Abstract

Natural Syntax is a developing deductive theory, a branch of Naturalness Theory. The naturalness judgements are couched in naturalness scales, which follow from the basic parameters (or «axioms») listed at the beginning of the paper. The predictions of the theory are calculated in deductions, whose chief components are a pair of naturalness scales and the rules governing the alignment of corresponding naturalness values. Parallel and chiastic alignments are distinguished, in complementary distribution. Chiastic alignment is mandatory in deductions limited to unnatural environments.

The paper deals with English interrogative main clauses. Within these, only the interrogatives containing wh-words exclusively in situ constitute an extremely unnatural environment and require chiastic alignment. Otherwise parallel alignment is used.


Keywords: naturalness, syntax, morphosyntax, main clause, interrogative clause, English

Natural Syntax is a (developing) deductive linguistic theory that determines the presuppositions on the basis of which a (morpho)syntactic state of affairs can be made predictable, and thus synchronically explained. The two basic kinds of presuppositions are naturalness scales and rules of alignment among corresponding values of any two scales. Every (morpho)syntactic state of affairs is represented by two comparable variants. Natural Syntax contains no generative component.

I begin by listing the criteria with which Natural Syntax substantiates naturalness scales:

(a) The parameter of favourable for the speaker and of favourable for the hearer. What is favourable for the speaker is more natural, the speaker being the centre of communication. Expressed in a scale: >nat (favourable for the speaker, favourable for the hearer). This view of naturalness is commonplace in linguistics (Havers 1931: 171), under the names of tendency to economise (utilised first of all by the speaker) and tendency to be accurate (mainly in the hearer’s interest).

(b) The principle of least effort (Havers 1931: 171). What conforms better to this principle is more natural for the speaker. What is cognitively simple (for the speaker) is easy to produce, easy to retrieve from memory, etc.

(c) Prototypicality. What is nearer to the prototype is more natural for the hearer. The speaker favours non-prototypicality.
(d) Degree of integration into the construction. What is better integrated into its construction is more natural for the speaker.

(e) Frequency. What is more frequent tokenwise is more natural for the speaker. What is cognitively simpler for the speaker is used more. (However, the reverse does not obtain: what is natural for the speaker is not necessarily more frequent.)

(f) Small v. large class. The use of (a unit pertaining to) a small class is more natural for the speaker than the use of (a unit pertaining to) a large class. During speech small classes are easier for the speaker to choose from than are large classes.

(g) Specialised v. non-specialised use. The specialised use of a category is more natural for the speaker than its non-specialised use. Suppose that a language has reflexive personal pronouns. These pronouns are specialised for expressing reflexivity (whereas other personal pronouns are not specialised for expressing reflexivity, although they do express it under certain conditions) and their use for expressing reflexivity is very natural for the speaker: \( \triangleright \text{nat} (+, -) / \text{reflexive personal pronoun expressing reflexivity} \).

(h) Given a construction, the movement of a unit to the left is more natural for the speaker than the movement of a unit to the right. (Movement to the left is more natural than non-movement; movement to the right is less natural than non-movement.)

(i) Acceptable v. non-acceptable use. What is acceptable is more natural for the speaker than what is not acceptable. The very reason for the acceptability of a syntactic unit is its greater naturalness for the speaker with respect to any corresponding non-acceptable unit.

(j) What is more widespread in the languages of the world is more natural for the speaker (the typological criterion). What is cognitively simpler for the speaker is realised in more languages.

The basic format of our naturalness scales is \( \triangleright \text{nat} (A, B) \), where A is favourable for the speaker and B is favourable for the hearer. A and B are the “values” of the scale. Whenever two basic scales are called for, the other assumes the shape \( \triangleright \text{nat} (C, D) \). Two expanded scales are allowed, viz. \( \triangleright \text{nat} (A + B, B) \) and \( \triangleright \text{nat} (A, A + B) \); they are valid if the corresponding scale of the format \( \triangleright \text{nat} (A, B) \) is valid. Exemplification below.

