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Cover: See Barber and Barber in this volume

From Discourse to Syntax: The Case of Compound Interrogatives in Indo-European and Beyond[1]

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This study examines the syntacticization of textual (mono-, bi-, and triclausal) discourse structures involving interrogative clauses. In particular, it is short rhetorical and focal interrogative clauses that often undergo desententialization and develop into function words (§1). While it is typical for rhetorical questions to develop into conjunctions, focal interrogative clauses can be shown to be among the typical source constructions for interrogative particles and pronouns. The pertinent pathway of development leads from what looks like pleonastic interrogative constructions to new fused interrogatives having the outward appearance of pronominal clusters (§§2, 2.1). The desententialization of interrogative clauses permits a new analysis of constructions containing an interrogative plus a coreferential demonstrative. In many IE languages, these constructions occur either in the guise of juxtaposed interrogatives and demonstratives (Latin, Greek, Indic) or as fused new interrogatives (e.g., Slavic, Albanian). Also among the latter cases are the Tocharian interrogatives (e.g. TB *mäksu* 'of what sort') built on the PIE interrogative stem *mo- 'of what sort [sg.]' and likewise hinting at an earlier clausal value (§2.2). The resulting etymologies shed new light on the integration of *mo- into the PIE system of pronouns. PIE *mo- can be shown to have formed part of a recurrent scheme of functionally alternating pronominals: *mo-, *k^wo-, *H_io-, *so/to- (§§2.2.2ff.). In most branches of IE outside of Anatolian and Tocharian, *mo- has been superseded by *k^wo-.

1.0 It is not only morphemes and single words that can provide the input for grammaticalization, but also larger units, such as textual structures. In fact, it is possible for mini-conversations (or rather soliloquies) to provide the raw models or prototypes for later syntactic structures. An instructive example is provided by the case of polar interrogative clauses, which in many languages can also function as conditionals. The formal overlap of conditionals and polar interrogatives can be accounted for by the functional overlap between the two. "Conditionals are topics," as John Haiman has put it in an important article (1978:570-571; Heine and Kuteva 2002:249[2]), and "topics" most often are raised in the form of polar questions. Consider the following example:

I. Discourse > Syntax, syntacticization/ clause fusion without desententialization

A Text: soliloquy S1+S2	→	B Complex clause: conditional S: [[S1>sub] S2>matrix]
S1 Topic: *Do they but see a corner of his hat?* **S2 Comment:** [*if so,*] *they go away happy.*	→ →	**Condition:** . *Do they but see a corner of his hat,* **Consequence:** *they go away happy.* (Haiman 1978:570)

A topic raising question (such as *Do they but see a corner of his hat?*) is immediately commented on by the speaker himself, thus yielding a topic-comment structure. The logical relation between the two clauses allows for a reinterpretation of the topic-comment structure as a sequence of condition plus ensuing consequence. In the end, the textual structure develops into a syntactic structure by changing the intonation of the first clause and reducing the intonational break between the two clauses. What is important in the present context is the transition of a textual structure consisting of several independent clauses into a single complex clause, a phenomenon that may be subsumed under the heading of "syntacticization of discourse structures" or "clause fusion."

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[2]Preempted by others, cf. Kühner and Stegmann (1955:165): "*Man hat vielfach solche Sätze, die sich als Bedingungssätze auffassen lassen, als Fragesätze aufgefaßt. Wie die Alten selbst sie aufgefaßt haben, läßt sich nicht beurteilen, da ihnen die Interpunktionszeichen fehlen.*"

The insight that discourse structures may lie at the base of syntactic structures is not an entirely new one. None other than the famous Indo-Europeanist Jacob Wackernagel drew attention to the transition of one-word interrogatives to causal conjunctions as early as the end of the 19th century. In particular, he was the first to point out the grammaticalization of rhetorical one-word questions as conjunctions, demonstrating that why-questions may develop into causal conjunctions (Wackernagel 1897:22, 1912-13:267f.).

While the emergence of causal conjunctions is also to be subsumed under the phenomenon of syntacticization, there is a significant difference. By contrast to the aforementioned emergence of conditionals, which retain their clausal value, the rhetorical questions under discussion lose their sentential value.

II. Discourse > Syntax, syntacticization/ clause fusion with desententialization

Text: soliloquy **S1+S2+S3**	→	**Complex clause**: causal S [S1>matrix [S2>COMP + S3]]
S1 Proposition *I'm falling asleep.* **S2 Question** *Why?* **S3 Comment** *I'm bored to death.*	→ →	**Matrix clause** *I'm falling asleep,* **Complementizer** *because* **Sub clause** *I'm bored to death.*

While the phenomenon has mostly been dealt with in the framework of individual case studies,[3] it is Talmy Givón's merit to have pointed out the universality of the syntacticization of discourse structures. In his book *On Understanding Grammar*, Givón set out programmatically a cycle of grammaticalization (1979:209) at the beginning of which we find the transition from discourse to syntax:

"Discourse → Syntax → Morphology → Morphophonemics → Zero."

Within the syntacticization of discourse structures, it is interrogative clauses that prove to play a particularly important role, as shown by previous studies[4] and as will emerge in the present study.

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[3]Thus Sankoff and Brown (1976) deals with the emergence of relative clauses from earlier asyndetic main clauses in Tok Pisin.

[4]Cf. Haiman (1978) on the transition from interrogative to conditional clauses, and Herring (1991), who demonstrates for Tamil the incipient or completed conversion of rhetorical or stimulus questions (term as per Hackstein 2004b:168, fn.2) meaning *what?*, *why?*, *how?* to causal, conditional, and other adjuncts. A host of parallels to

Talking to oneself is not pathological, and least of all from a syntactic point of view.

Aside from demonstrating the fundamental analogy between subordinate clause structure and text structure, the phenomenon under discussion has also a bearing on Indo-European historical linguistics. The recognition of interrogative clauses as a typologically frequent source of interrogative pronouns contributes to explaining some special features and morphological oddities of IE interrogatives. Some of the formal idiosyncrasies of IE interrogatives and conjunctions can be accounted for by certain types of syntacticization. More precisely, traces of the erstwhile sentential value may linger on in the compound character of the interrogative. In order to track down the prehistory of compound interrogatives, it is useful to set up a source-target typology, correlating particular types of textual-syntactic settings and the resulting morphological structures, that is: a typology of the desententialization of independent clauses. By desentialization, I mean a process whereby a clause, whether main or subordinate, turns into a non-sentential constituent of another clause. In other words, we are dealing with the lexicalization of a clause; a sentence is gradually univerbated and converted into a word.[5]

1.1 Source-Target Typology of Desententialization

There are three textual settings which prototypically provide the breeding-ground for the desententialization of formerly independent clauses: A) a monoclausal structure, B) a biclausal structure, and C) a triclausal structure.

In section A below, I illustrate and exemplify the desententialization of single sentences, which may be lexicalized as discourse particles or even further grammaticalized as conjunctions. Declarative clauses (A1) and imperative clauses (A2) provide typical source constructions for discourse particles and conjunctions.

A – Monoclausal structure:

A1 declarative clause > discourse particle:

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the Tamil cases set out by Herring come from ancient Indo-European languages, as discussed at length in Hackstein (2004b). Finally, Leuschner (1998) concentrates on conditional/ concessive structures from earlier interrogative structures in modern Germanic languages.

[5] On the gradual process of the desententialization of subordinate clauses cf. Lehmann (1988:193-200).

- English (archaic) *methinks*
- German *ich bitte* 'I beg' > discourse particle *bitte* 'please'; note the drop of the otherwise obligatory first person singular pronoun, cf. Auer (1998:303, fn.35). MHG *dem gote sî lob* literally 'praise be to God' > German *gottlób* 'thank God' with second syllable accent preserving a trace of the earlier clausal value

A2 imperative clause > particle > conjunction:

- English *say*, e.g. *There were say three hundred people listening.*
- German *sage und schreibe* lit. 'say and write!' = 'believe it or not', e.g. *Sie schüttelte sage und schreibe dreihundert Leuten die Hand.*
- Slavic *da*, Tocharian B affirmative *-tsa* < PIE *$déH_3$* 'give!', cf. Hackstein (2001:32-39).
- Classical Armenian *grea t^{c}e* > *gret^{c}e* lit. 'write so!' = 'so to speak'.

Continuing with biclausal source structures (section B below), I set out two scenarios, both of which generate what looks like compound interrogatives. As source constructions we typically find either the focal part of a cleft question (B1) or a simple question (B2), both sentence types developing into non-sentential constituents of the following (formerly) subordinate clause (B1) or main clause (B2).

In B1, we start with a complex sentence, a cleft interrogative, comprising main clause and subordinate clause. The focal matrix clause of the cleft undergoes desententialization and is integrated as an interrogative particle into the formerly extrafocal clause. A standard example is provided by the French interrogative particle *est-ce que*, which arose out of a focal interrogative. Another example is provided by the English colloquial causal interrogative *How come* from earlier *How has it come about that* (cf. 1548 Hall *Chron.* 186 [*OED* III 521 s.v. 21]: *How commeth this that there are so many Newe Testamentes abrode?*) or by dialectal German *wie dass, wo dass*,[6] attested from Middle High German onwards, which is nothing but the shortened version of a cleft interrogative *wie ist es, dass/ wo ist es, dass.*

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[6] On complementizing *wo daz, wie daz* in Middle and Early Modern German, cf. Behagel (1928:149f.).

Examples can easily be multiplied, cf. Harris and Campbell (1995:162ff.).

However, cleft interrogatives are not the only source of compound interrogatives. Another important source construction is provided by simple questions that function as stimulus (or appellative) questions[7] and occur pre- or postposed to another question. In the process of becoming a fixed phrase with fixed collocational use, the stimulus question undergoes cliticization and eventually coalesces with the accompanying question, thereby developing into a non-sentential constituent. This process is exemplified in section B2.

