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SYNTACTIC VARIANTS AND NATURAL SYNTAX: GREEK INFINITIVE CLAUSES DEPENDENT ON VERBS OF SPEAKING AND THINKING

This paper interprets a pair of syntactic variants in Greek from the perspective of Natural Syntax; other European languages are also referred to. The first part of the paper briefly presents Natural Syntax; its principles are then applied to a well-known feature of Greek infinitive clauses.

1. NATURAL SYNTAX: BASIC TERMS

The term syntactic variant is one of the basic notions in Natural Syntax. This is a developing linguistic theory, a branch of Naturalness Theory (NT). Some recent publications in English include Cvetko Orešnik/Orešnik (2007), Kavčič (2005), and Orešnik (2001, 2004, 2007a, 2007b, 2007c, 2008a, 2008b). This paper refers to another work from the field of NT (Mayerthaler/Fliedl/Winkler 1993, 1995), which reports findings from a study of the use of the infinitive in modern European languages conducted at the University of Klagenfurt.

Natural Syntax studies the behavior of expressions called syntactic variants. At the earliest stages, only two synonymous (syntactic) constructions were understood as variants (finite dependent clauses vs. infinitives; reported speech vs. direct speech). Later, it turned out that the term could be broadened in the sense that any morphological or syntactic units belonging to the same grammatical category (e.g., definite vs. indefinite articles) could be taken as variants (Orešnik 2001: 223). According to Natural Syntax, in a pair of syntactic variants, one of them is more natural and the other less natural; the term *natural* roughly corresponds to the term *unmarked*. The list of criteria below is used to determine the naturalness values of syntactic variants (Cvetko Orešnik/Orešnik 2007: 236–237):

(A) The criterion of favorable for the speaker and the hearer. This view of naturalness is commonplace in linguistics (Havers 1931: 171), under the names of tendency to economize (utilized first of all by the speaker) and the tendency to be accurate (mainly in the hearer's interest). What is more economical is more natural; what is more accurate is less natural.

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

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(C) Degree of integration into the clause. What is better integrated into its clause is more natural.

(D) Frequency. What is more frequent in a language tokenwise is more natural. (However, the inverse situation does not obtain: what is natural is not necessarily frequent.)

(E) Small vs. large class. The use of a unit pertaining to a small class is more natural 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.

(F) 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.)

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

(H) What is more widespread in the languages of the world is more natural (the typological criterion). What is cognitively simpler is realized in more languages.

When, in a pair of variants (A, B), A is more natural than B, this is expressed in the form of a naturalness scale in the following way: > nat (A, B). A naturalness scale is valid if it is supported by at least one of the above criteria. In addition, two expanded scales are allowed: > nat (A+B, B) and > nat (A, A+B). These are valid if the corresponding scale of the format > nat (A, B) is valid. According to the first expanded scale, alternative use of the less natural value is more natural than obligatory use of the less natural value. According to the second one, obligatory use of the more natural value is more natural than alternative use of the less natural value. See below, page 173 for exemplification.

Concerning the behavior of syntactic variants, Natural Syntax predicts that the more natural variant associates in at least one respect with a more natural parameter than the less natural variant. This prediction goes back the principle of markedness assimilation as developed within markedness theory (Andersen 1968). In the form of naturalness scales, this prediction is expressed as follows: > nat aligns with > nat and < nat aligns with < nat. The assumptions of Natural Syntax are normally expressed in the form of what are known as deductions. Their chief parts are naturalness scales and the prediction about the behavior of the syntactic variants; this is referred to in the deductions as alignment rules; see below, page 173.