The naturalness scales are supported by the above criteria of naturalness (henceforth, axioms). Normally it suffices to substantiate any scale with one criterion, which backs up either value A or value B of the scale; the non-supported value is allotted the only remaining position in the scale. Of course, a scale may be supported with more than one criterion. Any clash among the criteria applied to a scale is to be handled with constraints on the combinations of criteria. So far only a few constraints have been formulated; I have not yet encountered much useable crucial language data.

The naturalness scales are an essential part of deductions, in which Natural Syntax expresses its predictions about the state of affairs in language data. An example of a deduction:

English. The numerical indication of frequency normally consists of a cardinal number followed by the word *times* — e.g., *four times* — except that there are one-word
expressions available for the lowest numbers: once, twice and archaic thrice (Collins Cobuild 1990: 270–71).

The two variants: the type once and the type four times.

1. The assumptions of Natural Syntax:

1.1. $>\text{nat}$ (type once, type four times)

I.e., the type once is more natural than the type four times. – According to the criterion of least effort, item (b) in the list of axioms.

1.2. $>\text{sem}$ (low, non-low) / number

I.e., any low number is more natural than any non-low number (Mayerthaler 1981: 15). – Low numbers are more easily accessible to the speaker. According to the criterion of favourable for the speaker and of favourable for the hearer, item (a) in the list of axioms.

2. The rules of parallel alignment of corresponding values:

2.1. value A tends to associate with value C,

2.2. value B tends to associate with value D. See Note 4.1 below.

3. The consequences:

If a language distinguishes between low and non-low numbers in numerical indications of frequency, such that one kind of number uses the pattern four times and the other kind of number uses the pattern once, then it is the low numbers that tend to use the pattern once and it is the non-low numbers that tend to use the pattern four times. Q.E.D. (The reverse situation is not expected.)


4.1. Value A of scale 1.1 (= the type once) tends to combine with value C of scale 1.2 (= low number). Value B of scale 1.1 (= the type four times) tends to combine with value D of scale 1.2 (= non-low number); similarly in the remaining deductions, with the proviso that the alignment (unlike here) is sometimes chiastic. Chiastic alignment will be explained below.

4.2. Natural Syntax cannot predict the cut-off point between low and non-low numerals.

In every deduction, the rules of alignment play a prominent role; compare item 2 in the above deduction. The alignment rules regulate the combinations of corresponding values of the two naturalness scales mentioned in the deduction. The alignment can be parallel or chiastic. Suppose that the two scales are $>\text{nat}$ (A, B) and $>\text{nat}$ (C, D). Parallel alignment pairs value A with value C, and value B with value D. Chiastic alignment pairs A with D, and B with C.

A paramount question is when the alignment is parallel and when chiastic. Parallel alignment is the default case. Experience based on work with a number of examples has shown that chiastic alignment is necessary whenever a given deduction is limited to language data obtaining within an "extremely unnatural environment". This environment is defined as value B of the scale $>\text{nat}$ (A, B), provided the scale cannot be extended to the right; i.e., if there is no such value that would be even less natural than value B.

At the time of this writing, the state of the art cannot explain why there are two kinds of alignment and why they are distributed as they are.
Here I add a programmatic statement that could be a comment on any of our
deductions, not merely on the above one. The consequences adduced in item 3 of the
deduction are realised not only in English, but in all languages that distinguish between
low and non-low numbers in numerical indications of frequency such that one kind of
number uses the pattern \textit{once} and the other kind of number uses the pattern \textit{four times}.
This observation is of special importance because it enlarges the set of languages that can
contribute counterexamples. The perpetual influx of fresh instances of counterexamples
is a great desideratum in Natural Syntax because the theory, being deductive in nature,
can develop and improve primarily by attending to such crucial data.

Something like this holds for the concluding remark of item 3: “The reverse situation
is not expected”. This formula asserts: there are NO languages that would distinguish,
within numerical indications of frequency, between low and non-low numbers such that
the low numbers would use the pattern \textit{four times} and the non-low numbers would use
the pattern \textit{once}. This assertion – applicable mutatis mutandis in all our deductions – is
designed to attract any further counterexamples from the languages of the world, and
thus to ease the progress of the theory.

