NATURALNESS: THE SCALE FORMATS >SEM (+/-A, -A) AND >SEM (+/-A, +A)

In the framework of (the linguistic) Naturalness Theory two new formats of naturalness scales are suggested, namely >sem (+/-A, -A) and >sem (+/-A, +A), and 27 English (morpho)syntactic examples are adduced in which a naturalness scale of the new format helps to ensure a felicitous deduction of corresponding consequences.

The subject-matter of my paper is a (language-universal) theory developed in Slovenia by a small group of linguists (under my guidance), who mainly use English, German, and Slovenian language material as the base of verification. Our work owes much to, and exploits, the (linguistic) Naturalness Theory as elaborated especially at some Austrian and German universities; cf. Mayerthaler 1981, Wurzel 1984, Dressler et al. 1987, Stolz 1992. Naturalness Theory has also been applied to syntax, notably at the University of Klagenfurt; the basic references are Dotter 1990, Mayerthaler & Fliedl 1993, Mayerthaler et al. 1993, 1995, 1998. Within the natural syntax of the Klagenfurt brand, the Slovenian work group has built an extension, which will henceforth be referred to as "the Slovenian Theory."

The Slovenian Theory studies the behaviour of (near-)synonymous syntactic expressions, here called syntactic variants. Whenever two syntactic variants are included in the same naturalness scale, and consequently one variant can be asserted to be more natural than the other, the Slovenian Theory has something to say about some grammatical properties of the two variants.

Naturalness Theory operates with two basic predicates, "marked" and "natural." I cannot see any reason to distinguish the two predicates within the Slovenian Theory, therefore I use throughout one predicate only, namely "natural." (This standpoint was implied as early as Mayerthaler 1987, 50.)

Beside the technical terms "natural(ness)" and "naturalness scale," which have already been alluded to, the terms "sym-value" and "sem-value" (adopted from Mayer-thaler 1981, 10 et passim) must be mentioned. The sym-value refers to the naturalness of an expression in terms of its encoding properties. The sem-value refers to the naturalness of an expression in terms of its semantic complexity.

The following auxiliary symbols will be employed: ">sym" (= more natural with respect to encoding), "<sym" (= less natural with respect to encoding), ">sem" (= more natural with respect to semantic complexity), and "<sem" (= less natural with respect to semantic complexity).

The assumptions of the Slovenian Theory (in my recently revised version) can be briefly stated as follows.

In a pair of syntactic variants, within each variant, one of the following alternatives obtains:

- (1) at least one >sym-value tends to associate with at least one additional >sym-value and/or with at least one <sem-value;
- (2) at least one <sym-value tends to associate with at least one additional <sym-value and/or with at least one >sem-value;
- (3) at least one >sem-value tends to associate with at least one additional >sem-value and/or with at least one <sym-value;
- (4) at least one <sem-value tends to associate with at least one additional <sem-value and/or with at least one >sym-value.

In the above items (1-4) the object of the meta-verb "associate" refers to the interior of the unit under observation, OR to a part of the immediate environment of the unit under observation. The Slovenian Theory covers both cases.

Forschungsgeschichtlich, the predecessor of the above assumptions (1-4) is the familiar principle of constructional iconicity as formulated in Natural Morphology. The principle runs as follows. Iff a semantically more marked category C_j is encoded as 'more' featured than a less marked category C_i , the encoding of C_j is said to be iconic (Mayerthaler 1987, 48-9). Using the predicate "natural," the principle can be briefly stated as follows: <sem in combination with >sym is iconic. In the Slovenian Theory, the principle has been extended to syntax and expanded. Two published papers utilizing this framework: Orešnik 1999 and 2000.

Each case considered is presented in the format of a deduction. A straightforward example:

1. English. The referent of the subject of the clause is usually given, the referent of the direct object of the clause is usually new. (Biber et al. 1999, 123, 127.)

The two syntactic variants: the subject of the clause and the object of the clause.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (subject, object) / clause element in nom.-acc. languages

I.e. with respect to semantic complexity, the subject is more natural than the object, in nominative-accusative languages. (Mayerthaler 1981, 14.)

- 1.2. >sem (given, new) / referent
- I.e. with respect to semantic complexity, a given referent is more natural than a new referent. (Mayerthaler 1981, 14 on the property presupposed.)
- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem
- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between the subject and the object of the clause, such that the referent of one element is given, and the referent of the other element is new, it is the subject that tends to have a given referent. Q.E.D.

From 1.1, 1.2 and 2.2 it can be deduced:

3.2. If there is any difference between the subject and the object of the clause, such that the referent of one element is given, and the referent of the other element is new, it is the object that tends to have a new referent. Q.E.D.

The Slovenian Theory operates ex post facto. However, in some cases, the theory can be interpreted as applying ante factum. Assume that a generative grammar of English posits subjects and objects in finite clauses, and stipulates that one kind of clause elements has a given referent, and the other kind of clause elements has a new referent. In that situation the Slovenian Theory can intervene by predicting that given referents tend to be associated with subjects, and new referents tend to be associated with objects. In other words, the Slovenian Theory is able to help complete the generation of the language phenomenon under discussion.

In deduction 1 above, and in many additional deductions, naturalness scales are utilized which have already been discussed in the technical literature. However, some other cases require new kinds of scales. Two variants of a new scale format are used in the continuation of the present paper, namely >sem (+/-A, -A) and >sem (+/-A, +A). In each format, the relative naturalness of two classes is compared. One class contains units which have property A and units which lack that property (thus +/-A). The other class contains units which either all have property A or all lack that property (thus +A or -A). The two formats assert that +/-A is more sem-natural than either +A or -A. Consider the following example: in a language, most transitive verbs take the active and the passive forms (thus +/-A); a few transitive verbs take only the active forms (thus +A) or only the passive forms (thus -A).

Scales conforming to these two formats have so far not been exploited in the Naturalness Theory. They are illustrated below in deductions 2-28:

- (I) Illustrations of the scale format >sem (+/-A, -A)
- **2.** English. With non-finite clauses, the lack of a clause link is normal, e.g. *crossing*, he lifted the rolled umbrella high. (Biber et al. 1999, 135, 198.)

The two syntactic variants: finite clauses (the clause link lacking in some of them) and non-finite clauses (the clause link lacking in all of them).

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (+finite, -finite) / clause

I.e. with respect to semantic complexity, a finite clause is more natural than a non-finite clause. (Mayerthaler et al. 1998, 325.)

1.2. >sem (+/-clause link, -clause link) / clause type

I.e. with respect to semantic complexity, a clause type comprising clauses containing a clause link and clauses lacking a clause link is more natural than a clause type whose clauses invariably lack a clause link.—The scale has the format >sem (+/-A, -A).