2. GREEK INFINITIVE CLAUSES DEPENDENT ON VERBS OF SPEAKING AND THINKING

In Classical Greek, infinitive clauses could be governed by verbs of thinking and speaking and they could be substituted by finite dependent clauses under certain conditions:

Nach den Verben von Glaubens, Denkens, Urteilens, Hoffens, Versprechens, Schwörens, Leugnens folgt in der Regel der Infinitiv oder der Acc.c.Inf. ... Nach den Verben des Sagens, Meldens u.dgl. finden sich beide Konstruktionen [i.e., the infinitive clause and the finite dependent clause; J. K.] gleich häufig; doch nach φᾶναι, das nicht

das einfache sagen, sondern eine Meinung äussern bedeutet, weit überwiegend d. Inf. (Acc. c. Inf.). (Kühner/Gerth 1904: 357)

To sum up, infinitive clauses could be dependent on both verbs of speaking and thinking in Classical Greek. Finite dependent clauses (introduced by ὅτι/ὡς) could be governed only by verbs of speaking. However, one verb of speaking that regularly governs infinitive clauses is φημί 'say'. This is a well-known feature of Classical Greek infinitive clauses; cf. Bornemann/Risch (1978: 238), who claim that φημί governs only infinitive clauses. In addition, similar conditions occur in other languages. According to the Klagenfurt study of the use of the infinitive in modern European languages, the infinitive is considerably more common after verbs of thinking than after verbs of speaking; cf. Mayerthaler/Fliedl/Winkler (1995: 213), in which only 'to hope' and 'to believe' occur in the naturalness scale, referring to the naturalness of the governing verbs of infinitive clauses, whereas verbs of speaking are absent from the scale. The scale is the following: > nat (Hilfsverben, modale Hilfsverben, tun-Operatoren, Bewegungsverben, kausatives machen, intentionale Verben, permissives lassen, auditives Perzeptionsverb, visuelles Perzeptionsverb, kausatives lassen, Konklusivverben, auffordern, hoffen, glauben...)/*Infinitivrektion*.

In other words, verbs of speaking are not common as governing verbs of infinitive clauses in modern European languages, although they do occur in some languages and dialects; for example, in Portuguese, Spanish, French, Italian, and Ladin (Mayerthaler/Fliedl/Winkler 1995: 30, 33, 36, 38, 92, 94). In all of these, infinitive clauses can also be governed by 'to believe' and 'to hope'. On the other hand, there are languages and dialects in which infinitive clauses can be governed by 'to believe' and 'to hope', but not by 'to say'. Examples include German, Bavarian, South Bavarian-Tyrolian, and Friulian spoken in Aquileia (Mayerthaler/Fliedl/Winkler 1995: 30, 41, 56, 116). Finally, there are languages in which infinitive clauses cannot be governed at all by verbs of speaking and thinking, such as Croatian (Mayerthaler/Fliedl/Winkler 1995: 38), Basque, and Romanian (Mayerthaler/Fliedl/Winkler 1993: 50, 45). Apart from Romanian, Balkan languages were not included in the study.

3. INTERPRETATION IN TERMS OF NT

In terms of NT, infinitive clauses and finite clauses dependent on verbs of speaking and thinking are a pair of syntactic variants. As stated at the beginning, one syntactic variant is more natural than the other within Natural Syntax. In this case, infinitive clauses are more natural than finite dependent clauses, which is expressed in the form of a naturalness scale as follows: > nat (infinitive clauses, finite dependent clauses). This naturalness scale is supported by the following criteria for determining naturalness values:

– Criterion (A) of favorable for the speaker. Infinitive clauses correspond better than finite dependent clauses to the tendency to economize; cf. Mayerthaler/Fliedl/Winkler (1993: 153): "Infinitivbildungen dienen vor allem der Kodierungsökonomie. Sie führen zur Reduktion der Anzahl lexikalisierter Elemente in der Satzkonstruktion."

– Criterion (C) of integration into the clause. In Greek, the negative particle can be transferred from the infinitive clause into the main clause:

(i) Οὐκ   ἔφη   ἰέναι.   (Classical Greek)
    not   said:3SG   go:INF
    'He said that he would not go.'

Because, in the case of finite dependent clauses, the negative particle cannot be transferred from the dependent clause into the main clause, the latter are less natural than the former. In addition, dependent clauses are formed only with non-finite verb forms in certain languages; cf. Aalto (1953: 97); cf. the typological criterion (H).

Note: It is a well-known fact that infinitive eventually disappeared from Greek. NT can not predict language changes. What it assumes is that, if a language has infinitives, then infinitive clauses are more natural than finite dependent clauses.