In reference to English, this deduction likewise maintains that the state of affairs
cannot be the reverse; i.e., that the numerals above ‘two’ (or ‘three’ ) would be one-word
formations and that the numerals under ‘three’ (or ‘four’ ) would be two-word formations.
All predictions of our Natural Syntax, as far as they apply to a single language, are
restricted to such modest claims about the unlikelihood of the reverse situation.

This paper is about interrogative main clauses. (Any corresponding dependent
clause is sometimes also involved.) As is well known, the syntactic notion “interrogative
clause” and the semantic notion “question” are not synonymous, as can be seen in the
“rhetorical questions”; for instance, \textit{Who would have believed it!} ‘nobody would have believed it’. Rhetorical questions are not real questions; rather, they are interrogative
classes. Below the expression “interrogative clause” (or, briefly, “interrogative”) will
be used almost exclusively.

The continuation is divided into the following sections: (i) Introductory examples,
(ii) Yes-no interrogatives, (iii) Wh-interrogatives, and (iv) Interrogatives containing
\textit{wh}-words exclusively in situ.

(i) Introductory examples

(1) English. Main clauses sometimes realise the inversion of the subject and the
finite verb, albeit only when the finite verb is an “auxiliary”; for instance, \textit{have you seen them} (Huddleston & Pullum 2002: 94–95).

The two variants: “auxiliaries” and other finite verbs.

1. The assumptions of Natural Syntax:

1.1. \textit{nat (+, –)} / inversion of subject and finite verb

I.e., the inversion of the subject and the finite verb is more natural than
the absence of inversion. – Inversion results from the movement of the
finite verb to the left across the subject (Huddleston & Pullum 2002: 97).

All movement to the left is natural, item (h) in the list of axioms.

A special case of 1.1:
1.1.1. \( >\text{nat}(+/-,-) \) / inversion of subject and finite verb

I.e., optional absence of inversion is more natural than obligatory absence of inversion. – The scale assumes the permitted expanded format \( >\text{nat}(A+B,B) \), and is automatically valid because the corresponding basic scale 1.1 has been substantiated.

1.2. \( >\text{nat} \) (“auxiliary”, other finite verb)

I.e., an “auxiliary” is more natural than other finite verbs. – The class of “auxiliaries” is small, whereas the class of other finite verbs is large. According to the criterion of small v. large class, item (f) in the list of axioms.

2. The rules of parallel alignment:

2.1. value A tends to associate with value C,

2.2. value B tends to associate with value D.

3. The consequences:

If a language distinguishes, within main clauses, between “auxiliaries” and other finite verbs, such that one kind allow the inversion of the subject and the finite verb and the other kind do not allow inversion, then it is the “auxiliaries” that tend to allow inversion and it is other verbs that tend not to allow inversion.

Q.E.D. (The reverse situation is not expected.)

(2) English. \( Wh \)-interrogatives whose \( wh \)-word has been moved to the beginning of the clause. If the inversion of the subject and the finite verb is realised, the clause is a main clause. If inversion is absent, the clause is a dependent clause (Huddleston & Pullum 2002: 856, 973). Examples: what have you seen; tell me what you have seen.

The two variants: the inversion of the subject and the finite verb and its absence.

1. The assumptions of Natural Syntax:

1.1. \( >\text{nat}(+,-) \) / inversion of subject and finite verb

I.e., the inversion of the subject and the finite verb is more natural than the absence of inversion. – Inversion results from the movement of the finite verb to the left across the subject (Huddleston & Pullum 2002: 97).

All movement to the left is natural, item (h) in the list of axioms.

1.2. \( >\text{nat} \) (main, dependent) / clause

I.e., a main clause is more natural than a dependent clause. – In many languages dependent clauses are rare, whereas main clauses are never rare.