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem
- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1-2, and 2.1 it can be deduced:

3.1. If there is any difference between the class of finite and the class of non-finite clauses, such that in one class all clauses lack a clause link, and in the other class only some clauses lack a clause link, it is in the class of finite clauses that only some clauses tend to lack a clause link, Q.E.D.

From 1.1-2, and 2.2 it can be deduced:

- 3.2. If there is any difference between the class of finite and the class of non-finite clauses, such that in one class all clauses lack a clause link, and in the other class only some clauses lack a clause link, it is in the class of non-finite clauses that all clauses tend to lack a clause link. Q.E.D.
- 3. English. Many independent genitives have become conventionalized, so that they need no supporting head noun in the context, e.g. she's going to <u>a friend's</u>. Independent genitives are found particularly in conversation. (Biber et al. 1999, 297, 300.)

The two variants: conversation and the written registers.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (conversation, written registers)

I.e. with respect to semantic complexity, conversation is more natural than the written registers. (Dotter 1990, 228.)

1.2. >sem (+/-ellipted, -ellipted) / head noun of genitive, in English

I.e. with respect to semantic complexity, genitives admitting both ellipted and non-ellipted head nouns are more natural than genitives admitting only non-ellipted head nouns, in English.—The scale has the format >sem (+/-A, -A).

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem
- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1-2 and 2.1 it can be deduced:

3.1. If there is any difference between conversation and the written registers, such that one kind of register admits genitives with ellipted and non-ellipted head nouns, and the other kind of register admits only genitives with non-ellipted head nouns, it is conversation that tends to admit genitives with both ellipted and non-ellipted head nouns. Q.E.D.

From 1.1-2 and 2.2 it can be deduced:

- 3.2. If there is any difference between conversation and the written registers, such that one kind of register admits genitives with ellipted and non-ellipted head nouns, and the other kind of register admits only genitives with non-ellipted head nouns, it is the written registers that tend to admit only genitives with non-ellipted head nouns. O.E.D.
- **4.** English. Demonstrative pronouns normally cannot refer to persons, personal pronouns of course can. (Biber et al. 1999, 347.) Demonstrative determiners, e.g. *this man*, are not included.

The two syntactic variants: personal and demonstrative pronouns.

- 1. The assumptions of the Naturalness Theory:
- 1.1. >sem (personal, demonstrative) / pronoun
- I.e. with respect to semantic complexity, a personal pronoun is more natural than a demonstrative pronoun.—Personal pronouns are much commoner than demonstrative pronouns, for instance in English (Biber et al. 1999, 349).
- 1.2. >sem (+/-human, -human) / referent
- I.e. with respect to semantic complexity, admitting human and non-human referents is more natural than admitting only non-human referents.—The scale has the format >sem (+/-A, -A).
- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem
- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1-2 and 2.1 it can be deduced:

3.1. If there is any difference between the personal pronouns and the demonstrative pronouns, such that one kind of pronouns can have both human and non-human referents, and the other kind of pronouns can have only non-human referents, it is the personal pronouns that tend to have both human and non-human referents. O.E.D.

From 1.1-2 and 2.2 it can be deduced:

- 3.2. If there is any difference between the personal pronouns and the demonstrative pronouns, such that one kind of pronouns can have both human and non-human referents, and the other kind of pronouns can have only non-human referents, it is the demonstrative pronouns that tend to have only non-human referents. Q.E.D.
- **5.** English. When the aktionsart of the verb is instantaneous, the progressive aspect is not used, e.g. the man threw me off the bus. (Biber et al. 1999, 474-5.)

The two syntactic variants: progressive aspect, and the corresponding simple tenses.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (+/-instantaneous, -instantaneous) / aktionsart

- I.e. with respect to semantic complexity, expressing both instantaneous and non-instantaneous aktionsart is more natural than expressing only the non-instantaneous aktionsart.—The scale has the format >sem (+/-A, -A).
- 1.2. >sem (simple tense, progressive aspect) / in English

I.e. with respect to semantic complexity, a simple tense is more natural than the corresponding progressive aspect, in English.—From the standpoint of English, simple tenses are of earlier origin than the forms of the progressive aspect.

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. <sem tends to associate with another <sem
- 2.2. >sem tends to associate with another >sem
- 3. The consequences:

From 1.1-2 and 2.1 it can be deduced:

3.1. If there is any difference between the progressive aspect and the simple tenses, such that one kind denotes instantaneous or non-instantaneous aktionsart, and the other kind denotes only non-instantaneous aktionsart, it is the progressive aspect that tends to denote only the non-instantaneous aktionsart. Q.E.D.

From 1.1-2 and 2.2 it can be deduced:

- 3.2. If there is any difference between the progressive aspect and the simple tenses, such that one kind denotes instantaneous or non-instantaneous aktionsart, and the other kind denotes only non-instantaneous aktionsart, it is the simple tenses that tend to denote both the instantaneous and the non-instantaneous aktionsart. Q.E.D.
- 6. English. Most of the verbs common with *get* passive convey that the action of the verb is difficult or to the disadvantage of the subject, e.g. *my head got stuck up there*. (Biber et al. 1999, 481.)

The two syntactic variants: the be passive, and the get passive.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (be passive, get passive) / in English

I.e. with respect to semantic complexity, the *be* passive is more natural than the *get* passive, in English.—The *get* passive is of much younger origin than the *be* passive. Many languages lack a special 'get' passive.

1.2. >sem (+/-positive attitude, -positive attitude)

I.e. with respect to semantic complexity, having a positive or a negative attitude is more natural than having a negative attitude.—The scale has the format >sem (+/-A, -A).

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem
- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between the *be* passive and the *get* passive, such that one expresses either the positive or the negative attitude, and the other only the negative attitude, it is the *get* passive that tends to express only the negative attitude. Q.E.D.

From 1.1, 1.2 and 2.2 it can be deduced:

- 3.2. If there is any difference between the *be* passive and the *get* passive, such that one expresses either the positive or the negative attitude, and the other only the negative attitude, it is the *be* passive that tends to express either the positive or the negative attitude. Q.E.D.
- 7. English. Single-object prepositional verbs, such as wait for x, smile at x, correspond to x, rarely occur in the passive voice. (Biber et al. 1999, 482.)

The two syntactic variants: single-object prepositional verb, and direct-object verb.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (+/-passive, -passive) / transitive verb in English
- I.e. with respect to semantic complexity, the transitive verb that admits the active and the passive is more natural than the transitive verb that rejects the passive, in English.—The scale has the format >sem (+/-A, -A).
- 1.2. >sym (more transparent, less transparent) / syntactic unit
- I.e. with respect to encoding, a syntactic unit of greater syntactic transparency is more natural than a corresponding syntactic unit of lesser syntactic transparency. (Mayerthaler 1981, 35; Mayerthaler et al. 1998, 186. On the notion of transparency see Mayerthaler 1987, 49.)