B – Biclausal structure:
   B1 Focal part of cleft question > interrogative pronoun (Hackstein 2004c:95-96, 97-102)

- English *How [has it/ did it] come [about that] you don't know that?*, cf. *OED* VII 453 s v. 19 *how come?* and Hackstein (2004b:173, 2004c:101-102).
- French *est-ce que* in *qu'est-ce que/qui*, see below §2.1.2.
- Middle High German[8] *wie ist es, daz > wie daz*

Parzival 330, 8	... *nu rât mir wie ' daz i ᶜiuwern hulden næhe mich*
	now tell me how [that] I can approach your benevolence
Parzival 394, 8	*bit si sich bedenken wie ' daz si sin alsô behalte*
	she ought to think about how [that] she should deal with him

- German, East Frankish: *Ich kann mich nicht erinnern, was [es ist] das er sagt/ wo [es ist] dass er steht/ wie [es ist] dass es ist*
- Tocharian A *kuyal nu täm* 'why now is it that ...'

   B2 Simple question   > interrogative particle or pronoun (Hackstein 2004c:102-104 §3.2.)

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[7] By stimulus question I mean a subtype of rhetorical questions that serves as a discourse marker. For a definition of the term and more discussion, see Hackstein (2004b:167-169 and fn.2).

[8] Note that in both examples from Wolfram von Eschenbach's *Parzival, wie* and *daz* are separated by end-of-verse breaks.

- PIE *$k^w od$? 'what' and remodelings or derivatives thereof frequently function as interrogative particles in Indo-Iranian languages, cf. Av. *kaṯ* (Bartholomae 1904:435-436), Ved. *kát*, Cl.Skt. *kím* introducing polar questions (Speijer 1886:324-326, 1896:79; Delbrück 1900:261; Wackernagel 1929/30:566 §259e; Etter 1985:123-133), Pali *kiṇ* (Rhys Davids and Stede 1979:212 s.v. kiṇ 2), Hindi *kyā*, Bengali *ki*.

- PIE *$k^w iH_1$ 'how?' > Polish interrogative particle *czy*; e.g. **Czy? To jest pan Krakowski?* → *Czy to jest pan Krakowski?* "Is that Mr. Krakowski?"

There are, however, formally ambiguous cases which, taken at face value, are explainable both according to the B1 and the B2 model. Thus, the Russian sample *Čto éto ty skazal?* literally "What that you have said?" can be viewed as a desententialized focal interrogative (B1); at the same time, one may reckon with the generalization of a desententialized simple interrogative clause as attested in Russian *Čto éto?* "what is that?" (B2). For more pertinent examples see Hackstein (2004c:103). The two possibilities (B1 and B2) are not to be considered mutually exclusive alternatives, for both processes may operate alongside each other in the same language.

Turning to the triclausal structures of section C, we observe that once again interrogative clauses can play a crucial role in the grammaticalization of new function words. Rhetorical questions may turn into causal sentence connectives or into focalizing conjunctions. The direction of this type of change is determined by the textual position of the rhetorical question. Thus, an intermediate position between two propositions favors a causal or explicative interpretation (C1) whereas text-initial position favors reanalysis as a focalizing particle (C2).

C – Triclausal structure

C1: S1 proposition + S2 stimulus question + S3 explanation:

S1 Proposition *I'm falling asleep.*	→	Matrix clause *I'm falling asleep*
S2 Question *Why?*		Complementizer *because*
S3 Comment *I'm bored to death.*	→	Subordinate clause *I'm bored to death.*

- PIE $*k^w id\,pe?$ > Hom. τίπτε 'why?' → causal particle Lat. *quippe*, CLuv. *kwipa* (Melchert 2002; Hackstein 2004b:182).
- PIE $*k^w eH_1\,to[d]\,u$ > *kắ tu*? 'why that?' → TB *katú* 'because, namely', cf. below fn.32 and §2.2.2.4.1.1.

C2: S2 stimulus question + S1 proposition + S3 explanation (Hackstein 2004a:348-354):

S2 Question *How about this?*	→	**Focalizing particle** *Concerning the fact that*
S1 Proposition *The king is sick.*	→	
		Subordinate clause *the king is sick*
S3 Comment *Nobody has noticed it.*		**Matrix clause** *nobody has noticed it.*

- Lat. *quid quod* 'How about that ...', literally 'what that'
- Hitt. *ki kuit* 'As for the fact that ...', 'what [is] this?', literally 'this what'
- TB $k_u ce$ *ñake* 'As for the fact that ...', literally 'what now'

Given this typology, the following basic pattern emerges, which makes it clear that biclausal textual settings such as those presented in section B typically generate what look like compound interrogatives.

Desententialization: Correlation of source and resulting morphological structure

SOURCE	TARGET
A Monoclausal	discourse particles: NHG *bitte*
B Biclausal B1 focal question B2 simple question	compound interrogatives: NE *How come* NHG *Wieso*
C Triclausal C1 Proposition, question, explanation C2 Question, proposition, explanation	sentence connectives: causal, explicative ... focalizing

1.2 Methodological prerequisites

For the syntactic reconstruction to be plausible three conditions have to be satisfied, to which I have given the following labels: I. recoverability, II. naturalness, and III. explanatory power.

proviso	criterion	in order to avoid
I. recoverability	attestation of prototypes	marker/structure fallacy
II. naturalness	typological parallels, repeatability	ad-hoc-ness
III. explanatory power	explanation of idiosyncratic patterns	arbitrariness

I. By recoverability I mean the following: the prototypes claimed to be the forerunners of a particular construction must either be attested, or at least plausibly recoverable, in order to avoid the so-called marker/structure-fallacy, i.e. the automatic assumption "that the structure in which a particular innovative grammatical element is found developed out of the structure in which that grammatical element originated" (Harris and Campbell 1995:284). Using the etymology of function words alone as a means of syntactic reconstruction of whole constructions provides nothing but an extremely slippery ground, since the etymology of function words may not coincide with the origin of the construction. Thus, not every English clause that is introduced by what historically represents an interrogative must necessarily go back to an interrogative clause. For instance, English relative clauses using the relative pronoun *who* do not go back to an interrogative clause just because the English pronoun *who* originated as an interrogative pronoun. To the contrary, language history teaches us that the forerunner of the English relative clause is not an interrogative phrase introduced by *who*, but a relative clause with indeclinable *þe*.

II. Let me now proceed with what I term the naturalness provision: It is desirable that typological parallels be adduced for the syntactic development hypothesized, both in order to underscore the naturalness and repeatability of a given pathway of development, and in order to rule out an ad hoc explanation.

To name just one prominent example, returning to the phenomenon described in section C2, we may note that the transition of *Why* > *Because* is so overwhelmingly natural as to recur even within the same language family, as occurred separately in Italic, Tocharian, and West Germanic. In Latin, the original value of *quia* as an interrogative is still preserved in the archaic *quianam*; somewhat later in the post-classical era, *cur* also occurs as a causal conjunction; and the same holds for *quare* in the works of early

Christian writers (Hackstein 2004b:171). These three developments are independent of each other. In East Tocharian we find $k_uyal\text{-}te$, which etymologically is still transparently 'why so?' (Hackstein 2004b:172f.). Likewise in West Tocharian, the causal particle *katú* is still transparently "why this?". Turning to West Germanic, in OHG there are a few attestations of an interrogative *hwanta* 'why', which hints at the interrogative origin of the homophonous causal conjunction, cf. Behagel (1928:332f.) and Eroms (1980:86ff.). And some centuries later we find Berthold Brecht employing German *warum* as a quasi causal conjunction.

Lat. *quia-nam* 'why'	> *quia* 'because'
Lat. *cur* 'why'	> *cur* also 'because'
Post-Classical *quare*	> *quare* 'because', cf. Fr. *car*
TA *k_uyal* 'why?'	> *k_uyalte* 'because'
TB *kā tu* 'why that?'	> *katú* 'for, because'[9]
OHG *(h)wanta* 'Why?' = Lat. *quare*, e.g. *Monsee Fragments* 8, 16:	> OHG *(h)wanta* 'because' = Lat. *quoniam*, e.g. *Tatian* 138, 13:
huuanta sprihhis ..? translating **quare** ... *loqueris*?	*Sint iru forlazano manago sunta,* **uuanta** *siu minnota filu* translating *remittentur ei peccata multa,* **quoniam** *dilexit multum.* (Luke 7.47)
Modern German	Brecht *Mutter Courage und ihre Kinder* (1963:62, line 2):"*Die zahlen nicht,* **Warum** [= *denn*], *die haben nix*"[10]

The case for the naturalness of a given phenomenon may – aside from its multiple recurrence within the same language – be bolstered by demonstrating its cross-linguistic repeatability. Taking again the *why > because* case as an example, typological parallels can be readily found even for overtly more elaborate structures, such as an interrogative phrase "if saying why/ if you ask why":

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[9] Translating Skt. *hi, tu, yatas* (Sieg and Siegling 1949:105), e.g. B 251 b3 ~ *hi*. The explanation of *katú* as an original interrogative was first suggested by Sieg and Siegling (1949:105) "*viell. aus* kā tu *weshalb das?*".

[10] Further examples: "*Ich heiß ihn Schweizerkas,* **warum** [= *denn*], *er ist gut im Wagenziehen*" (Brecht 1963:11, line 27f.); "*Nein [es beweist], daß etwas faul ist.* **Warum?** *Wenn ein Feldhauptmann ... recht dumm ist und er führt seine Leute in die Scheißgaß, dann brauchts Todesmut bei den Leuten*" (Brecht 1963:25, line 25f.);

Middle Indo-Aryan (Aśoka)	*kim-ti* what/why-QUOT "saying to oneself what, why" (Marlow 1997:56-59)
Tamil	*ēṉ-ṉā* why-SUBD "if you ask why" (Herring 1991:272f.)
Japanese	*naze-ka to kiku to* why-INT.PTC QUOT ask-SUBD "if you ask why" (Hackstein 2004b:171)

III. Let me now turn to the third condition to be met, which refers to explanatory power. According to this condition, a given explanation is all the more convincing if it can account for synchronic morphological or syntactic **anomalies** of the function words, cf. below §2.1.5.