According to the typological criterion, item (j) in the list of axioms.

2. The rules of parallel alignment:

2.1. value A tends to associate with value C,

2.2. value B tends to associate with value D.

3. The consequences:

If a language distinguishes, within \( wh \)-interrogatives whose \( wh \)-word has been moved to the beginning of the clause, between main and dependent clauses, such that the inversion of the subject and the finite verb is realised in one type of clause and inversion is absent in the other type of clause, then it is the main
clauses that tend to realise inversion and it is the dependent clauses that tend to lack inversion. Q.E.D. (The reverse situation is not expected.)

4. Note. What applies to wh-words is also valid for phrases that contain a wh-word as a determiner; for instance, *which boy did you see?*

(3) English. A question and the answer to it are variants. On average, the answer is shorter than the question; for instance, *Have you seen John? Yes, I have* (Huddleston & Pullum 2002: 1542).

The two variants: a question and the corresponding answer.

1. The assumptions of Natural Syntax:
   1.1. >nat (answer, question)
       I.e., the answer to a question is more natural than the question itself. – On average, the answer contains a great deal of repetition with regard to the question. Repetition is very natural because it is a kind of innate tendency (of higher animals) to imitate. According to the criterion of least effort, item (b) in the list of axioms.
   1.2. >nat (shorter, longer) / construction
       I.e., a shorter construction is more natural than a longer construction. – According to the criterion of least effort, item (b) in the list of axioms.

2. The rules of parallel alignment:
   2.1. value A tends to associate with value C,
   2.2. value B tends to associate with value D.

3. The consequences:
   If a language distinguishes between questions and answers to them, such that one kind is shorter (on average) and the other kind is longer, then it is questions that tend to be longer (on average) and it is answers that tend to be shorter. Q.E.D. (The reverse situation is not expected.)

(ii) Yes-no interrogatives

(4) English. Verbs like *explain* only seldom combine with yes-no interrogatives and these favour the subordinator *whether*; for instance, *you should explain whether they are required to write detailed answers.* Verbs like *inquire* combine with yes-no interrogatives more often and they use the subordinators *whether* and *if*; for instance, *I’ll enquire if/whether we are required to write detailed answers* (Huddleston & Pullum 2002: 975).

The two variants: verbs like *explain* and verbs like *inquire."

1. The assumptions of Natural Syntax:
   1.1. >nat (type *inquire*, type *explain*)
       I.e., the type *inquire* is more natural than the type *explain*. – The type *inquire* combines with yes-no interrogatives more often than the type *explain*. According to the frequency criterion, item (e) in the list of axioms.
   1.2. >nat (*if*, *whether*) / subordinator
       I.e., the subordinator *if* is more natural than the subordinator *whether*. – According to the criterion of least effort, item (b) in the list of axioms.

A special case of 1.2:
1.2.1. $\text{>nat (if \& whether, only whether) / subordinator}$

I.e., optional use of the subordinator $\text{whether}$ is more natural than its preferred use. – The scale assumes the permitted expanded format $\text{>nat (A + B, B)}$ and is automatically valid because the corresponding basic scale 1.2 has been substantiated.

2. The rules of parallel alignment:
   2.1. value A tends to associate with value C,
   2.2. value B tends to associate with value D.

3. The consequences:

   If a language distinguishes between verbs like $\text{explain}$ and verbs like $\text{inquire}$, such that with one type the yes-no interrogative uses the subordinators $\text{if}$ and $\text{whether}$, and with the other type favours the subordinator $\text{whether}$, then it is the verbs like $\text{inquire}$ whose yes-no interrogative tends to use the subordinators $\text{if}$ and $\text{whether}$, and it is the verbs like $\text{explain}$ whose yes-no interrogative tends to favour the subordinator $\text{whether}$. Q.E.D. (The reverse situation is not expected.)