A special case of 1.2:

- 1.2.1. >sym (verb + preposition + object, verb + object) / in English
- I.e. with respect to encoding, the pattern verb + preposition + object is more natural than the pattern verb + object, in English.
- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sym tends to associate with <sem
- 2.2. <sym tends to associate with >sem
- 3. The consequences:

From 1.1, 1.2.1 and 2.1 it can be deduced:

3.1. If there is any difference between the single-object prepositional verbs and the direct-object verbs, such that one kind can be used both in the active and in the passive, and the other kind can be used in the active only, it is the single-object prepositional verbs that tend to be used in the active only. Q.E.D.

From 1.1, 1.2.1 and 2.2 it can be deduced:

3.2. If there is any difference between the single-object prepositional verbs and the direct-object verbs, such that one kind can be used both in the active and in the passive, and the other kind can be used in the active only, it is the direct-object verbs that tend to be used both in the active and in the passive. Q.E.D.

8. English. Adjectives occur as detached predicatives, e.g. <u>slender and demure</u>, she wore a simple ao dai. (Biber et al. 1999, 520-1.) A comparison between the example-sentences containing detached predicatives and the list of common predicative adjectives (ibidem 517 and 521) shows that detached predicatives contain mostly non-frequent adjective lexemes.

The two syntactic variants: adjective as detached predicative, and predicative adjective.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sym (more transparent, less transparent) / syntactic unit
- I.e. with respect to encoding, a syntactic unit of greater syntactic transparency is more natural than a corresponding syntactic unit of lesser syntactic transparency. (Mayerthaler 1981, 35; 1998, 186. On the notion of transparency see Mayerthaler 1987, 49.)

A special case of 1.1:

- 1.1.1. >sym (detached, intra-clausal) / predicative
- I.e. with respect to encoding, a detached predicative is more natural than an intraclausal predicative.—Detached units are more conspicuous than intra-clausal units.
- 1.2. >sem (+/-frequent, -frequent) / class of units
- I.e. with respect to semantic complexity, a class comprising frequent and infrequent units is more natural than a class comprising only infrequent units.—The scale has the format >sem (+/-A, -A). Cf. the scale in item 1.2 of deduction 19.
- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sym tends to associate with <sem
- 2.2. <sym tends to associate with >sem
- 3. The consequences:

From 1.1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between adjectives as detached predicatives and non-detached predicative adjectives, such that one kind of adjectives comprise frequent and less frequent lexemes, and the other kind of adjectives comprise less frequent lexemes only, it is the adjectives as detached predicatives that tend to comprise less frequent adjective lexemes only. Q.E.D.

From 1.1.1, 1.2 and 2.2 it can be deduced:

- 3.2. If there is any difference between adjectives as detached predicatives and non-detached predicative adjectives, such that one kind of adjectives comprise frequent and less frequent lexemes, and the other kind of adjectives comprise less frequent lexemes only, it is the adjectives as non-detached predicatives that tend to comprise frequent and less frequent adjective lexemes. Q.E.D.
- **9.** English. The appositive noun phrase (as postmodifier), e.g. the dissident playwright, <u>Vaclav Havel</u>, is almost always non-restrictive in function. (Biber et al. 1999, 605, 638.)

The two syntactic variants: the appositive noun phrase, and other postmodifiers.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (+/-restrictive, -restrictive) / postmodifier

I.e. with respect to semantic complexity, a postmodifier which can be restrictive or non-restrictive is more natural than a postmodifier which is only non-restrictive.—The scale has the format >sem (+/-A, -A).

1.2. >sym (pure juxtaposition, other relationship) / as postmodification

I.e. with respect to encoding, pure juxtaposition is more natural than other types of postmodification. (In the spirit of Dotter 1990, 47.)

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with <svm
- 2.2. <sem tends to associate with >sym
- 3. The consequences:

From 1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between the appositive noun phrase and other postmodifiers, such that one kind of postmodifiers can be restrictive or non-restrictive in function, and the other kind of postmodifiers is only non-restrictive, it is the "other" modifiers that tend to be either restrictive or non-restrictive in function. Q.E.D.

From 1.1, 1.2 and 2.2 it can be deduced:

- 3.2. If there is any difference between the appositive noun phrase and other postmodifiers, such that one kind of postmodifiers can be restrictive or non-restrictive in function, and the other kind of postmodifiers is only non-restrictive, it is the appositive noun phrase that tends to be only non-restrictive in function. Q.E.D.
- 10. English. Postmodifiers in academic prose. A passive clause is used instead of an ed-clause when tense, perfect aspect, or modality are mentioned in the clause, e.g. selections <u>retained from the second year</u> v. the mistaken view is that theory refers to ideas which have never been tested. (Biber et al. 1999, 630, 632.)

The two syntactic variants: passive clause, and ed-clause (both postmodifiers).

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (+finite, -finite) / clause

I.e. with respect to semantic complexity, a finite clause is more natural than a non-finite clause. (Mayerthaler et al. 1998, 325.)

A special case of 1.1:

1.1.1. >sem (passive clause, ed-clause) / in English

I.e. with respect to semantic complexity, a passive clause is more natural than an ed-clause, in English.

1.2. >sem (+/-[tense, perfect aspect, or modality], -[tense, perfect aspect, or modality])/ in an English clause

I.e. with respect to encoding, the presence or absence of tense, perfect aspect, or modality is more natural than the absence of tense, perfect aspect, or modality, in an English clause.—The scale has the format >sem (+/-A, -A).

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem
- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between the passive clause and the *ed*-clause (both as postmodifiers), such that one clause type can express tense, perfect aspect, or modality, and the other clause type cannot, it is the passive clause that tends to be able to express tense, perfect aspect, or modality. Q.E.D.

From 1.1.1, 1.2 and 2.2 it can be deduced:

- 3.2. If there is any difference between the passive clause and the *ed*-clause (both as postmodifiers), such that one clause type can express tense, perfect aspect, or modality, and the other clause type cannot, it is the *ed*-clause that tends not to express tense, perfect aspect, or modality. Q.E.D.
- 11. English. Infinitive clauses as postmodifiers. An option with adverbial and prepositional object gaps is an infinitive clause introduced by a preposition and a relative pronoun, e.g. a good helping of functional grey matter with which to devise theories. (Biber et al. 1999, 632-3.)

The two syntactic variants: postmodifying infinitive clause showing subject or object gap, and postmodifying infinitive clause showing adverbial or prepositional object gap.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sym (subject/object gap, adverbial/prepositional object gap) / infinitive clause in English

I.e. with respect to encoding, an infinitive clause showing a subject or object gap is more natural than an infinitive clause showing an adverbial or prepositional object gap, in English.—Subject and object gaps are easier for the hearer to process than adverbial and prepositional object gaps.

