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

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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 măksu '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 pronounals: *mo-, *kʷo-, *Hjo-, *so/to- (§§2.2.2ff.). In most branches of IE outside of Anatolian and Tocharian, *mo- has been superseded by *kʷo-.

1I am grateful to Brent Vine, Raimo Anttila, Vjacheslav Ivanov, Stephanie Jamison, and others for inviting me to present this lecture at the UCLA Indo-European conference, and I gratefully acknowledge the support of the UCLA Program in Indo-European Studies and the UCLA graduate student association. Also I am indebted to Hans Henrich Hock, Jared Klein, Mark Southern, Brent Vine, and Calvert Watkins for helpful discussion. Many thanks also to Craig Melchert for commenting (per litteras) on a draft version of this paper. Naturally, the responsibility for the ideas expressed in the present article remains entirely my own.
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 interogatives 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

<table>
<thead>
<tr>
<th>A Text: soliloquy</th>
<th>B Complex clause: conditional S: [[S1&gt;sub] S2&gt;matrix]</th>
</tr>
</thead>
</table>
| S1 Topic:  
  Do they but see a corner of his hat? | → Condition:  
  → Do they but see a corner of his hat, |
| S2 Comment: [if so,] they go away happy. | 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."

\(^2\)Preempted by others, cf. Kühner and Stegmann (1955:165): "Man hat vielfach solche Sätze, die sich als Bedingungssätze auffassen lassen, als Fragessätze 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

<table>
<thead>
<tr>
<th>Text: soliloquy</th>
<th>Complex clause: causal</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1+S2+S3</td>
<td>S [S1&gt;matrix [S2&gt;COMP + S3]]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S1 Proposition</th>
<th>I’m falling asleep.</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2 Question</td>
<td>Why?</td>
</tr>
<tr>
<td>S3 Comment</td>
<td>I’m bored to death.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Matrix clause</th>
<th>I’m falling asleep, because</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complementizer</td>
<td>because</td>
</tr>
<tr>
<td>Sub clause</td>
<td>I’m bored to death.</td>
</tr>
</tbody>
</table>

While the phenomenon has mostly been dealt with in the framework of individual case studies, 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 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 desententialization, 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.

• 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 si 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.
  • Classical Armenian greata>e > gref-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 desententionalization 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)

- 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, ... *nu rät mir wie 'daz i fiuwern hulden næhe mich*

now tell me how [that] I can approach your benevolence

> *Parzival* 394, *bit si sich bedenken wie 'daz si sin alsó 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 *kʷoð? ‘what’ and remodelings or derivatives thereof frequently function as interrogative particles in Indo-Iranian languages, cf. Av. kaṭ (Bartholomae 1904:435-436), Ved. kát, Cl.Skt. kíṁ 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 *kʷiH₁ ‘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 ēto 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 ēto? “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:

<table>
<thead>
<tr>
<th>S1 Proposition</th>
<th>I’m falling asleep.</th>
<th>→</th>
<th>Matrix clause</th>
<th>I’m falling asleep</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2 Question</td>
<td>Why?</td>
<td>→</td>
<td>Complementizer</td>
<td>because</td>
</tr>
<tr>
<td>S3 Comment</td>
<td>I’m bored to death.</td>
<td>→</td>
<td>Subordinate clause</td>
<td>I’m bored to death.</td>
</tr>
</tbody>
</table>
• PIE *kʷeH₁ to[d] u > kā tu? ‘why that?’ → TB kaiú ‘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? |
| S1 Proposition | The king is sick. |
| S3 Comment | Nobody has noticed it. | → | Focalizing particle Concerning the fact that |
| Subordinate clause | the king is sick |
| 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 kʷce 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

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>TARGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Monoclausal</td>
<td>discourse particles: NHG bitte</td>
</tr>
<tr>
<td>B Biclausal</td>
<td>compound interrogatives: NE How come NHG Wieso</td>
</tr>
<tr>
<td>B1 focal question</td>
<td></td>
</tr>
<tr>
<td>B2 simple question</td>
<td></td>
</tr>
<tr>
<td>C Triclausal</td>
<td>sentence connectives: causal, explicative ... focalizing</td>
</tr>
<tr>
<td>C1 Proposition, question, explanation</td>
<td></td>
</tr>
<tr>
<td>C2 Question, proposition, explanation</td>
<td></td>
</tr>
</tbody>
</table>

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

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 *be*.