(5) English (substandard). The matrix clause $+$ dependent interrogative can be question-oriented or answer-oriented. For instance, $\text{I wanted to know if he was coming}$ (question-oriented), $\text{I told her where I lived}$ (answer-oriented). As suggested by the two examples (considering the quantity of words in the matrix clause) the scale is $\text{>nat (answer, question) / orientation}$; according to the criterion of least effort, item (b) in the list of axioms. Given this scale, “question orientation” is an extremely unnatural environment, requiring chiastic alignment. Within “question orientation” a weak and a strong variant must be distinguished. For instance, $\text{he didn’t know she was ill}$ (weak variant, the information is elicited indirectly), $\text{he wanted to know if she was ill}$ (strong variant, the information is requested). As suggested by the two examples (considering the quantity of words in the matrix clause), the scale is $\text{>nat (weak, strong) / question orientation}$. When “question orientation” is strong, the substandard uses the inversion of the subject and the finite verb in the dependent interrogative; for instance, $\text{he wanted to know was she ill}$ (Huddleston & Pullum 2002: 983). The two variants: weak and strong question orientation. – The deduction proceeds in the extremely unnatural environment “question orientation”.

1. The assumptions of Natural Syntax:
   1.1. $\text{>nat (weak, strong) / question orientation}$
       I.e., weak question orientation is more natural than strong question orientation. – According to the criterion of least effort, item (b) in the list of axioms. For details, see the above examples.
   1.2. $\text{>nat (+, –) / inversion of subject and finite verb}$
       I.e., the inversion of the subject and the finite verb is more natural than the absence of inversion. – Inversion results from the movement of the finite verb to the left across the subject (Huddleston & Pullum 2002: 97). All movement to the left is natural, item (h) in the list of axioms.

2. The rules of chiastic alignment:
2.1. value A tends to associate with value D,
2.2. value B tends to associate with value C.

3. The consequences:
If a language distinguishes between weak and strong question orientation, such
that one orientation is accompanied by inversion (of the subject and the finite
verb) and the other orientation lacks inversion, then it is the strong orientation
that tends to be accompanied by inversion and it is the weak orientation that
tends to lack inversion. Q.E.D. (The reverse situation is not expected.)

(iii) Wh-interrogatives

(6) English. Wh-interrogatives. The wh-word can move to the beginning of the clause
without the accompanying preposition (if any is present); for instance, who did
you sell your bicycle to. The preposition can of course also move: to whom did
you sell your bicycle (formal). If the wh-word is a determiner, the situation is
the same; for instance, which car will you be travelling in and in which car will
you be travelling (formal). If however the clause is reduced to the wh-word and
the accompanying preposition, the former pair of examples yields who to and to
whom; the latter pair of examples yields the unacceptable which car in and the
acceptable in which car (Huddleston & Pullum 2002: 1541). The generalisation:
if the wh-word is a determiner, any accompanying preposition must precede the
wh-word in the reduced clause.
The two variants; the reduced and the unabridged clause whose wh-word is a
determiner and accompanied by a preposition.

1. The assumptions of Natural Syntax:
   1.1. >nat (+, −) / ellipsis
       I.e., the ellipsis of language material is more natural than its non-ellipsis. –
       According to the criterion of least effort, item (b) in the list of axioms.
   1.2. >nat (+, −) / movement of preposition to the left
       I.e., the movement of a preposition to the left is more natural than its
       non-movement. – This is the very movement criterion, item (h) in the list
       of axioms.
       A special case of 1.2:
   1.2.1. >nat (+, +−) / movement of preposition to the left
       I.e., obligatory movement of a preposition to the left is more natural
       than optional movement of a preposition to the left. – The scale
       assumes the permitted expanded format >nat (A, A + B) and is
       automatically valid because the corresponding basic scale 1.2 has
       been substantiated.

2. The rules of parallel alignment:
   2.1. value A tends to associate with value C,
   2.2. value B tends to associate with value D.

