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Rhetorical Questions and the Grammaticalization of Interrogative Pronouns as Conjunctions in Indo-European*

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1. Some discourse functions of rhetorical questions

The technique of employing rhetorical questions can be claimed to be cross-linguistically universal both in oral and written discourse. As it turns out, the importance of rhetorical questions is not restricted to the pragmatics of human speech; rhetorical questions also play an important role in historical syntax because they provide an important source of new syntactic structures. By way of ellipsis and phonetic reduction, rhetorical questions may turn into discourse particles and conjunctions. It is the intention of the present paper to investigate such cases. Before we survey a number of relevant cases, it is necessary to digress very briefly on the notion of a rhetorical question. A rhetorical question in the broad sense is a question for which the speaker does not request an answer from the addressee¹. We have to distinguish further between two basic types of rhetorical questions. First, there are rhetorical questions in the narrow sense of the term, such as "Would anybody stand in a freezing river at five o'clock by choice?", that is a question the answer to which is obvious and implicit in the question itself, put differently a pseudo-question. The answer to this standard type of rhetorical question is not made explicit by the speaker, and usually rhetorical questions of this sort serve a social function of one kind or another. The catalogue of different functions includes *emphasis* (in the case of a question like: "Do two wrongs make a right?"), *intensification* ("Are you crazy?"), *criticizing* ("Do you really think so?"), and *ridiculing* (in the case of nonsensical questions: "Have you ever taken a shower with a raincoat on?").

In contrast to this type of rhetorical question there is a second type the answer to which is **not** implied by the question and therefore is made **explicit**

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¹ Cf. recently Bussmann (1996: 408f).

by the speaker himself/herself. An example would be the monologue: "Snow is white. **How come?** Well, snow reflects most of the light." Questions of this kind do not serve a social function at all. Instead, they function as mere discourse-markers that serve to announce an explanation or a clarification, with the intention of arousing the attention of the addressee, and appealing to the addressee's intellect to be attentive, understanding, and recollective of the answer. It therefore seems appropriate to term this type of question as "epexegetic questions" (since they introduce a clarification) or as "stimulus questions" in view of their stimulating function².

It is possible to draw further distinctions between the questions of the first and of the second kind with reference to phonetics and syntax. The differences are summarized in the matrix below. Thus, questions of type A are usually elaborated questions, whereas the stimulus questions are prone to elliptical and phonetic reduction. Second, questions of type A tend to remain syntactically independent, whereas stimulus questions show a propensity for being integrated into the following clause, as we shall see in this paper.

² The term "Stimulusfrage" has been introduced by Meibauer (1986: 178): "Stimulusfragen kommen häufig in Textanfängen vor und sollen den Leser anregen, über ein Problem nachzudenken", cf. the term "appellative question" (Herring 1991: 259). It is to be noted however that Meibauer (loc. cit.) discounts the Stimulusfrage from the phenomenon of the rhetorical question. According to Meibauer (1986: 163), the basic trait of rhetorical questions is an indirect proposition (indirekte Behauptungen). Since the stimulus question does not convey any indirect propositional content, Meibauer (1986: 178) concludes that stimulus questions are not rhetorical questions. This view is probably responsible for the fact that the stimulus question has been considered a marginal issue and has not received any detailed treatment so far. Nonetheless, the absence of indirect propositional content does not preclude that the stimulus question serves an indirect illocutionary function. Since by virtue of being a stimulus the stimulus question does have an indirect illocutionary force, it seems justified to count the stimulus question among the rhetorical questions. In contrast to the indirect propositional function of rhetorical questions, the function of stimulus questions has to be perceived as a communicative one (stimulus) and a structural one (stimulus questions functioning as information chunking devices, marking the transition from the thematical to the rhematical content, cf. Schwitalla 1984: 149, 153).

	a) pseudo question	b) epexegetic/stimulus question
EXAMPLE	<i>Do two wrongs make a right?</i>	<i>Snow is white. How come? Well, snow reflects most of the light.</i>
content/ answer	is implied and not given by the speaker	is not implied and is provided by the speaker
pragmatic function	social interaction, i.e.: accusing, ridiculing, intensification/emphasis	discourse marker, marking change of discourse mode to an explana- tion
phonetics	elaborated question	prone to elliptical reduction and phonetic reduction (erosion)
syntactic integration	lesser degree of syntactic integration	higher degree of syntactic integration

The present paper intends to focus on the questions of type B and to demonstrate that the grammatical discourse structures provide an important source for the emergence of new syntactic structures. In particular, it is quite typical for IE interrogatives to be homophonous with complementizing particles. The homophony can be accounted for by the grammaticalization of a monologue into a syntactic structure. *Why*-, *how*- and *what*-questions gradually turn into function words meaning *because*, *if* and *that*. While the propensity of discourse structures to be grammaticalized as syntactic structures has long been known in general³, it is more specifically the universal role and importance of interrogative phrases that has not been recognized so far⁴. As the following data will show, the ancient Indo-European languages show a recurrent pathway of development whereby interrogative structures constitute the source of later subordinating and complementizing structures. The following case studies serve to illustrate the developmental cycle of “wh-question > particle > complementizer”, and may thus augment the entries “how?” and “wh-question” in the important source-to-target lexicon by Heine & Kuteva (2002: 177f, 249-251).

2. Dialogue/Monologue > Syntactic Structure:

Interrogative Pronoun > Epexegetic Particle > Complementizer

A WHY-QUESTIONS

A1 WHY > BECAUSE

Causal interrogatives may develop into causal conjunctions. A case in point is furnished by Latin *quia* “why?, because” (← **qui* [Schrijver 1991: 83f] < PIE

³ Cf. Givón’s cycle of grammaticalization (1979: 209): “Discourse > Syntax > Morphology > Morphophonemics > Zero”.

