. Daddy'll smack you
 c. Your bottom will get smacked soon
 d. I'll be very angry if you do that again
 e. If you go on doing that Daddy'll get very cross with you
 f. If you don't stop you'll have to come inside

Halliday draws up the following **system network**:



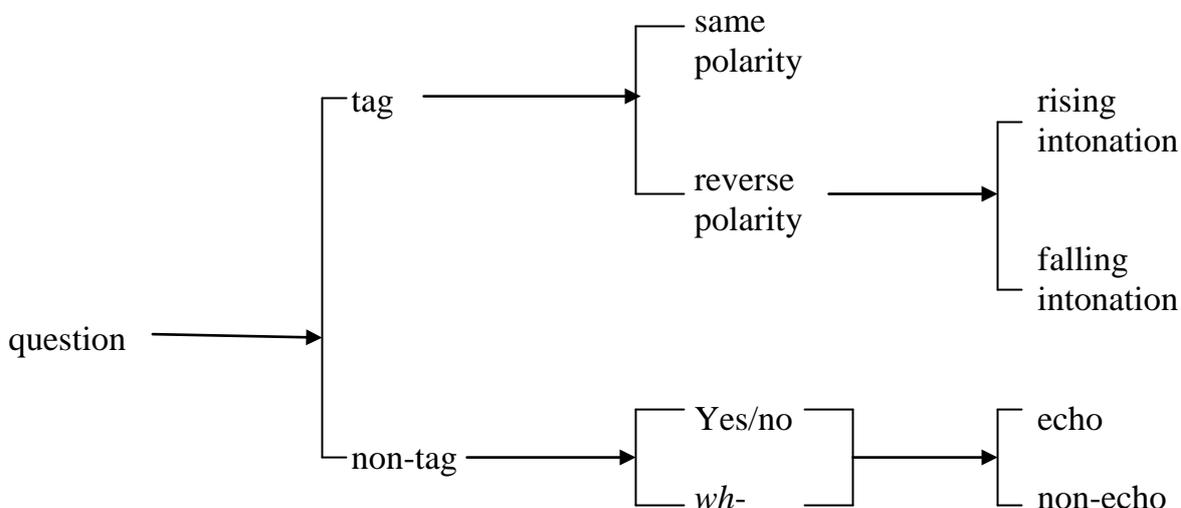
In a systemic analysis the emphasis is on language as a **system of choice**, and the system network above attempts to chart the possible choices that lie open to a speaker who wants to issue a threat.

Each of the examples given under (29a-f) above is a **realization** of one of the options in the system network. Language is viewed as 'meaning potential', actualized on the lexicogrammatical level.

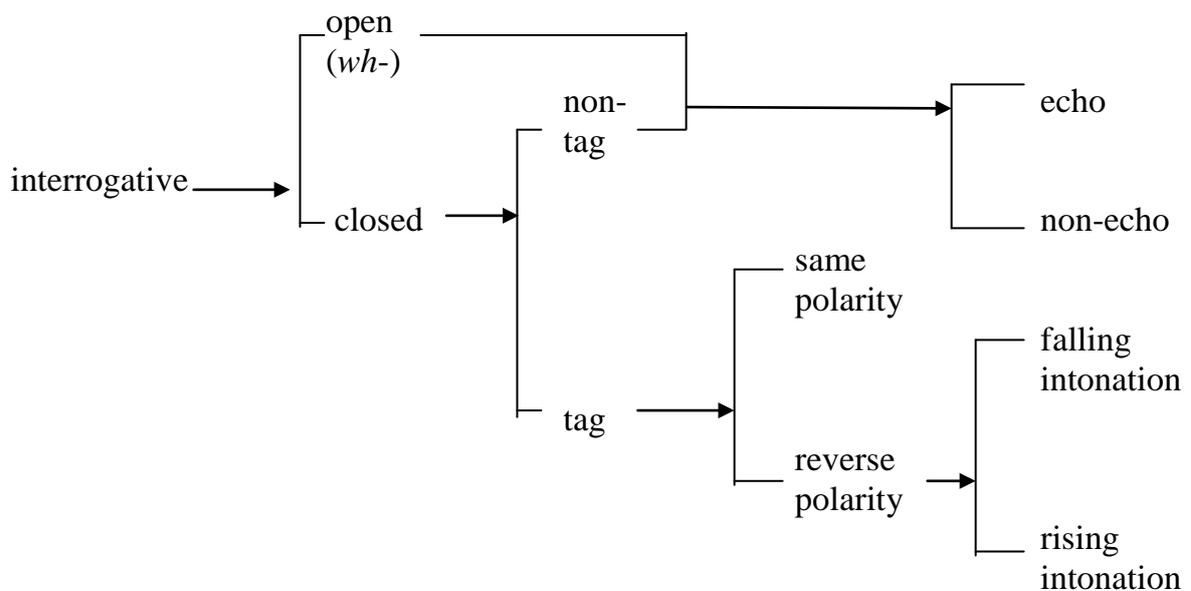
Having briefly looked at the way that **questions** are treated in transformational-generative grammar, it is interesting to compare how systemic linguists deal with them. This sample (corpus) contains the different types of question in English:

