

Relative Clauses, Indo-Hittite, and Standard Average European *

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Abstract

Similar relativization strategies recur across the early attested Indo-European languages, but some of these languages use a reflex of **yo-* as the relative pronoun while others use a reflex of **k^wi-/k^wo-*. Differences in relative clause syntax between “**k^wi-/k^wo-* languages” and “**yo-* languages” offer little help towards an explanation: the similarities are more striking than the differences, and apparent differences have much to do with the kinds of texts that happen to be attested early. In addition, all hypotheses under which one relative pronoun ousted the other in some or all daughter languages, while plausible in themselves, suffer from a lack of relics of relative **yo-* in “**k^wi-/k^wo-* languages” and of relative **k^wi-/k^wo-* in “**yo-* languages.” This paper argues that what we can reconstruct is a stage at which Indo-European languages belonged to a linguistic area characterized by common strategies for relative clause syntax—despite having different relative pronouns with different origins. At least two relativization strategies should be attributed to this stage: the correlative construction (“Who drinks from this cup, him desire will seize”) and (in Comrie’s terms) the “relative pronoun strategy” (“The man whom you seek is here”). Chronological reflections lead to an argument for connecting two questions normally thought to pertain to very different time periods: the Indo-Hittite question and the Standard Average European question.

* The central idea presented in this paper is also put forward briefly in Probert forthcoming, §15.7, but the Twenty-Fifth Annual UCLA Indo-European Conference has given me the stimulus to work it out in more detail and to present it for a more Indo-Europeanist audience. I would like to thank very warmly Craig Melchert and the UCLA Program in Indo-European Studies for their extremely kind invitation to speak at this conference, and the participants for very valuable discussion. Craig Melchert and Mattyas Huggard have generously shared their new discoveries in Hittite relative clauses (see nn.27–8), and Eleanor Dickey has given me perceptive comments on this paper in draft. The volume editors have read the piece with admirable care and saved me from some errors. During his life Calvert Watkins returned many times to questions about relative clauses, and I am honored to offer a paper on the subject in a volume dedicated to his memory. I would have valued his reactions very much.

1. Relativization strategies in early Indo-European languages

Attempts to reconstruct relative clauses for (some stage of) Proto-Indo-European are faced with the fact that the same kinds of relative clauses recur across the early attested languages, but some of these languages use a reflex of *yo- (or *Hyo-) as the relative pronoun while others use a reflex of *kʷi-/kʷo-. Specifically, the following four structures are widely attested across early Indo-European languages. (For the first structure, examples will be given from Greek, Latin, Vedic Sanskrit, and Hittite. For the others we shall leave Anatolian languages out of the discussion in the first instance, because opinions differ as to which of these structures, if any, were present in Anatolian in the earliest times. However, we shall return to the question of construction (C) in Anatolian in §6.)

(A) Relative clauses in correlative sentences

In this first structure a sentence-initial relative clause with case-marked relative pronoun is followed by a syntactically complete main clause. The latter contains a demonstrative pronoun or full noun phrase “picking up” the relative clause:

Greek:

- (1) ὃς δ' ἂν τῷδε πίῃσι ποτῆρι[ῳ] αὐτίκα κῆνον
ἡμερος χαρῆσει καλλιστε[φάν]ῳ Ἀφροδίτῃς
 And **whoever** drinks from this cup, **immediately desire of lovely-crowned**
Aphrodite will seize him. (SEG 14:604: “Nestor’s Cup” from Pithecusae, 8th cent. BC)

Latin:

- (2) quem uides, eum ignoras
 (He) **whom** you see, **him** you don’t know. (Plautus, *Captivi* 566)

Vedic:

- (3) yám rákṣanti pracetaso várūṇo mitró aryamā ná cit sá dabhvate jánah
Whom wise Varuṇa, Mitra, and Aryaman protect, **never is that person in-**
jured. (RV 1.41.1)

Hittite:

- (4) nu kuit [LU]GAL-uš tezzi nu apāt iyami
Whatever the king says, **that I shall do**. (KBo 17.4 ii 12–13 = Otten and Souček 1969:24, lines ii 17–18)

(B) Free relative clauses

This second structure comprises relative clauses with case-marked relative pronoun and no external head noun:

Greek:

- (5) εἰ μὲν τις τὸν ὄνειρον Ἀχαιῶν ἄλλος ἐνισπεν,
 ψεῦδός κεν φαῖμεν καὶ νοσφιζοίμεθα μάλλον·
 νῦν δ' ἴδεν ὃς μέγ' ἄριστος Ἀχαιῶν εὖχεται εἶναι.

If anybody else among the Greeks had related the dream, we should call it a falsehood and rather distance ourselves from it. But as it is, (he) who professes to be by far the greatest among the Greeks has seen it. (*Iliad* 2.80–2)

- (6) ... αἰεὶ γάρ μοι ἔωθεν ἐνικλᾶν ὅττι νοήσω.

For she is always accustomed to frustrate whatever I have in mind. (*Iliad* 8.408)

Latin:

- (7) *fur facile quem opseruat uidet*

The thief easily sees (the person) whom he's watching. (Plautus, *Rudens* 385)

Vedic:

- (8) *stotāram ... vardhaya yé ca tvé vrktābarhiṣaḥ*

Strengthen the praiser ... and (those) whose barhis is laid out for thee. (*RV* 8.97.1cd, tr. Klein 1992:18)

I take examples such as (5), with the relative clause postponed until the end of the main clause, to involve the same basic construction as examples such as (7), with the relative clause clearly embedded in the main clause, except that in (5) the relative clause is extraposed to the end of the main clause.¹ The point that these

¹ Given the free constituent order of Greek, Latin, and Sanskrit, extraposition can rarely be identified for certain in free relative clauses (in (5) itself it could be argued that we merely have the subject ordered after the verb). However, it is clear that the authors of our early texts in these languages often extrapose headed relative clauses (see below), where extraposition typically separates the relative clause from its head noun. Given this, the frequency with which free

right-peripheral relative clauses belong in the main clause at some level of representation is illustrated particularly well by example (8), where the free relative clause is accompanied by a conjunction co-ordinating this relative clause with a noun that appears in the main clause. It has been suggested, in effect, that extraposition was obligatory in Proto-Indo-European;² this issue will not be addressed here.

(C) *Externally headed restrictive relative clauses*

This third construction consists of a relative clause with case-marked relative pronoun, restrictively modifying a preceding head noun; this head noun is external to the relative clause itself. English speakers—and speakers of many other modern European languages—might think of these as “ordinary” relative clauses:

Greek:

- (9) ἢ γὰρ ὀϊόμαι **ἄνδρα** χολωσέμεν ὃς μέγα πάντων
Ἀργείων κρατέει καὶ οἱ πείθονται Ἀχαιοί.