⁴ An exception is Herring’s article (1991) studying the reanalysis of rhetorical questions in Tamil as markers of textual cohesion (p. 264ff).

interrogative nom.-acc. pl. n. **k^wih₂*, cf. Greek Megarian *σά* (*μάν*), *Ar. Ach.* 757 784, Boeotian *τά* Pi. O 1, 82 *‘‘what’’ > ‘‘why?’’), which etymologically is an interrogative and is used as such in Archaic Latin and as a poetic archaism later on, whereas it is normal already for the spoken Latin of Plautus to use *quia* as a causal conjunction. A second example is furnished by Latin *cūr* (< Archaic Latin *quōr* < PIE **k^wōr*, cf. PIE **k^wor* > Skt. *kārhi* ‘‘when?’’, Goth. *hvar* ‘‘where’’) which is used as the interrogative ‘‘why’’ in Archaic and Classical Latin, but has come to be used as a causal conjunction in the post-Classical period. Ennius preserves an example of *cur* being employed as a stimulus question. An example of the post-Classical use of *cur* as a causal conjunction is provided by Quintilian. The transition of WHY to BECAUSE is so natural as to recur at different times and places, from Archaic Latin to Classical Latin or from Classical to post-Classical Latin, or even later as in the case of *quare* ‘‘why?’’. The passage from Suetonius in the left-hand column below illustrates the use of *quare* as a stimulus question which was timelessly possible, whereas colloquial spoken Latin apparently had already begun much earlier to use *quare* as a causal particle. The earliest example occurs in the Pompeian inscriptions and is thus datable to before 79 AD. This example foreshadows a use of *quare* which does not become standard until some centuries later.

quia ‘‘why?’’ + cause >

Enn. Ann. 246 Skutsch *quia-nam dictis nostris sententia flexa est*

Why has your opinion been turned by my words?

Verg. A. 5, 13 | *heu, quia-nam tanti cinxerunt aethera nimbi?* |

Why have so many clouds veiled the sky?

cur ‘‘why?’’ + cause >

Enn. frg. varia 17 (Vahlen², p. 215)
Nemo me lacrimis decoret nec funera fletu saxit. cur? volito vivos per ora virum

Let none embellish me with tears, or make a funeral with wailing; Why? I am flying around alive from lips to lips of men.

quia ‘‘because’’ + cause

Pl. Cist. 102 *mea mater iratata mihi, quia non redierim ...*

My mother is upset about me because I haven't returned yet.

cur ‘‘because’’ + cause

post-Classical Latin Quint. inst. 1, 3, 15
... ut pueri non facere quae recta sunt cogantur, sed cur non fecerint, puniantur.

Quintilian criticises ‘‘that they don't force the pupils to do what is right, but that they rather punish them, because they haven't done it.’’

quare "why?" + cause >

Suet. *Tib.* 59 *non es eques; quare? non sunt tibi milia centum.*

You don't belong to the order of knights?

Why? You don't have ten thousand sesterces.

quare "because" + cause > Middle

French *quar/ car* > French *car*

colloquial Latin CIL IV 2421 (before 79

A.D) *Rufa ita vale, quare bene felas*

Thus farewell, Rufa, for you are a good sucker. (Väänänen 1966: 126)

Peregr. Aeth. 40,2 *arguit Thomam, quare incredulus fuisset.*

He attacks Thomas, because he has been unfaithful.

The development of a discourse structure into a clause linking strategy is not restricted to (ancient) Indo-European languages. Japanese, to name just one prominent example, is strikingly similar in that it may use certain interrogative locutions much in the same fashion as causal conjunctions.

Japanese *naze-ka* to *kiku/iu*

why-inter.ptcle quot.ptcle ask/say

If you ask/say why...

Ashita, tōkyō ni iku. naze-ka to

kiku/iu to, omatsuri ga aru, kara.

Tomorrow, I'll be going to Tokyo, for there's going to be a celebration, therefore.

The technique and the mechanism behind this development was explained by Wackernagel⁵ a century ago. We start out with a discourse structure consisting of a rhetorical why-question and a paratactically joined explanation, put differently a stimulus question plus clarification (left-hand column above). In an intermediate stage, the why-question is grammaticalized as an explicative-causal particle (cf. below A2 Toch. A *kuyalte* and D3 *quippe*). Finally, the explicative particle may turn into a subordinator (right-hand column above). Syntactically, the entire course of events is to be subsumed under the phenomenon of "clause fusion". In the following, the term *clause fusion* will be applied in a broader sense to designate the coalescence of any two clauses, be they coordinate clauses or a pair of superordinate plus subordinate clauses. Clause fusion is a diachronic process whereby (a) one of the two coordinate clauses is grammaticalized as a constituent of the other clause or (b) the superordinate clause is grammaticalized as a constituent of a subordinate clause⁶. As will be shown,

⁵ Wackernagel (1897: 22 [KS I 783], 1912-13: 267f [KS II 1244f]), cf. Ernout & Thomas (1997: 298).

⁶ The term clause fusion is used by Harris & Campbell (1995: 172) in a somewhat narrower sense and basically focuses on the grammaticalization of auxiliaries from earlier matrix clauses: "Clause fusion is a diachronic process in which (a) a biclausal surface structure becomes a monoclausal surface structure; (b) the verb of the matrix clause becomes an auxiliary, that of the subordinate clause becomes the main (lexical) verb." Among the factors motivating clause-fusion, the most important factor may be seen in the degree of pragmatic relevance. As Auer has convincingly

stimulus questions are very susceptible to clause-fusion in accordance with the expectation that stimulus questions should show a higher degree of syntactic integration.

