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NATURAL SYNTAX:
ENGLISH INTERROGATIVE MAIN CLAUSES

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.

Earlier publications on Natural Syntax: Kavčič 2005a,b, Orešnik 1999, 2000a,b, 2001a–f, 2002, 2003a–c, 2002/03, 2004. This list cites only works written in English.

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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: >nat (+, −) / 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 >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 >nat (C, D). Two expanded scales are allowed, viz. >nat (A + B, B) and >nat (A, A + B); they are valid if the corresponding scale of the format >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. >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. >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. Notes.
    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 >nat (A, B) and >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 >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 *once* and the other kind of number uses the pattern *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 *four times* and the non-low numbers would use the pattern *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, *Who would have believed it!* 'nobody would have believed it'. Rhetorical questions are not real questions; rather, they are interrogative clauses. 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 *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, *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. >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. >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 >nat (A + B, B), and is automatically valid because the corresponding basic scale 1.1 has been substantiated.

1.2. >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. >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 (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

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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. >nat (*if & whether,* only *whether*) / subordinator

I.e., optional use of the subordinator *whether* is more natural than its preferred use. – The scale assumes the permitted expanded format >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 *explain* and verbs like *inquire*, such that with one type the yes-no interrogative uses the subordinators *if* and *whether*, and with the other type favours the subordinator *whether*, then it is the verbs like *inquire* whose yes-no interrogative tends to use the subordinators *if* and *whether*, and it is the verbs like *explain* whose yes-no interrogative tends to favour the subordinator *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, *I wanted to know if he was coming* (question-oriented), *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 >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, *he didn't know she was ill* (weak variant, the information is elicited indirectly), *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 >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, *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. >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. >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, <u>who did you sell your bicycle to</u>. The preposition can of course also move: <u>to whom did you sell your bicycle</u> (formal). If the *wh*-word is a determiner, the situation is the same; for instance, <u>which car will you be travelling in and in which car will you be travelling</u> (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, <u>*who*</u> *did he give the book <u>to</u>*. In formal language, *whom* is used and it moves together with the preposition; for instance, <u>*to whom*</u> *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, <u>*who*</u> *did he give the book <u>to</u>*. 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 <u>make</u> such a fuss* 'stop the fuss'; or with *to*, for instance, *how <u>to explain</u> 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 <u>make</u> such a fuss* 'stop the fuss'; or with to, for instance, *how <u>to explain</u> 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 & Pullum 2002: 873). Example: *John looked for what?*

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*.

References

Collins Cobuild English grammar, 1990: London: HarperCollins.

HAVERS, Wilhelm, 1931: Handbuch der erklärenden Syntax. Heidelberg: Winter.

HUDDLESTON, Rodney, & Geoffrey K. Pullum, 2002: The Cambridge grammar of the English language. Cambridge, UK: Cambridge University Press.

KAVČIČ, Jerneja, 2005a: Pleonastic use of verbs of speaking in Greek: An interpretation in terms of naturalness theory. Linguistica 45, 203–12.

KAVČIČ, Jerneja, 2005b: The syntax of the infinitive and the participle in Early Byzantine Greek. Ljubljana: Filozofska fakulteta.

MAYERTHALER, Willi, 1981: Morphologische Natürlichkeit. Wiesbaden: Athenaion.

OREŠNIK, Janez, 1999: Naturalness: The English s-genitive and of-phrase. Studia Anglica Posnaniensia 34, 191–200.

OREŠNIK, Janez, 2000a: Naturalness: The preterit and present perfect tenses in German. In: Kovačič, Irena, Milena Milojević-Sheppard, Silvana Orel-Kos and Janez Orešnik (eds.), Linguistics and language studies: Exploring language from different perspectives. Ljubljana: Filozofska fakulteta. Pp. 21–43.

OREŠNIK, Janez, 2000b: Naturalness: Negators in Standard French. Papiere zur Linguistik 62/63, 39–48.

OREŠNIK, Janez, 2001a: Naturalness: The passive in the mainland Scandinavian languages. Sprachtypologie und Universalienforschung 54, 26–34.

OREŠNIK, Janez, 2001b: Naturalness: Some Slovenian (morpho)syntactic examples. Slovenski jezik – Slovene Linguistic Studies 3, 3–31.