3. The consequences:
If a language distinguishes, within wh-interrogatives containing a wh-word
= determiner and an accompanying preposition, between the ellipsis and the
non-ellipsis of all language material except the wh-word and the accompanying
preposition, such that the preposition undergoes obligatory movement to the left in one case and optional movement only in the other case, then it is ellipsis that tends to favour the obligatory movement of the preposition to the left, and it is non-ellipsis that tends to favour optional movement of the preposition to the left. Q.E.D. (The reverse situation is not expected.)

4. Note. Concerning (to) whom, compare deduction (7).

(7) English. The wh-words who and whom accompanied by a preposition. In informal language, who is used and it moves to the beginning of the clause without the preposition; for instance, who did he give the book to. In formal language, whom is used and it moves together with the preposition; for instance, to whom did he give the book (Huddleston & Pullum 2002: 1541–42). Concerning the formal language, compare deduction (8).

The two variants: who and whom accompanied by a preposition.
1.1. >nat (who, whom)
   I.e., who is more natural than whom. – According to the criterion of least effort, item (b) in the list of axioms.
1.2. >nat (without preposition, with preposition) / who(m) clause initially
   I.e., who(m) without a preposition is more natural than who(m) accompanied by a preposition. – According to the criterion of least effort, item (b) in the list of axioms.

2. The rules of parallel alignment:
   2.1. value A tends to associate with value C,
   2.2. value B tends to associate with value D.

3. The consequences:
   If a language distinguishes between who and whom (+ preposition), such that one wh-word is accompanied by the preposition to the beginning of the clause and the other wh-word is not accompanied, then it is whom that tends to be accompanied by the preposition, and it is who that tends not be accompanied by the preposition. Q.E.D. (The reverse situation is not expected.)

(8) English. The wh-words who and whom accompanied by a preposition. In informal language who is used and it moves to the beginning of the clause without the preposition; for instance, who did he give the book to. In formal language whom is used and it moves together with the preposition; for instance, to whom did he give the book (Huddleston & Pullum 2002: 1541–42). Concerning the preposition, compare deduction (7).

The two variants: informal who and formal whom + preposition.
1.1. >nat (who, whom)
   I.e., who is more natural than whom. – According to the criterion of least effort, item (b) in the list of axioms.
1.2. >nat (–, +) / formal language
   I.e., informal language is more natural than formal language. – Many languages use only colloquial language, a variant of informal language. According to the typological criterion, item (j) in the list of axioms.
2. The rules of parallel alignment:
   2.1. value A tends to associate with value C,
   2.2. value B tends to associate with value D.

3. The consequences:
   If a language distinguishes between who and whom (+ preposition), such that
   one wh-word prevails in the formal language and the other wh-word prevails
   in the informal language, then it is whom that tends to prevail in the formal
   language and it is who that tends to prevail in the informal language. Q.E.D.
   (The reverse situation is not expected.)

**Wh-interrogatives, infinitive clause:**

(9) English. Infinitive clauses as wh-interrogatives. The infinitive can be bare; for
instance, why make such a fuss ‘stop the fuss’; or with to, for instance, how to
explain his attitude. In interrogatives containing the bare infinitive, the only
wh-word admissible is why and the meaning is indirect directive. In interrogatives
containing a to-infinitive, all wh-words are permitted and the meaning is asking
and the like (Huddleston & Pullum 2002: 856, 873–74). The meaning is dealt
with in deduction (10).

The two variants: the infinitive with and without to.

1. The assumptions of Natural Syntax:
   1.1. >nat (why, all wh-words)
       I.e., the wh-word why by itself is more natural than all wh-words taken
together. – According to the criterion of small v. large class, item (f) in
the list of axioms. See 4. Note below.
   1.2. >nat (−, +) / to in front of infinitive
       I.e., the absence of to before the infinitive is more natural than the presence
of to. – According to the criterion of least effort, item (b) in the list of
axioms.

2. The rules of parallel alignment:
   2.1. value A tends to associate with value C,
   2.2. value B tends to associate with value D.

3. The consequences:
   If a language distinguishes, within infinitive wh-interrogatives, between the
bare infinitive and the to-infinitive, such that one of them admits only the
wh-word why and the other admits all wh-words, then it is the bare infinitive
that tends to admit only why and it is the to-infinitive that tends to admit all
wh-words. Q.E.D. (The reverse situation is not expected.)