A2 WHAT IS TO BE DONE > WHAT'S UP > WHY > BECAUSE

The East Tocharian interrogative pronoun *kyal* is synchronically still transparent as an interrogative clause consisting of an interrogative pronoun *ku-* "what" plus first verbal adjective *yal* "to be done":

Toch. A *kyal* [te] < PIE **kʷid ieh₁lom* [teh₂i⁷]?" "what is to be done [thus]?"⁸

Regarding the semantics of Toch. A *kyal*, two pathways of development may have led to the attested causal meaning "why":

I) A question inquiring about the job/task/responsibility (*what is to be done*) becomes phraseological. The meaning is generalized to include the circumstances of the situation during which the question is posed (*what is to be done?* > *what's up?*). Subsequently, a semantic shift from *what's up* (circumstances) to *why* (cause) occurred. It is quite natural for modal interrogatives meaning *how* to be used in a causal meaning. A strikingly close parallel is provided by Japanese *dōshite* "why", which ultimately derives from interrogative *dō* "how" plus *shite* "doing" (suspensive form of *suru* "do"), e.g. *Dōshite karera-wa watashi-o ijimeru-no-darō?* "Why are they torturing me?", cf. below Toch. A 101b5.

II) Alternatively, the chances are that Toch. *ku-* was used in a causal sense from the start. This option gains plausibility in light of the widely attested causal use of PIE **kʷid* and the neuter of the interrogative in general: e.g. Mod. Germ. *Was lachst du denn?* (...), Iliad 1. 362 τέκνον, τί κλαίεις, Pl. Mil 1311 *quid ni fleam* (Kühner & Stegmann 1955: 496), Cic. Tusc. 1, 12 *Quid tandem?* "Why?", Skt. *kīm* "why" (*Petersburger Wörterbuch* s.v., cf. Strunk *Fs Narten*:

argued (1998: 292-297), pragmatic relevance may be marked syntactically by syntactic upgrading. Now, in the case of cleft clauses, the center of pragmatic relevance lies in the subordinate clause, whereas the superordinate focal clause is comparatively less relevant. A tendency emerges for the focal clause to be integrated into the subordinate extra-focal clause, thus turning into a non-finite constituent of the extra-focal clause and redefining the extra-focal clause as a main clause. Typically, the process of clause fusion is further accompanied by the ellipsis of single constituents of the fused clause, by univerbation of the remaining constituents and by a further (allegro-style) phonetic reduction of the resultant phonological structure.

⁷ As for Tocharian A *te* see Lühr, *TIES* 7 (1997): 99f. *te* cannot come from **toj*, see Ringe (1996: 80-86).

⁸ Note that the loss of the final dental in the interrogative results from an old sandhi phenomenon: PIE **dj* yields Tocharian *y* on a regular basis.

259), Old Irish *cid* “why?” (DIL 168 II m), Hitt. *kuwat* “why?”, cf. Hebrew *mah* “what, how, why?”.

Syntactically, Toch. A *k_wyal* may have arisen from a cleft interrogative by way of elliptical reduction. For instance, the passage A 92a3 *k_wyal nu tām śurāmyo ... tsāknāsmār?* permits the interpretation as a cleft: “Why [is it] that I’m tortured by my sins?” A shorter and semantically comparable version of this sentence is provided by A 101b5 *k_wyal pālksē nī* “Why are they torturing me?” If augmented by the particle *te*, Toch. A *k_wyal* is used as a rhetorical question with the meaning “Why thus?”, with the answer provided immediately thereafter by the speaker himself, e.g. A 64a3 *k_wyalte: pālkar nātāk* “Why thus? Look, master, ...”. Toch. A *k_wyalte* shows the further development into a causal particle, and as such, it is frequently preposed to a conjunction or relative pronoun, e.g. *k_wyalte kusne/ k_wyalte äntāne (māmtne/ kuprene/ kosne)*. This usage immediately calls to mind Latin *quippe qui, quippe cum* as an independent parallel⁹. It may even be the case that the use of Toch. A *k_wyal* has further been extended to that of a subordinating causal conjunction, as was suggested by Sieg/Siegling/Schulze (1931: 187 §315) for the passage A 111b5 [*u*]mpar brāhmam tu, *k_wyalte mā yat lānt watku* “You are evil, Brahman, because you don’t execute the king’s command”.

A3 HOW [HAS IT] COME THAT > HOW COME > WHY

A parallel for the elliptical reduction of the focal part of cleft causal interrogative clauses is offered by English interrogative clauses with the colloquial and informal *How come* as an emergent new interrogative. *How come* can be conceived of as the abbreviated version of a cleft construction such as *How has it come that* (= German *Wie kommt es, dass*), e.g. *How come he doesn’t know that?* (< ***How has it come that he doesn’t know that?*).

B HOW QUESTIONS

B1 HOW > adversative, interrogative particle (Latin *at qui* and *atqui*)

We have seen so far that a stimulus question meaning WHY may turn into a function word meaning BECAUSE. In parallel fashion, a stimulus question meaning HOW may eventually turn into an adversative particle meaning HOWEVER or even into an interrogative particle. A model case is provided by Archaic Latin *at (pol) qui?* > Classical Latin *atqui* which is mainly used as an adversative particle in Classical Latin “however, now”, but comes closer to a question in Archaic Latin. This comes as no surprise: Etymologically *atqui* is made up of the adversative particle *at* and the instrumental of the interrogative *qui*

⁹ As for *quippe* see below D3.

(< PIE proclitic $*h_2et^{10}$ + $*k^sh_1$, cf. Leumann, Hofmann & Szantyr 1965: 493f, *ThLL II* 1090, 59ff). The Archaic Latin use of *atqui* is quite consistent with this etymology. In Archaic Latin *at qui* or *at pol qui* expresses the speaker's skepticism about what has been said before, and at the same time, it introduces and emphasizes the speaker's own contrary point of view which is instantly added after *at pol qui*? Thus, in the following example, Amphitruo rejects the slave's advice to give in with *at pol qui*?, adding his own contrary assessment of the situation (*But how [does that make sense]? That's for sure: she'll be nagging*):

Pl. *Amph.* 705f ... *at pol qui*? : *certa res* | *hanc est obiurgare* ...