The assumption of NT is that the more natural variant associates in at least one respect with a more natural parameter than the less natural variant. In the given case, these parameters are verbs of speaking and verbs of thinking used as governing verbs of infinitive or finite dependent clauses. The following applies regarding their naturalness value:

(1) In English, some verbs of thinking allow the negative particle to be transferred from the dependent clause into the main clause:

(ii) I do not think it is right. (English)

This does not apply to verbs of speaking. A similar phenomenon occurs in Modern Greek, in which the negative particle can be transferred from finite clauses introduced by να. According to Klaires/Mpampiniotes (2005: 502), this is allowed particularly when the governing verbs are πιστεύω 'believe', νομίζω 'think', φαντάζομαι 'imagine', θεωρῶ 'think, regard', and μου φαίνεται 'it seems to me', which are all verbs of thinking. This suggests that verbs of thinking are more integrated into the clause structure and are more natural than verbs of speaking; cf. page 170, criterion (C). On the other hand, Bornemann/Risch (1978: 259) claim that in Classical Greek the negative particle οὐ(κ) is transferred from the dependent clause into the main clause particularly when the governing verb is φημί 'say'; regarding this issue, cf. page 174.

(2) Several data suggest that verbs of thinking are more frequent than verbs of speaking. Consequently, verbs of thinking are more natural than verbs of speaking according to criterion (D) of frequency. Biber/Conrad/Leech (1999: 365, Table 1; 669) cite the following statistical data on the frequency of verbs of speaking and thinking in English:

(a) There are 53 verbs of thinking and 36 verbs of speaking among the verbs that occur at least 50 times in 1 million words.

(b) Among the verbs that govern *that*-clauses, 13 verbs of thinking occur 20 to 600 times in 1 million words. There is only one such verb of speaking ('say').

(3) Verbs of thinking are more abstract than verbs of speaking. Abstract is less accurate than concrete. What is less accurate is more natural according to criterion (A).

Some other characteristics of verbs of speaking and thinking could be referred to that all seem to suggest that verbs of thinking are more natural than verbs of speaking, such as the transitivity or intransitivity of verbs of speaking and thinking. An intransitive verb is more natural than a transitive verb; cf. the criterion (B) of least effort.

To sum up, it can be argued that verbs of thinking are more natural than verbs of speaking. In terms of NT, they are the more natural parameter with which the more natural syntactic variant (the infinitive clauses) is supposed to associate. However, infinitive clauses associate with both verbs of thinking and speaking. In terms of NT, this is still a more natural parameter than only verbs of speaking (without verbs of thinking) because verbs of thinking are more natural than verbs of speaking. This is expressed in the form of an expanded naturalness scale: > nat (verbs of thinking + verbs of speaking, verbs of speaking); cf. page 170. The less natural variant (finite dependent clauses) associate with the less natural parameter (verbs of speaking). This interpretation is expressed in the form of a deduction in the following manner:

Variants: infinitive clause, finite dependent clause.
1. Naturalness scales:
1.1. > nat (infinitive clause, finite dependent clause)
– according to criteria (A) and (C); cf. above
1.2. > nat (verbs of thinking, verbs of speaking)
– according to criteria (A), (D), and (D); cf. above
1. 2. 1. > nat (verbs of thinking + verbs of speaking, verbs of speaking)
– the scale is of the type > nat (A, B) → > nat (A+B, B); cf. above and page 170.
2. Alignment rules:
2. 1. > nat aligns with > nat
2. 2. < nat aligns with < nat
3. Consequences: If there is any difference between infinitive clauses and finite dependent clauses in the respect that one can be dependent on verbs of thinking and verbs of speaking whereas the other can be dependent only on verbs of speaking, it is expected that infinitive clauses can be dependent on verbs of thinking and verbs of speaking, whereas finite dependent clauses can be dependent only on verbs of speaking. Q. E. D.