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 $k_{\text{w}}y\text{al-te}$, which etymologically is still transparently ‘why so?’ (Hackstein 2004b:172f.). Likewise in West Tocharian, the causal particle $k\text{atú}$ is still transparently “why this?”. Turning to West Germanic, in OHG there are a few attestations of an interrogative $hw\text{anta}$ ‘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_{\text{w}}y\text{al} ‘why?’ | > $k_{\text{w}}y\text{al-te} ‘because’ |
| TB kâ tu ‘why that?’ | > $k\text{atú} ‘for, because$ |
| OHG $(h)w\text{anta ‘Why?’} = \text{Lat. quare, e.g. Monsee Fragments 8, 16:}$ | > OHG $(h)w\text{anta ‘because’} = \text{Lat. quoniam,}$ |
| e.g. Tatian 138, 13: $huu\text{anta} spri\text{hhis} ..?$ | Sint iru forlazano manago sunta, |
| translating quare ... loqueris? | $uu\text{anta} siu minnota filu$ translating remittentur ei peccata multa, $quoniam$ dilexit multum. (Luke 7.47) |

Modern German


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. $	ext{hi, tu, yatas}$ (Sieg and Siegling 1949:105), e.g. B 251 b3 ~ $hi$. The explanation of $k\text{atú}$ as an original interrogative was first suggested by Sieg and Siegling (1949:105) “viel. aus kâ 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 brauchs Todesmut bei den Leuten” (Brecht 1963:25, line 25f.).
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 univerbed 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. māksu ‘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 kṭo čyto, Alb. kush, and Toch. kᵣse kᵣce. 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 kṭo čyto, Alb. kush, and Toch. kᵣse kᵣce have thus far always been explained as simple extensions of the interrogatives.\textsuperscript{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  quīs est qui ...
Vahlen, Plautus, Mercator 808 “who is [he] who ...?”

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

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 otorié?  
“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.

^{12} For further examples, see Lodge (1933:498,2) and Löfstedt (1966:262f.).
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 *What is this* “what this is” *what you have done?*

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

- TB *kₜₜ se pi ksa/ kₜₜ se 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. *au 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 astonishingly pleonastic structure: *on the day* “of ‘on the day of 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 *τις ὁδε*/ *τις οὖτος*.

| Animate Greek τις ὁδε /τις οὖτος < PIE *k'is so... |

Originally this construction was a full cleft interrogative, as in (5):
(5) Iliad 15.247 τὶς δὲ σὺ ἐσαι ὁς μ’ εἶρεαι;
“Who are you, who speak to me?”

Plato, Meno 85e ἔστιν ὅνν ὅστις τοῦτον πάντα δεδίδαξεν;
“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 τὶς δ’ οὗτος κατὰ νῆας ἀνὰ στρατῶν ἔρχεαι ...;
“Who are you, who walk alone through the ships and the army ...?” (Lattimore)

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 τὶς δ’ οὗτε Ναυσικᾶς ἔπεται;
“Who is this ... stranger that follows Nausicaa?
(Cook)

(9) Odyssey 20. 191 τὶς δὴ οὗτε ξεῖνος νέον εἰλήλουθε,
συβδότα τὴν ἡμέραν πρὸς δῶμα;
“Who is this stranger, swineherd, who is newly arrived at our house?” (Cook)

(10) Euripides, Hecuba 501f. ἦ... τὶς οὗτος σῶμα τούμον ὁυκ ἔδα
Ικεῖσθαι;
“What 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 ποιον 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. sā figé (occurrence of [uninflected] sā 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. sā 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 sā figé: It is inflected (cf. τὶ τοῦτο), it occurs with third-person reference, and it is found in non-initial position.