For I think I shall anger a **man who** is very powerful among all the Greeks, and the Greeks obey him. (*Iliad* 1.78–9)

- (10) δαίμόνι, οὐκ ἂν τίς τοι **ἀνὴρ**, ὃς ἐναΐσιμος εἴη,
ἔργον ἀτιμήσειε μάχης, ἐπεὶ ἄλκιμός ἐσσι·

Sir, no **man who** was in his right mind would fault your prowess in battle, since you are strong. (*Iliad* 6.521–2)

Latin:

- (11) ... si **uidulum** illum quem ego in naui perdidī,
cum auro atque argento sauum inuestigauero

If I track down that **trunk which** I lost in the ship, safe and sound with the gold and silver ... (Plautus, *Rudens* 1339–40)

relative clauses appear in a right-peripheral position in Homer is elegantly explained on the basis that the poet has frequent recourse to extraposition here too.

- 2 So in effect Kiparsky (1995:153–8), arguing that subordinate clauses were always adjoined to their matrix clauses in Proto-Indo-European, never embedded in them. On this view a relative clause was always either left-adjoined (i.e., in the position for correlative relative clauses) or extraposed to the right. Kiparsky builds on the work of Hale (1987a, 1987b, 1991) on the syntax of the *RgVeda* (see especially Hale 1991:36), but see also Keydana 2011.

Vedic:

- (12) *ná mṛṣā śrāntām yád āvanti devāh*

Not in vain (is) the effort which the gods make. (RV 1.179.3a, example from Hettrich 1988:541)

Once again the relative clause may be extraposed to the end of its matrix clause, as in (9), or it may be clearly embedded in the matrix clause, as in (10).

(D) *Non-restrictive relative clauses*

This fourth construction consists of a relative clause with case-marked relative pronoun, non-restrictively modifying a preceding noun phrase. It is not clear whether any of the early Indo-European languages made an intonational distinction between this construction and the preceding one, or indeed to what extent we should think of these as syntactically distinct constructions in these languages.³

Greek:

- (13) τοῖσι δ' ἀνέστη/ Νέστωρ, ὃς ῥα Πύλοιο ἄναξ ἦν ἡμαθόεντος.

And among them stood up Nestor, who was lord of sandy Pylos. (*Iliad* 2.76–7)

- (14) ἀλλ' ἄγ' ἐγών, ὃς σεῖο γεραίτερος εὐχομαι εἶναι,
ἐξείπω καὶ πάντα διίχομαι.

But come, I, who profess to be more senior than you, shall speak out and go through everything. (*Iliad* 9.60–1)

Latin:

- (15) *Cornelius Lucius Scipio Barbatus*
Gnaiuod patre | prognatus, fortis uir sapiensque,
quoius forma uirtutei parisuma | fuit,
consol censor aidilis quei fuit apud uos
Taurasia Cisauna Samnio cepit ...

Cornelius Lucius Scipio Barbatus,
begotten of his father Gnaeus, a brave and wise man,
whose looks were equal to his manliness,

3 For some discussion of this question in relation to Latin, see Touratier 1980:267–8.

who was consul, censor and aedile among you,
(he) captured Taurasia, Cisauna, and(?) Samnium ... (CIL I² 7)

Vedic:

- (16) *tvám divo duhitar yá ha devī pūrváhūtau maṁhānā darśatā bhūh*

You, O daughter of heaven, who (are) a goddess, became visible at the early invocation with might. (RV 6.64.5cd, tr. Holland 1991:31)

At least three of these relative clause constructions, and probably all of them, have a very restricted distribution in the world's languages today.⁴ It is therefore unlikely to be a simple coincidence that we find all four constructions widely attested in early Indo-European languages. As already suggested, the main difficulty that stands in the way of simply reconstructing all these relative clause strategies for the parent language is that our languages fail to agree on what the relative pronoun was.

2. Syntactic differences between “**k^wi-/k^wo-* languages” and “**yo-* languages”?

Some scholars have argued that evidence for the Proto-Indo-European state of affairs can be derived from differences in relative clause syntax between languages with **k^wi-/k^wo-* and languages with **yo-*, with correlative sentences being especially prominent in Hittite and early Latin (with reflexes of **k^wi-/k^wo-*), and non-restrictive relative clauses in the earliest extensive texts in Greek and Vedic (with reflexes of **yo-*).⁵ However, from a typological perspective the simi-

4 For this point in relation to construction (A), see §4 below. On construction (C), see §6 below. I am not aware of typological work that directly addresses the distribution of externally headed non-restrictive relative clauses with a relative pronoun (construction (D)). However, according to Comrie (1989:139) most languages probably make no formal distinction between restrictive and non-restrictive relative clauses, or only an intonational distinction. If this is so then it follows from the very restricted distribution of construction (C) that construction (D) has a very restricted distribution too. Free relative clauses formed with relative pronouns (construction (B)) appear to be found primarily in languages that form other kinds of relative clauses with relative pronouns (cf. Lehmann 1984:303), and are therefore also very restricted in their distribution. However, free relative clauses may use a different relative pronoun from other relative clauses, and there also exist languages in which free relative clauses use a relative pronoun while other relative clauses do not (see Luján 2009:229–30).

5 The idea is due to Sturtevant 1930. See further Hahn 1946; 1949; 1964; Lehmann 1980; Hettrich 1988:467–790; Hajnal 1997:58–64; cf. Clackson 2007:173–6.

larities are more striking than the differences. The differences lie in the frequencies with which different constructions are attested in early texts, and it has been suggested that these may have more to do with the kinds of texts that happen to be attested early than with the distinction between “**k^wi-/k^wo-* languages” and “**yo-* languages.” As Clackson (2007:175) puts it,

... it is important to remember that the early texts in Greek and Sanskrit are poetic, whereas in Old Hittite and early Latin most of our texts belong to a different register: laws, annals, ritual prescriptions, etc., which have a less digressive style than epic poetry or hymns.

In more detail, Hock (1993; 2000:177–8) has argued that the high frequency of non-restrictive relative clauses in the *RgVeda*, and their considerably less high frequency in Vedic prose, is an effect of the type of text rather than the early date of the *RgVeda*. To his arguments we might add an observation from Greek.