2.0 Two Topics in Indo-European Interrogatives

In what follows, I will deal with two topics in Indo-European interrogatives. Tackling two old problems, I will suggest new solutions in light of the above scenarios (syntacticization of interrogative clauses as interrogative pronouns).

In the first half of my article, I will argue that the above framework permits us to account for a striking formal peculiarity shared by many ancient Indo-European interrogatives that appear in the guise of univerbated interrogative and demonstrative stems (§2.1). In the second half of my article, I will try to show that the given scenario helps elucidate the prehistory of yet another interrogative pronoun, Toch. *mäksu* 'which one', in much the same fashion. As a by-product of the new etymology we will be able to resolve a long-standing question, namely the problem of the interrogative stems in **mo-*, which are residually found in both Hittite and Tocharian (§2.2).

In the course of my discussion, I will pay heed to the three requirements (outlined above) for a plausible syntactic reconstruction, i.e. the recoverability of prototypes, the availability of typological parallels, and the explanation of morphological anomalies.

2.1 Compound interrogatives as desententialized interrogative clauses

As mentioned before, it is quite typical for the grammaticalization of interrogative clauses to result in what appears on the surface to be compound interrogatives. Among the interrogatives which show this

peculiarity, we find for instance OCS *kъto čьto*, Alb. *kush*, and Toch. $k_u se\ k_u ce$. Taken at face value, that is, if simply projected back into Indo-European, these pronouns look like interrogatives extended by demonstratives. It comes as no surprise, therefore, that OCS *kъto čьto*, Alb. *kush*, and Toch. $k_u se\ k_u ce$ have thus far always been explained as simple extensions of the interrogatives.[11] All such explanations have in common that the description has been declared the explanation.

A new approach, couched in terms of the scenario described above, would try to motivate the given structure. As I will argue, such interrogatives plausibly conceal earlier independent interrogative clauses according to the B1 or B2 type scenario (B1 reduction of focal cleft, B2 extension of pronominalized interrogative clause) outlined above. The plausibility of this new approach hinges on two things: first, whether examples of the full interrogative phrases thought to constitute the prototype can be adduced; second, whether enough typological parallels are available to underscore the naturalness of the B1-2 scenario.

In the following I will endeavour to show that these questions can be answered in the affirmative. A number of languages attest to the gradual syntacticization of focal clefts, showing the characteristic earmarks of grammaticalization such as elliptical reduction, univerbation and semantic bleaching. Examples come from a number of languages including Latin, Old French, French, Greek, and non-IE languages.

2.1.1 LATIN. Let us start our survey with Latin. Focal clefts involving an interrogative pronoun, a demonstrative and a relative pronoun are attested for Latin, including the Archaic and the Old Latin periods. As examples consider the following passages from Ennius and Plautus:

(1) Ennius, *Scenica* 374   *quis est qui ...*
Vahlen, Plautus, *Mercator* 808   "who is [he] who ...?"

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[11]OCS *kъto čьto*: "*-to Partikel*" (Brugmann 1892:777), "*verstärkende Partikel*" (Vondrák 1928:90), "*Erweiterung*" (Aitzetmüller 1991:122f.); Alb. *kush*: "*š [sh]... rest eines ... pronominalen Elements*" (Pedersen 1900:317), Demiraj (1997:228); TB *kuse kuce*: "a conflation of the two IE pronominal stems $*k^w i-/*k^w o-$ 'who' and $*so-$ 'this'" (Hilmarsson 1996:196f.), "the regular demonstrative reinforcing the original interrogative/ relative" (Adams 1999:187).

Plautus, *Persa* 200   *quis haec est quae ...?*[12]
                             "who is this one (f.) who ..?"

However, focal clefts never underwent further syntacticization in Latin, save for one particular kind of focal cleft involving the inanimate interrogative *quid*. Thus, a condensation of the prototype *quid est quod ... ?* as attested in Plautus (2) gave rise to the new bipartite interrogative *Quid quod*? 'How about that ...?' which serves to raise a new issue or to establish a new topic in the framework of a discussion.

(2) Plautus,   *quid est quod te volo?*
Rudens 1216   "what is [it] what I request of you?"
Cicero, *de*   ***Quid quod*** *sapientissimus quisque aequissimo animo*
Senectute 23, 83 *moritur ...?*
                    "What of the fact that wise men die with utmost equanimity?"

2.1.2 FRENCH. French offers us a textbook example of the grammaticalization of focal interrogative clauses. Old and Modern French represent the two poles of a development at the beginning of which we find a cleft interrogative with full focalizing force[13] and at the end of which we obtain a desententialized particle *est-ce que* which – bereft of any focalizing force – serves only as an interrogative particle. Some details of the entire process are still discernible. Thus the clausal value of the Old French construction is hinted at by its positional and inflectional freedom, witness example (3), in which a vocative intervenes between the focal interrogative and the extrafocal relative clause, or example (4) with inversion of copula and demonstrative:

(3) *Renart* IV 233   *Qui est ce, diex, qui m'aparole?*
                           "**Who is it**, oh gods, **who** is speaking to me?"
(4) *Mort Artu* 14, 12 *Et savez **que** ce est **que** m'avez otroie?*
                           "And do you know **what it is that** you have empowered me to do?"

By contrast, the inability of Modern French *est-ce que* to be either split or inverted attests to its frozen structure.

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[12] For further examples, see Lodge (1933:498,2) and Löfstedt (1966:262f.).
[13] Cf. Moignet (1988:172f.) and Wolf and Hupka (1981:174).

The development sketched for French is significant in two respects. First, it demonstrates that elliptical reduction need not automatically accompany the process of desententialization. Second, the Old French focal construction is preserved formally in Modern French, but as an interrogative particle devoid of any focal value. What is important for our purposes is that the semantic bleaching of the erstwhile focal construction entails the possibility of lexical renewal.

- Old French **focal** *Que est ce que* tu as fet? (*Queste* 218, 28) > II) Modern French **non-focal** *Qu'est-ce que tu as fait?* vis-à-vis III) the **renewed focal** *Qu'est-ce que c'est que tu as fait?*, literally *^aWhat is this ^bwhat this is ^cwhat you have done*?

- OHG **focal** *wîo ist daz sô* (*dasz* ...)? > II) Early Modern German **non-focal** *wie so* > German *wieso*, which may form part of III) a **renewed focal** question such as *Wieso ist das so?*, cf. Hackstein (2004c:95-97).

- TB *k_use pi ksa/ k_use no su* 'who now', etymologically 'who is he who(ever) ...', see below §2.1.5.

Outside the domain of focal interrogatives, other cases can also be cited in which a similar process repeats itself even more than twice.

- Old French *hui*, the continuation of Lat. *hodie*, underwent additive lexical renewal in later French to give Fr. *a u jourd'hui* 'today', which – if necessary for a more emphatic version of 'today' – may be even further expanded to *au jour d'aujourd'hui* 'today, nowadays'. Again, an etymological rendering would create the illusionary impression of an astoundingly pleonastic structure: *^aon the day ^bof 'on the day ^cof today* (Posner 2001:84, 86).

2.1.3 ANCIENT GREEK. The same variety of constructions, ranging from prototypical interrogative clauses via elliptical variants to bipartite interrogatives, can be exemplified from Greek. I will begin my demonstration with the animate interrogative τίς ὅδε/ τίς οὗτος.

Animate Greek τίς ὅδε / τίς οὗτος < PIE *ḱʷis so...

Originally this construction was a full cleft interrogative, as in (5):

(5) *Iliad* 15.247   τίς δὲ σύ ἐσσι ὅς μ' εἴρεαι;
                        "Who are you, who speak to me?"

Plato, *Meno* 85e   ἔστιν οὖν ὅστις τοῦτον πάντα δεδίδαχεν;
                        "Is there then anyone who has taught this boy
                        everything?"

By omission of the copula and deletion of the relative the
following construction obtains:

(6) *Iliad* 10.82   τίς δ' οὗτος κατὰ νῆας ἀνὰ στρατὸν
                        ἔρχεαι ...;
                        "Who are you, who walk alone through the ships
                        and the army ...?" (Lattimore)[14]

This example is far from isolated, let alone unique. Nor is it
restricted to second person singular reference, as becomes clear from
the three following examples, all with third person singular reference:

(8) *Odyssey* 6.276   τίς δ' ὅδε Ναυσικάα ἕπεται;
                        "Who is this ... stranger that follows Nausicaa?
                        (Cook)[15]

(9) *Odyssey* 20. 191   τίς δὴ ὅδε ξεῖνος νέον εἰλήλουθε,
                        συβῶται ἡμέτερον πρὸς δῶμα;
                        "Who is this stranger, swineherd, who is newly
                        arrived at our house?" (Cook)

(10) Euripides,   I... τίς οὗτος σῶμα τοὐμὸν οὐκ ἐᾷ
Hecuba 501f.   Ικεῖσθαι;
                        "Who is it that keeps my body from repose?"
                        (Kovacs)

It is important to note two things: first that the demonstrative
has retained its inflectability, and second that it can be replaced by a
concrete noun – compare the frequent formula ποῖον τὸν μῦθον

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[14] The Greek use of οὗτος, as shown in *Iliad* 10.82, with non-third-person shows
resemblance to the so-called Ved. *sá figé* (occurrence of [uninflected] *sá* with non-
third-person reference) and the PIE sentence connective particle **so*, as has been
noted, cf. Hock (1997:58); Klein (1997:264); Watkins (2000:268). Yet, an equation
can be ruled out on closer inspection. While Ved. *sá figé* (1) may occur uninflected,
(2) usually shows non-third-person reference, and (3) occurs in sentence-initial
position, the Greek construction under discussion shares none of these core
characteristics of *sá figé*: It is inflected (cf. τί τοῦτο), it occurs with third-person
reference, and it is found in non-initial position.

[15] Likewise LSJ 1798: "Who is this that follows N?"