15 Likewise LSJ 1798: “Who is this that follows Ν?”
"Which was the word that you spoke?"\textsuperscript{16}, literally "Which the word did you speak?" with ποίον being used predicatively.\textsuperscript{17}

(11) \textit{Iliad} 1.552 + αἰνοτατε Κρονίδη, ποίον τὸν μῦθον ἐξίπτες;

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

\begin{center}
\textbf{Inanimate Greek τί τοῦτο < PIE *kʰid tod...}
\end{center}

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, \textit{Apologia} 20d

\[ ... \text{άποδειξαὶ, τί ποτ' ἑστιν τοῦτο, ὃ ἔμοι πεποίηκεν τὸ τε ὄνομα καὶ τὴν διαβολὴν.} \]

"[...to explain,] what it can be which has given rise to both my reputation and the slander."

and its shortened version (13-14).

(13) \textit{Odyssey} 17.576 \quad τί τοῦτ' ἑνόησεν ἄλητης; \quad "What is this that the wanderer means?"
(14) S. Ph. 1173 \quad τί τοῦτ ἐλέξας; \quad "What is this that you have said?"

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

(15) \textit{Odyssey} 20.351 \quad τί κακὸν τὸδε πᾶσχετε; \quad "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 \textit{Quo\ s\ h\ o\ c\ m\ o\ n\ s\ t\ r\ m\ n\ \ s\ n\ \ p\ o\ n\ c\ i\ a\ \ t\ a\ m\ \ m\ i\ s\ m\ i\ s\ u\ s}?

\textit{Verrem} 4.47 \quad "Which is this monster that we have sent into the province?" (Ernout and Thomas 1953:156)

\textsuperscript{16} Cf. Kühner and Gerth (1955:626): "was ist das für eine Rede, die du gesagt hast."
\textsuperscript{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 ὥδε/ 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-ʾēḇōʾ hūʾ, māh zzeh* have the appearance of structural (and functional) analogues of Gk. τίς οὗτος and τί τοῦτο, and much the same can be said of *mī-zeh* and *mah-zzoʾ* when correlated with OCS *kēto* and *eṭo*.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. Samuel 12.21  
*māh-haddāḇār hazzeh ʿašer ʿāšītā*

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 syntactic relative clause by an asyndetic one, via deletion of the REL marker ʿašer, 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-zzo ʿāšītā*

what-INT=DEM.N do:PRF.2SG.M

"What [is] this that thou hast done?"\(^{19}\)

(19) Isaiah 63.1  
*mī-zeh bāʾ mēʾsegōm*

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 šāhqāh ʿārāh*

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.  
*mī ʿatāh qārāʿtā*

who-INT you-2SG.M cry:PRF.2SG.M

"Who art thou that criest?"

(22) Isaiah 60.8  
*mī ʿēleḥ kāʿāb tōʿūpēnāh*

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-ššād-ṣayid* "the one hunting (the) hunted" lends itself to an analysis as a nominalized relative.

---

\(^{19}\) Likewise Genesis 3.13 *mah-zzo ʿāšīt What [is] this that thou (f.) hast done?* and Exodus 14.5 *mah-zzo ʿāšīnū* lit. "What [is] this that we have done?."
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  
\[
\text{mī zo}'\xi\ 'olāh min-hammidbār} \\
\text{who-INT=DEM.F.SG come:PTCP.PRES.F.SG from-ART-desert} \\
\text{“Who is this that cometh up from the wilderness?”}
\]

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 hā'īš 'ašer “who ART-man REL” [Judges 10.18 Deuteronomy 20.5] or mī 'ašer... “who REL” [Exodus 32, 33]) or “who that it [is].”

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 όδει or τί τοῦτο has not taken place. They have not undergone univerbation to become new interrogatives. Nevertheless, both constructions, τίς όδει 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 όδει etymologically represents *k”is so, the same phrase can be posited to underlie the Tocharian interrogative

---

20 Interestingly this construction could be held to foreshadow the later Modern Hebrew use of hū² as a copula.
TB kْuṣe ‘who?’ < *kْw is so(s)? or Alb. kush < PIE *kْw os so(s) ‘Who [is] he [who …]?’

I. Animate interrogative “Who?” < interrogative clause *“Who [is] he [who …]?”

| Gk.   | τίς ὁ-δε               | < PIE *kْw is so? |
| TB    | kْse < PToch. **kْwu sαe | < PIE *kْw is so(s)? |
| Alb.  | kush٢٣           | < PIE *kْw os so(s)? |
| OCS   | κύτσο  < PSI *κύτσο | < PIE *kْw os tod٢⁴ |

In the analogous way, it is possible to explain the neuter interrogatives as derivatives of interrogative phrases. A phrase like τί ἐστι τοῦτι is mirrored in OCS κύτσο and through various additional changes in TB kْce, both ultimately deriving from *kْw id tod? ‘what [is] that?’