The idea that non-restrictive relative clauses are especially prominent in early Greek is based on their high frequency in the Homeric poems, the earliest extensive texts in Greek. If we look instead at the relative clauses in the earliest surviving alphabetic Greek inscriptions (up to about 550 BC) we find fifteen relative clauses that are complete enough for our purposes:

nine correlative sentences or sentences resembling them (see below):

- (17) ἥδς δ' ἄν τῷδε πίῃσι ποτῆρί[ῳ] ἀντίκα κῆνον ἡμέρος χαιρέσει καλλιστε
[φάν]ῳ Ἀφροδίτῃς “And **whoever** drinks from this cup, **immediately desire**
of lovely-crowned Aphrodite will seize him.” (“Nestor’s Cup” = (1))
- (18) ἥδς νῦν ὀρχεστών πάντων ἀταλῶτατα παίζει, τῷ τῷδε ... “**Who** now plays
most daintily of all the dancers, (?) **his (is/will be) this ...**” (IG I² 919: vase
inscription from Athens, “Dipylon oenochoe,” 8th cent. BC)
- (19) Ταταίῃς ἐμὶ λέρυθος· ἥδς δ' ἄν με κλέψῃ θυφλὸς ἔσται. “I am a vase of
Tataië’s. And **whoever** steals me **will be blind.**” (IGASMG III 16: graffito
on an aryballos from Kyme, c. 675–650 BC?)
- (20) πόλι ἔφαδε διαλήσασι πυλᾶσι : ὅστις προ. πολε..ειε μὴ τίν[τ]εσθα(ι) τὸν
ἀγρέταν. “It seemed good to the city, to the assembled tribes, that **whoever**
should (do something), the ἀγρέτας should not punish.” (Bile 1988, no. 4;
Dreros, seventh century BC)
- (21) κῶτι κοσμησιε : μηδὲν ἤμην. “and **whatever** he might have enacted as kos-
mos **is to be void.**” (Bile 1988, no. 2: Dreros, late seventh or early sixth cen-
tury BC)

- (22) ἔφαδε τοῖσι θυγα[σι] ὅς μὲν κα διδοι .ισθ. λαγκάνεν [τ]ὸ ε[— — — “It seemed good to the ⁷priests that whoever gives (something) should receive (something).” (Bile 1988, no. 6; Dreros, late seventh or early sixth century BC)
- (23) πᾶσι : ἀρὰ : τὸ [θε]δ : háδε : ἡὸς κα(τ) τὸ ἀρχομάδ θύε : ὀγδόαν ἀποτεισάτῳ “This is the imprecation of the god for all: (He) who sacrifices against the (will/directions of) the archomaos shall pay the eighth (part).” (NGSL, no. 25, lines 1–8; Megara Hyblaia, c. 600–550 BC; tr. Lupu, *NGSL*:342)
- (24) οἱ κα μὴ ἀπόμοσεν ἔ ὁτρ[ύ]νεν κῖτος [ἐ]κπέρεν. “(Those) who do not deny on oath or who push(?), the monster is to take away.” (*IC* IV 28: Gortyn, 600–550 BC according to Nomima ii: 62–3)
- (25) αἱ δὲ σίναίτο, ἀφ[α]κεσάσθῃ. ἡοῖζ δὲ δαμιοργός ἐπ[α]ναγκασσάτῳ, ἡὸ δ’ ἀμοίπολος μελεταινέτῳ τούτῳ. “But if one damages them, he shall make amends. As for (the things) with which a δαμιοργός is to compel (him to make amends), the ἀμοίπολος is to give thought to these things.”⁶ (*SEG* 11: 314, lines 11–13; Argos, 575–550 BC)

three free relative clauses:

- (26) (face A:) σᾶμα τόζ’ Ἰδαμενεὺς ποίησα hína κλέος εἶη. (face B:) Ζεὺ(δ) δέ νιν ὅστις πημαῖνοι λειόλη θείῃ. “I, Idameneus, made this monument so that there would be glory. And may Zeus make whoever might harm it utterly destroyed.”⁷ (*IG* XII/1 737: Kamiros, Rhodes, c. 600–575 BC)
- (27) σ : τ’ ὑπ[ε]ρμηρίδια ὁμόσαι δ’ ἅπερ ἐν ὀρκίοισι : α — — καθαρόν γένοιτο “... saddle of lamb, and to swear (those things) which ... in oaths ... let [something] be pure.” (*SEG* 15:564: Dreros, 7th century BC)
- (28) αἱ ζέ μὲ πῖθεϊαν τὰ ζίκαια ὅρ μέγιστον τέλος ἔχοι καὶ τοὶ βασιλᾶες, ζέκα μναῖς κα ἀποτίνοι φέκαστος τὸν μὲ πῖποεόντων καθυταῖς τοῖ Ζι Ὀλυμπίοι, ... “If (he) who holds the highest office and the βασιλεῖς do not impose the fines, let each of those who fail to impose them pay a penalty of ten minae dedicated to Olympian Zeus.” (*IvO* 2: Olympia, before 580 BC; tr. after Buck 1955:260)

one externally headed restrictive relative clause:

- 6 For a defense of the syntactic analysis adopted here (with a correlative sentence) see Probert and Dickey (forthcoming).
- 7 For a defense of the syntactic analysis adopted here (with νιν as the object of πημαῖνοι within the relative clause) see Probert forthcoming, §8.3.

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- (29) καὶ κεράμει πάντα ὅσα κα(τ) τὰ(ν) φοικίαν χρῆ καὶ στρόφιν (in a list of items in the accusative case:) “and all the clay objects which are necessary for the house, and a winch.” (IGASM V 18, lines 13–6; c. 550 BC)

two non-restrictive relative clauses:

- (30) Δφενία τόδε [σᾶμα], τὸν ὄλεσε πόντος ἀναι[δέες] “This is the tomb of Deinias, whom the shameless sea killed.” (IG IV 358: Corinth, c. 650 BC(?))
- (31) Ἀριστογείτω ἐμὶ : τῷ Ἀρκ(α)δίῳ ὅς ὑπὸ Μοτύρῃ : ἀπέθανε. “I am of Aristogeitos, son of Arkadion, who died under (the walls of) Motya.” (IGASM I² 18: Selinus, c. 550 BC)

The first nine examples ((17)–(25)) are either correlative sentences or at least resemble correlative sentences in that there is a relative clause followed by the main clause. The main clauses do not all include a pronoun or noun phrase “picking up” the relative clause, and the correct syntactic analysis of such examples is a topic we shall not pursue here. But these examples are worth bringing together here because they correspond to the sentences of Hittite or Latin that have, in practice, typically been taken as a single category of “preposed relative clauses” or the like.⁸ We might call such sentences “correlative sentences in a broad sense.”

The most cogent basis for the claim that correlative sentences in a broad sense actually predominate in early Latin is the observed predominance of sentence-initial relative clauses in early prescriptive texts (as well as in later prescriptive texts whose language is taken to be conservative): the Twelve Tables, the *Leges Regiae*, and other official and legal texts.⁹ The majority of early Greek inscriptions with relative clauses are also prescriptive in content.

8 For Latin this is so not least when figures are quoted for the relative frequencies of different relative clause types at different periods. See Bertelsmann 1885 and especially the conclusions on pp.55–6, repeated by Kroll (1910:7–8; 1933:11), Durante (1981:60), and Fruyt (2005:39–40). Compare the remarks of Vonlaufen (1974:9) on the scholarly tradition on Latin relative clauses. For Hittite see, e.g., the definitions given by Held (1957:9–10), which allow for an overt or implied correlative element in the main clause. Compare Kiparsky (1995:155) on left-peripheral relative clauses in early Indo-European languages more generally. Against this tradition, Probert (2006) argues that left-peripheral relative clauses in Old Hittite belong to two syntactic classes rather than just one.