1.2. >sem (+/-[preposition + relative pronoun], -[preposition + relative pronoun]) / introducing postmodifying infinitive clause

I.e. with respect to semantic complexity, a postmodifying infinitive clause admitting introduction by a preposition + relative pronoun is more natural than a postmodifying infinitive clause rejecting such introduction.—The scale has the format >sem (+/-A, -A).

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sym tends to associate with <sem
- 2.2. <sym tends to associate with >sem

3. The consequences:

From 1.1-2 and 2.1 it can be deduced:

3.1. If there is any difference between a postmodifying infinitive clause showing subject or object gap, and a postmodifying infinitive clause showing an adverbial or prepositional object gap, such that one kind of postmodifying infinitive clauses can be introduced by a preposition + relative pronoun, and the other kind of postmodifying infinitive clauses cannot be introduced by a preposition + relative pronoun, it is the postmodifying infinitive clause showing a subject or object gap that tends not to be introduced by a preposition + relative pronoun. Q.E.D.

From 1.1-2 and 2.2 it can be deduced:

- 3.2. If there is any difference between a postmodifying infinitive clause showing subject or object gap, and a postmodifying infinitive clause showing an adverbial or prepositional object gap, such that one kind of postmodifying infinitive clauses can be introduced by a preposition + relative pronoun, and the other kind of postmodifying infinitive clauses cannot be introduced by a preposition + relative pronoun, it is the postmodifying infinitive clause showing an adverbial or prepositional object gap that tends to allow introduction by a preposition + relative pronoun. Q.E.D.
- **12.** English. *To-*clauses as noun complement clauses, e.g. *you've been given permission to wear them*. Such *to-*clauses have covert subjects. (Biber et al. 1999, 645.)

The two syntactic variants: to-clauses, as noun complement clauses and as verb complement clauses.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (verb, noun) / to-clause as complement of, in English

I.e. with respect to semantic complexity, a *to*-clause as complement of a verb is more natural than a *to*-clause as complement of a noun, in English.—Verbs are more sem-natural than nouns, to judge by the circumstance, obtaining in many languages, that verbal morphology is much richer than noun morphology.

1.2. >sem (+/-overt, -overt) / subject of to-clause, in English

I.e. with respect to semantic complexity, the subject of a *to*-clause which can be overt or covert is more natural than the subject of a *to*-clause which can only be covert.—The scale has the format >sem (+/-A, -A).

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem
- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1-2 and 2.1 it can be deduced:

3.1. If there is any difference between to-clauses as verb complement clauses and to-clauses as noun complement clauses, such that one clause type takes both overt and covert subjects, and the other clause type takes only covert subjects, it is the to-clauses as verb complement clauses that tend to take both overt and covert subjects. Q.E.D.

From 1.1-2 and 2.2 it can be deduced:

- 3.2. If there is any difference between to-clauses as verb complement clauses and to-clauses as noun complement clauses, such that one clause type takes both overt and covert subjects, and the other clause type takes only covert subjects, it is the to-clauses as noun complement clauses that tend to take only covert subjects. Q.E.D.
- **13.** English. *To*-clauses and *ing*-clauses as complement clauses. Those verbs of desire which can take both kinds of clauses are often expanded with the modal *would* if the subordinate clause is a *to*-clause, e.g. *I* <u>would</u> like to cooperate. (Biber et al. 1999, 758.)

The two syntactic variants: verb of desire + to-clause, and verb of desire + ing-clause.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (+/-would, -would) / accompanying verb of desire + complement clause, in English
- I.e. with respect to semantic complexity, the pattern +/-would + verb of desire + complement clause is more natural than the pattern -would + verb of desire + complement clause, in English.—The scale has the format >sem (+/-A, -A).
- 1.2. >sem (to-clause, ing-clause) / in English
- I.e. with respect to semantic complexity, a to-clause is more natural than an ing-clause, in English.—To-clauses are phylogenetically earlier than ing-clauses, as complement clauses.
- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem
- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between verb of desire + to-clause and verb of desire + ing-clause, such that in one pattern the verb of desire is or is not accompanied by would, and in the other pattern the verb of desire is not accompanied by would, it is in the pattern verb of desire + to-clause that the verb of desire tends to be accompanied or not by would. Q.E.D.

From 1.1, 1.2 and 2.2 it can be deduced:

- 3.2. If there is any difference between verb of desire + to-clause and verb of desire + ing-clause, such that in one pattern the verb of desire is or is not accompanied by would, and in the other pattern the verb of desire is not accompanied by would, it is in the pattern verb of desire + ing-clause that the verb of desire tends not to be accompanied by would. Q.E.D.
- **14.** English. Fronting of core elements is virtually restricted to declarative main clauses (discounting the initial placement of *wh*-words). (Biber et al. 1999, 900.)

The two syntactic variants: declarative main clauses and other clauses.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (declarative main clause, other clause)
- I.e. with respect to semantic complexity, a declarative main clause is more natural than other clauses.—The declarative sentential mode is among the most sem-natural sentential modes (Mayerthaler et al. 1998, 326). Main clauses are phylogenetically among the earliest clauses.
- 1.2. >sem (+/-fronting, -fronting) / core elements in English
- I.e. with respect to semantic complexity, optional fronting of core elements is more natural than no fronting of core elements, in English.—The scale has the format >sem (+/-A, -A).
- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem
- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between declarative main clauses and other clauses, such that in one kind fronting of core elements can occur, and in the other kind fronting of core elements cannot occur, it is in the declarative main clause that fronting of core elements tends to be admitted. Q.E.D.

From 1.1, 1.2 and 2.2 it can be deduced:

- 3.2. If there is any difference between declarative main clauses and other clauses, such that in one kind fronting of core elements can occur, and in the other kind fronting of core elements cannot occur, it is in the "other" clauses that fronting of core elements tends not to occur. Q.E.D.
- 15. English. Inversion in reporting clauses. Initial reporting clauses mostly lack subject-verb inversion, e.g. <u>She said</u>: "Elderly people often have smaller groups of friends." Non-initial reporting clauses can have inversion, e.g. "That's the whole trouble," <u>said Gwen</u> v. "You can ask one or two of them," <u>Laura said</u>. (Biber et al. 1999, 921-2.)

The two syntactic variants: initial and non-initial reporting clauses.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sym (more transparent, less transparent) / syntactic unit
- I.e. with respect to encoding, a syntactic unit of greater syntactic transparency is more natural than a corresponding syntactic unit of lesser syntactic transparency. (Mayerthaler 1981, 35; Mayerthaler et al. 1998, 186. On the notion of transparency see Mayerthaler 1987, 49.)