II. Inanimate interrogative “what?” < interrogative clause *“what [is] it [that …]?”

| Gk.   | τί τοῦτο [Plato, Symposium 202a] | < PIE *kْw id tod? |
| = TB  | kْce < PToch. *kْce < *kْw id te٢⁵ | < PIE *kْw id tod? |

٢٣ Note that Alb. kush cannot be derived from simple *kْw 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).
٢٤ With replacement of the animate predicate noun by its more indefinite neuter correspondent, cf. Germ. niemand anders, Skt. Brähmanas tāt tvām asi.
٢٥ Remodelling of *tod analogically after o-stem inflection, cf. TB wate ‘second’ < *dui-tos with oblique sg. masculine and neuter wace < *duitom). The palatalization of the obl. sg. ending of the o-stems has been ascribed to the influence of personal pronouns such as PIE *swε 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.
<table>
<thead>
<tr>
<th></th>
<th>Alb.</th>
<th>qi-sh&lt;sup&gt;26&lt;/sup&gt;</th>
<th></th>
<th>OCS</th>
<th>e&lt;sub&gt;i&lt;/sub&gt;to &lt; PSI. *e&lt;sub&gt;i&lt;/sub&gt; to</th>
<th></th>
<th></th>
</tr>
</thead>
</table>

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. <i>kʷse pi ksa</i> and <i>kʷse no su</i>,<sup>27</sup> as I will now demonstrate.

An etymological rendition of <i>kʷse pi ksa</i> would be “who is this who this is?” The presumed historical analysis of <i>ksa</i> as containing a relative pronoun (<i>ksa</i> from a ellipticized relative clause *<i>kʷ</i>is so “who it [is/may be]”) seems to be contradicted by the fact that synchronically <i>ksa</i> occurs as an indefinite pronoun. But this does not exhaust all of its functions. Aside from its indefinite usage, <i>ksa</i> also occurs as a highlighting device after interrogatives, e.g. <i>kʷse ksa “what if anything, what precisely.”</i> 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 τὸς ‘someone’ as opposed to East-Ionic κοῖός τις, Attic ποῖος τίς ‘who precisely,’ e.g. Herodotus 3, 34 κοῖον μὲ τινα νομίζοις Πέρσαι εἶναι, Sophocles, <i>Oedipus Coloneus</i> 1163, Xenophon, <i>Historia Graecα</i> 4.1.6 ποῖόν τιν(α); “Which one precisely?”, Plato, <i>Respublicα</i> 398c οὐκουν ... ἔχω ... ἔμμβαλέσθαι,

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<sup>26</sup> = /kʷi-ʃ/ (with younger palatalization of *k > k'/ _i; -sh extended from ku-sh), ultimately deriving from < PIE *kʷid, analogical restoration of the velar onset on the model of the animate interrogative ku-sh; cf. the creation of Skt. <i>ki-m</i> ‘what’ (replacing inherited cid as in Skt. indefinite -cid) on the basis of animate kah ‘who’ or Hitt. <i>kuwat</i> ‘why’ replacing delabialized *kat (< *kod < *kʷod; as for the delabialization of *kʷ before /o/, cf. the references in Hackstein 2002:130, fn.33).

<sup>27</sup> Cf. Pedersen (1941:121) which repays careful study.
ποία ἀττα δεῖ ἡμᾶς λέγειν “I have no idea what precisely we have to say.” 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 kₜₛₑ 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

kₜₛₑ pi ksa wesān kekamor orocce lánt šarsāšši?
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

kₜₛₑ 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 kₜₛₑ no su uttare ... and relative sū, as found in:

(27) TB 31b2

kₜₛₑ no, sū tākam apāštte, kallaṃ svātsi alanmem...
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 monoclusal 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


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 ὁδε, τίς οὕτος, τί τοῦτ’
  Lat. quid est quod? > quid quod, quid hoc
  Fr. Qui est-ce qui, Qu’est-ce que etc.
  Bib. Heb. mî-²êpô² hû² mah-zzo² 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 univerbalizations postdating the loss of final *-s and *-d in the interrogative, which fits with their explanation as originally free clausal constituents.
- A morphological peculiarity. The restriction of the demonstrative -to in kū-to and Toch. -se in k. se 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 māksu ‘which one’ and the modal interrogative TA mānt ‘how’.