9 See Bertelsmann 1885:7; Kroll 1910:8–9; Calboli 1987:143.

On the one hand, then, if we compare the relative clause usage of Homer with that of the Twelve Tables we find that rather different relative clause constructions predominate. On the other hand, the apparent difference disappears if we compare the Twelve Tables with some early Greek texts whose content is much more comparable.

3. How did different Indo-European languages come to have different relative pronouns?

At this point we are no closer to understanding why some some early Indo-European languages use a reflex of **k^wi-/k^wo-* while others use a reflex of **yo-*. Many scholars accept that at least one relative clause strategy (most often the correlative construction) should nevertheless be reconstructed for Proto-Indo-European, given the similar relative clause syntax found across the early and substantially attested Indo-European languages. Even if we cannot decide which pronoun or pronouns were involved, the idea is that we should reconstruct one or more of the structures themselves.¹⁰ In essence this line of thinking is persuasive. Yet for it to be fully convincing there needs to be some concrete reality that could plausibly lie behind the early distribution of the relative pronouns **yo-* and **k^wi-/k^wo-*. Scholars who have asked themselves what kind of reality this might be have almost inevitably responded with one of the following hypotheses:

Hypothesis 1: **yo-* and **k^wi-/k^wo-* were syntactically and semantically different relative pronouns in Proto-Indo-European. In the prehistories of the daughter languages the two pronouns started to encroach on each other's functions. In some daughter languages or branches **yo-* took over the functions of **k^wi-/k^wo-* (so Greek, Indo-Iranian) while in others **k^wi-/k^wo-* took over the functions of **yo-* (so Italic, Anatolian).¹¹

Hypothesis 2: **yo-* and **k^wi-/k^wo-* were both relative pronouns in (late) Proto-Indo-European, competing with one another in the same uses. In some

10 Thus Holland (1984:619), reconstructing relative clauses in correlative sentences, forcefully rejects the idea that we should feel "unable to accept them without being able to posit a single relative pronoun." Similarly Haudry (1973:148–9, 180–4) saw the correlative structure as the primary reconstructible item and emphasized that formal elements can be replaced over time. In a more modern vein, Hale (1987a, 1987b, 1991) and Kiparsky (1995:153–8) reconstruct Proto-Indo-European syntactic structure on an abstract level, in such a way as to allow for, *inter alia*, correlative sentences.

11 So the scholars cited in n.5 above.

daughter languages or branches the competition was resolved in favor of *yo- (so Greek, Indo-Iranian) while in others it was resolved in favor of *k^wi-/k^wo- (so Italic, Anatolian).¹²

Hypothesis 3: *yo- was a relative pronoun in Proto-Indo-European; *k^wi-/k^wo- was not. In some daughter languages or branches *k^wi-/k^wo- came to be used as a relative pronoun, ousting *yo- (so Italic, Anatolian).¹³

Hypothesis 4: *k^wi-/k^wo- was a relative pronoun in Proto-Indo-European; *yo- was not. In some daughter languages or branches *yo- came to be used as a relative pronoun, ousting *k^wi-/k^wo- (so Greek, Indo-Iranian).¹⁴

All these hypotheses posit that in some or all branches of Indo-European, one of our two pronouns ousted the other. There are indeed good typological parallels for the replacement of one relative clause marker by another (see Hendery 2012:144–52). However, the ousted pronoun typically leaves relics in the guise of derived forms that have not undergone replacement, or fossilized case forms functioning as complementizers or adverbial subordinators. For example, ancient Greek dialects in which the originally demonstrative/anaphoric pronoun ὁ/ἡ/τό has become the basic relative pronoun still have derived forms built on the stem *yo- (ὅσος, οἷος, ὁποῖος, etc.). In modern Greek the basic relativizer is ποῦ (from the interrogative meaning ‘where?’) but under some circumstances the relativizer is ὅποιος, again continuing a derivative of *yo- (ancient Greek ὁποῖος). But it is very difficult to point to convincing relics of relative *yo- in Italic or Anatolian, and to convincing relics of relative *k^wi-/k^wo- in Greek or Indo-Iranian.¹⁵

The morpheme that comprises the relative stem *yo- is sometimes thought identical to the *-yo of the thematic genitive singular ending *-osyo, attested both in Italic and in Anatolian,¹⁶ or to the Hittite enclitic conjunction =ya ‘and’.¹⁷ But

12 Schmitt-Brandt 1973:128–36.

13 E.g., Brugmann 1889–92:771–2; 1904:659–63; Delbrück 1893–1900/III:295–406. The source of relative *k^wi-/k^wo- has been variously seen as indefinite *k^wi-/k^wo- or interrogative *k^wi-/k^wo-. For the latter as far more plausible typologically, see Luján 2009:225–8.

14 Szemerényi 1996:210–1; cf. Holland 1984:619–20 n.1.

15 Cf. Lehmann 1980:164.

16 See Watkins 1963:16, 28 n.2; Schmidt 1977:70–3.

17 See Sturtevant 1930:148; Hahn 1949:347 n.9; Ivanov 1958:41; Watkins 1963:16; Schmidt 1977:63, 69; Szemerényi 1996:210. If =ya ‘and’ is indeed built on the stem *(H)yo-, it is difficult to maintain an etymological connection between this Hittite form and the =ha ‘and’ of Hieroglyphic and Cuneiform Luwian—a point which has been adduced either against the

even if either of these morphemes is etymologically identical to the relative stem **yo-* (which is by no means certain), it does not follow that it is a relic of the inflected pronoun **yo-* in relative function. Indeed, phonologically neither the **-yo* of **-osyo* nor Hittite *=ya* could continue an inflected form of the pronoun **yo-* or **Hyo-*. If any of these morphemes are related at all, some different relationship is involved.¹⁸

As regards putative relics of relative **k^wi-/k^wo-* in “**yo-* languages,” the situation is somewhat different because the morpheme **k^wi-/k^wo-* is quite clearly found in these languages, in its function as the stem of the interrogative and indefinite pronouns. The only realistic candidate for a relic of relative **k^wi-/k^wo-* in Greek or Indo-Iranian comes from the Thessalian dialect of Greek.¹⁹ Thessalian Greek has *κίς* < **k^wis* and *ποῖο-* < **k^wosyo-* in relative function, and Hettrich (1988:770) argues that these represent relics of relative **k^wi-/k^wo-*, although they have usually been taken as innovations (e.g., Hock 1990:612). In Hettrich’s favor (as Hettrich notes) is the fact that Thessalian also has complementizers and adverbial subordinators built on the stem **k^wi-/k^wo-*, such as *ποκί* ‘that’ < **k^wod-k^wi* and *διε κί* < **die k^wi* ‘because’, which might speak against a recent and limited replacement of **yo-* by **k^wi-/k^wo-*. Pointing in the other direction is that Thessalian also has derived subordinators built on the stem **yo-*, such as *ῥοσαπερ* and *οὐς* (Attic *ὥς*). Certainty is difficult since we lack relevant evidence before the third century BC.²⁰ Nonetheless, if Greek and Indo-Iranian languages had inherited **k^wi-/k^wo-* as a relative pronoun we might have expected to see relics of this pronoun distributed a little more widely in these languages.

connection between Hittite *=ya* ‘and’ and the relative stem **(H)yo-*, or against the connection between Hittite *=ya* and Luwian *=ha*. Contrast the treatments of Puhvel (1984–/1:9) and Kloekhorst (2008:379).