ἐείπες "Which was the word that you spoke?"[16], literally "Which the word did you speak?" with ποῖον being used predicatively.[17]

(11) *Iliad* 1.552 +   αἰνότατε Κρονίδη, ποῖον τὸν μῦθον ἐείπες;

"Majesty, son of Kronos, what sort of thing have you spoken?" (Lattimore)

> Inanimate Greek τί τοῦτο < PIE *k^wid tod...

Turning now to the inanimate interrogative, it is important to note that the same range of constructions that we have just exemplified for the animate interrogative can also be exemplified for the inanimate interrogative. Thus, we find both a full cleft (12)

(12) Plato,   [... ἀποδεῖξαι,] τί ποτ᾽ ἔστιν τοῦτο, ὃ ἐμοὶ
Apologia 20d   πεποίηκεν τό τε ὄνομα καὶ τὴν διαβολήν.
                 "[...to explain,] what it can be which has given rise to both my reputation and the slander."

and its shortened version (13-14).

(13) *Odyssey*   τί τοῦτ᾽ ἐνόησεν ἀλήτης;·
17.576   **"What is this that** the wanderer means?"
(14) S. Ph. 1173 τί τοῦτ᾽ ἔλεξας;
                  "What is this that you have said?"

The demonstrative might be accompanied by a noun, as in (15).

(15) *Odyssey*   τί κακὸν τόδε πάσχετε;
20.351   **"What evil is this** you suffer?" (Cook)

Structurally, this example calls to mind parallel cases in other languages, such as the passage from Cicero (16):

(16) Cicero, *in*   *quod hoc monstrum ... in provinciam misimus* ?
Verrem 4.47   **"Which is this monster that** we have sent into the province?" (Ernout and Thomas 1953:156)

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[16] Cf. Kühner and Gerth (1955:626): "*was ist das für eine Rede, die du gesagt hast.*"
[17] As already observed by Ameis and Hentze (1913:43). In general, the elliptical reduction of focal clauses is not infrequent in Greek, cf. Kühner and Gerth (1955:626).

The given structure permits an explanation as the reduced focal part of a cleft structure: it can be viewed as the elliptical reduction of a presumed fuller structure such as *quod est hoc monstrum quod ... in provinciam misimus?*.

2.1.4. BIBLICAL HEBREW. Typological parallels to the process under discussion and structures such as Gk. τίς ὅδε/ τί τοῦτο are also found outside Indo-European. Thus, it is not uncommon for Biblical Hebrew to juxtapose the interrogative *mi* 'who' or *mah* 'what' with coreferential demonstratives or personal pronouns, see below (18-24). Traditionally, Heb. *zeh* and *hū'* have been conceived of as reinforcing particles "*enklitisch zur Verstärkung von Fragewörtern*" Gesenius and Kautzsch (1909:463), cf. Brockelmann (1956:55) and Waltke and O'Connor (1990:312f.). The synchronic emphatic value associated with *zeh* and *hū'* after interrogatives can in fact be explained historically.

Constructions such as Biblical Hebrew *mī-'ēpō' hū'*, *māh zzeh* have the appearance of structural (and functional) analogues of Gk. τίς οὖτος and τί τοῦτο, and much the same can be said of *mī-zeh* and *mah-zzo't* when correlated with OCS *kъto* and *čьto*.[18]

The question of whether we are entitled to interpret this structural parallel in terms of a posited diachronic parallel (reduction of earlier cleft construction in both cases) quite naturally imposes itself. In fact, precisely this scenario is quite reasonable, for both the presumed prototype (full cleft) and gradually reduced versions thereof are attested in Biblical Hebrew. The developmental cycle (reducing earlier clefts to yield a doubly-headed structure with interrogative plus demonstrative) can be delineated in the following way. At the onset we have a full cleft involving a nominal interrogative and a syndetic relative clause with the relative particle *'ašer*.

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[18] The functional equivalence with focal clefts was already noted by Goldenberg (1971 = 1998:118-120) and Joüon and Muraoka (1996:[532]533 [on Genesis (Gn.) 18.13]): "As can be seen from some of the translations given above, the original function of the demonstrative pronoun seems to have been to mark the preceding phrase as extraposed and forming a cleft sentence." As for Gn. 12, 18 and Gn. 3, 13, Joüon and Muraoka (1996:533) are justified in referring to the French *est-ce que*-interrogative as a typological parallel. For further Semitic parallels (Aramaic, Syriac, Arabic), see Goldenberg (1977 = 1998:117ff.).

(17) 2.   *māh-haddābār hazzeh ʾašer ʿāśîtā*
Samuel 12.21   what-INT=ART-word ART-DEM.M.SG REL
                           do:PRF.2.SG.M
                           "What thing is this that thou hast done?"

A replacement of the syndetic relative clause by an asyndetic one, via deletion of the REL marker *ʾašer*, leads to a shortened version of the same construction. Still, in each case, an analysis as a cleft interrogative involving a nominal interrogative clause and a verbal relative clause continues to be possible on formal grounds.

(18) Genesis 12.   *mah-zzoʾt ʿāśîtā*
18   what-INT=DEM.N do:PRF.2SG.M
                           "What [is] this that thou hast done?"[19]

(19) Isaiah 63.1   *mî-zeh bāʾ mēʾedōm*
                          who-INT=DEM.M.SG come:PRF.3SG.M from-Edom
                          "Who [is] this that cometh from Edom?"

The preceding examples have no nominal subject; an asyndetic relative with overt subject is found in

(20) Genesis 18.13   *lāmmāh zzeh ṣāḥqāh śārāh*
                          for=what-INT DEM.M.SG laugh:PRF.3SG.F Sarah
                          "Why [is it] that Sarah has laughed?"

The predicate is also attested in the 2sg. and 3pl.:

(21) 1 Samuel 26.   *mî ʾatāh qārāʾtā*
14   who-INT you-2SG.M cry:PRF.2SG.M
                          "Who art thou that criest?"

(22) Isaiah 60.8   *mî ʾelleh kāʿāb taʿūpênāh*
                          who-INT DEM.3PL.F like=cloud fly:IMPF.3PL.F
                          "Who are these that fly like a cloud?"

The same reduction is found with non-finite relative-like constructions such as the following where *ha-ṣṣād-ṣayid* "the one hunting (the) hunted" lends itself to an analysis as a nominalized relative.

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[19] Likewise Genesis 3.13 *mah-zzoʾt ʿāśît* What [is] this that thou (f.) hast done? and Exodus 14.5 *mah-zzoʾt ʿāśînū* lit. "What [is] this that we have done?."

(23) Genesis 27.33   *mī-ᵓēpō̄ᵓ hū̄ᵓ ha-ṣṣād̠-ṣayid̠*
who-INT=there he-PERS ART/REL-hunt:PTCP-
PRES.M.SG hunted
"**Who is he that** hath taken venison?"[20]

By omission of the article before the participle a somewhat more condensed version of this construction results, in which, crucially, an analysis of the particle as relative clause is prohibited by the omission of the article:

(24) Canticum 8.5   *mī zoᵓt̠ ᶜōlāh min-hammid̠bār*
who-INT=DEM.F.SG come:PTCP.PRES.F.SG from-ART-
desert
"**Who is this that** cometh up from the wilderness?"

It remains to be noted that a later typological parallel to the syntacization of interrogative clauses is furnished by the Modern Hebrew indefinite pro-word masc. *mi-še-hu* 'someone' (who-REL-he), fem. *mi-še-hi* 'someone' (who-REL-she), neut. *ma-še-hu* 'something' (what-REL-he) with *-še-hu/hi* counting as an inseparable particle. The explanation of *mišehu* as a desententialized interrogative clause 'who [is the one] who' > 'whoever' is uncontested, in light of constructions such as *mī hāᵓīš ᵓašer* "who ART-man REL" [Judges 10.18 Deuteronomy 20.5] or *mī ᵓašer...* "who REL" [Exodus 32, 33]) or "who that it [is]."[21]

2.1.5 SLAVIC AND TOCHARIAN. But let us return to the Greek examples. In Greek, a further grammaticalization of interrogative collocations of the type τίς ὅδε or τί τοῦτο has not taken place. They have not undergone univerbation to become new interrogatives. Nevertheless, both constructions, τίς ὅδε and τί τοῦτο, are of relevance when it comes to explaining the Tocharian, Albanian, and OCS interrogatives, for the unfused Greek collocations provide the etymological analogues and prototypes for the latter, univerbated cases. Given that Gk. τίς ὅδε etymologically represents *$k^w$is so*, the same phrase can be posited to underlie the Tocharian interrogative

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[20] Interestingly this construction could be held to foreshadow the later Modern Hebrew use of *hū̄ᵓ* as a copula.
[21] Cf. Haspelmath (1997:135).

TB $k_u se$ 'who?' < $*k^w is\ so(s)$? or Alb. *kush* < PIE $*k^w os\ so(s)$ 'Who [is] he [who ...]?':

I. Animate interrogative "Who?" < interrogative clause *"Who [is] he [who ...]?"

	Gk.	τίς ὄ-δε	< PIE $*k^w is\ so$?
	TB	$k_u se$ < PToch. $**k^w u\ sæ$[22]	< PIE $*k^w is\ so(s)$?
	Alb.	*kush*[23]	< PIE $*k^w os\ so(s)$?
	OCS	*kъto* < PSl *kŭ to*	< PIE $*k^w os\ tod$[24]?

In the analogous way, it is possible to explain the neuter interrogatives as derivatives of interrogative phrases. A phrase like τί ἐστι τουτί is mirrored in OCS *čъto* and through various additional changes in TB $k_u ce$, both ultimately deriving from $*k^w id\ tod$? 'what [is] that?'.

II. Inanimate interrogative "what?" < interrogative clause *"what [is] it [that ...]?"

	Gk.	τί τοῦτο [Plato, *Symposium* 202a]	< PIE $*k^w id\ tod$?
=	TB	$k_u ce$ < PToch. $*k^u u\ ce < *k^w id\ tē$[25]	< PIE $*k^w id\ tod$?