Or in another example, Gripus refuses to cooperate "I won't listen". This refusal is then countered by Trachalio with *at pol qui*? expressing strong dissent. Trachalio goes on to state directly what he demands Gripus to do:

Pl. *Rud.* 946 GRIPUS: *non audio*. TRACHALIO: *at pol qui*? *audies post!*
 GRIPUS: I won't listen. TRACHALIO: *But how [about that]?*
 You will certainly listen later.

The functional range of *atqui*? need not be restricted to the described adverbial use. In some examples *atqui* comes close to an interrogative particle:

Ter. *Heaut.* 729 *atqui* (?) *tu hanc iocari credis?*
 But how? Do you really think she's kidding?

In the given example *atqui* may on the one hand still be understood as a one-word-question, while on the other hand, an analysis with *atqui* as a syntactically integrated interrogative particle seems equally possible. This brings us to our next point: the transition of *qui* into an interrogative particle. The use of *qui* as an interrogative particle, as illustrated by the passage cited from Terence, is not isolated. Parallels are provided by ancient and even Modern IE languages: Tocharian and Polish.

B 2 HOW > Interrogative particle (Tocharian A *as̄si*, Polish *czy*)

In East Tocharian we find an interrogative particle *as̄si*, cf. Sieg, Siegling & Schulze (1931: 190). Toch. A *as̄si* has thus far withstood all attempts at an etymology, but may now be compared to and equated with Latin *at qui* and *atqui* which as we saw above occurs as an interrogative clause in Old Latin. Formally, little stands in the way of equating the two: PIE $*h_2et$ + $*k^sh_1$ > Tocharian A interrogative particle *as̄si*. In light of Toch. A *nās̄i*, pl. *nās̄sān* "lady" < $*nātkeyā$

¹⁰ As for the etymology of Latin *at* see Dunkel, *HS* 101 (1988): 54-58 with a list of cognates, from which however Skt. *āthā* has to be discounted, since a segmentation of the former as *āt-hā* is unlikely in light of *yā-thā*, *tā-thā* etc. (Klein 1996: 218ff).

we may assume a palatalization of the cluster *tk* to *śś* before syllabic *y*¹¹. Functionally, the development of an interrogative PIE **h₂et* + **k^hih₁* into an interrogative particle may easily be accounted for by assuming an erstwhile tag question “and how?” which eventually came to be generalized to all polar yes/no-questions. As for a typological parallel, one may refer to the colloquial use of German equivalent of English “How”, i.e. Germ. *Wie* as a tag question which can either occur postposed or preposed:

Colloquial Germ. *Du hast wohl nicht mehr alle Tassen im Schrank? Wie?*
Wie? Hast du etwa nicht gemerkt, dass der Reifen platt war?

Strikingly similar are Tocharian instances of *aśśi* being employed as a question particle in polar yes/no-questions. Note the following example:

MSN 17 [I.5]a7 *hai tālo, k_ncim našt aśśi ...*
 “Hey, miserable one! You are incapable, aren’t you?”¹²

A79b2 *wraśäl ślā aśśi?*
 I have caused [you] pain, haven’t I?

It is noteworthy that the proposed etymology of *aśśi* as a tag question is also supported by syntactic observations in that *aśśi* does not behave like a second position clitic at all, but may be postposed to the verb. And finally, a direct parallel for the assumed development of PIE **k^hih₁* into an interrogative particle is offered by the Polish interrogative particle *czy*. Not only is Polish *czy* etymologically equatable with Tocharian A *-śi*, it also shares with the latter parts of its grammaticalization history. Polish *czy* (< PIE **k^hih₁*) is used as a sentence-initial interrogative particle in direct and indirect yes/no-questions and remains untranslated in German and English. *Czy to jest pan Krakowski?* “Is that Mr. Krakowski?”¹³

B3 HOW > IF

An interrogative pronoun asking for the circumstances of a proposition, e.g., English *how*, may develop into an interrogative asking for the truth of the proposition, e.g., English *if*. This change typically occurs if two conditions are met, i.e., if the *how*-interrogative occurs after a verb expressing a doubt, and second if the verb of the *how* clause is non-preterital.

¹¹ The alleged B counterpart *-atsi* (TEB II) is not related, see Hilmarsson (1996: 53). Adams (1998: 729) s.v. *tsa* does not provide an etymology.

¹² Schmidt’s suggestion that Tocharian A *k_ncim* be rendered as “aus Kuča” (Schmidt, *MSS* 59 (1999): 110 and *Kratylos* 46 (2001): 80) has recently been refuted by Pinault (2002: 324-325, 335-340).

¹³ Further typological parallels come from Indic and Iranian, cf. Etter (1985: 123-133) and Bartholomae *Wörterbuch* 435-436.

- You are in favor of tax increases,
but I'm dubious about that:
"How can the economic situation be improved
by tax increases?"*
- > *You are in favor of tax increases,
but I'm dubious
if the economic situation can be im-
proved by tax increases?*
- Er fragte: "Wie? Hat sie etwa einen Rück-
fall erlitten?"*
- > *Er fragte, ob sie einen Rückfall erlitten
hat.*

A case in point is furnished by Polish *czy* "if, or", Ukrainian *чи* "if", and Old Russian *ѣ/а*¹⁴, all of which go back to the PIE instrumental of the interrogative **k^hi^h*, "how?"¹⁵ and represent extra-paradigmatic archaisms beside the re-fashioned forms in the paradigm of the interrogative¹⁶. The tendency of stimulus questions to be grammaticalized as interrogative particles recurs with other questions as well.