- 18 For some suggestions and reflections on the nature of these relationships see Sturtevant 1930: 148; Ivanov 1958:41; Watkins 1963:16, 28 n.2; Schmidt 1977:63, 69, 72–3; Szemerényi 1996: 210.
- 19 Occasionally instances of the pronoun *τίς* in relative or possibly relative function are found in other varieties of Greek. However, after one possible example in Homer and a small handful in Attic tragedy, examples become gradually more common, a pattern suggesting that the early examples are the beginnings of an innovation rather than the tail end of an archaism. For examples, bibliography, and further discussion see Probert forthcoming, §3.2.5 with n.65.
- 20 All the Thessalian forms just mentioned occur in the inscription *IG IX/2 517* (214 BC) (as well as elsewhere, in most cases). The form *ποίας* may possibly occur in relative function in the late fourth century BC, if this is the date of *SEG 43:310*.

To sum up, there is nothing implausible a priori about hypotheses in which one relative pronoun was ousted by another, but there is a distinct dearth of evidence that any of the possible replacements actually occurred in the early history of the Indo-European language family. At this point we are still no closer to understanding why some early Indo-European languages use a reflex of **k^wi-/k^wo-* while others use a reflex of **yo-*. In the next section we shall approach the problem from a different angle, by starting with a slightly different question.

4. Why do “**k^wi-/k^wo-* languages” and “**yo-* languages” have the same relative clauses?

In search of a different kind of solution we might ask whether the point to be explained is really the difference in relative pronoun between “**k^wi-/k^wo-* languages” and “**yo-* languages,” or rather the similarity in relative clause structures. If we look at the problem from this angle we might now look for inspiration to modern South Asia—an area in which one of our constructions, the correlative construction, is remarkably widespread although the languages involved use different relative pronouns with completely different histories. In this case the languages themselves belong to quite different language families, Dravidian and Indo-European. It is hardly surprising that these languages do not share a relative pronoun. What is striking is the shared relative clause syntax, exemplified here by means of a correlative sentence from the Dravidian language Malto and one from the Indo-European language Hindi:

- (32) Malto (from Kobayashi 2012:80; translation adjusted and intentionally over-literal):

ne:reh a:G-ih a:h tenG-ih

REL.M knows he tells

(He) who knows, he tells (it).

- (33) Hindi (from Srivastav 1991:639; translation adjusted and intentionally over-literal):

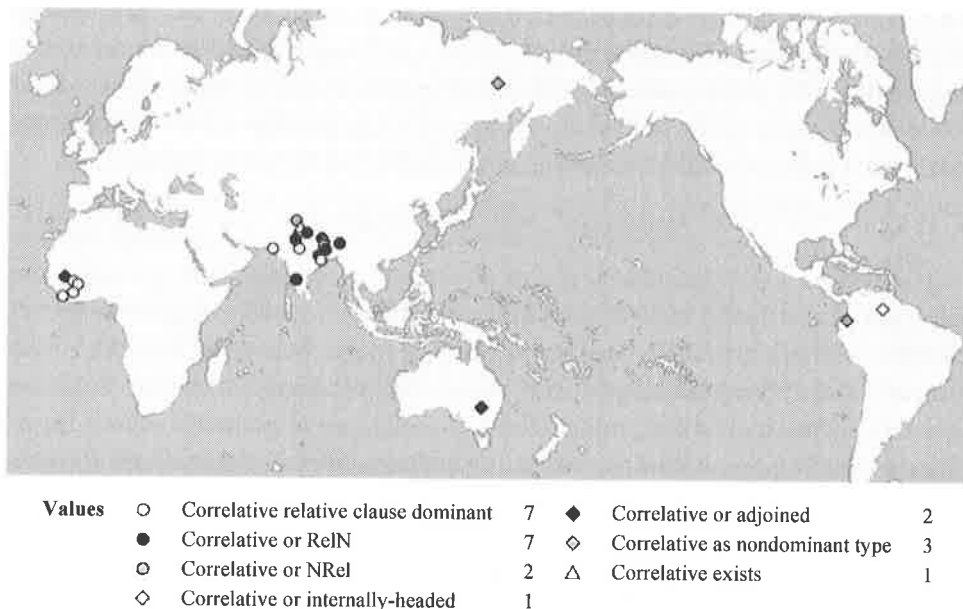
jo laRkii khaRii hai yo lambii hai

REL girl standing is DEM tall is

The girl who is standing, she is tall.

There is some debate as to how the construction came to occur in both Dravidian and Indo-European languages in this part of the world (see, e.g., Ramasamy 1981:366–7), but it is clear from the distribution of correlative relative clauses in

the world's languages that this is very unlikely to be a simple coincidence (see map 1).



Map 1. Languages in the *WALS* database with correlative relative clauses (Dryer 2013).

This distribution suggests strongly that correlative relative clauses are rarely innovated independently, but it appears that they are prone to spreading via language contact. In addition to their occurrence across language families in modern South Asia we might note their presence in Hurrian as well as Hittite, and in Achaemenid Elamite as well as Old Persian.²¹ Furthermore, we should arguably add to map 1 the fact that correlative relative clauses occur at least marginally in some modern European languages (as in Wittgenstein's *wovon man nicht reden*

21 For Hurrian see Wilhelm 2004:117. For Achaemenid Elamite see, e.g., DB §7: *ap-pa¹ ap ti-ri-ia, ^dši-ut-ma-na [^d]na-a-ma-na-ma hu-uh-pè hu-ut-tá-iš* "what I said to them, by night (and) by day, that they did," translating an Old Persian correlative construction. On the history of Elamite relative clause formation cf. Grillot 1970:222–3; on Old Persian correlative constructions cf. Adiego Lajara 2000:5. There is room for debate as to the details of the contact situation in the Achaemenid period, and the extent to which Old Persian influence on Achaemenid Elamite extended beyond translation phenomena.

kann, darüber muss man schweigen); language contact phenomena are likely to be involved here to some degree.²²

With modern South Asia as inspiration, a possible explanation emerges for the fact that early attested Indo-European languages use very similar relativization strategies although some use a reflex of **k^wi-/k^wo-* as the relative pronoun and some use a reflex of **yo-*. Specifically, we might reconstruct a stage at which Indo-European languages belonged to a linguistic area characterized by common strategies for relative clause syntax, in spite of having different relative pronouns with different histories. Differently from the situation in modern South Asia, the ancient languages in question all belonged to the Indo-European language family (which is not to deny that our linguistic area might have included non-Indo-European languages too); the similarity envisaged lies in the convergence in relative clause syntax across languages with different relative pronouns.