A special case of 1.1:

1.1.1. >sym (+initial, -initial) / reporting clause in English

- I.e. with respect to encoding, an initial reporting clause is more natural than a non-initial reporting clause, in English.—Initial reporting clauses are more conspicuous than non-initial ones.
- 1.2. >sem (+/-inversion, -inversion) / of subject and verb in English
- I.e. with respect to semantic complexity, optional subject-verb inversion is more natural than lack of subject-verb inversion, in English.—The scale has the format >sem (+/-A, -A).
- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sym tends to associate with <sem
- 2.2. <sym tends to associate with >sem
- 3. The consequences:

From 1.1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between initial and non-initial reporting clauses, such that one kind of reporting clauses has optional subject-verb inversion, and the other kind lacks subject-verb inversion, it is the initial reporting clause that tends to lack subject-verb inversion. Q.E.D.

From 1.1.1, 1.2 and 2.2 it can be deduced:

- 3.2. If there is any difference between initial and non-initial reporting clauses, such that one kind of reporting clauses has optional subject-verb inversion, and the other kind lacks subject-verb inversion, it is the non-initial reporting clause that tends to optionally show subject-verb inversion. Q.E.D.
- **16.** English. Inversion in reporting clauses. Inversion is found in non-initial reporting clauses containing a simple verb. Inversion is lacking if the verb is complex. E.g. "That's the whole trouble," <u>said Gwen</u> v. "Konrad Schneider is the only one who matters," Reinhold had answered.

The two syntactic variants: non-initial reporting clauses containing a simple and a complex verb.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sym (more transparent, less transparent) / syntactic unit
- I.e. with respect to encoding, a syntactic unit of greater syntactic transparency is more natural than a corresponding syntactic unit of lesser syntactic transparency. (Mayerthaler 1981, 35; Mayerthaler et al. 1998, 186. On the notion of transparency see Mayerthaler 1987, 49.)

A special case of 1.1:

- 1.1.1. >sym (complex, simple) / verb of reporting clause in English
- I.e. with respect to encoding, a complex verb of the reporting clause is more natural than a simple verb of the reporting clause, in English.
- 1.2. >sem (+/-inversion, -inversion) / subject and verb of reporting clause in English

- I.e. with respect to semantic complexity, optional subject-verb inversion is more natural than lack of subject-verb inversion, in reporting clauses, in English.—The scale has the format >sem (+/-A, -A).
- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sym tends to associate with <sem
- 2.2. <sym tends to associate with >sem
- 3. The consequences:

From 1.1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between non-initial reporting clauses containing a simple and a complex verb, such that one kind of reporting clauses exhibits optional subject-verb inversion, and the other kind of reporting clauses lacks subject-verb inversion, it is the non-initial reporting clause containing a complex verb that tends to lack subject-verb inversion. Q.E.D.

From 1.1.1, 1.2 and 2.2 it can be deduced:

- 3.2. If there is any difference between non-initial reporting clauses containing a simple and a complex verb, such that one kind of reporting clauses exhibits optional subject-verb inversion, and the other kind of reporting clauses lacks subject-verb inversion, it is the non-initial reporting clause containing a simple verb that tends to exhibit optional subject-verb inversion. Q.E.D.
- 17. English. Inversion in reporting clauses. Inversion of subject and verb is possible if the clause does not contain the specification of the addressee. Otherwise inversion is not possible. E.g. "That's the whole trouble," said Gwen v. There's so much to living that I did not know before, Jackie had told her happily. (Biber et al. 1999, 921-2.) The latter example would be more to the point if it did not contain had (which makes the verb complex, and therefore prevents subject-verb inversion on its own, cf. deduction 16).

The two syntactic variants: reporting clauses containing and lacking the specification of the addressee.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sym (more transparent, less transparent) / syntactic unit
- I.e. with respect to encoding, a syntactic unit of greater syntactic transparency is more natural than a corresponding syntactic unit of lesser syntactic transparency. (Mayerthaler 1981, 35; Mayerthaler et al. 1998, 186. On the notion of transparency see Mayerthaler 1987, 49.)

A special case of 1.1:

- 1.1.1. >sym (+addressee, -addressee) / reporting clause in English
- I.e. with respect to encoding, the specification of the addressee of the reporting clause is more natural than the lack of the specification of the addressee of the reporting clause, in English.
- 1.2. >sem (+/-inversion, -inversion) / subject and verb of reporting clause in English

I.e. with respect to semantic complexity, optional subject-verb inversion is more natural than lack of subject-verb inversion, in reporting clauses, in English.—The scale has the format >sem (+/-A, -A).

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sym tends to associate with <sem
- 2.2. <sym tends to associate with >sem
- 3. The consequences:

From 1.1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between reporting clauses containing and lacking the specification of the addressee, such that one type of reporting clauses exhibits optional subject-verb inversion, and the other type of reporting clauses lacks subject-verb inversion, it is the reporting clause containing the specification of the addressee that tends to lack subject-verb inversion. Q.E.D.

From 1.1.1, 1.2 and 2.2 it can be deduced:

- 3.2. If there is any difference between reporting clauses containing and lacking the specification of the addressee, such that one type of reporting clauses exhibits optional subject-verb inversion, and the other type of reporting clauses lacks subject-verb inversion, it is the reporting clause lacking the specification of the addressee that tends to exhibit optional subject-verb inversion. Q.E.D.
- **18.** English. Inversion is overwhelmingly a main-clause phenomenon. (Biber et al. 1999, 926.)

The two syntactic variants: main and dependent clauses.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (main, dependent) / clause
- I.e. with respect to semantic complexity, a main clause is more natural than a dependent clause.—Phylogenetically, main clauses are earlier than dependent clauses.
- 1.2. >sem (+/-inversion, -inversion)

I.e. with respect to semantic complexity, admitting subject-verb inversion is more natural than excluding subject-verb inversion, in English.—The scale has the format >sem (+/-A, -A).

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem
- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between main and dependent clauses, such that one kind of clauses admits inversion, and the other kind of clauses excludes inversion, it is the main clauses that tend to admit inversion. Q.E.D.

From 1.1, 1.2 and 2.2 it can be deduced:

- 3.2. If there is any difference between main and dependent clauses, such that one kind of clauses admits inversion, and the other kind of clauses excludes inversion, it is the dependent clauses that tend to exclude inversion. O.E.D.
 - (II) Illustrations of the scale format >sem (+/-A, +A)
- 19. English. The two constituent parts of any phrasal verb tend to pertain to relatively frequent lexical items, e.g. come/go/get/take/put + up/down/on/in etc. (Biber et al. 1999, 412-3.)