B4 HOW > THAT (Albanian *se*)

Alb. *se* either serves as a generic inanimate interrogative after prepositions (e.g. Alb. *me se* "with what"¹⁷) or as a conjunction, causal "because" (Lambertz 1959: 163) or as a complementizer after declaratives (Lambertz 1959: 173). The phonological interpretation leaves several possibilities for reconstructing Albanian *se*. In light of the attested functions of Alb. *se*, it seems possible to narrow down the number of possible proto-forms. Thus, the interrogative use of Albanian *se* after prepositions may suggest a frozen case form of the interrogative, either an ablative (of/from what) or an instrumental (with what). Both the ablative and the instrumental could be used as causal complements, thus accounting for the use of *se* as a causal conjunction. As for the further transformation of causal conjunctions into complementizers after declarative verbs, compare Homeric Greek *οὐνεκα* (Kühner & Gerth 1955: 356),

¹⁴ On the latter see Vondrák 1928: 452. The word-initial *ε*- instead of expected *ě* has been explained by *cokan'e* (Vaillant 1950: 40) and by analogical influence of *čě* < PIE **k^hoj* (Vaillant 1977: 242) on which see below §4.2 B4.

¹⁵ Alongside PIE **k^hi^h*, (Poln. *czy*, OE *hwī*, Lat. *quī*, Alb. *si* "how?", Toch. A *aśśi*), the individual languages attest to stem/ablaut-variants PIE **k^heh¹*, (Goth. *he* "with whom, with what?", Old Icelandic *hvé* "how?", Greek Doric *πῆ* "where") and PIE **k^hoh¹*, (OSax. *wō*, OHG *wuo* "how?", Latin, *quō* "where to", Greek. *πῶ* "where?"). All three instrumental forms are attested in the same meaning "how?". Yet it is quite likely that the formal variation conceals an earlier functional differentiation according to which **k^hi-/*k^he-* was inanimate substantival, whereas **k^ho-* was animate and adjectival, cf. Rix (1992: 187).

¹⁶ Polish *czym*, Old Russian *čem*, OCS *čimъ* all represent remodellings on the basis of the relevant demonstrative pronouns, cf. Aitzetmüller (1991: 123).

¹⁷ Demiraj 1997: 353, cf. Toch. B *mäkte* "how" ← **"with what"*; as for Toch. *mä-*, cf. Hackstein (2003: ad p. 451f), Balles 1999: 139f, Matzinger, *Die Sprache* 40,1 (1998): 114.

compare Homeric Greek οὐνεκα (Kühner & Gerth 1955: 356), Hellenistic Greek διότι, and Latin *quia, cur*.

- Alb. *se* ← **qe* < PIE ablative **k̑ōt* or instrumental **k̑óh₁* (Latin *quō* ‘where?’)

The only drawback of this analysis lies in the phonological difficulty in accounting for the onset of Albanian *se*. Alternatively, one may propose to identify Albanian *se* with Greek πῶς. Under this analysis, the analogical change of **qe* to *se* could be attributed to the nearby synonymy between *se* and *si* ‘how’ and to a resulting analogical refashioning of Proto-Albanian **qe* after *si* ‘how’ < PIE **k̑ih₁*. Functionally, the change of ‘how’ to a causal conjunction or a complementizer is typologically well attested. The drawback of the given analysis is that it leaves the prepositional uses of *se* unaccounted for.

- Alb. *se* ← **qe* < PIE adverbial **k̑ōs a*) < instrumental **k̑óh₁* plus adverbial -*s*¹⁸ or **b**) < **k̑oss* < **k̑ot-s* ‘in which manner, in what way’: i.e. PIE acc. **k̑od##* / **k̑o-t/* plus adverbial -*s*. Cf. Greek πῶς ὡς (Vine 1999: 581f argues in favor of a reconstruction **sōs*, as for **sy-* > *s-* cf. however Hackstein 2002: 129f)¹⁹. Tocharian AB *kos* is not directly related to πῶς, since it cannot represent an old monosyllabic formation, cf. Katz, *TIES* 7 (1997): 78 fn. 72. Nevertheless, an equation of Toch. AB *kos* and Greek πῶς is not entirely out of the question since Toch. AB *kos* may derive from a compound structure such as PIE **k̑ō-syo*²⁰, with univerbation of an interrogative and the congruent demonstrative, which is otherwise attested in Toch. B nominative *k_use* < **k̑is so(s)*, and possibly in the genitive *kete* < PIE **k̑oiHos toiHos* (Hilmarsson 1989: 28, differently 1996: 197). The indirect equation Albanian *se*, Greek πῶς, Tocharian *kos* would speak in favor of an inherited form instead of an inner-Greek creation.

¹⁸ As to the origin of the adverbial *s*-morpheme, various proposals have been made. It has been suggested to conceive of the adverbial -*s* as the generalized genitive singular ending (cf. recently Balles 1999: 139 fn. 7). However, in such cases where it is possible to reconstruct adverbial *s*-formations for the protolanguage, it emerges that none of these share the morphological and functional properties of the genitive. Thus, the *s*-morpheme of the distributive numbers is clearly both morphologically and functionally distinct from the genitive singular. Reconstructable PIE forms such as **dui-s*, **tri-s*, **k̑etur-s* are distinct from the relevant genitives. Functionally, the formations in adverbial -*s* have nothing to do with the functional domain of the genitive. This holds especially true for the directional value that can be ascertained for some cases of adverbial *s*-formations, on which see Hackstein (2002: 109 fn. 12), cf. *ChEG* 6 (2001) = *RPh* 75 (2001), p. 160. For a collection of heterogeneous material see Magnien (1929). Note however that many of Magnien’s examples have to be discounted because they are amenable to other explanations.