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[22] See Ringe (1996:66); Hilmarsson (1996:196f.) and for the treatment of the final vowel see Hackstein (2001:32f.). The protoform PIE $*k^w o s o$ posited by Klingenschmitt (1994:348, fn.66) is out of the question because the regular Tocharian phonological development would rather be PIE $*k^w o-$ > PT $*kæ-$ > TB *ke-*, TA *ka-*, see Kim (1999:149-50).

[23] Note that Alb. *kush* cannot be derived from simple $*k^w os$ since word-final *-s* is regularly dropped in Albanian, cf. *na* "we" < *nos* (Matzinger 1998:199), and that PIE */o/ between velar and */s/ in unstressed syllables is raised to Albanian /u/ (Klingenschmitt 1994:316, fn.11).

[24] With replacement of the animate predicate noun by its more indefinite neuter correspondent, cf. Germ. *niemand anders*, Skt. Brāhmaṇas *tát tvám asi*.

[25] Remodelling of *tod* analogically after *o*-stem inflection, cf. TB *wate* 'second' < $*dui-tos$ with oblique sg. masculine and neuter *wace* ← $*dui tom$). The palatalization of the obl. sg. ending of the *o*-stems has been ascribed to the influence of personal pronouns such as PIE *swe* and *twe* by Pedersen (1941:39) and Winter (1980:552); similarly Hilmarsson (1996:26) "secondary morphological palatalization" and Pinault (1997:458). The use of the Toch. *casus obliquus* in *-ce* can be explained by case attraction of the interrogative and demonstrative in a cleft interrogative, compare Ancient Greek instances of a comparable process: Sophocles, *Electra* 328f.

=	Alb.	*qi-sh* [26]	
=	OCS	*čьto* < PSl. **či to*	< PIE **k^wid tod*

Put differently, the Greek expressions on the one hand, and the Slavic, Albanian, and Tocharian expressions on the other, are etymological equivalents, albeit at different stages of grammaticalization.

In light of the above etymologies hinting at an erstwhile sentential value of the interrogative pronouns, the question arises of whether a cleft interrogative (B1) or a simple interrogative (B2) might have been the source construction. As noted already above (§1.1.), these options are not mutually exclusive. Nevertheless, in the case of Tocharian, it can be shown that the assumption of original clefts underlying these interrogatives is not just an abstract postulation. In Tocharian, such original clefts can indeed be shown to underlie Toch. *k$_u$se pi ksa* and *k$_u$se no su*, [27] as I will now demonstrate.

An etymological rendition of *k$_u$se pi ksa* would be "who is this who this is?". The presumed historical analysis of *ksa* as containing a relative pronoun (*ksa* from a ellipticized relative clause **$k^w$is so* "who it [is/may be]") seems to be contradicted by the fact that synchronically *ksa* occurs as an indefinite pronoun. But this does not exhaust all of its functions. Aside from its indefinite usage, *ksa* also occurs as a highlighting device after interrogatives, e.g. *k$_u$se ksa* "what if anything, what precisely." This in turn fits nicely with the general observation that focus particles frequently turn into indefinites when co-occurring with interrogatives, cf. Ancient Greek indefinite pronoun τις 'someone' as opposed to East-Ionic κοῖός τις, Attic ποῖός τις 'who precisely,' e.g. Herodotus 3, 34 κοῖόν μέ τινα νομίζουσι Πέρσαι εἶναι; Sophocles, *Oedipus Coloneus* 1163, Xenophon, *Historia Graeca* 4.1.6 ποῖόν τιν(α); "Which one precisely?", Plato, *Respublica* 398c οὔκουν ... ἔχω ... ξυμβαλέσθαι,

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τίν' (acc.) αὖ σὺ τήνδε ...| ... φωνεῖς ... φάτιν;| "What's the message you are proclaiming?," Plato, *Crito* 43c Τίνα ταύτην;

[26] = /*k^{y}i-ś*/ (with younger palatalization of **k* > *k^y* / _*i*; -*sh* extended from *ku-sh*), ultimately deriving from < PIE **k^wid*, analogical restoration of the velar onset on the model of the animate interrogative *ku-sh*; cf. the creation of Skt. *ki-m* 'what' (replacing inherited *cid* as in Skt. indefinite -*cid*) on the basis of animate *kah* 'who' or Hitt. *kuwat* 'why' replacing delabialized **kat* (< **kod* < **k^wod*; as for the delabialization of **k^w* before /o/, cf. the references in Hackstein 2002:130, fn.33).

[27] Cf. Pedersen (1941:121) which repays careful study.

ποῖα ἄττα δεῖ ἡμᾶς λέγειν "I have no idea what precisely we have to say."[28] Crosslinguistically, such a development of highlighting particles from cleft contructions has been repeatedly documented, see Heine and Reh (1984:109f., 149-182, 249f.). In sum, the interpretation of *ksa* in *k*_u*se ksa* as a frozen relative in a cleft interrogative construction (25-26) seems well supported and not at all ad hoc.

(25) TB 81 b3   *k*_u*-se pi ksa wesäñ kekamor orocce länt śarsäṣṣi?*
                         who-INT=he-DEM PT who-IND/REL we:GEN.PL
                         big:OBL.SG.M. king:OBL.SG.M. know:CAUS-
                         SUBJ.OPT.3SG.ACT.
                         originally *"Who [is] he now who would let the
                         great king know of our arrival?"

(26) TB K2 b2   *k*_u*-se no sū yāmor?*
                         who-INT=he-DEM.M. PT who-DEM/REL.M. deed-M.
                         originally *"What [is] this now which is the deed?"

Compare B 95 a2 *k*_u*se no su uttare* ... and relative *su*, as found in:

(27) TB 31b2   *k*_u*se no, sū tākaṃ apāṣtte, kallaṃ śwātsi*
                         alanmeṃ...
                         who-INT=he-DEM.M. PT who-DEM/REL.M. be-
                         SBJ.3SG.ACT.
                         "Whoever he is who should be unrestrained, he will
                         get to eat from others"

Constructions like these started out as focal clefts, but entered a slide leading ultimately from monoclausal highlighting constructions to completely defocalized interrogatives, while at the same time keeping their overt cleft structure. The combination of semantic bleaching and subsequent additive renewal of language structures will then characteristically yield what looks like pleonastic structures on the surface level. It is precisely the persistence of the semantically bleached structure that creates this impression of a pleonasm.[29]

Returning to our initial question whether there might be a motivation for the peculiar shape of the Slavic, Albanian, and Tocharian interrogatives (§2.1), we may conclude that it is entirely

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[28] Cf. Haspelmath (1997:162) on the formal identity of focus particles and indefinite markers.

[29] See above §2.1.2 for examples.

reasonable that these interrogatives arose from earlier clefts. All three of the criteria required for the syntactic reconstruction to be plausible (§1) have been satisfied. As for the "recoverability of prototypes," the presumed syntactic prototypes are indeed attested. As for "naturalness," typological parallels are provided by a number of languages:

- Ancient Gk. τίς ὅδε, τίς οὗτος, τί τοῦτ'

  Lat. *quid est quod*? > *quid quod, quid hoc*
  Fr. *Qui est-ce qui, Qu'est-ce que* etc.
  Bib.Heb. *mī-ʾēp̄ōʾ hūʾ mah-zzoʾṯ* etc.

Finally, as for the third condition, "explanatory power," which requires that a given hypothesis ought to be able to account for anomalies, two peculiarities can be accounted for in the framework of the above hypothesis:

- A phonological peculiarity. The Slavic and Tocharian interrogatives represent late univerbations postdating the loss of final *-s* and *-d* in the interrogative,[30] which fits with their explanation as originally free clausal constituents.
- A morphological peculiarity. The restriction of the demonstrative *-to* in *kъ-to* and Toch. *-se* in *kᵤse* to the nominative is a survival of the original function of the demonstrative as the nominative predicate in copular and equational sentences.

2.2 Interrogative *mo-* in Indo-European: resolving a puzzle

Having established that interrogative clauses provide a potential source of new interrogative words, we are now in a position to contribute to the etymology of two particular Tocharian compound interrogatives, both containing the interrogative stem PIE *mo-* as first member. These are the adjectival interrogative/relative TB *mäksu* 'which one' and the modal interrogative TA *mänt* 'how'.

2.2.1 TOCHARIAN B *mäksu* 'WHICH ONE'. The only detail of the analysis of TB *mäksu* which is unanimously agreed upon is that the

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[30] The unextended form of the interrogative *kʷid* > *čъ* is preserved by the OCS indefinite pronoun *ni-čъ-že* 'nothing', and in Čakavian Serb. *ča*, as well as in Pol. *za-cz* (Vondrák 1928:90; Aitzetmüller 1991:123).

word ends in a demonstrative. This much is confirmed by the oblique forms of the pronoun, all of which agree with the corresponding inflected forms of *su* or *sem*:[31]

nom.sg.	m. *mäksu*, f. *mäksā$_u$*, n. *mäktu*	m. *su*, f. *sā$_u$*, n. *tu*
obl.sg.	m. *mäkce$_u$*, f. *mäktā$_u$*, n. *mäktu*	m. *ce$_u$*, f. *tā$_u$*, n. *tu*
nom.pl.	m. *mäkcai*, f. *mäktom*	m. *cai*, f. *tom*

By contrast, the analysis of the material preceding *su* is much less straightforward. In trying to account for the -*k*- directly preceding the final demonstrative *su*, Klingenschmitt (1994:316, fn.11) reckons with an internal deictic particle **kä* < PIE **ĝ^{h}i*, **ĝ^{h}u*. Although it is difficult to disprove this solution, a simpler and more elegant explanation suggests itself. If we apply internal reconstruction and compare TB -*ksu* with the otherwise attested -*ksa* (the clitic destressed variant of *k$_u$-se*), the same analysis immediately suggests itself for -*ksu* (clitic destressed variant of **k$_u$-su*); the only difference is that demonstrative **so* (> TB *se*) in *k$_u$-se* is replaced by **so u*[32] (> TB *su*) in **k$_u$-su* (> TB -*ksu*). In both cases, the element **ku* can formally be analyzed as the reflex of **k^{w}is*, the relative marker – an analysis which, as we will see, makes excellent sense as well.