4. NOTES

4. 1. This deduction explains why infinitive clauses can be dependent on both verbs of thinking and speaking, whereas finite dependent clauses can be dependent only on verbs of speaking. NT does not expect the reverse situation; namely, that infinitive clauses would be dependent only on verbs of speaking, but not on verbs of thinking, or that infinitive clauses would be more common after verbs of speaking than after verbs of thinking; cf. above on European languages that allow infinitive clauses after verbs of speaking and also allow infinitive after verbs of thinking (page 171). NT also does not predict that there must be a difference between infinitive and finite dependent clauses in the respect that one of them must be governed by certain governing verbs and the

other not. What it expects is that, if there is such difference, infinitive clauses associate with more natural governing verbs than finite dependent clauses. Languages that do not allow infinitive clauses after verbs of thinking or verbs of speaking are not incongruous with NT, just as languages in which infinitive clauses can be dependent on verbs of speaking and thinking without basic differences between the two verb groups. Such a situation did occur also in Greek; namely, in the Post-Classical period, when finite dependent clauses (as well as infinitive clauses) could be dependent on both verbs of speaking and thinking; cf. Blass/Debrunner/Rehkopf (2001: 326).[1]

4. 2. The interpretation above does not account for the fact that there is a verb of speaking that governs only infinitive clauses in Greek; namely, φημί. In order to explain in terms of NT why the verb φημί governs infinitive clauses more often than other verbs of speaking, one would have to assume that φημί is more natural than other verbs of speaking, even more natural than λέγω. The following can be said about its naturalness:

(1) According to Moorhouse (1955: 180), the meaning of the verb εἶπον "is objective in sense; it means 'speak, utter, tell' . . . φημί is basically subjective 'affirm, maintain, declare, think'"; cf. Kühner/Gerth (1904: 357): ". . . φᾶναι, das nicht das einfache sagen, sondern eine Meinung äussern bedeutet . . ." The verb φημί is therefore closer to verbs of thinking than other verbs of speaking. Note however that Kühner/Gerth (loc. cit.) also state that φημί does not simply mean 'say', which could suggest that there is a verb of speaking with a more simple meaning and consequently a more natural verb of speaking; namely, λέγω.[2]

(2) According to Bornemann/Risch (1978: 259), the negative particle is transferred from the dependent clause into the main clause particularly when the governing verb is φημί. As already mentioned, corresponding phenomena in Modern Greek and English occur particularly when verbs of thinking are used in the governing clause. This contrast is less striking when it is taken into account that the meaning of φημί is close to verbs of thinking. In addition, this could suggest that φημί is more natural than other verbs of the semantic group; see criterion (C), page 170. Nevertheless, Schwyzer (1959: 593) groups φημί along with several other verbs that allow the negative particle to be transferred from the dependent clause into the governing clause.

(3) The verb φημί is highly natural in the morphological respect. First, it is an irregular verb; very natural verbs (such as the most natural verb 'be') are often irregular. Second, some forms of the verb φημί are enclitic, similar to some forms of the most natural verb 'be'; other verbs of speaking are not enclitic. An enclitic word is more natural than a non-enclitic, according to principle (B) of least effort. In addi-

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[1] I found no data in the sources consulted to indicate that, while the infinitive was disappearing from Greek, infinitive clauses were increasingly frequent after verbs of speaking than after verbs of thinking.

[2] However, the term 'simple' must not be understood as a commonsense term. A verb that is partially a verb of speaking and partially a verb of thinking can be understood as more natural than other verbs of speaking because such a verb is less accurate than other verbs of speaking; cf. criterion (A).

tion, φημί belongs to a very small group of athematic verbs without reduplication in the present. A unit belonging to a small class is more natural than a unit belonging to a large class; see criterion (E), page 170.

(4) Judging from TLG, λέγω was more frequent than φημί in 5th-century Greek. I found 16,971 occurrences of the former and 10,902 occurrences of the latter. However, these data are based on rather limited sources and may not be conclusive. See also the remark on criterion (D), page 170; namely, that what is natural (according to other criteria) is not necessarily frequent.

5. CONCLUSIONS

NT can provide an explanation of why infinitive clauses in Classical Greek can be governed by both verbs of speaking and thinking, whereas finite dependent clauses can be governed only by verbs of speaking. Its explanation is that infinitive clauses and finite dependent clauses are a pair of syntactic variants, the former being more natural than the latter. In addition, verbs of thinking are more natural than verbs of speaking. It is expected that the more natural variant associates with more natural parameters, which in this case are verbs of thinking used as governing verbs. The reverse situation is not expected. In several respects, although perhaps not in all of them, the verb φημί is more natural than λέγω.