¹⁹ Oscan *puz ... issoc* is not related, since Oscan <z> presupposes a syncopated final syllable of the structure -*tV/s*, cf. Untermann (2000: 627f).

²⁰ Cf. similarly Hilmarsson *TIES* (1987): 41 and 1996: 168f: **k̑ō-syo*.

Both analyses, i.e. Albanian *se* as “why” or “how” would account for the syntactic use of *se* as a complementizing particle followed by direct speech:

Tue thanë, se: U mzi O Zot 'im ngushlluom

In saying that: I'm hardly consoled ... (Lambertz 1955: 3).

Qeni i thotë macit, se: ti e mban bates onazën,”

The dog says to the cat that: You are holding the ring for the brother (Lambertz 1959: 196).

This particular construction can be quite easily and straightforwardly aligned with the discourse structures surveyed in the above paragraphs and the grammaticalization of discourse structures to syntactical structures (discourse/syntax-interface) in general.

WHERE > WHICH (REL.) > THAT (*Tosk që, Geg qi*)

Alongside *se*, Albanian uses *që* (Tosk), *qi* (Geg, Gjon Buzuk's *missale* (1555) +) as a complementizer. Tosk *që* and Geg *qi* correspond with Albanian *se* in that they complementize object clauses after verbs meaning *say, believe, perceive*, and as in the case of *se*, it is also possible for Tosk *që*, Geg *qi* to be followed by direct speech (Lambertz 1948: 79, 1959: 173).

I tha, që: nga ç vënd je ti?

He said to him (that:) “Where are you from?”

I thotë që: rri edhe ha bukë!

He says (that:) “Stay here and dine with me!”

Since Tosk *që*, Geg *qi* is homophonous with the indeclinable relative pronoun, it has always been presumed that complementizing Tosk *që*, Geg *qi* is also to be identified with a frozen form of the relative pronoun, e.g., with PIE nom. m./f. **k^hoi* = Lat. *qui*. However, the reconstructed proto-form **k^hoi* also permits an identification as a locative, and this option has to be preferred over the nominative interpretation since there are at least two otherwise attested scenarios that may have led up to the development of a relative-interrogative locative PIE **k^hoi* into a complementizer. The first scenario would involve PIE **k^hoi* as a relative pronoun which changes its function from a local relative to a relative and thereafter widens its usage to include complementizing functions, after having been fossilized as a generic all-case-and-gender relative. There are many parallels for the development of the local relative pronoun “where” into a generic relative pronoun, cf. dialectal German *der, wo arbeitet* or *που* in Modern Greek. Furthermore, cross-linguistically, it is quite typical for relative pronouns to develop into complementizers and to be homophonous with complementizers. A table illustrating “the overlap in the forms that function as complemen-

tizers, definite markers, and relative clause markers” in German, Yiddish, English, and several non-IE languages is provided by Frajzyngier (1991: 236). The second scenario would not start from a relative pronoun, but from an interrogative PIE **k^oi*. Lithuanian attests to a two-stage development according to which PIE **k^oi* (augmented by a particle **po*, cf. below fn. 27) first undergoes a functional shift from a local interrogative “where (now)” to a modal interrogative “how (now)” (Lith. *kaip* “how”²¹) and then, in Old Lithuanian, expands its functional range to include the function of a complementizer after declaratives, e.g. *Angelai pemenimus pasakie... , kaip: panas Jesus Christus dos mumus druktibe* “The angels told the shepherds, that: Our lord, Jesus Christ will bestow strength on us” (Mažvydas, ed. Gerullis, p. 74, 1-3).²² There is a wealth of parallels for the transition of a modal interrogative to a complementizer. The Slavic languages share the Baltic development of PIE **k^oi* into a modal interrogative, but differ in that they develop PIE **k^oi* into a concessive particle “nevertheless, however” (OCS (a) *čě* “und doch obwohl”, s. LLP I: 66 and IV: 832, cf. Vaillant 1977: 242 §1464²³). For the pertinent functional shift, a textual setting such as the following might have been prototypical:

A	<i>I'm rich.</i>	<i>I'm rich.</i>
B	<i>But where(in)? ></i>	<i>Nevertheless,</i>
C	<i>I don't have any money.</i>	<i>I don't have any money.</i>

I.e. a textual setting in which question B serves to convey the speaker's deliberative attitude and skepticism about proposition A which is then immediately made explicit by proposition C which contains a qualification of A.

C WHICH OF THE TWO > WHETHER

A stimulus question meaning WHICH OF THE TWO ALTERNATIVES may turn into a particle complementizing alternative questions. Model cases are provided by Germanic (Old and Middle High German *hwedar*, *weder*, Old English *hwæðer* (Behagel 1928: 334-335, Paul, Schröbler, Wiehl & Grosse 1998: 419-420)), Greek *πότερον*. Classical Latin employs interrogative *utrum* to introduce indirect alternative questions. Latin *utrum* goes back to an originally autonomous one-word question meaning “Which of the two?” just like its English cognate *whether*. Ancient Greek and Sanskrit preserve the etymological corre-

²¹ As for the semantic shift, cf. Greek interrogative *ποῦ* (1) “where?”, (2) “how?”, and the local indefinite adverbs *ποῦ* and *ποθί* “somewhere” > “somehow” (e.g. *αἶ κε ποθί* Od. 1.379, 2.144 +) or Modern German *Irgendwo* [= *irgendwie*] *haben Sie Recht*.

²² For the historical development and the functional range of Lithuanian *kaip* see Hermann (1912: 73-78).

²³ The otherwise customary equation of OCS *čě* with Greek *καί* (cf. Schwyzer 1950: 567 fn. 2, Aitzetmüller 1991: 28, 192 Fn. 285) has to be abandoned.

spondents of Latin *utrum* as plain interrogatives: Greek *πότερον*; “which of the two?”, Sanskrit *katarād?* And in Old Latin there are in fact scant residuary instances of *utrum* being used as an autonomous interrogative.