#### 2.2.1 Tocharian B māksu ‘WHICH ONE’. The only detail of the analysis of TB māksu which is unanimously agreed upon is that the

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30 The unextended form of the interrogative *kʷid > *ɛb is preserved by the OCS indefinite pronoun ni-ɛb-ze ‘nothing’, and in Čakavian Serb. ća, 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.\textsuperscript{31}

<table>
<thead>
<tr>
<th>Case</th>
<th>n.m. mākṣu, f. māksā, n. māktu</th>
<th>m. su, f. sā, n. tu</th>
</tr>
</thead>
<tbody>
<tr>
<td>nom.sg</td>
<td>m. mākce, f. māktā, n. māktu</td>
<td>m. ce, f. tā, n. tu</td>
</tr>
<tr>
<td>obl.sg</td>
<td>m. mākcai, f. māktom</td>
<td>m. cai, f. toṃ</td>
</tr>
</tbody>
</table>

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 *kā < PIE *gʰi, *gʰu. 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 k₁-se), the same analysis immediately suggests itself for -ksu (clitic destressed variant of *k₁-su); the only difference is that demonstrative *so (TB se) in k₁-se is replaced by *so u\textsuperscript{32} (TB su) in *k₁-su (TB -ksu). In both cases, the element *ku can formally be analyzed as the reflex of *kʷis, the relative marker – an analysis which, as we will see, makes excellent sense as well.

As for the initial element of TB māksu, Klingenschmitt’s proposal to explain mā- as a destressed variant of interrogative *mo- carries most conviction despite the otherwise possible reconstruction of mā- as *me- or *mu-,\textsuperscript{33} for both these latter possibilities 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

\textsuperscript{31} As already noted by Krause and Thomas (1960:166).
\textsuperscript{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 *t₁od 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).
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. katamāḥ or katarah 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. kʷse 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
K4 b3
mäksu no yāmor kʷcesa onolmo ... skwassōnc māskentrā
“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’

34 Cf. Sieg and Siegling (1949:149) and B PK NS 53 (ed. Pinault 1988:100f., 130f.): a2 enkalne mäksu ‘greed, which-one [is] it?’, Skt. upadānah katamāḥ; a1 yoko mäksāu ‘thirst, which-one [is] it?’, Skt. tṛṣṇā katamā; a2 srukalne mäksu ‘death, which-one [is] it?’, Skt. maranam katarat.
and Pal. *mas,\textsuperscript{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 k"is '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,\textsuperscript{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.

\begin{center}
\begin{tabular}{ll}
*mos k"is - so-u & lit. 'Which-Who is this?' \textsuperscript{*}
\end{tabular}
\end{center}

\begin{center}
\begin{tabular}{ll}
\textit{orde} & mä-ksu
\end{tabular}
\end{center}

\begin{center}
\begin{tabular}{ll}
French & quel qui/quel que \textsuperscript{37}
\end{tabular}
\end{center}

\begin{center}
\begin{tabular}{ll}
Early Modern German & welez was
\end{tabular}
\end{center}

- Modern Fr. quel qui/quel que

\textbf{(29)} \textit{l'auteur d'un homme quel qui soit}
the authority of a man \textbf{whoever he may be}

A closer analogue is supplied by Early Modern German (14\textsuperscript{th}-15\textsuperscript{th} centuries) welez was, which matches TB mäksu both structurally and semantically:

\textsuperscript{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 *-i or -i, which functions as an adjective (cf. aši 'the aforementioned')" (Melchert 1984:36).

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

\textsuperscript{37}
(30) Sprüche deutscher Mystiker, Pfeiffer (1851:218)\textsuperscript{37}

*sage mir, welez was diu hoehste vröude(...), die unser herre Jésus Kristus ie bewisede üf ertriche? 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 *k'os, relative *Hjios, and demonstrative *so(s).