4. Note. It does not follow from scale 1.1 that why is the most natural wh-word.
   Scale 1.1 says that why is more natural than the average of all other wh-words
(some of which are more natural and some less natural than why).

(10) English. Infinitive clauses as wh-interrogatives. The infinitive can be bare; for
instance, why make such a fuss ‘stop the fuss’; or with to, for instance, how to
explain his attitude. In interrogatives containing the bare infinitive, the only wh-
word admissible is why and the meaning is indirect directive. In interrogatives
containing a *to*-infinitive, all *wh*-words are permitted and the meaning is asking and the like (Huddleston & Pullum 2002: 856, 873–74). The correlation between the *wh*-words and the type of infinitive is treated in deduction (9).

The two variants: the infinitive with and without *to*.

1. The assumptions of Natural Syntax:
   1.1. >nat (indirect directive, asking) / meaning of interrogative
       I.e., indirect directive is more natural than asking. – The infinitive clause  
       *why make such a fuss* can be understood literally (i.e., as asking) and  
       thus as favourable for the hearer, hence it occupies position B in the  
       scale. Alternatively the clause means ‘stop the fuss’, which is indirect  
       directive; this meaning must be mentioned in the remaining position  
       of the scale. It is not favourable for the hearer because it requires more  
       calculation (thus additional mental effort) than the former meaning.
   1.2. >nat (–, +) / *to* in front of infinitive  
       I.e., the absence of *to* before the infinitive is more natural than the  
       presence of *to*. – According to the criterion of least effort, item (b) in  
       the list of axioms.

2. The rules of parallel alignment:
   2.1. value A tends to associate with value C,  
   2.2. value B tends to associate with value D.

3. The consequences:
   If a language distinguishes, within *wh*-interrogatives, between the bare and  
   the *to*-infinitive, such that one of them means indirect directive, and the  
   other means asking, then it is the bare infinitive that tends to mean indirect  
   directive and it is the *to*-infinitive that tends to mean asking. Q.E.D. (The  
   reverse situation is not expected.)

(iv) Interrogatives containing *wh*-words exclusively in situ

Interrogatives containing *wh*-words exclusively in situ are mostly used in sustained  
questioning; for instance, *and those senses are located where*, partly also in echo questions  
(Huddleston & Pullum 2002: 855, 873).

Interrogatives containing *wh*-words exclusively in situ serve as an extremely unnatural  
environment. The corresponding scale is >nat (normal *wh*-interrogative, interrogative  
containing *wh*-words exclusively in situ). (Syntactic units in situ are favourable for the  
hearer because the hearer, while decoding, expects to find syntactic units in situ; what  
is favourable for the hearer is unnatural according to our theory.) The scale cannot be  
extended to the right. Therefore chiastic alignment is mandatory in deductions restricted  
to interrogatives containing *wh*-words exclusively in situ.

(11) English. Interrogatives containing *wh*-words exclusively in situ. In such  
interrogatives there is no inversion of the subject and the finite verb (Huddleston  

The two variants: interrogative containing *wh*-words exclusively in situ and  
lacking inversion, unacceptable interrogative containing *wh*-words exclusively  
in situ and displaying inversion. – The deduction proceeds in the extremely
unnatural environment “interrogative containing wh-words exclusively in situ”.

1. The assumptions of Natural Syntax:
   1.1. >nat (+, -) / inversion of subject and finite verb
       I.e., the inversion of the subject and the finite verb is more natural than
       the absence of inversion. – Inversion results from the movement of the
       finite verb to the left across the subject (Huddleston & Pullum 2002:
       97). All movement to the left is natural, item (h) in the list of axioms.
   1.2. >nat (+, -) / acceptable
       I.e., what is acceptable is more natural than what is not acceptable. –
       This is the very acceptability criterion, item (i) in the list of axioms.