Ter. Eun. 721 *Utrum?* | *Taceam-ne an praedicem?*

“Which of the two? Shall I be quiet or shall I speak up?”

Note that the sentence boundary after *Utrum* is proven by the enclitic particle *-ne* (bold print) which occurs in second position thus indicating *taceam* to be the beginning of the clause. In Classical Latin however, *utrum* is solely employed to introduce an indirect alternative question.

D WHAT-QUESTIONS:

D1 Stimulus Question WHAT [IS IT]? (HOW COME?)

In light of the technique of employing *why*- and *how*-questions as epexegetic discourse markers, it comes as no surprise to find that *what*-questions may show a parallel grammaticalization history which is amply documented in Indo-European. At the onset, we find tripartite textual structures (macro structures) consisting of a proposition, a what-question, and the explanation. This textual structure turns out to be quite useful for didactic purposes because the simulation of a teacher-pupil dialogue is very apt to stimulate the addressee’s motivation and ability to learn. The illocutionary force of the question is used to prompt the addressee to find an answer, thus serving as an incentive. It is therefore not fortuitous to find that the tripartite schema recurs independently in didactic literature as a *σχῆμα διδακτικόν*, in Tocharian Buddhist literature (*Abhidharma* and *Karmavācana*) and in Early Modern German Christian literature, in Martin Luther’s *Kleiner Katechismus* (1526), Weimarer Ausgabe vol. 30,1 p. 239ff:

A) Explanandum: citation or technical term + B) Question *What is that?* + C) Explanation/ answer

Toch. B 192b1 MQ A) *rūp* “Rūpa”
 (cf. TEB II, p. 68 Nr. B) *te k_{we} ste?* “This, what is it?”
 27,6, Couvreur 1954: C) *śtvāra mahābhūtānta śtvāra mahābhūtāntamts tetan-*
 113) *māṣṣuwa śak āyatanta, avijñāpti rūpā ṣ po te tot rūp westrā.*
 “The four great elements, and the ten *āyatanas* generated by the four great elements, *avijñāpti* and *rūpā*, all this is termed Rūpa.”

Martin Luther, A) *Unser teglich brod gib uns heute,*
 Weimarer Ausgabe B) *Was ist das?*
 vol. 30,1 p. 373 C) *Antwort: Gott gibt teglich brod auch (...) allen boesen menschen. (...)*

D2 Stimulus questions and explicative particles (Greek *τί ταῦτα*; Latin *quid quod*, Sanskrit *kim ca*)

It is not hard to find further analogues to the textual structure and strategy employed by the Tocharian buddhists and Martin Luther alike: A somewhat shortened and condensed version of the *schema didaktikon* forms part of the rhetorical repertoire of many languages. It is found for instance in dialogue passages in Ancient Greek literature, as exemplified by the following passage from Euripides, which provides a rhetorical *τί ταῦτα* question plus a clarification immediately added to it:

Greek stimulus question *τί ταῦτα*; "What [is] this?" + answer, e.g. E. *Ph.* 382 ἀτὰρ τί ταῦτα; δεῖ φέρειν τὰ τῶν θεῶν.

The same practice is even more commonly used in Classical Latin. Cicero makes wide use of rhetorical *quid quod* questions or just simple *quid* questions, all of which serve to raise a new issue in an enumeration and to establish new thematical rubrics in the framework of a discussion:

(1) *Quid [id] est quod?* "[And] How about it that ...?" Pl. *Ru.* 1216, (2) *Quid id quod?* Pl. *Pers.* 553, (3) *quid quod?* Cic. *Off.* 3, 25, 94, (4) *quid?*²⁴ Cic. *Tusc.* 2, 37.

So far, it has not been noticed that Latin *quid quod* has an analogue in the Hittite locution *kī kuit* "as regards" which serves as a topicalizing construction. The precursor of this construction is a syntactically independent homophonous interrogative clause *kī-wa kuit* "what [is] this?"²⁵ By way of syntactic integration and clause fusion the erstwhile interrogative phrase *kī kuit* turns into a subordinating topicalizing function word.

Similarly, Sanskrit uses the neuter interrogative *kim ca* as an explicative/additive particle. *kim ca* goes back to a stimulus question "And what?" and serves to introduce citations. It either remains untranslated or is rendered as "moreover, and also"²⁶.

Returning to Latin again, it is possible to point out a close parallel to Sanskrit explicative *kim* which appears in the guise of the Latin particle *quippe*.

²⁴ Cf. Kühner & Stegmann (1955: 277, 306f), Hofmann (1926: 66f).

²⁵ For attestations see Ünal (1978: 54-99), Puhvel (1997: 4).

²⁶ Cf. *PW* p. k-65 s. v. *kim ca* and Speijer (1886: 338f). See also Speijer *loc. cit.* 322: "Sanskrit has a pronounced predilection for rhetorical questions."