The two syntactic variants: phrasal verb, and single-unit verb.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (single-unit, phrasal) / verb in English
- I.e. with respect to semantic complexity, a single-unit verb is more natural than a phrasal verb, in English.—Cross-linguistically, phrasal verbs are much less common than single-unit verbs.
- 1.2. >sem (+/-frequent, +frequent) / unit
- I.e. with respect to semantic complexity, units that comprise frequent and less frequent items are more natural than units that comprise only frequent items.—The scale has the format >sem (+/-A, +A). Cf. the scale in item 1.2 of deduction 8.
- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem
- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1-2 and 2.1 it can be deduced:

3.1. If there is any difference between phrasal verbs and single-unit verbs, such that one kind comprises frequent and less frequent lexical items, and the other kind comprises only frequent lexical items, it is the single-unit verbs that tend to comprise frequent and less frequent lexical items. O.E.D.

From 1.1-2 and 2.2 it can be deduced:

- 3.2. If there is any difference between phrasal verbs and single-unit verbs, such that one kind comprises frequent and less frequent lexical items, and the other kind comprises only frequent lexical items, it is the phrasal verbs that tend to comprise only frequent lexical items. Q.E.D.
- 4. Note. The same deduction would account for other lexical items consisting of more than one word: the type *make do, let be/go*, the type *take time, have a chance*, those intransitive prepositional verbs in which the meaning of the verb and the preposition is not composite, for instance *look like (a barrell)* 'resemble (a barrell),' phrasal-prepositional verbs such as *get out of*, and *do* in idiomatic expressions, e.g. *do the car*. (Biber et al. 1999, 414-30.)

20. English. The sequences good and X, nice and X are intensifiers, e.g. you're going to be good and sorry; I'll be nice and pissed. (Biber et al. 1999, 537-8.)

The two syntactic variants: adjective X, and nice/good + X.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sym (more transparent, less transparent) / syntactic unit

I.e. with respect to encoding, a syntactic unit of greater syntactic transparency is more natural than a corresponding syntactic unit of lesser syntactic transparency. (Mayerthaler 1981, 35; Mayerthaler et al. 1998, 186. On the notion of transparency see Mayerthaler 1987, 49.)

A special case of 1.1:

1.1.1. >sym (nice/good + X, X) / X is adjective in English

I.e. with respect to encoding, the type nice/good + X is more natural than the type X, where X is an adjective in English.

1.2. >sem (+/-emphasis, +emphasis)

I.e. with respect to semantic complexity, expressing emphasis optionally is more natural than expressing emphasis obligatorily.—The scale has the format >sem (+/-A, +A).

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sym tends to associate with <sem
- 2.2. <sym tends to associate with >sem
- 3. The consequences:

From 1.1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between the type X and the type nice/good + X, such that one type expresses emphasis optionally, and the other type expresses emphasis obligatorily, it is the type nice/good + X that tends to express emphasis obligatorily. Q.E.D.

From 1.1.1, 1.2 and 2.2 it can be deduced:

- 3.2. If there is any difference between the type X and the type nice/good + X, such that one type expresses emphasis optionally, and the other type expresses emphasis obligatorily, it is the type X that tends to express emphasis only optionally. Q.E.D.
- **21.** English. Within subject *to*-clauses, extraposed constructions are more common with adjectives than with verbs. (Biber et al. 1999, 754.)

The two syntactic variants: verbal and adjectival predicates.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (+/-extraposed, +extraposed) / subject to-clause in English

I.e. with respect to semantic complexity, a subject to-clause which admits extraposition is more natural than a subject to-clause which almost must be extraposed, in English.—The scale has the format >sem (+/-A, +A).

1.2. >sem (verb, adjective)

I.e. with respect to semantic complexity, a verb is more natural than an adjective.—Adjectives are not universal (Mayerthaler et al. 1998, 19).

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem
- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1-2 and 2.1 it can be deduced:

3.1. If there is any difference between verbal and adjectival predicates combined with subject *to*-clauses, such that one kind of predicates take extraposed and non-extraposed subject *to*-clauses, and the other kind of predicates take almost only extraposed subject *to*-clauses, it is the verbal predicates that tend to take both extraposed and non-extraposed subject *to*-clauses. Q.E.D.

From 1.1-2 and 2.2 it can be deduced:

- 3.2. If there is any difference between verbal and adjectival predicates combined with subject to-clauses, such that one kind of predicates take extraposed and non-extraposed subject to-clauses, and the other kind of predicates take almost only extraposed subject to-clauses, it is the adjectival predicates that tend to take almost only extraposed subject to-clauses. Q.E.D.
- 22. English. With verbs which can control both *that*-clauses and non-finite clauses in the pattern verb + complement clause, *that*-clauses are used when: (1) the subject of the complement clause is not co-referential with the subject of the main clause, e.g. *I hope that you were happy while you were here*; and/or (2) the complement clause includes a modal verb, e.g. *remember that fortune and misfortune should be left to heaven and natural law*. (Biber et al. 1999, 756-7.)

The two syntactic variants: *that*-clauses and non-finite clauses, in the pattern verb + complement clause.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (+finite, -finite) / subordinate clause

I.e. with respect to semantic complexity, a finite subordinate clause is more natural than a non-finite subordinate clause. (Mayerthaler et al. 1993, 145.)

A special case of 1.1:

- 1.1.1. >sem (that-clause, -finite clause) / complement clause in English
- I.e. with respect to semantic complexity, a complement *that*-clause is more natural than a complement non-finite clause, in English.
- 1.2. >sem (+/-modal verb, -modal verb) / in the complement clause, in English
- I.e. with respect to semantic complexity, a complement clause admitting a modal verb is more natural than a complement clause rejecting modal verbs, in English.—The scale has the format >sem (+/-A, -A).
- 1.3. >sem (+/-co-referentiality, +co-referentiality) / the subject of the complement clause with the subject of the main clause

I.e. with respect to semantic complexity, the subject of a complement clause which can be co-referential with the subject of the corresponding main clause is more natu-

ral than the subject of a complement clause which is always co-referential with the subject of the corresponding main clause.—The scale has the format >sem (+/-A, +A).

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem
- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between *that*-clauses and non-finite clauses, such that one kind of clauses can contain a modal verb, and the other kind of clauses invariably lacks a modal verb, it is the *that*-clauses that tend to contain a modal verb. Q.E.D.

From 1.1.1, 1.2 and 2.2 it can be deduced:

3.2. If there is any difference between *that*-clauses and non-finite clauses, such that one kind of clauses can contain a modal verb, and the other kind of clauses invariably lacks a modal verb, it is the non-finite clauses that tend to lack a modal verb. Q.E.D.

From 1.1.1, 1.3 and 2.1 it can be deduced:

3.3. If there is any difference between *that*-clauses and non-finite clauses, such that in one kind of clauses the subject can be co-referential with the subject of the main clause, and in the other kind of clauses the subject must be co-referential with the subject of the main clause, it is in the *that*-clauses that the subject tends to be or not to be co-referential with the subject of the main clause. Q.E.D.