5. The correlative construction as an early areal feature

The comparison with modern South Asia might prompt us to ascribe the correlative construction in particular to the areal stage just posited. This construction is uncontroversially attested at the earliest stages of all the early and substantially attested Indo-European languages, whether the relative pronoun is **k^wi-/k^wo-* or **yo-*.²³ (For this reason it is the construction most often reconstructed for the parent language itself.) As we have just seen, this construction is not typologically widespread, and in addition is prone to spreading by language contact. But the correlative construction is by no means the only relative clause formation strategy that may spread across languages in contact. In her study of the diachronic typology of relativization Hendery finds contact-induced change so pervasive as to suggest that “While not every instance of change in a relative clause is triggered by language contact, it is possible that the converse is true: that cases of intensive language contact between languages with different relative clause constructions always or almost always lead to change in one or both languages” (Hendery 2012:236). Moreover, the correlative construction is not the only relativization

22 For examples of the construction in various European languages see Murelli 2011:158–68. In some cases learned language contact with Latin may be a factor. Murelli (2011:262–4) in essence denies this, but it is incorrect to say that the correlative strategy disappeared in classical Latin. For the point that instances in Cicero are frequent see, e.g., Kroll 1910:8 n.1.

23 In addition, the correlative construction is quite clearly found in several of the early attested but less well-attested languages: in Celtiberian (Botorrita 1 A7: see Meid 1994:24); Phrygian (see Brixhe 2004:785); and Oscan and Umbrian (see Dupraz 2012:130–1, 183–8).

strategy for which our suggested areal stage helps to resolve some very difficult problems in the prehistory of Indo-European languages. In the next section we shall consider the early history of the externally headed relative clause construction (construction (C) above).

6. The "relative pronoun strategy": another areal feature, but of what date?

Externally headed relative clauses in early Indo-European languages have the two most crucial characteristics that define a construction Comrie (2006:134) terms the "relative pronoun strategy":

- (a) The construction is externally headed.
- (b) Within the relative clause, the head is taken up by a Pronoun showing its semantic/syntactic role in the relative clause (by case marking, adposition).

(Comrie 2006:136)

Comrie includes a third characteristic, purely in order to distinguish in difficult cases between the "relative pronoun strategy" and the "pronoun retention strategy" (constructions of the type "the woman that Hasan gave a potato to her"):

- (c) This Pronoun (or the phrase containing it) is preposed to the beginning of the clause (or, in principle, to any specific predefined position).

(Comrie 2006:136)

Characteristic (c) appears unnecessary as part of the definition of the "relative pronoun strategy" if it is clear for other reasons that we are not dealing with the "pronoun retention strategy." In the early attested Indo-European languages we cannot be dealing with the "pronoun retention strategy," because the pronouns that function as relativizers are not also used as personal or demonstrative pronouns.²⁴ For present purposes we may therefore replace characteristic (c) with the following:²⁵

24 It has sometimes been argued that the stem **(H)yo-* is related to the stem **(H)i-/(H)ei-* that gives demonstrative pronouns such as Latin *is, ea, id* (here with a thematic variant **(H)eyo-* for **(H)ei-*). However, even if the two stems are related (via ablaut or thematization) they are already distinct at the earliest recoverable period, since relative function is consistently associated with the form **(H)yo-* rather than **(H)i-/*(H)ei-* (cf. Hettrich 1988:486).

25 Traditionally it has been considered uncontroversial that relative clauses in all the early attested Indo-European languages involve *wh*-movement (even if another constituent is sometimes

(c)' This Pronoun is not analyzable as a retained pronoun.

Unlike the correlative construction, the "relative pronoun strategy" is not normally reconstructed for Proto-Indo-European. The main reason for this appears to be the perception that the construction is not attested in the earliest records of the Anatolian languages, and therefore cannot be considered a shared inheritance of Anatolian and non-Anatolian Indo-European languages. It is worth emphasizing, however, that the construction is certainly attested in Hittite:²⁶

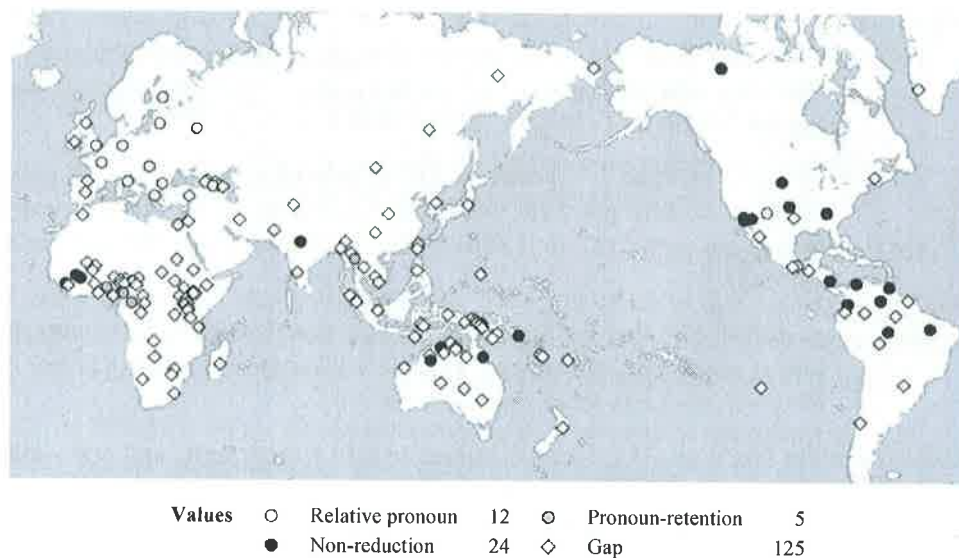
- (34) *nu GIŠ.ḪIA LUGAL-uš* ^D*U-ni wēkzi hēyawēš kuit tašnušker šallanušker*
 "The king asks the Stormgod for timber that the rains have made strong and tall." (KUB 29.1 i 26–7; tr. Garrett 1994:42)
- (35) *nu=kan karūliya* ^{URUDU}*ardāla* [*par*]ā *tiyandu nepiš tekann=a kuēz arḫa kuerer*
 "Let them put forth the ancient saw with which they cut apart heaven and earth." (KUB 33.106 iii 52–3; tr. Puhvel 1984–/7:87 after Held 1957:48)
- (36) *nu apē[l É-SÚ] kuel=a* ^{GIŠ}*eyan āški=šši šakuwān a[pēniššan]* "The house of him at whose gate an eyan-tree is visible is li[kewise exempt]." (KBo 6.2 ii 61–2 = Hittite Laws series one, §50 (copy A))²⁷

Some examples (such as (34)) occur in copies of Old Hittite texts, and one—our (36)—even occurs in an original text in Old Hittite script. Opinions may differ as to whether (36) represents a well-established construction that only happens to occur once in our relatively small corpus of Old Hittite texts, or whether it represents the beginning of an innovation.²⁸ Either way, however, we probably need

topicalized to the left of the wh-constituent), but Huggard (2011) now shows that this is not the case for Hittite.