OREŠNIK, Janez, 2001c: Naturalness expressed in sEm-values. Linguistica 41, 5–19.

OREŠNIK, Janez, 2001d: Naturalness expressed in sYm-values. Folia Linguistica 35, 321–35.

OREŠNIK, Janez, 2001e: Naturalness applied to Slovenian (morpho)syntax. Wiener slavistisches Jahrbuch 47, 135–58.

OREŠNIK, Janez, 2001f: A predictable aspect of (morpho)syntactic variants. Predvidljiv vidik (obliko)skladenjskih dvojnic. Ljubljana: Slovenska akademija znanosti in umetnosti.

OREŠNIK, Janez, 2002: Naturalness in English: Some (morpho)syntactic examples. Linguistica 42, 143–60.

OREŠNIK, Janez, 2003a: Naturalness: Some Norwegian (morpho)syntactic examples. Norsk lingvistisk tidsskrift 21, 57–70.

OREŠNIK, Janez, 2003b: Naturalness in English: (A) The genitive, (B) The pronouns. Linguistica 43, 119–40.

OREŠNIK, Janez, 2003c: Naturalness: Some English (morpho)syntactic examples. Studia Anglica Posnaniensia 39, 77–101.

OREŠNIK, Janez, 2002/03: Naturalness in English: The infinitive clause. Klagenfurter Beiträge zur Sprachwissenschaft 28/29, 147–60.

OREŠNIK, Janez, 2004: Naturalness in (morpho)syntax: English Examples. Jezikovna naravnost v (obliko) skladnji – angleški zgledi. Ljubljana: Slovenska akademija znanosti in umetnosti.

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 križno ujemanje, ki sta v dopolnjevalni razvrstitvi. Križno ujemanje je obvezno v izpeljavah, omejenih na skrajno nenaravno okolje.

Sestavek je posvečen angleškim vprašalnim glavnim stavkom. V okviru teh tvorijo samo vprašalni stavki, katerih vprašalnice ostanejo in situ, skrajno nenaravno okolje in zahtevajo križno 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 vprašalni stavki, katerih vprašalnica je premaknjena na začetek stavka. Če se pri tem uresniči obratna stava osebka in osebne glagolske oblike, je stavek glavni stavek; če take stave ni, je stavek odvisnik.

(3) Vprašanje in odgovor sta dvojnici. V povprečju je odgovor krajši od vprašanja.

(ii) Odločevalni vprašalni stavki

(4) Glagoli kot explain 'razložiti' se redko vežejo z odločevalnimi vprašalnimi stavki in slednji rabijo veznik whether. Glagoli kot inquire 'poizvedeti' se bolj pogosto vežejo z odločevalnimi vprašalnimi stavki in rabijo veznika if in whether.

(5) Nadredni stavek + odvisni odločevalni vprašalni stavek je usmerjen v vprašanje ali v odgovor. Usmerjenost v vprašanje ima blažji in manj blag različek. V manj blagem različku dopuščajo deli neknjižnega jezika v odvisniku obratno stavo osebka in osebne glagolske oblike.

(iii) Vsebinski vprašalni stavki

(6) Morebitni predlog, ki spremlja vprašalnico v vsebinskih vprašalnih stavkih, se seli z vprašalnico na začetek stavka ali ostane in situ. Če pa se vprašalni stavek skrči na vprašalnico in spremljajoči predlog, slednji mora stati pred vprašalnico.

(7) Vprašalnica who 'koga, komu' se seli na začetek stavka, morebitni spremljevalni predlog ostane in situ. Vprašalnica whom 'koga, komu' se seli na začetek stavka in morebitni spremljajoči predlog mora stati pred njo.

(8) Nadaljevanje točke (7).

Vsebinski vprašalni polstavki:

(9) V nedoločniškem polstavku kot vsebinskem vprašalnem stavku je nedoločnik lahko goli, in tedaj je edina dovoljena vprašalnica why 'zakaj', ali pa je nedoločnik predložni, in tedaj so dovoljene vse vprašalnice.

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(10) Nadaljevanje točke (9).

(iv) Vprašalni stavki z vprašalnicami in situ