From 1.1.1, 1.3 and 2.2 it can be deduced:

- 3.4. If there is any difference between *that*-clauses and non-finite clauses, such that in one kind of clauses the subject can be co-referential with the subject of the main clause, and in the other kind of clauses the subject must be co-referential with the subject of the main clause, it is in the non-finite clauses that the subject tends to be co-referential with the subject of the main clause. Q.E.D.
- 23. English. Circumstance adverbials, stance adverbials, and linking adverbials. Circumstance adverbials are the most varied class, as well as the most integrated into the clause structure, e.g. he was even now sitting <u>beside her on the sofa</u>. (Biber et al. 1999, 763-4.)

The two syntactic variants: circumstance adverbials and other adverbials.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (+/-integrated, +integrated) / into clause structure

I.e. with respect to semantic complexity, a unit which is or is not integrated into clause structure is more natural than a unit that is necessarily integrated into clause structure.—The scale has the format >sem (+/-A, +A).

1.2. >sem (few, many) / adverbials of a kind, in English

I.e. with respect to semantic complexity, a set of only few adverbials of a kind is more natural than a set of many adverbials of a kind, in English.—It can be observed time and again that small (closed) classes are more >sem-natural than large (open) classes.

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem
- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between circumstance adverbials and other adverbials, such that one kind of adverbials is integrated into clause structure, and the other kind of adverbials is or is not integrated into clause structure, and such that one kind of adverbials is a small set, and the other kind of adverbials is a large set, it is the "other" adverbials that tend to be or not to be integrated into clause structure, and to be a small set. Q.E.D.

From 1.1, 1.2 and 2.2 it can be deduced:

- 3.2. If there is any difference between circumstance adverbials and other adverbials, such that one kind of adverbials is integrated into clause structure, and the other kind of adverbials is or is not integrated into clause structure, and such that one kind of adverbials is a small set, and the other kind of adverbials is a large set, it is the circumstance adverbials that tend to be integrated into clause structure, and to be a large set. Q.E.D.
- 4. Notes.
- 4.1. To items 3.1-2. "To be a small/large set" means "to have relatively few/many subsets typewise." "To be a small/large set" does not mean "to have relatively few/many members tokenwise."
- 4.2. It can be concluded from 1.1-2 that the sem-naturalness of adverbials conforms to the following scale: >sem (linking/stance, circumstance) / adverbial in English.
- **24.** English. Fronting: complement clauses as fronted objects. Many examples contain a negative main clause, e.g. how he would use that knowledge he could <u>not</u> guess. (Biber et al. 1999, 901.)

The two syntactic variants: main clause containing a fronted complement clause, and main clause containing a fronted nominal.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (nominal, clause) / object in English

I.e. with respect to semantic complexity, an object which is a nominal is more natural than an object which is a clause, in English.—A nominal is nearer to the prototypical object than a clause.

- 1.2. >sem (+/-negative, +negative) / main clause
- I.e. with respect to semantic complexity, a main clause which can be both negative and not negative is more natural than a main clause which can be only negative.—The scale has the format >sem (+/-A, +A).
- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem

- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between a main clause containing a fronted nominal and a main clause containing a fronted complement clause, such that one kind of main clauses can be either negative or not, and the other kind of main clauses can only be negative, it is the main clause containing a fronted nominal that tends to be either negative or not. O.E.D.

From 1.1, 1.2 and 2.2 it can be deduced:

- 3.2. If there is any difference between a main clause containing a fronted nominal and a main clause containing a fronted complement clause, such that one kind of main clauses can be either negative or not, and the other kind of main clauses can only be negative, it is the main clause containing a fronted complement clause that tends to be negative. Q.E.D.
- **25.** English. Predicative fronting with subject-verb inversion. The fronted predicative is cohesive, e.g. *far more serious were the severe head injuries*. (Biber et al. 1999, 902-3.)

The two syntactic variants: the type far more serious were the severe head injuries, and the type the severe head injuries were far more serious.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sym (more transparent, less transparent) / syntactic unit

I.e. with respect to encoding, a syntactic unit of greater syntactic transparency is more natural than a corresponding syntactic unit of lesser syntactic transparency. (Mayerthaler 1981, 35; 1998, 186. On the notion of transparency see Mayerthaler 1987, 49.)

A special case of 1.1:

- 1.1.1. >sym (+fronted, -fronted) / predicative in English
- I.e. with respect to encoding, a fronted predicative is more natural than a non-fronted predicative, in English.—Fronted elements are more conspicuous than non-fronted elements, *ceteris paribus*.
- 1.2. >sem (+/-cohesive, +cohesive) / predicative in English

I.e. with respect to semantic complexity, a predicative which is optionally cohesive is more natural than a predicative which is obligatorily cohesive.—The scale has the format >sem (+/-A, +A).

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sym tends to associate with <sem
- 2.2. <sym tends to associate with >sem
- 3. The consequences:

From 1.1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between the type far more serious were the severe head injuries and the type the severe head injuries were far more serious, such that in one

type the predicative is optionally cohesive, and in the other type the predicative is obligatorily cohesive, it is in the type far more serious were the severe head injuries that the predicative tends to be obligatorily cohesive. Q.E.D.

From 1.1.1, 1.2 and 2.2 it can be deduced:

- 3.2. If there is any difference between the type far more serious were the severe head injuries and the type the severe head injuries were far more serious, such that in one type the predicative is optionally cohesive, and in the other type the predicative is obligatorily cohesive, it is in the type the severe head injuries were far more serious that the predicative tends to be optionally cohesive. Q.E.D.
- **26.** English. Fronted infinitive predicates. There is no inversion of the subject, which is usually short. Fronted infinitive predicates often repeat a previous verb or predicate, e.g. *I had said he would come down and <u>come down</u> he did.* The fronted element is cohesive. There is a double focus in the clause. (Biber et al. 1999, 905-6.)

The two syntactic variants: fronted and non-fronted infinitive predicates.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sym (more transparent, less transparent) / syntactic unit

I.e. with respect to encoding, a syntactic unit of greater syntactic transparency is more natural than a corresponding syntactic unit of lesser syntactic transparency. (Mayerthaler 1981, 35; Mayerthaler et al. 1998, 186. On the notion of transparency see Mayerthaler 1987, 49.)