This could be the reason why it governed only infinitive clauses in Classical Greek.

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Summary

SYNTACTIC VARIANTS AND NATURAL SYNTAX: GREEK INFINITIVE CLAUSES DEPENDENT ON VERBS OF SPEAKING AND THINKING

This paper explains a very well-known feature of Classical Greek syntax from the perspective of Natural Syntax. Most grammars of Classical Greek state that infinitive clauses could be dependent on both verbs of speaking and thinking in Classical Greek. In contrast, finite dependent clauses (introduced by ὅτι/ὡς) could be governed only by verbs of speaking. However, one verb of speaking that regularly governs infinitive clauses is φημί 'say'. In terms of Natural Syntax, infinitive clauses are more natural than finite dependent clauses. The scale > nat (infinitive clause, finite dependent clause) is supported by the criterion of favorable for the speaker and the hearer (criterion A) and the criterion of integration into the clause (criterion D). In addition, verbs of thinking are more natural than verbs of speaking. The scale > nat (verbs of thinking, verbs of speaking) is supported by the criterion of integration into the clause (criterion C), the criterion of frequency (criterion C), and the criterion of favorable for the speaker and the hearer (criterion A). Natural Syntax predicts that the more natural syntactic variant (i.e., infinitive clauses) associates with more natural parameters (i.e., verbs of thinking) than the less natural syntactic variant (i.e., finite dependent clauses). This type of alignment rule is called parallel alignment. In addition, most of the criteria applied indicate that the verb φημί 'say' is more natural than other verbs of speaking (e.g., it is an enclitic verb). Consequently, it is expected within Natural Syntax that the verb φημί 'say' associates with the more natural syntactic variant (i.e., with infinitive clauses).

Povzetek

SKLADENJSKE RAZLIČICE IN NARAVNA SKLADNJA: GRŠKI NEDOLOČNIŠKI STAVKI, ODVISNI OD GLAGOLOV GOVORJENJA IN MIŠLJENJA

Prispevek skuša z vidika teorije naravnosti razložiti skladenjsko pravilo, ki ga omenja večina slovnic klasične grščine: nedoločniški polstavki so v klasični grščini lahko odvisni od glagolov govorjenja ali od glagolov mišljenja; finitni odvisni stavki, ki jih uvaja veznik ὅτι ali ὡς, pa so lahko v klasični grščini odvisni od glagolov govorjenja, a ne tudi od glagolov mišljenja. Med glagoli govorjenja je izjema glagol φημί 'rečem, pravim'; kot se pogosto navaja, se povezuje samo z nedoločniškimi polstavki. Z vidika teorije naravne skladnje so nedoločniški polstavki bolj naravni kot finitni odvisni stavki. Lestvica > nat (nedoločniški polstavek, finitni odvisni stavek) je v prispevku utemeljena z načelom ugodnega za govorca in ogovorjenega (načelo A naravne skladnje) in z načelom včlenjenosti v stavek (načelo C naravne skladnje). Velja tudi lestvica > nat (glagoli mišljenja, glagoli govorjenja). Utemeljena je z načelom včlenjenosti v stavek (načelo C), z načelom pogostnosti (načelo D) in z načelom ugodnega za govorca in ogovorjenega (načelo A). Na podlagi obeh lestvic naravnosti in na podlagi pravil vzporednega ujemanja se v naravni skladnji pričakuje, da se bolj naravna skladenjska dvojnica (nedoločniški polstavki) povezuje z bolj naravnimi parametri (glagoli mišljenja) kot manj naravna skladenjska dvojnica (finitni odvisni stavki). Glagol φημί 'rečem, pravim', ki se v klasični grščini kot edini izmed glagolov govorjenja povezuje samo z nedoločniškimi polstavki, se z vidika naravnosti od drugih glagolov govorjenja loči po vrsti parametrov (npr. je enklitika); v večini parametrov je bolj naraven kot drugi glagoli govorjenja, zato se v naravni skladnji pričakuje, da se povezuje z bolj naravno skladenjsko dvojnico (t. j. z nedoločniškimi polstavki).