- (30) a. This is the one, is it? (tag, same polarity)
- b. This is the one, isn't it? (tag, reverse polarity, rising intonation)
- c. This is the one, isn't it? (tag, reverse polarity, falling intonation)
- d. Is this the one? (yes/no, non-echo)
- e. This is the one? (yes/no, echo)
- f. Which one is it? (*wh*-, non-echo)
- g. This is which one? (*wh*-, echo)

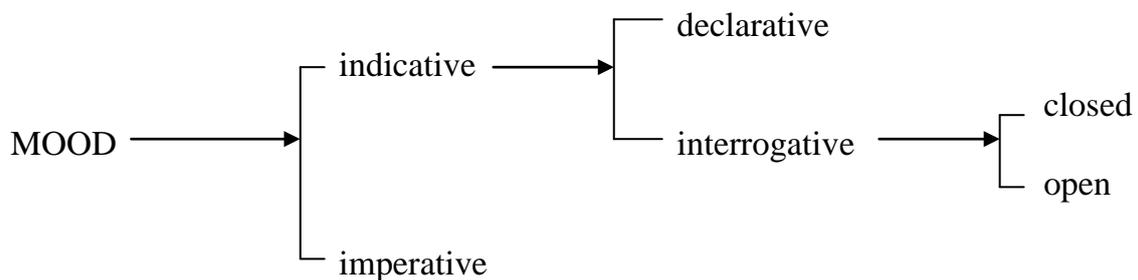
Where the transformationalist would be interested in treating the analysis of such examples in as **general** a way as possible, the systemic linguist would see in this sample a realization of a grammatical network, or a set of grammatical options that are open to a speaker, and which may be characterized in the following way:



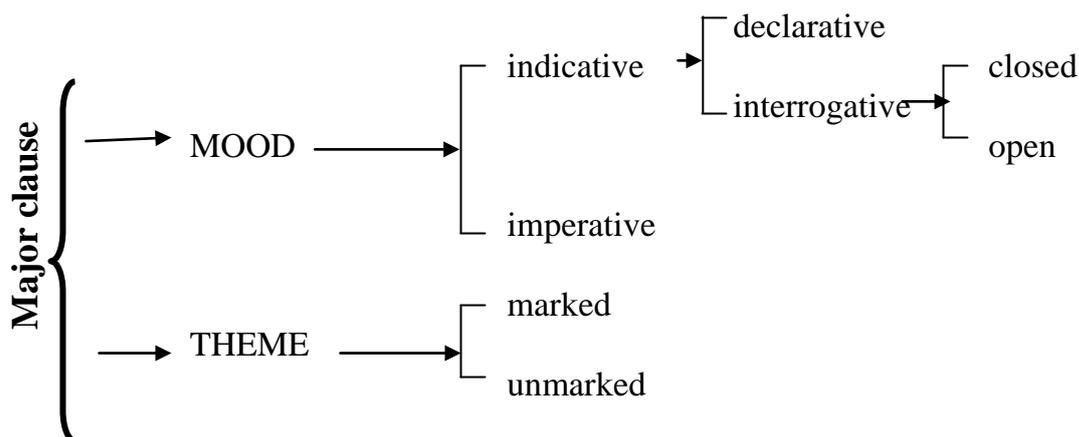
Such a presentation of grammatical options can be either less or more delicate, depending on the uses to which one would put the analysis. Moreover, there are other possible ways of presenting the same options, that would give theoretical expression to an even more general way of characterising questions:



If the system network is presented in this way, it can be seen to fit into an even larger system network (cf. Berry, 1975: 166ff.) in the choice between **declarative** and **interrogative** sentences as options in the indicative mood. This system, in turn, fits into the higher system that regulates choices between **indicative** and **imperative** at the level of mood in English, thus:



This has been one illustration of a single set of options open to a speaker at one level of realization. But Halliday stresses that in actually using a language, we make numerous choices or selections from several systems simultaneously. So, at the level of the (major) clause, we have, as speakers, not only choices of **mood**, but an additional set of choices on how, for example, the **theme** of such a clause may be realized (Butler, 1985: 52f.):



So, in (31) and (32), we have instances of major clauses in the indicative mood, realizing the declarative option in the latter, but differing in respect of **unmarked** and **marked** theme:

- (31) Bruno gave Yogi a black eye
 (32) What Bruno gave Yogi was a black eye

Halliday's notion of 'theme' ties in with a level of linguistic description that considers lingual phenomena 'beside the clause' (cf. Halliday, 1985: chapter 8), i.e. with a view to describing the clause as **message**, as a means of conveying what is lingually meaningful.