Two special cases of 1.1:

- 1.1.1. >sym (+fronted, -fronted) / infinitive predicate in English
- I.e. with respect to encoding, a fronted infinitive predicate is more natural than a non-fronted infinitive predicate, in English.—Fronted units are more conspicuous than non-fronted units.
- 1.1.2. >sym (double focus, single focus) / clause in English
- I.e. with respect to encoding, a clause containing double focus is more natural than a clause containing single focus, in English.
- 1.3. >sem (+/-cohesive, +cohesive) / initial element in English
- I.e. with respect to semantic complexity, an initial element which is optionally cohesive is more natural than an initial element which is obligatorily cohesive.—The scale has the format >sem (+/-A, +A).
- 1.4. >sem (+/-repetition, +repetition) / initial element in English
- I.e. with respect to semantic complexity, an initial element which is or is not a repetition is more natural than an initial element which must be a repetition.—The scale has the format >sem (+/-A, +A).
- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sym tends to associate with <sem
- 2.2. <sym tends to associate with >sem
- 2.3. >sem tends to associate with another >sem

- 2.4. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1.1-2, 1.3-4, 2.1 and 2.4 it can be deduced:

3.1. If there is any difference between fronted and non-fronted infinitive predicates, such that clauses containing one kind of infinitive predicates have double focus, and clauses containing the other kind of infinitive predicates have single focus, and such that the initial element of clauses containing one kind of infinitive predicates is optionally cohesive and optionally a repetition, and the initial element of the other kind of infinitive predicates is obligatorily cohesive and obligatorily a repetition, it is clauses containing the fronted infinitive predicate that tend to have double focus, and their initial element tends to be obligatorily cohesive and obligatorily a repetition. Q.E.D.

From 1.1.1-2, 1.3-4 and 2.2-3 it can be deduced:

- 3.2. If there is any difference between fronted and non-fronted infinitive predicates, such that clauses containing one kind of infinitive predicates have double focus, and clauses containing the other kind of infinitive predicates have single focus, and such that the initial element of clauses containing one kind of infinitive predicates is optionally cohesive and optionally a repetition, and the initial element of the other kind of infinitive predicates is obligatorily cohesive and obligatorily a repetition, it is clauses containing the non-fronted infinitive predicate that tend to have single focus, and their initial element tends to be optionally cohesive and optionally a repetition. Q.E.D.
- 27. English. Clauses with direct objects and object predicatives. When the whole of the direct object is a clause, either the order is as expected, e.g. but he made clear it was not a sacking offence, or there is a dummy it in ordinary object position, and the clause is placed in extraposition, e.g. he made it impossible for her to do anything. (Biber et al. 1999, 931-2.)

The two syntactic variants: the pattern it ... object predicative + long direct object, and the pattern object predicative + long direct object.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sym (more transparent, less transparent) / syntactic unit

I.e. with respect to encoding, a syntactic unit of greater syntactic transparency is more natural than a corresponding syntactic unit of lesser syntactic transparency. (Mayerthaler 1981, 35; Mayerthaler et al. 1998, 186. On the notion of transparency see Mayerthaler 1987, 49.)

A special case of 1.1:

1.1.1. >sym (it ... object predicative + long direct object, object predicative + long direct object) / in English

I.e. with respect to encoding, the pattern it ... object predicative + long direct object is more natural than the pattern object predicative + long direct object, in English.

1.2. >sem (+/-clause, +clause) / direct object in English

I.e. with respect to semantic complexity, a direct object which takes the form either

of a clause or of a non-clause is more natural than a direct object which takes only the form of a clause, in English.—The scale has the format >sem (+/-A, +A).

- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sym tends to associate with <sem
- 2.2. <sym tends to associate with >sem
- 3. The consequences:

From 1.1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between the pattern it ... object predicative + long direct object and the pattern object predicative + long direct object, such that the direct object is a clause in one pattern, and the direct object is either a clause or non-clausal in the other pattern, it is in the pattern it ... object predicative + long direct object that the direct object tends to be a clause. O.E.D.

From 1.1.1, 1.2 and 2.2 it can be deduced:

- 3.2. If there is any difference between the pattern it ... object predicative + long direct object and the pattern object predicative + long direct object, such that the direct object is a clause in one pattern, and the direct object is either a clause or non-clausal in the other pattern, it is in the pattern object predicative + long direct object that the direct object tends to be either a clause or non-clausal. Q.E.D.
- 28. English. Existential clauses. Minimal existential clauses occur most frequently in conversation, commonly with negation, e.g. there's no bus. (Biber et al. 1999, 950.)

The two syntactic variants: affirmation and negation in existential clauses in conversation.

- 1. The assumptions of Naturalness Theory:
- 1.1. >sem (+/-minimal, +minimal) / existential clause
- I.e. with respect to semantic complexity, an existential clause which can be minimal or non-minimal is more natural than an existential clause which can only be minimal.—The scale has the format >sem (+/-A, +A).
- 1.2. >sem (affirmation, negation)
- I.e. with respect to semantic complexity, affirmation is more natural than negation. (Mayerthaler 1981, 15.)
- 2. The assumptions of the Slovenian Theory, concerning any two syntactic variants:
- 2.1. >sem tends to associate with another >sem
- 2.2. <sem tends to associate with another <sem
- 3. The consequences:

From 1.1, 1.2 and 2.1 it can be deduced:

3.1. If there is any difference between affirmation and negation in existential clauses in conversation, such that one kind can be minimal or non-minimal, and the other kind is minimal, it is the affirmative existential clauses that tend to be minimal or non-minimal. O.E.D.

From 1.1, 1.2 and 2.2 it can be deduced:

3.2. If there is any difference between affirmation and negation in existential clauses in conversation, such that one kind can be minimal or non-minimal, and the other kind is minimal, it is the negative existential clauses that tend to be minimal. Q.E.D.

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Povzetek

JEZIKOVNA NARAVNOST: >SEM (+/-A, -A) IN >SEM (+/-A, +A) KOT DVE PREDLOGI ZA LESTVICE

Sestavek sega v teorijo jezikovne naravnosti in predlaga dve podobni si predlogi lestvic naravnosti, namreč >sem (+/-A, -A) in >sem (+/-A, +A). Predlogi določata relativno sem-naravnost po dveh razredov (obliko)skladenjskih enot. V enem razredu so enote z lastnostjo A in enote brez lastnosti A, v drugem razredu enote samo z lastnostjo A ali samo brez nje. Preprost zgled: v številnih jezikih se prehodni glagoli rabijo v tvorniku in trpniku (razred takih glagolov je +/-A), le nekateri prehodni glagoli se rabijo samo v tvorniku (razred takih glagolov bodi +A; to so activa tantum) ali samo v trpniku (razred takih glagolov bodi -A; to so passiva tantum). Predlogi izražata domnevo, da je pri posamičnem prehodnem glagolu raba obeh glagolskih načinov bolj naravna kot samo raba tvornika ali samo raba trpnika.

V sestavku je predstavljenih 27 angleških (obliko)skladenjskih zgledov, v katerih se je treba nasloniti na káko lestvico, narejeno po eni izmed novih predlog. Vsak zgled je par (obliko)skladenjskih dvojnic, katerim se da del (obliko)skladenjskega vedenja napovedati. Do napovedi o zgledu se dokopljemo z izpeljavo, ki temelji na primernih lestvicah naravnosti in na povezavah med njimi. Te povezave so (kakor obe zgoraj omenjeni predlogi) slovenski prispevek k teoriji jezikovne naravnosti.