D3 Stimulus question Latin *quippe*

Latin *quippe* originates from a paratactic interrogative clause PIE **k^hid pe*²⁷? “What there?” and acquired an explicative causal meaning and subordinating force. Again, as in the case of Latin *utrum* and Latin *quia*, its exact Greek equivalent preserves the original interrogative function: Homeric τίπτε; “what, why”. Before we turn to the syntax of *quippe* some remarks on the etymology seem to be called for, especially since there exists an alternative analysis of the latter. Thus, Brugmann (1930: 618) has suggested deriving *quippe* from *qui-pe* by the littera rule. According to this derivation, *quippe* would have to be associated not with *quid* but with the instrumental *qui*. Brugmann’s idea seems however questionable on formal grounds. The preform posited by Brugmann would in all likelihood have undergone proclitic shortening early enough for it not to provide an input to the littera rule. Apart from the fact that proclitic shortening operated before iambic shortening in Archaic Latin (Lat. *quam si* > *quā^m si* > *qua -sī* [proclitic shortening] > *quāsī* [iambic shortening]), there are indications that proclitic shortening might even be older than that because the same phenomenon can be observed in Greek, Luvian and Tocharian²⁸. It seems advisable therefore to keep with the traditional analysis of *quippe* as **k^hid pe*?. Besides, it is possible to adduce further independent and formally unequivocal evidence in favor of **k^hid pe*?: Hieroglyphic Luvian REL-*ipa* /*kwipa*/ “indeed, certainly” (Melchert 2002) and Homeric Greek τίπτε²⁹. Let us now turn our attention to the syntactic properties of Latin *quippe*. There are a number of re-

²⁷ **Pronominal stem PIE **pe***: Latin indefinite pronoun *quispiam*, *quaepiam*, *quippiam*/*quidpiam* < **k^his-pe-iam* ...; Luvian *kwipa*; Toch. B *sam-p*, *som-p*, *tam-p* “Skt. *aśau* that (one there)”, with Tocharian *-mp* < **-n-pe* (as for *-n*, cf. Toch. A *sam*, and Armenian *ay-n*); note that PIE **mb(h)* yields Tocharian *-m*. Cf. **PIE locative **poj***: Latv. *pie* and phonetically reduced *-p* in the Lithuanian adessive *miškiē-p* “at the forest”, allative *miškió-p* “to the forest”, Hittite preverb *pie* “to(wards), at, by” (Eichner, *MSS* 31, 1973: 78f), Tocharian A copulative particle *-pi*, e.g. *säk we-pi* “12”, lit. “ten two-therewith”. As for Proto-Italic **-dp-* > Latin *-pp-*, cf. Archaic Latin *topper* (Ennius) “speedily, forthwith” < **tod per*, and Latin *appellare* < **ad-pellare*.

²⁸ Proclitic shortening is to be subsumed under the phenomenon of rightward accent shift in proclitics, and applies both to monosyllables (a) and polysyllables (b):

a) *sī-quidem* → *sī-quidem*, Latin: ablative *sēd* (*reflexive pronoun) “by/from itself” > proclitic conjunction *sēd* “but”, cf. Leumann, Hofmann & Szantyr (1965: 271).

Tocharian B: *mā* + *-nta* → *ma-nta* “certainly not, not at all”.

b) CLuvian adverb *ánnan* “below” → *annán pádanza* “below the feet” (Craig Melchert, p.c.)

Cf. Greek: rightward shift of accent in proclitics, ἄλλα “other(s)” → proclitic ἀλλά “but”, ὑπο → proclitic ὑπό, s. Hackstein, *Kratylos* 45 (2000): 101,

Lat. *pópulus* + *-que* → *populúsque*

Avestan *ašāt* + *-cā* → *ašāat-cā* etc. (Hofmann & Forssman 1996: 113)

²⁹ The formal and syntactic development of Homeric Greek τίπτε will be subject of another study.

siduary cases in which *quippe* is used as an autonomous paratactic one-word clause prefacing an explicative *enim* sentence, cf. the following passage from Lucretius. The assertion that *the sun draws off a large portion of water* is followed by *quippe* "How come?" and an explicative *enim*-sentence *videmus enim* with *enim* as a second-position clitic (Kühner & Stegmann 1955: 120) marking *videmus* to be sentence-initial.

Lucr. 6. 616ff *Praeterea magnam sol partem detrahit aestu|*
 Quippe. Videmus enim ...

In other words, the prior and original function of *quippe* as a one-word-stimulus question is at least formally still preserved in the guise of the syntactic peculiarity of *quippe* plus *enim*-clause. One could think of this construction as an exclusively poetic archaism, but this need not be the case, for the same construction is used by Cicero:

Cic. *Fin.* 4. 7 *ista ... a ... te apte ac rotunde (sc. dicuntur).*
 Quippe. Habes enim a rhetoribus.

You have put that in nice and elegant terms. What (is it)?
 (How come?): You have adopted it from the orators."

And what is even more remarkable: Cicero presents one instance of *Quippe* being prefixed to a *Quid*-question, in which case one might argue that it was still possible for the Classical Latin period to feel and partially preserve the status of *quippe* as a stimulus question:

Cic. *Caec.* 55 *Quippe?: Quid enim facilius est quam probari ...?*
 cf. Cic. *Att.* 13,10,1 *Quid? Tibi Servius quid videtur?*
 Cic. *Att.* 2,16,2 *Quid? Hoc quemadmodum obtinebis?*

For our present purposes it is important to note two things: first, *quippe* has originated as a STIMULUS QUESTION and there are cases in which it still is used as such. Second, *quippe* is at least originally followed by sentence-boundary. Besides these relic cases, the grammaticalization of *quippe* as an explicative-causal particle has run its course.

3. Summary

The phenomenon that dialogue structures are grammaticalized as syntactic structures recurs timelessly and independently in different branches of Indo-European, and we find it in accordance with non Indo-European languages as well. But what proved to be most important for our present purposes: the given context contributes to the formal understanding of single function words, both as regards their etymology and their syntactic behavior.

DISCOURSE > SYNTAX

- A. WHY? > causal conjunction (*quia, cur, quare*)
- B. HOW? > adversative (*atqui*),
> interrogative particle (Pol. *czy*, Toch. A *aśśi*)
> complementizer "that" (Alb. *se*)
- C. WHICH OF THE TWO? > interrogative particle, alternative questions
(Lat. *utrum*)
- D. WHAT? > explicative (lat. *quid quod*, Skt. *kim ca*)
> causal particle/ interrogative (Lat. *quippe*,
Greek *τίπτε*)

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