2. The rules of chiastic alignment:
   2.1. value A tends to associate with value D,
   2.2. value B tends to associate with value C.

3. The consequences:
   If a language distinguishes, within interrogatives containing wh-words
   exclusively in situ, between inversion (of the subject and the finite verb)
   and the absence of inversion, such that one case is acceptable and the other
   case is not acceptable, then it is the absence of inversion that tends to be
   acceptable and it is the realisation of inversion that tends to be unacceptable.
   Q.E.D. (The reverse situation is not expected.)

4. Note. What applies to wh-words is also valid for phrases that contain a wh-
   word as a determiner; for instance, John looked for which book.

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Povzetek
NARAVNA SKLADNJA – ANGLEŠKI VPRAŠALNI GLAVNI STAVKI

Naravna skladnja je deduktivna teorija v razvoju in veja teorije naravnosti. Sodbe o naravnosti so ube­sedene v lestvicah naravnosti, ki sledijo iz osnovnih meril (ali “aksiomov”), naštetih v začetku sestavka. Napovedi teorije se izračunavajo v t.i. izpeljavah, katerih glavni sestavini sta par lestvic naravnosti in pravila o ujemanju med soodnosnimi vrednostmi naravnosti. Ločimo vzporedno in krivično ujemanje, ki sta v dopol­njevalni razvrstivitvi. Krivično ujemanje je obvezno v izpeljavah, omejenih na skrajno nenaravno okolje.

Sestavek je posvečen angleškim vprenalnim glavnim stavkom. V okviru teh tvorijo samo vprenalni stavki, katerih vprenalnice ostanejo in situ, skrajno nenaravno okolje in zahtevajo krivično ujemanje. Drugače se rabi vzporedno ujemanje.

Glavni namen naravne skladnje je določati pogoje, pod katerimi so razmere v nekem jezikovnem gra­divu napovedljive. V tem smislu so v sestavku izvedene izpeljave, ki napovedujejo razmere v naslednjem jezikovnem gradivu (oštevilčenje je kakor v angleškem besedilu):

(i) Uvodni zgledi
(1) V glavnih stavkih je uresničena obratna stava osebka in osebne glagolske oblike, če je osebna gla­golska oblika “pomožnik”.
(2) Vsebinski vprenalni stavki, katerih vprenalnica je premaknjena na začetek stavka. Če se pri tem uresniči obratna stavka osebka in osebne glagolske oblike, je stavek glavni stavek; če take stavke ni, je stavek odvisnik.
(3) Vprašanje in odgovor sta dvojinci. V povprečju je odgovor krajši od vprašanja.

(ii) Odločevalni vprenalni stavki
(4) Glagoli kot explain ‘razložiti’ se redko vežejo z odločevalnimi vprenalnimi stavki in slednji rabijo veznik whether. Glagoli kot inquire ‘poizvedeti’ se bolj pogosto vežejo z odločevalnimi vprenalnimi stavki in rabijo veznika if in whether.

(iii) Vsebinski vprenalni stavki
(6) Morebitni predlog, ki spremlja vprenalnico v vsebinskih vprenalnih stavkih, se seli z vprenalnico na začetek stavka ali ostane in situ. Če pa se vprenalni stavek skrbi na vprenalnico in spremljavač predlog, slednji mora stati pred vprenalnico.
(7) Vprenalnica who ‘koga, komu’ se seli na začetek stavka, morebitni spremljevalni predlog ostane in situ. Vprenalnica whom ‘koga, komu’ se seli na začetek stavka in morebitni spremljevalni predlog mora stati pred njo.
(8) Nadaljevanje točke (7).

Vsebinski vprenalni polstavki:
(9) V nedoločniškem polstavku kot vsebinskem vprenalnem stavku je nedoločnik lahko goli, in tedaj je edina dovoljena vprenalnica why ‘zakaj’, ali pa je nedoločnik predložni, in tedaj so dovoljene vse vprenalnice.
(10) Nadaljevanje točke (9).

(iv) Vprašalni stavki z vprašalnicami in situ