As for the initial element of TB *mäksu*, Klingenschmitt's proposal to explain *mä*- as a destressed variant of interrogative **mo*- carries most conviction despite the otherwise possible reconstruction of *mä*- as **me*- or **mu*-,[33] for both these latter possiblities are less likely on morphological grounds. Within the known system of pronominal stems, **mu* would be expected to be an adverbial (local/temporal), while **me* should be the oblique variant of **mo*-. In the latter case, moreover, **me* should be expected to have yielded a hypothetical TB *mi*- through palatalization in at least some cases; but no such morpheme exists. All this tips the scales in favor of the option of a reconstructed **mo*-, the more so since inner-Tocharian

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[31] As already noted by Krause and Thomas (1960:166).
[32] With clitic particle PIE **-u*. Note that the clitic and non-compositional character of **-u* is indirectly confirmed by the neuter correlate TB *tu* from PIE **tod u*. Here the loss of final PIE **-d* requires the demonstrative to be followed by word-boundary. On PIE **so+ u* see Peters (1980:312f.); Mayerhofer (1992:62); Klingenschmitt (1972:99); Watkins (1999:267).
[33] Cf. Pinault (1997:459).

parallels can be adduced for the vowel-weakening of PIE *-o-* to Toch. *-ä-* in clitic (allegro-)forms, cf. below §2.2.2.4.1.

Combining historical phonological and internal reconstruction, then, we arrive at the following analysis of TB *mäksu*: we are dealing with a tripartite structure, a) *mo(s)*, b) *-kʷis* as a second-position clitic and c) the inflected demonstrative pronoun *so+u* which functions as predicate nominal. Let us now hypothesize that this represents a desententialized interrogative clause *mos, kʷis - so u*, literally 'which-one, who this' or more explicitly 'which one is this, who this is'.

While the hypothesized cleft origin of the interrogative pronoun *mäksu* is not concretely recoverable in terms of attested forerunner constructions, *mäksu* displays some notable semantic and functional peculiarities which can be straightforwardly accounted for in the framework of a cleft origin. Semantically and functionally, TB *mäksu* is best described as an adjectival interrogative for restricting reference, "which one of a given class or group." As such, it also has a highlighting function, placing emphasis on the questioned constituent. The highlighting value of *mäksu* 'precisely what kind of' is still hinted at by its use in translating Skt. *katamaḥ* or *kataraḥ*[34] 'which one, who or which of many'. The upshot is that the Toch. *mäksu* construction can again be explained as a syntactic survival of an earlier cleft which later was desententialized while retaining its pronominal frame, much in the same fashion as the seemingly pleonastic Toch. *kᵤse su* construction, cf. above §2.1.5.

Furthermore, there are occasional instances where *mäksu* explicitly functions as the focal part of a cleft interrogative. Such examples attest to the (additive) formal renewal of frozen clefts, as encountered above in connection with the Fr. *est-ce que* construction, cf. §2.1.2.

(28) TB   *mäksū no yāmor kᵤcesa onolmi ... skwassoñc mäskenträ*
K4 b3   "What kind of karma is it by which beings become happy?"

Not much has been said so far about the function of interrogative/relative *mos*, but in light of Hitt. *masi-* 'how many'

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[34] Cf. Sieg and Siegling (1949:149) and B PK NS 53 (ed. Pinault 1988:100f., 130f.): a2 *eṅkalñe mäksu* 'greed, which-one [is] it?', Skt. *upadānaḥ katamaḥ*; a1 *yoko mäksāᵤ* 'thirst, which-one [is] it?', Skt. *tṛṣṇā katamā*; a2 *srukalñe mäksu* 'death, which-one [is] it?', Skt. *maranaṃ katarat*.

and Pal. *mas*,[35] it is reasonable to specify the function of PIE **mo-* as a quantifying interrogative in the meaning 'how many'. Note, however, that Hitt. *masi-* 'how many' is attested only in the plural; the singular of the derived stem *masiwant-* means 'as big as'. A semantic extension from the particularistic spatial meaning 'how much, how big' to the more general qualitative one 'what kind of' could plausibly have occurred.

There are also formational and structural parallels to the hypothesized **mos kʷis* 'which who' to be cited from other languages, such as French and German. Whereas there are only very few attestations of a Lat. *qualis quis* in early Christian writers,[36] we find an analogue in Modern Fr. *quel qui/ quel que* being frequently employed as a generalizing relative 'whoever, whatever', whose indefiniteness is accounted for by the habitually co-occurring subjunctive.

	*mos kʷis - so-u	lit. '***Which-Who** is this?' or 'Which one/What kind of person is this'
≈	> **TB**	*m ä-ksu*
≈	French	*quel qui/ quel que*
	Early Modern German	*welez was*

- Modern Fr. *quel qui/ quel que*

(29)   *l'autorité d'un homme **quel qui** soit*
         the authority of a man **whoever** he may be

A closer analogue is supplied by Early Modern German (14th–15th centuries) *welez was*, which matches TB *mäksu* both structurally and semantically:

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[35] As for PIE **mos*, cf. Pal. *mas* 'as much as', Hitt. *mas-i* 'how, as much', the latter "a frozen form of the anim. nom. sg. **mas* plus deictic **-ī* or *-i*, which functions as an adjective (cf. *aši* 'the aforementioned')" (Melchert 1984:36).

[36] Late Latin (6th century) indefinate *qualis quis* 'any', e.g. Oribasius Latinus, *Synopsis* VII, 8 (Bussemaker and Daremberg 1876:139): *aut* [sc. *de*] *quales quibus cacoitcis ulceribus*.

| (30) Sprüche deutscher Mystiker, Pfeiffer (1851:218)[37] | *sage mir, welez was diu hoehste vröude(...), die unser herre Jêsus Kristus ie bewîsede ûf ertrîche?* Tell me, what precisely (lit. **which what**) the greatest joy [was] that our lord Jesus Christ has ever granted [us] on earth. |

An evaluation of the above derivation of TB *mäksu* would require us to ask whether we are dealing with a mere phonological possibility or whether there are additional criteria to bolster the proposed etymology. We have already mentioned semantic plausibility and typological parallels, and in fact, the hypothesized explanation of *mäksu* can be tested on still other grounds. It can be observed that in Indo-European, interrogative PIE **mos* forms part of a "pronominal chain" with corresponding pronominal alternates, including interrogative **kʷos*, relative **Hi̯os*, and demonstrative **so(s)*.

	*mos Pal. *mas* 'as much as', Hitt. *mas-i* 'how, as much'	**kʷos* Skt. *kaḥ*	**Hi̯os* Skt. *yaḥ*	**so(s)* Skt. *sa(ḥ)*

It follows that the posited juncture **mos kʷis* – if real – could imply the coexistence of corresponding forms **Hi̯os kʷis* and **so kʷis*. Such forms do indeed exist. Alongside **Hi̯os kʷis* (Myc. *jo-qi*, Hom. ὅστις, GAv. *yas ... cišcā*), **so kʷis* is attested in Hom. ὅ τις (Hackstein 2002:26-27, fn.26).

	*mos kʷis TB *mäksu*	[see below §2.2.2.2.]	**Hi̯os kʷis* Myc. *jo-qi*, Hom. ὅστις, GAv. *yas ... cišcā*	**so kʷis* Hom. ὅ (κέν) τις

Thus the reconstructed **mos kʷis*, claimed to lie at the base of TB *mäksu*, not only represents a phonological option, but also makes sense as part of a larger system of recurrent pronominal correspondences.

2.2.2 TOCHARIAN A *mänt*, B *mänt, mant*. The etymology of *mäksu* has repercussions on yet another problem. It will help us clarify the prehistory of TA *mänt* 'how'. According to the handbooks, A *mänt* has no equivalent in Tocharian B. This however

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[37] Cf. Grimm *Deutsches Wörterbuch* 14 (1960:1351).

is not true. The Tocharian B equivalent is B *mant* 'thus', which –
pace the handbooks[38] – is in fact attested in the same meaning as TA
mänt 'as, like'.

(31) TB   *mänt wewenor ste poyśintse*
FII K2 a3   "**as** is Buddha's teaching"

Within Tocharian B, the prevalent employment of *mant* as a
deictic particle meaning 'so, thus' can be explained by elliptical
reduction of expressions such as *te mant*, literally 'thus-like'.[39]

(32) TB 225 b2   *[c]e mant reki*
                       this like word
                       "such a word"

(33) TB FI K 1a4   *tom mant we[ṣ](ṣ)i (re)kauna*
                       these like spoke words
                       "words like these he spoke"

(34) TB   *tesa mant*
H149add.26/30a6   thus like
                       sic ut

By omission of the demonstrative, TB *te mant* 'this-how/as/like'
gives rise to *mant* 'thus(ly), so'.

Another scenario to account for the transition from
relative/interrogative 'how, -like' to demonstrative 'so' involves a
semantic reinterpretation. In a structure like the following, the
postpositive particle '-like'[40] can be semantically equivalent to
demonstrative 'so'. By reanalysis, the postposed comparative particle
may accordingly transform into a sentence-initial demonstrative:

comparative particle	→	modal demonstrative
X *mant* Y		X *mant* Y
X like [is] Y	→	**X: so/ such [is] Y**
"Y [is] like X"	=	"X: thus [is] Y"

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[38] Thomas (1964:218) 'so (etwa)', Adams (1999:439) 'so', 'thus'.

[39] TB *mant* originally means 'how', Germ. '*wie*', cf. Pedersen (1941:122): "*Die Wahrheit ist, dass das Wort auch in B 'wie' bedeutet, und dass nur eine Verbindung von einem demonstrativen Pronomen mit* mant⁸ *die Bedeutung 'so' hat* (vgl. frz. *comme ça*)."