<table>
<thead>
<tr>
<th>*mos</th>
<th>*k'os</th>
<th>*Hjios</th>
<th>*so(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pal. mas ‘as much as’, Hitt. mas-i ‘how, as much’</td>
<td>Skt. kah</td>
<td>Skt. yah</td>
<td>Skt. sa(h)</td>
</tr>
</tbody>
</table>

It follows that the posited juncture *mos k'is – if real – could imply the coexistence of corresponding forms *Hjios k'is and *so k'is. Such forms do indeed exist. Alongside *Hjios k'is (Myc. jo-qi, Hom. ὀστίς, GAv. yas ... ciścā), *so k'is is attested in Hom. ὧ τίς (Hackstein 2002:26-27, fn.26).

<table>
<thead>
<tr>
<th>*mos k'is</th>
<th>[see below §2.2.2.2.]</th>
<th>*Hjios k'is</th>
<th>*so k'is</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB mäksu</td>
<td>[see below §2.2.2.2.]</td>
<td>Myc. jo-qi, Hom. ὀστίς, GAv. yas ... ciścā</td>
<td>Hom. ὧ (κέν) τίς</td>
</tr>
</tbody>
</table>

Thus the reconstructed *mos k'is, 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

is not true. The Tocharian B equivalent is B mant ‘thus’, which – pace the handbooks\textsuperscript{38} – is in fact attested in the same meaning as TA mānt ‘as, like’.

(31) TB
FII K2 a3

\textit{mānt} weweñor ste poyšintse
“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’.

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

(33) TB FI K 1a4
tom mant we[§](§i (re)kauna
these like spoke words
“words like these he spoke”

(34) TB
H149add.26/30a6

\textit{tesa mant}
thus like
\textit{sic ut}

By omission of the demonstrative, TB \textit{te mant} ‘this-how/as/like’ gives rise to \textit{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’\textsuperscript{40} can be semantically equivalent to demonstrative ‘so’. By reanalysis, the postposed comparative particle may accordingly transform into a sentence-initial demonstrative:

\[
\begin{align*}
\text{comparative particle} & \quad \rightarrow \quad \text{modal demonstrative} \\
X \textit{mant} Y & \quad \rightarrow \quad X \textit{mant} Y \\
X \text{like [is]} Y & \quad \rightarrow \quad \text{X: so/ such [is]} Y \\
\text{“Y [is] like X”} & = \quad \text{“X: thus [is] Y”}
\end{align*}
\]


\textsuperscript{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. kiyat- 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. män, mahhan ‘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. män, mahhan, one may note the deployment as postpositive comparative particle, which represents the core usage in both languages (Hitt. Bo. 2865 II 23 MÜSEN-is män ‘like a bird’, cf. CHD L-N 145 sub 1 :: TB [see above] se mant ‘thus like’) and interrogative ‘how’ (Hitt. KUB 17.10 1 29 [CHD L-N 106] mähhan 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. män appears to be a case form of the simple interrogative. To be sure, Hitt. män could derive from *mant 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. män as *meH₂m- carries much more conviction, when seen in a wider IE context.

It follows that Hitt. män 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 *Hj0-, and demonstrative *so/to-. In the following, I suggest integrating both Hitt. män and Toch. mänt in a chain of corresponding pronominals. Consider the following template:

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.”
<table>
<thead>
<tr>
<th></th>
<th><em>mo-</em></th>
<th><em>kʷo-</em></th>
<th>*Hjo</th>
<th>*s/to-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia</td>
<td>*mos</td>
<td>*kʷos</td>
<td>*Hjo</td>
<td>*so(s)</td>
</tr>
<tr>
<td></td>
<td>Pal. maš ‘as much as’, Hitt. maš-i ‘how, as much’</td>
<td>Skt. kah</td>
<td>Skt. yah</td>
<td>Skt. sa(h)</td>
</tr>
<tr>
<td>Ib</td>
<td>locative-sociative *me</td>
<td>*kʷe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.</td>
<td>*mos *kʷis</td>
<td>[see below §2.2.2.2.]</td>
<td>*Hjo *kʷis</td>
<td>*so kʷis</td>
</tr>
<tr>
<td></td>
<td>TB mäksu</td>
<td></td>
<td>Myc. jo-qi, Hom. ὅστις, GAv. yas</td>
<td>Hom. ὅ (κέν) τις</td>
</tr>
<tr>
<td>III.</td>
<td>*meH₂m</td>
<td>*kʷeH₂m</td>
<td>*HjeH₂m</td>
<td>*teH₂m</td>
</tr>
<tr>
<td></td>
<td>Hitt. män, maḥḥan &lt; män-handa</td>
<td>Lat. quam</td>
<td>Lat. iam</td>
<td>Lat. tam</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gk. πηνίκα</td>
<td>Gk. ἴν</td>
<td></td>
</tr>
<tr>
<td>IV.</td>
<td>*meH₂nt</td>
<td>*kʷeH₂nt</td>
<td>*HjeH₂nt</td>
<td>*teH₂nt</td>
</tr>
<tr>
<td></td>
<td>TA mänt, B mänt, mant</td>
<td>Lat. quantus</td>
<td>Skt. vāt ‘inasmuch as, as soon as’</td>
<td>tantus</td>
</tr>
</tbody>
</table>

**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 preverbal particle *me- as a locative-sociative case form of the pronoun stem *mo- (Ib) in much the same fashion as conjunctival *kʷe ‘and’ has been related to *kʷo, cf. Klein’s supposition (1985:119) “of a primordial relationship between *kʷe and *kʷos.”

**2.2.2.2. Ad II.** The emerging template *mo- : *kʷo- : *Hjo- : *s/to- helps recover a system of alternating compound pronominals: *mos kʷis is matched by *Hjo *kʷis and *so kʷis, see above §2.2.1. The failure of a juncture *kʷos kʷis to occur is not random, for it is impossible to reconstruct a side-by-side occurrence of both forms for the animate interrogative (Mayrhofer 1992:347-348). Instead, both forms can but represent reconstrucional alternatives. Thus Mayrhofer (1992:347-348) argues in favor of viewing *kʷos as the inherited formation and kʷis as a later refashioning of the latter, copying the vocalism of inanimate *kʷid.

**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 pronoun chain given under number III containing modal pronominals, all of which occur in the acc.sg.f.: *meH₂m (Hitt.
mān, maḥḥan < mān-handa\textsuperscript{42})*\textsuperscript{42}, *k\textsuperscript{w}eH\textsubscript{2}m (Lat. quam, Gk. πνήκα), *HjeH\textsubscript{2}m (Lat. iam, Gk. ἦν), *teH\textsubscript{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. τῆν εὐθείαν [όδόν] ‘directly’, μακράν ‘far’), ablative (Lat. aliqua [ref]), 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\textsuperscript{w}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. mē ‘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\textsubscript{2}m, cf. Hajnal (1995:166, fn.196), and cf. mutatis mutandis the precedent case of conjunctional *k\textsuperscript{w}om and *k\textsuperscript{w}eH\textsubscript{2}m co-occurring even within the same language, e.g. in Umb. (PUNE ‘when’ < *k\textsuperscript{w}om-de, PANE ‘when’ < *k\textsuperscript{w}eH\textsubscript{2}m-de). Hittite mān, thus might even represent a merger of *móm and *méH\textsubscript{2}m.

2.2.2.4. Ad IV. The pronominal correspondences found in I-III open the way to an explanation of TA mānt. It is possible to integrate TA mānt in a chain of corresponding neuter nt-stems, derived from the stems *mo-, *k\textsuperscript{w}o-, *H\textio-, and *to-, i.e. PIE *meH\textsubscript{2}nt, *k\textsuperscript{w}eH\textsubscript{2}nt, *HjeH\textsubscript{2}nt, *teH\textsubscript{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\textsuperscript{w}eH\textsubscript{2}nt and *teH\textsubscript{2}nt (both subsequently thematized in Proto-Italic). While competing alternative reconstructions of Lat. quantus tantus cannot be substantiated,\textsuperscript{43} the assumption of an inherited PIE formation\textsuperscript{44} is

\textsuperscript{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, maḥḥan could be a shortened form of the otherwise attested mahhanda, see Melchert (1984:36, fn.20, 1994:124).