- 26 Arguing from a different angle, Garrett (1994) reconstructs a more restricted version of this construction for Proto-Anatolian: one in which the head noun always heads an indefinite noun phrase and the relative clause is always right-adjoined to the matrix clause (or in the terms adopted here, extraposed). Both of these conditions are met, e.g., in example (34), but not in all Hittite examples: compare (35) and (36).
- 27 This particular example looks like an instance of wh-movement, since the genitive relative pronoun form is separated from *āški=šši* "at his gate," with which it forms a split genitive. Craig Melchert and Mattyas Huggard suggest, however, that the focus-marker *-a* on the relative pronoun form implies focus movement rather than wh-movement.
- 28 In Probert 2006 I counted twenty-six Old Hittite relative clauses altogether, among which only (36) has our construction. For comparison, I count fifteen relative clauses on archaic Greek inscriptions (above), of which just one has our construction. These are of course small samples,

some explanation for the fact that the relative pronoun strategy occurs in Anatolian at all, because the relative pronoun strategy is another construction that is typologically not at all widespread—notwithstanding the temptation for speakers of modern European languages to see this as simply the “normal” relative clause construction. Maps 2 and 3 show how languages in the *World Atlas of Linguistic Structures* database relativize subjects and non-subjects respectively; white circles show where the relative pronoun strategy is used.



Map 2. Languages in the WALS database with relativization on subjects (Comrie and Kuteva 2013b).

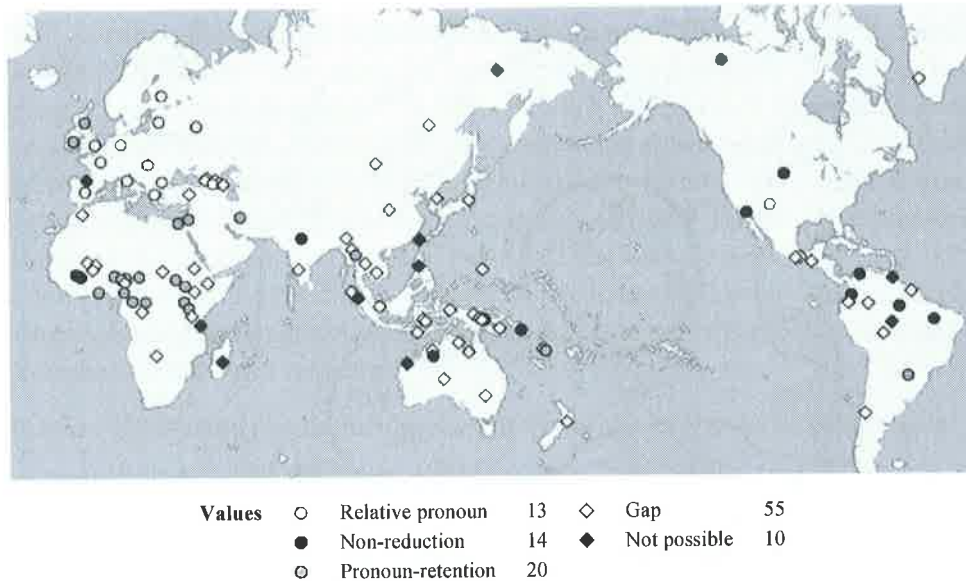
In the modern world the relative pronoun strategy is heavily associated with an area corresponding more or less to Europe. Many of the relevant languages are Indo-European languages, but not all: languages with our construction include Finnish, Hungarian, and Georgian.

but the difference in the incidence of the relative pronoun strategy is not remarkable. In Greek we also find plenty of examples of the relative pronoun strategy in Homer, and so we know that the construction really is well established in the language. In Hittite we do not know, because we do not have an early text (or any text) of the length of the *Iliad* or *Odyssey*. However, I learn from Craig Melchert and Mattyas Huggard that in the Hittite corpus as a whole our construction appears considerably more often than has been thought, along with other varieties of embedded relative clause. For details readers should await Huggard's dissertation.

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Map 3. Languages in the *WALS* database with relativization on obliques (Comrie and Kuteva 2013a).

On the basis of extensive typological work on the relative pronoun strategy, Comrie concludes that the construction is rarely or perhaps never attested outside Europe, except in cases of influence from European languages.²⁹ Thus the relative pronoun strategy does not appear to occur very often independently, but once again it appears capable of spreading by language contact. Indeed, Comrie (2006:139) suggests that our construction might have arisen once in the history of the Indo-European language family and then spread by language contact. But if this is what happened, it is worth asking quite when the construction arose—and perhaps more importantly, when it started spreading by language contact.

The relative pronoun strategy is one of a whole series of linguistic features heavily associated in the modern world with an area corresponding roughly to Europe: features that have given rise to the so-called “Standard Average European” hypothesis, the idea that Europe is a linguistic area. Haspelmath (1998) defines the relevant area in terms of a nucleus, core, and periphery as shown in figure 1, with the languages in the nucleus sharing the most converging features and the languages in the periphery sharing the fewest.

29 Comrie 1998a:59; 1998b:59–63, 77–8; 2003:20; 2006.

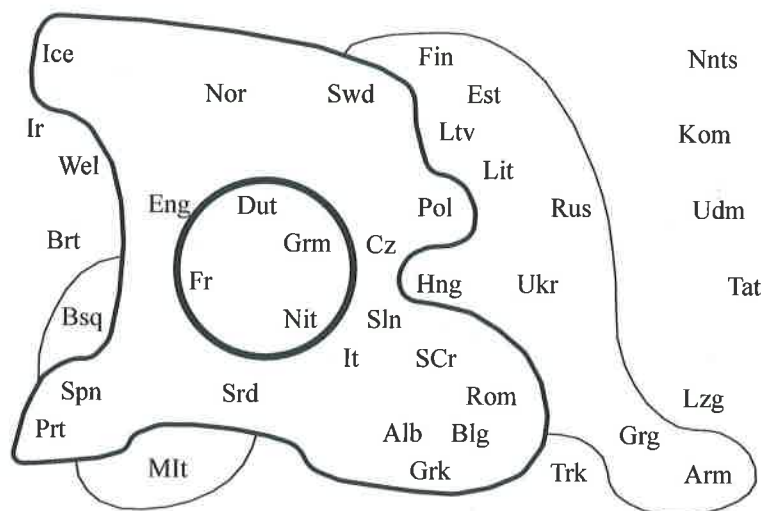


Figure 1. Standard Average European (Haspelmath 1998:273, fig. 1).