Where traditional or conventional approaches to grammar would take a **product** view, in other words focus only on the result (the lingual object that is produced by lingual subjects), Halliday is concerned, like many other approaches to the analysis of language today, with a **process** view. He therefore distinguishes a unit of linguistic description that may be called an **information unit** (Halliday, 1985: 274ff.). Even though the clause is not necessarily co-extensive with the information unit, it will be so in the unmarked case.

The information unit is organized so that there is an interplay in any instance of text between what is **given** and what is **new**. What is new at the level of the clause is given **prominence** in terms of its intonation contour (examples taken or adapted from Halliday, 1985: 275ff.):

- (33) a. We're dealing with a nutcase here.
 b. Now nutcases need to have *love*.

where the prominence of *love* in (33b) marks the end of the **new** information the clause contains. Since *nutcase*, having been mentioned in (33a), is **given** in (33b), we may therefore assume that the information structure of the latter is as follows:

(34) GIVEN [Now nutcases] NEW [need to have love]

Observe, once again, that in systemic functional grammar, as in other syntactic descriptions of English, the lingual **position** of elements within a lingual unit such as a clause or sentence – the sequentiality that we associate with spatial analogies in the lingual dimension of reality – is once again prominent. In the new lingual unit being dealt with here, that Halliday calls the information unit, the sequence or position of elements is always critically important to its lingual meaning-making. In (34) above, the lingual position of elements within the lingual information unit is a sequence of GIVEN and NEW. This sequentiality is the usual (unmarked) position of given and new material in the information unit. But of course speakers have the option of putting new information first, as in

(35) *You can go if you like, I'm not going*

where the information structure is

(36) NEW [You] GIVEN [can go if you like] NEW [I'm] GIVEN [not going]

In (36) the information structure is **contrastive**, and therefore **marked**. The expectable lingual sequence (of GIVEN followed by NEW) is inverted, so that the sequence, markedly, becomes NEW followed by GIVEN.

Closely related to the information structure of a text is its **thematic structure**, already referred to above. 'Theme' Halliday defines as that which the speaker takes as his/her point of departure (Halliday, 1985: 278), what is being talked about.

Theme and **Rheme** structure does not necessarily coincide with GIVEN and NEW, though: it does so only in the unmarked case. Theme + rheme is a speaker-oriented structure, while GIVEN + NEW is a listener-oriented device. In other words, the information structure tells the **listener** what is new (by making the end of the new element more prominent), while thematic structure is a conscious lingual choice on the part of the speaker to place the 'theme' he or she wishes to talk about in focus. There are several strategies for thematizing elements in English, some of which are exemplified in (37) to (40) below:

- (37) a. *Alice saw a mock turtle at the party*
 b. *It was a mock turtle that Alice saw at the party*
 ('It-clefting')

- (38) a. He seems to get along with the neighbours, but *he* can't stand this one
 b. He seems to get along with the neighbours, but *this one* he can't stand

(Clefting)

- (39) a. *I* am disgusted by this attitude
 b. *This attitude* disgusts me
 (Quasi-passive)

- (40) a. *He* has often helped Elaine
 b. *Elaine* has often been helped by him
 (Passivization)

In the case of (37b) and (38b) above, 'theme' coincides not with 'given', but (markedly) with what is 'new'.

The **polyphonic** nature of an actual instance of language use is such that information structure and thematic structure are mapped onto each other to give a certain kind of (composite) **texture** to a text. To see how speakers achieve a certain kind of texture in a text, we may look at an example given by Halliday (1985: 279f.). In

- (41) A: Are you coming **back** into circulation?
 B: I didn't know I was **out**.
 A: I haven't **seen** you for ages.

we have, in A's last turn, a **marked** information structure

- (42) NEW [I haven't seen] GIVEN [you for ages]

with the **new** information placed first. The thematic structure is, however, **unmarked**:

- (43) **Theme** [I] **Rheme** [haven't seen you for ages]

Why has Speaker A selected these choices? It is obvious from the rest of the dialogue that A needs to defend his first claim, and explain this in the light of B's complaint. He does so by choosing a composite lexicogrammatical structure, the texture of which, in terms of thematic and information structure, can **functionally** achieve this.

We shall be returning to other measures of texture; we have, however, seen sufficient examples of the selection, by speakers, of functionally important

positions for elements in the clause, to know why this approach to the grammar of English is called **functional**. The deliberate, lingually meaningful **positioning** of functional elements in the clause is a further demonstration that an investigation of the reflection of the spatial dimension within the lingual is a linguistically worthwhile endeavour. Without this set of analogies, the kind of investigation of the formal sides of the language process that is conventionally undertaken by grammatical description, of whatever variety, would have been conceptually impossible.

The functional school of linguistic investigation, in emphasizing what speakers actually do with language, also provides an important bridge, for linguistic analysis, between such **formal** characterisations and **sociolinguistic** approaches to the study of the lingual dimension of reality. It is to the latter that we should direct our attention in order to get a more complete picture of what the rest of the linguistic encyclopaedia holds in store for us.

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