[40] In Tocharian, the comparative particle is postposed to the standard of comparison, cf. TA *oki*, TB *ra* (Thomas 1968:198-213), TB *se mant* 'such' (m.), lit. 'this one like'.

As for the etymology of TA *mänt*, Pedersen (1938:71) was the first to draw a connection between TA *mänt* and Hitt. *masiyant-* as derivatives of the same pronominal stem, PIE **mo-*. Further comparison of Lat. *quantus, tantus* and Skt. *kíyat-* led Pedersen (1938:71, 1941:124) to reconstruct a pronominal stem **mant-*. Yet Pedersen did not venture a further connection of Toch. *mänt* with Hitt. *mān, maḫḫan* 'how'. This would in fact seem enticing in light of the phonological similarity and functional closeness of the two pronouns. Among the striking functional resemblances between TA *mänt* and Hitt. *mān, maḫḫan*, one may note the deployment as postpositive comparative particle, which represents the core usage in both languages (Hitt. Bo. 2865 II 23 *MUŠEN-is mān* 'like a bird', cf. *CHD* L-N 145 sub 1 :: TB [see above] *se mant* 'thus like') and interrogative 'how' (Hitt. KUB 17.10 i 29 [*CHD* L-N 106] *māḫḫan iyaweni* 'how shall we do':: TA 71 al *mänt yal ñi* 'how shall I do?'). Other parallels include a number of adverbial uses (causal, final).

Despite these functional similarities, however, the Tocharian and the Hittite pronoun turn out to be formally irreconcilable. The major obstacle that stands in the way of equating the two is the differing stem formation. TA *mänt*, TB *mant* is an *nt*-stem whereas Hitt. *mān* appears to be a case form of the simple interrogative. To be sure, Hitt. *mān* could derive from **mānt* phonologically,[41] but this assumption could be maintained only *ex silentio*, given the absence of any inner-Anatolian evidence. As we will see below, the alternative possibility to reconstruct Hitt. *mān* as **meH₂m-* carries much more conviction, when seen in a wider IE context.

It follows that Hitt. *mān* and Toch. *mänt* are not identical, but rather derivational variants of the same pronominal stem. The derivational process becomes apparent only if we recall what was already mentioned above, that there is a pronominal template according to which **mo-* in pronominal compounds alternates with interrogative **kʷo-*, relative **Hi̯o-*, and demonstrative **so/to-*. In the following, I suggest integrating both Hitt. *mān* and Toch. *mänt* in a chain of corresponding pronominals. Consider the following template:

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[41] Melchert (1994:85 §4.1.6.3.1.): "Final */nt/ almost certainly became */-n/ already in PA. Hittite-Palaic nt. nom.-acc. sg. *-ont > -an."

	mo-	*k^wo-*	*Hio*	*s/to-*
Ia	*mos Pal. *maš* 'as much as', Hitt. *maš-i* 'how, as much'	*k^wos Skt. *kaḥ*	*Hios Skt. *yaḥ*	*so(s) Skt. *sa(ḥ)*
Ib	locative-sociative *me	*$k̑^u$e		
II.	*mos *$k^w$is TB *mäksu*	[see below §2.2.2.2.]	*Hios *$k^w$is Myc. *jo-qi*, Hom. ὅστις, GAv. *yas* ... *ciščā*	*so $k^w$is Hom. ὅ (κέν) τις
III.	*meH₂m Hitt. *mān*, *maḫḫan* < *mān-handa*	*k^weH₂m Lat. *quam* Gk. πηνίκα	*HieH₂m Lat. *iam* Gk. ἦν	*teH₂m Lat. *tam*
IV.	*meH₂nt TA *mänt*, B *mänt, mant*	*k^weH₂nt Lat. *quantus*	*HieH₂nt Skt. *yāt* 'inasmuch as, as soon as'	*teH₂nt *tantus*

2.2.2.1. *Ad I.* The series of corresponding unextended pronominals given in the first row under the Roman number Ia has already been dealt with above in §2.2.1. In light of this scheme, it does not seem improbable to identify the prepositional and preverbial particle *me-* as a locative-sociative case form of the pronominal stem *mo-* (Ib) in much the same fashion as conjunctional *k^we* 'and' has been related to *$k̑^u$o*, cf. Klein's supposition (1985:119) "of a primordial relationship between *k^we* and *k^wos.*"

2.2.2.2. *Ad II.* The emerging template *mo-* : *k^wo-*: *Hio-* : *so/to-* helps recover a system of alternating compound pronominals: *mos $k̑^u$is* is matched by *Hios $k^w$is* and *so $k^w$is*, see above §2.2.1. The failure of a juncture *k^wos $k̑^u$is* to occur is not random, for it is impossible to reconstruct a side-by-side occurence of both forms for the animate interrogative (Mayrhofer 1992:347-348). Instead, both forms can but represent reconstructional alternatives. Thus Mayrhofer (1992:347-348) argues in favor of viewing *k^wos* as the inherited formation and *$k^w$is* as a later refashioning of the latter, copying the vocalism of inanimate *k^wid*.

2.2.2.3. *Ad III.* Now, the two sets of correspondences (I and II) taken together provide a template which for the first time confirms concretely the pronominal chain given under number III containing modal pronominals, all of which occur in the acc.sg.f.: *meH₂m* (Hitt.

mān, maḫḫan < *mān-handa*[42]), *$*k^w eH_2 m$* (Lat. *quam*, Gk. πηνίκα), *$*HieH_2 m$* (Lat. *iam*, Gk. ἥν), *$*teH_2 m$* (Lat. *tam*). The feminine gender displayed by all these forms can be accounted for by the presumed ellipsis of a congruent feminine head noun of some metaphorical meaning like "way, fashion." In IE, adverbs of manner frequently occur as ellipticized feminine adjectives, e.g. in the accusative (Gk. τὴν εὐθεῖαν [ὁδόν] 'directly', μακράν 'far'), ablative (Lat. *aliqua [re]*), and instrumental, cf. the straightforward equation of Lat. *qua*, Gk. πῆ and Toch. *kā*, all three of which continue the instrumental feminine singular form of PIE *$*k^u o-$*.

It must be conceded, though, that Hitt. *mān* is phonologically ambiguous, also allowing for a reconstruction as *$*móm$* (cf. already Melchert 1984:36, fn.20), and that Lyc. *mê* 'thus' unequivocally points to PIE *$*móm$*, as Craig Melchert reminds me. Yet, given the inflectability of PIE *$*mo-$*, the existence of *$*móm$* does not preclude the concomitant existence of *$*méH_2 m$*, cf. Hajnal (1995:166, fn.196), and cf. *mutatis mutandis* the precedent case of conjunctional *$*k^w om$* and *$*k^w eH_2 m$* co-occurring even within the same language, e.g. in Umb. (PUNE 'when' < *$*k^w om-de$*, PANE 'when' < *$*k^w eH_2 m-de$*). Hittite *mān*, thus might even represent a merger of *$*móm$* and *$*méH_2 m$*.

2.2.2.4. *Ad IV*. The pronominal correspondences found in I-III open the way to an explanation of TA *mänt*. It is possible to integrate TA *mänt* in a chain of corresponding neuter *nt*-stems, derived from the stems *$*mo-$*, *$*k^w o-$*, *$*Hio-$*, and *$*to-$*, i.e. PIE *$*meH_2 nt$*, *$*k^w eH_2 nt$*, *$*HieH_2 nt$*, *$*teH_2 nt$*. Within this chain, Tocharian provides the missing link to two other pieces of evidence furnished by Old Italic on the one hand and Indo-Iranian on the other. Beginning with Old Italic, the correlative pairs, Lat. *quantus tantus* and Umb. *panto tanto*, can count as evidence for PIE *$*k^w eH_2 nt$* and *$*teH_2 nt$* (both subsequently thematized in Proto-Italic). While competing alternative reconstructions of Lat. *quantus tantus* cannot be substantiated,[43] the assumption of an inherited PIE formation[44] is

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[42]Adopting Melchert's explanation of Hitt. *mān* (1984:36, fn.20, 1994:124). Arguments have been presented in favor of considering *mān* the primary and original form, which extended by *-handa* gives rise to *$*manhanda$* and *mahhanda*. However, *maḫḫan* could be a shortened form of the otherwise attested *mahhanda*, see Melchert (1984:36, fn.20, 1994:124).

[43] Cf. Szemerényi's suggestion (1956:100) "that *$*tānt-$* *$*quānt-$* are the regular continuations of IE *$*tāwont-$* *$*k^w āwont-$*" by positing a Latin contraction rule: *$*āwo$*

crucially supported by Indo-Iranian, which still preserves a fully developed system of individualizing *nt*-derivatives, formed on pronominal collectives in *-H_2, as pointed out by Klingenschmitt (1972:101-108); Zeilfelder (2001:181). Thus, we find Skt. *kíyat-* 'how big, how many' from PIE *k^wiH_2nt, Av. *avāt-*, OPer. DB 4.51 *avā* 'as much (as)' from *$eueH_2nt(-)$, and finally, and particularly important, Skt. *yát,* GAv. *yāt* 'inasmuch as, as soon as' from *$(H)ieH_2nt$.

While it is true that Skt. *yát,* and GAv. *yāt* would equally well permit an analysis as a fossilized ablative *$Hiōd$, inflectional and semantic arguments clearly point in the direction of two homonyms, a) PIE *$HieH_2nt$, b) PIE *$Hiōd$. Notwithstanding case forms of Skt. *ya-* which are clearly to be classed as (fossilized) ablatives on semantic grounds,[45] there are non-ablatival case forms that offer unequivocal evidence of an *nt*-stem, notably [abl.-]genitive sg. *yā.tə*[46] (GAv. Y 35, 7[47]) and nominative-accusative sg. n. *yāt* (GAv. 32, 4). Aside from these inflectional criteria, the semantics plead strongly for two meanings, semantically hard to reconcile with each other: a) a qualifying 'inasmuch as' and b) a temporal-ablatival 'since'. At the same time, these two functional domains ultimately become formally differentiated, when seen in diachronic perspective: a) *nt*-derivative PIE *$HieH_2nt$, b) bare ablative PIE *$Hiōd$.