Since many of the languages in this area are Indo-European languages, it is worth asking whether these languages inherited the features in question from Proto-Indo-European (and then passed them to a few non-Indo-European languages via language contact) or whether the Standard Average European area is the result of more recent and more thoroughgoing linguistic convergence. With these questions in mind Haspelmath (1998) considered the antiquity of eleven Standard Average European features. With the exception of the possessive dative he found that none of these was present in Proto-Indo-European; and argued that linguistic convergence in this area largely began in late antiquity. One piece of the argument is the fact that many scholars do not reconstruct the relative pronoun strategy for Proto-Indo-European. Yet it is very difficult to imagine a plausible historical context, at any stage later than the very early history of the Indo-European language family, in which the relative pronoun strategy could have got into all the early attested, well-attested Indo-European languages, including Anatolian as well as, for example, Indo-Iranian languages (cf. Harbert 2007:12). What date should we then posit for the relative pronoun strategy as a converging feature?

7. A very early date for the relative pronoun strategy

The problem just raised has a solution if (and perhaps only if) the relative pronoun strategy existed in the very early history of the Indo-European language family. We might not want to reconstruct the strategy for the proto-language it-

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self, however, because different languages again use different relative pronouns in this construction. Once again the syntactic agreement between “**k^wi-/k^wo-* languages” and “**yo-* languages” is more readily explained if our construction spread across a linguistic area at the very early stage already proposed. If this line of reasoning is accepted then at least this particular Standard Average European feature started to spread areally at an extremely early date. It need not follow that the center of linguistic convergence at this date fell near the middle of the modern Standard Average European area. Linguistic areas can shift over time,³⁰ and convergence could have centered around more or less any of the places where Indo-Europeans might have originated.³¹

8. Indo-Hittite and the linguistic plausibility of the proposed linguistic area

It will be clear that the linguistic area proposed here is one that still includes Anatolian speakers. Relative clauses in correlative constructions clearly occur in Anatolian, and we have seen that the relative pronoun strategy occurs in Anatolian too. For those who believe in a very strong version of the Indo-Hittite hypothesis, this areal stage will probably not seem very plausible. Strong versions of the Indo-Hittite hypothesis would seem to imply either that the Anatolian speakers left the Indo-European homeland in a sudden rush and quickly stopped talking to other Indo-European speakers, or perhaps that the other Indo-Europeans left in a sudden rush and quickly stopped talking to the Anatolians. But the areal stage proposed here becomes increasingly plausible in the light of recent work favoring a rather mild version of the Indo-Hittite hypothesis, with little by way of major innovations common to all the non-Anatolian Indo-European languages but excluding Anatolian (see Melchert forthcoming).

In this light, two things are worth revisiting. The first is a case made by Puhvel (1994) that Anatolian has a particular tendency to share features with “western” Indo-European languages, much more than with eastern ones. For these purposes “western” Indo-European languages are the Italic, Celtic, and Germanic languages, and interestingly Tocharian, with Greek as a bridge between east and west. The shared isoglosses are mostly lexical, but not exclusively so: they also

30 Cf. Thomason 2001:104.

31 In favor of a connection with the Caucasus one might note that the relative pronoun strategy occurs not only in Georgian but in some of the other Kartvelian languages, and in Old Georgian (see Harris 1991:382–4 and 1994:130–2; Boeder 2005:71–2). But not much can be concluded from this.

include the mediopassive endings with *-r-*. The use of **k^wi-/k^wo-* as a relative pronoun fits well into this picture as a feature which Anatolian shares with Italic, Tocharian, and perhaps early Germanic.³²

The second matter worth revisiting is the centum/satem isogloss. Puhvel's "western" Indo-European languages are precisely the centum languages, if we include Greek for this purpose as a western language. It has become increasingly clear that Luwian and Lycian preserve reflexes of three series of velars in some contexts, but that Anatolian languages remain essentially "centum" languages (see Melchert 2012). If this is accepted it destroys attempts to reconstruct Proto-Indo-European with only two series of velars, and so the merger between the "plain velars" and "palatal velars" is, after all, an innovation of the centum languages: Celtic, Italic, Germanic, Anatolian, Tocharian, and Greek. Nevertheless the centum languages cannot have been a sub-group of Indo-European in any traditional sense: this is excluded if even a mild version of the Indo-Hittite hypothesis is accepted. On the other hand the centum innovation supports the idea that we have a network of languages in contact with each other at an early post-Indo-Hittite stage.

The traditional objection to the reconstruction of three series of velars for Proto-Indo-European is that the centum languages include the westernmost and the easternmost Indo-European languages. Given the evidence from Luwian and Lycian, we have to face the fact that people moved around in prehistory, and we cannot conclude too much from the historical locations of Indo-European languages.

9. What about relative clauses in the parent language itself?

This paper has argued that at some early post-Indo-Hittite stage, Indo-European languages belonged to a linguistic area characterized by shared strategies for relative clause syntax, in spite of having different relative pronouns with different histories. Furthermore, arguments have been offered for attributing two relative clause strategies in particular to this stage: correlative relative clauses, and externally headed relative clauses featuring the relative pronoun strategy. It may be

32 On early Germanic see Harbert 2007:422. As Puhvel (1994:318) points out, there are also some striking similarities of morphological detail between Anatolian and Italic in the whole system of forms built on the **k^wi-/k^wo-* stem: "... Anatolian and Italic go beyond the grammatical to the intricately lexical as well, encompassing an entire matching system of interrogative, relative, and indefinite pronouns, as illustrated by Hittite *kuis*, *kuiskuis* ... *kuwat*, and *kuwapi* besides Latin *quis*, *quisquis* ... *quod*, and *(c)ubi*."

that a similar argument could be made for free relative clauses featuring relative pronouns,³³ but we shall not pursue this question here.

At this point it is natural to ask how relative clauses were formed in the proto-language of the whole language family. An answer to this question will not be offered here, but an argument for agnosticism may be offered. If the posited areal stage existed, with languages converging extensively in relative clause syntax, this convergence would deprive us of comparative evidence with which to see how relative clauses were formed at an even earlier date.³⁴ The problem is that comparative reconstruction cannot undo linguistic innovations that have found their way into all the languages being used for reconstruction—in this case the relativisation strategies on which our early-attested Indo-European languages have converged.³⁵ We may not know how relative clauses were formed in Proto-Indo-European, but I hope to have offered a suggestion as to why that might be.

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33 Cinque (2009) argues persuasively that the relative clauses of correlative sentences do not constitute an independent relative clause construction. Instead they consist of a relative clause of some independently existing kind, embedded in a left-dislocated determiner phrase. If this argument is accepted then we might expect a language with what we have labelled construction (A) (our correlative sentences) also to have construction (B) (our free relative clauses), because the relative clauses of construction (A) have the internal structure of those of construction (B); by Cinque's argument the existence of (A) should presuppose the existence of (B). Whether this is so in documented languages is an empirical question to which I do not have the answer, but note Cinque's (2009:15) observation that "there may be no single language for which correlatives are the only relativization strategy available."

34 Evidence of other kinds may get us further: note especially Luján's (2009) arguments on the earliest syntax of relative clauses with **k^wi-/k^wo-*, based on the diachronic typology of the grammaticalization of interrogative pronouns as relative pronouns.

35 Compare Hoenigswald (1960:125) on "duplicate merger."

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