\textsuperscript{43} Cf. Szemerényi’s suggestion (1956:100) “that *tānt- *quānt- are the regular continuations of IE *tāwont- *k\textsuperscript{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 *-H₂, as pointed out by Klingenschmitt (1972:101-108); Zeilfelder (2001:181). Thus, we find Skt. kiya't- 'how big, how many' from PIE *kʷiH₂n̥t, Av. avāt-, OPer. DB 4.51 avā 'as much (as)' from *euēH₂n̥t(-), and finally, and particularly important, Skt. yaēt, GAv. yāt 'inasmuch as, as soon as' from *(H)jeH₂n̥t.

While it is true that Skt. yāt, and GAv. yāt would equally well permit an analysis as a fossilized ablative *H₂di, inflectional and semantic arguments clearly point in the direction of two homonyms, a) PIE *(H)jeH₂n̥t, b) PIE *H₂di. 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.tā⁴⁶ (GAv. Y 35, 7⁴⁷) 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 *(H)jeH₂n̥t, b) bare ablative PIE *H₂di.

> *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.

⁴⁵ Instead of a secondary creation within Proto-Italic, as suggested by Untermann (2000:241).
⁴⁶ See Hettrich (1988:327f.).
⁴⁷ Under Narten’s analysis (1986:120).
⁴⁸ yā.tā isamaidě '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. män, whether deriving from PIE */ö/ 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-/æ- > -ä-:

- PIE *so u > *sæ-u > *sā-u > TB su (Klingenschmitt 2004:316, 409; Adams 1999:693)
- PIE *-tH₂a > PToch. 2sg. act.pres./sbj./opt. *-tā (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-ntā > unstressed mā-ntā ‘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 VOCAL 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 Schrott (1992:264-266) for German. Seizing on German examples displaying adverbial first syllable accentuation (e.g. adverbial dā-mit ‘thereby’) versus conjunctional second-syllable accent (final conjunction da-mit ‘in order to’), Schrott 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 wohlf?’ (e.g. B 547 a7 (katha)n tarhi = kātsi tu) with first-syllable accent as opposed to conjunctural kā tu > katū ‘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 mānt, 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 mānt and TB mant represent a frozen oblique case form (to be associated with the athematic nt-stem, type TB pernent, TA parnonti, 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. mānt 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 mānt-ne ... tām-ne ...\(^{49}\) matches with Latin quantus ... tantus ... and Umb. panta ... etantu ....\(^{50}\)

Tocharian A mānt-ne ... , tām-ne ... 
(35) A 276 a6 mānt-ne kāsu kārsācār, tām-ne pyāmās yas penu. “Whatever you deem appropriate, that go ahead and do.”

(36) A 25a5 mānt-ne tīnī ākāl rito, tām-ne šakk atrs tās. “Whatever your wish, exactly this shall come true.”

(37) MSN 10 mānt-ne yāsāṁ kri tās, tām-ne pyāmās [II.12] b2 “As you wish, thus let’s do it!”

Latin quantum ... , tantum ...
(38) Plautus, domum me rursum quantum potero tantum recipiam Aulularia 118f. “I’ll come home just as fast as I possibly can.”

\(^{48}\) For examples see Hackstein (2004b:182, fn.28), to which add Melchert (1994:106) on Hittite, e.g. kuitman ‘until’, but kuitmān-ās ‘until he’.


\(^{50}\) Cf. Watkins (1976:313).
(39) Plautus, 
Bacchides 674  
... ut quantum velles tantum sumeres
"... that you take as much as you wanted."
(40) Plautus, 
Pseudolus 938  
... quantum dignu's tantum dent.
"... that they give you as much as you deserve."

Umbrian Panta ... etantu ...

(41) Um 1 (= IT)  
Panta muta fratru Atiiefiu mestru karu ... ařerture eru 
pepurkurent herifi, etantu mutu ařerture 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" (Poulney 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.

Syntactization involving desententialization: (cleft) interrogative 
clauses > compound interrogatives

A. PIE *k’is so(s)  > Gk. τίς ὁδὲ, τίς οὗτος, TB kṣe
   ‘Who is this, that?’
B. PIE *mos k’is - 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' o- | *Hjo- | *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,


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