> *$āo$ > Lat. *ā*. Note however that neither Lat. *malo* nor Lat. *Mars* are compelling evidence for the contraction posited by Szémerenyi. The contraction shown by *malo* can be ascribed to the same allegro speech phenomenon for which *nolle* and *posse* provide unequivocal examples. As for *Mars*, its derivation from *Mavors* is not clear, given the evidence of Oscan and Umbrian *Mamers* (*Mamercus* Oscan praenomen, Rix 1995:731). Besides, *Mars* is not a reliable piece of evidence anyway since by virtue of being a proper name it could also represent a "Kurzform." As for *quartus*, it involves analogical refashioning and dissimilatory loss of the dental onset of its second syllable. The original form may be set forth in Osc. *trutum* and TRUTAS (Untermann 2000:771). Aside from the examples mentioned by Szémerenyi, some isolated nouns such as Lat. *avus, (g)naavus*, and *Gnaeus* (Rix 1995:730) attest to the preservation of intervocalic -*w*- between an *a*- and *o*-vowel. Finally (and fatally), the Sabellic evidence testifies against Szémerenyi's analysis since Oscan and Umbrian keep intervocalic -*w*- intact (cf. Planta 1892:198ff.); indeed, no such contraction is apparent in Umb. **Panta ... etantu ...** and Osc. *pantes*.

[44] Instead of a secondary creation within Proto-Italic, as suggested by Untermann (2000:241).

[45] See Hettrich (1988:327f.).

[46] Under Narten's analysis (1986:120).

[47] *yā.tə isamaidē* 'as much as will be in our command' (Humbach, Elfenbein, and Skjærvø 1991:119).

2.2.2.4.1. PHONOLOGICAL PROBLEMS: THE VOCALISM. Two phonological problems stand in the way of putting TA *mänt* together with Lat. *tantus* and *quantus*, one concerning the vocalism and the other concerning the auslaut of the Tocharian form. Both these problems have plausible solutions. First, it is true that the vocalism of the Tocharian and Hittite forms seems hard to reconcile at first sight. The vowel implied by Hitt. *mān*, whether deriving from PIE */ó/ or */ā/, ought not to have yielded a shwa-like vowel in Tocharian according to the standard treatment of these vowels. It is to be noted, however, that within the domain of function words Tocharian frequently shows destressed variants which deviate phonologically from standard stressed vowels. Thus TB *-e-* and *-a-* can be shown to alternate with destressed shwa.

Unstressed Toch. *-æ-/-a-* > *-ä-*:

- PIE *so u > *sæ-u > *sä-u > TB *su* (Klingenschmitt 2004:316, 409; Adams 1999:693)
- PIE *-*tH₂a* > PToch. 2sg. act.pres./sbj./opt. *-*tä* (Peters 2004:438, fn.40); the phenomenon described in Hackstein (2001:24f.), the posttonic weakening of internal *a*-vowel to shwa, may well be related.
- PIE *mē > PToch. *ma > TB *mā* : *ma-ntá* > unstressed *mä-ntá* 'not at all' (e.g. B 284b7, 295a7)

Along these lines, it is perfectly reasonable to ascribe the vocalism of Tocharian A clitic *mänt* to the same regular vowel weakening process.

2.2.2.4.1.1. RIGHTWARD ACCENT SHIFT (OR "PROTRACTION") IN DISYLLABIC PROCLITICS, DESTRESSING AND VOWEL WEAKENING. The assumption of a destressed variant *mänt* gains plausibility in light of typological observations according to which, in IE, conjunctional use fosters accent protraction in polysyllables and destressing in monosyllables. This is a convenient point at which to comment on the phenomenon observed by Schrodt (1992:264-266) for German. Seizing on German examples displaying adverbial first syllable accentuation (e.g. adverbial *dá-mit* 'thereby') versus conjunctional second-syllable accent (final conjunction *da-mít* 'in order to'), Schrodt points out the contrastive stress pattern transforming adverbs into conjunctions by rightward stress shift. For parallel cases from other (ancient) Indo-European languages, see Hackstein (2004b:182, fn.28). The employment of rightward accent shift to mark the

conversion of a pronominal form into a conjunction recurs within Tocharian. A case in point is interrogative TB *kātsi* '*warum wohl*?' (e.g. B 547 a7 *(katha)n tarhi = kātsi tu*) with first-syllable accent as opposed to conjunctional *kā̆ tu > katú* 'for, because' with contrasting second-syllable accent. The tendency of conjunctions in IE to appear as proclitics can be accounted for in the following way: i) The accent protraction marks proclisis;[48] ii) proclisis serves to delete an ensuing intonational break, thereby marking subordination. The absence of an intonational break is among the classic marks of subordination.

2.2.2.4.2. PHONOLOGICAL PROBLEMS: THE AUSLAUT. The second problem concerns the word-final *-nt-* of TA *mänt*, TB *mant*, which according to the otherwise obligatory loss of final consonant clusters in Proto-Tocharian cannot be original. It is perfectly conceivable, however, that TA *mänt* and TB *mant* represent a frozen oblique case form (to be associated with the athematic *nt*-stem, type TB *pernent*, TA *parnont*, adjectival *nt*-stems, type III, see Krause and Thomas 1960:155 §242).

I am thus led to conclude that no formal obstacle stands in the way of seeing Toch. *mänt* and Lat. *quantus, tantus*, Skt. *yāt* as cognate phenomena.

2.2.2.4.3. FUNCTIONAL PARALLELS. In addition, there are notable functional parallels. Thus we may notice that the Tocharian correlative diptych *mänt-ne ... täm-ne ...*[49] matches with Latin *quantus ... tantus ...* and Umb. **panta ... etantu** ...:[50]

Tocharian A *mänt-ne ..., täm-ne ...*

(35) A 276 a6	*mänt-ne kāsu kärsācär, täm-ne pyāmäs yas penu.* "Whatever you deem appropriate, that go ahead and do."
(36) A 25a5	*mänt-ne tñi ākāl rito, täm-nek ṣakk ats tāṣ.* "Whatever your wish, exactly this shall come true."
(37) MSN 10 [II.12] b2	*mänt-ne yäsäṃ kri tāṣ, täm-ne pyāmäs* "As you wish, thus let's do it!"

Latin *quantum ..., tantum ...*

(38) Plautus, *Aulularia* 118f.	*domum me rursum quantum potero tantum recipiam* "I'll come home just as fast as I possibly can."

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[48] For examples see Hackstein (2004b:182, fn.28), to which add Melchert (1994:106) on Hittite, e.g. *kuitman* 'until', but *kuitmān-aš* 'until he'.
[49] Cf. Thomas (1968:219-231).
[50] Cf. Watkins (1976:313).

(39) Plautus,   ... *ut **quantum** velles **tantum** sumeres*
Bacchides 674   "... that you take as much as you wanted."
(40) Plautus,   ... ***quantum** dignu's **tantum** dent.*
Pseudolus 938   "... that they give you as much as you deserve."

Umbrian **Panta ... etantu ...**
(41) Um 1 (= IT)   **Panta muta** fratru Atiiẻriu mestru karu ... aṝferture eru
Vb 3-7   pepurkurent herifi, **etantu mutu** aṝferture si.
                              "Whatever fine a majority of the Atiedian Brothers ...
                              demand shall be (imposed) on the *adfertor*, so great a
                              fine shall be (imposed) on the *adfertor*" (Poultney
                              1959:224).

All in all, the functional equation is impeccable. The Tocharian correlative structure with **mo* and **to* is mirrored by Italic **kʷo-* and **to-*. In Proto-Italic, **kʷo* extended its usage to include the functional domain of **mo* after the latter had dropped out of living use.

3.0 Conclusion

I. Typology:
We began our discussion with a demonstration that the transition from textual structures into syntactic structures is fairly widespread among IE and non-IE languages. In the course of this development the clauses could either retain or give up their sentential value. Concentrating on the latter process, the desententialization of clauses, my article has focussed on the importance of interrogative clauses as sources of later function words. In particular, interrogative clauses frequently develop into compound interrogatives.

Syntacticization involving desententialization: (cleft) interrogative clauses > compound interrogatives
  A. PIE **kʷis so(s)*   > Gk. τίς ὅδε, τίς οὗτος, TB *kᵤse*
  'Who is this, that?'
  B. PIE **mos kʷis - so u*   > TB *mäksu*
  'Which one is it?'

In each case, the methodological prerequisites were satisfied:
  a. Recoverability: First it could be shown that the presumed synactic prototypes were still attested or plausibly recoverable.
  b. Naturalness: As for the desired naturalness of linguistic developments, I have pointed out typological parallels.

c. Anomalies: Concerning my third methodological provision, "explanatory power," each of the above explanations could account for certain anomalies. Thus, the nominative restriction of the pronominal *so could be explained by its origin as a predicate nominal. And on the syntactic level, we were able to explain some seemingly pleonastic constructions as deriving from earlier clefts which were defocalized while retaining their syntactic structure.

II. Etymology

Finally, as a side effect of our investigation, a new explanation of some compound interrogatives involving the pronominal stem PIE *mo- has emerged in light of a scheme of recurrent pronominal correspondences.

*mo-	*k^wo-	*Hio-	*s/to-

Abbreviations

CHD = *The Hittite Dictionary of the Oriental Institute of the University of Chicago.* Hans G. Güterbock and Harry A. Hoffner (eds.). Chicago: The Oriental Institute of the University of Chicago,

LSJ = Liddell, Scott, and Jones, *A Greek-English Lexicon*, 1940, 9th edition. Oxford: The Clarendon Press.

OED = *Oxford English Dictionary* 1989 Simpson and Weiner (eds.). 2nd edition. Oxford: Oxford University Press.

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