THE DEEP STRUCTURE OF THE QUESTION

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The parameters of human expression are quite fully delineated between the concepts of "declaration" and "interrogation." From his very soul, man experiences the urges both to "tell" and to "ask." Perhaps the more fundamental of the two is to "ask," as this is inherent in the infant's first utterance, the cry, and in the perpetual whining of children for the objects of their wants. How did primitive man learn to ask questions?

The question signal, at least in our language, has both intonational and morphemic characteristics. In practically every human language, it is associated with a distinct intonational phenomenon, the *raising* of the voice.

The following study attempts to trace the question signal in the Indo-European language system to a primitive segmental morpheme, which was eventually assimilated into the wh- items, and absorbed as an intonational feature into direct interrogative utterances requiring a yes-or-no response.

This language-element, denoted in the following as *kw,* must originally have constituted an actual "word" which, when placed in its proper relation to other words, signalled the interrogative nature of the utterance; and as we will see, it must have been intoned on a rising pitch. We will speculate on its significance somewhat in our final paragraphs.

The wh- Items

Historically, the wh- words (who(m), whose, which, what, why, now, where, when, etc.), related to the Latin *qu*- words and Gothic *ƕ-*words, seem to have been derived from an elemental question indicator and/or interjection. Most of them also serve in English as relatives. We would like to suggest here an explanation regarding their origin.

Let us posit a pre-IE etymon more or less equivalent to a question mark: *kw,* having the meaning: "if you please," "please explain."

The etymorph[1] at the base of all these words and also of the words "*qu*estion," "r*equest,"" "qu*ery," etc. was a form bearing no meaning in

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[1]This may be an already coined term. Our meaning is: a prime morpheme from which a morpheme is derived.

itself but denoting a plea[1]. Of course, it was more than an intonational feature, just as the English word "huh?." Therefore, for suggestive semantic purposes, we will represent it in the examples that follow as "whu": a symbol to which we will assign a meaning varying between "huh?" and "what?."

Then the deep structure of yes-no questions would be

you are going whu (you are going huh?)
→ Are you going?
you did whu it → Did you do it?
they whu came → Did they come?

and that of the wh- questions would be

you are going whu- there (you are going what-there?)
→ Where are you going?
you did it whu- thus → How did you do it?
they came whu- then →When did they come?
she saw whu- him (her, them) → Whom did she see?

The wh- interrogatives thus each contain a pronominalized nominal or adverbial element (P)[2]. Forms resulting from this type of combination are:

who = wh- + he (she, they)
whom = wh- + him (her, them)
whose = wh- + his (hers, theirs)
which = wh- + it (they, them)
what = wh- + that
where = wh- + there
when = wh- + then
how = wh- + thus
why = wh- + therefore[3]

In wh- questions (both isolated and embedded), the *lew* forms therefore have the structure

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[1]Germanic cognates are: *wheeze, whimper, whistle, whine.* "Whine" clearly expresses the character of this etymorph: a pleading elevation of pitch _____ ↗. Latin *queri* means "to utter plaintive cries."

[2]Latin *quis/is, ubi/ibi, unde/inde,* etc. seem to have the same relationship (the *u-* being the labialized remnant of *qu-). Cur* ("why") was also originally a *qu-* item having its complementary form.

[3]These pronominalized elements are not intended as direct projections of etymorphs, although they are in some cases.

kw + P

EX: He saw which he wanted =

he saw
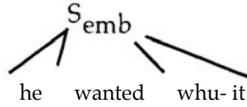
(he saw what-it he wanted)

This brings us to the basic differentiation between an interrogative and a relative. Note the following strings:

   a) he showed us where she lives
   b) he showed us *the street* where she lives

   a) Alice knew who hit her
   b) Alice knew *the man* who hit her

   a) I know why you're sick
   b) I know *the reason* why you're sick

(Some wh- forms are defective as relatives: *what, how.)*

In each case, (a) contains an embedded wh- question and (b) a relative clause. In the prime strings of (b) there is a nominal antecedent (head noun, italicized).

Now how does the question-concept extend to the wh- relatives? Obviously, the relative clause answers, an anticipated question about the head noun.

EX: The man who came is my brother.

   B_1 the man is my brother
   B_2 whu- man (please explain "man")
 B_3 the man came

This becomes:

   the man + -whu + he came + is my brother

and shows relative "who" to consist of *-kw + he,* similarly but not identically as the interrogative "who."

To illustrate this more fully, let us take some more examples of the (a) pronominalization/adverbalization process followed by (b) relativization.

1. We saw the area where they grow cork.

        a) we saw the area -whu they grow cork in the area
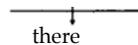
                                      there

    b) we saw the area –whu there   they grow cork

                          where
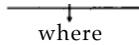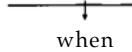
2.   I remember the time when we were young.
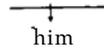
    a)   I remember the time -whu we were young in the time

                          then

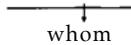   b)   I remember the time –whu then we were young

                          when

3.   He knew the man whom he hit.

    a)   he knew the man -whu he hit the man

                          him
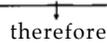
    b)   he knew the man -whu him   he hit

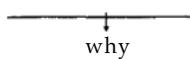   whom

A perhaps debatable example of this process would be

4.   They know the reason why he came.

   a)   they know the reason -whu he came for the reason

                          therefore

    b)   they know the reason -whu therefore   he came

                          why

The *kw* forms in wh- relative clauses possess a slightly
different structure from those of the wh- question, namely:
$-kw + P$

The *kw* element is NP (noun phrase)-oriented (note the direction
of the dash), whereas in the interrogative it is independent and,
in fact, indefinite. This explains the necessity for number-and-
gender agreement with the head noun such as distinguishes the
relative from the interrogative in various IE dialects. In Latin,
the relatives are *qui, quae, quod,* and the interrogatives *quis, quid,* thus
distinctly different forms. EX: He saw the book which he wanted,
he saw the book

$$S_{emb}$$
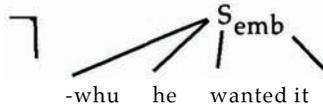
           -whu   he   wanted it

(he saw the book huh? he wanted it)

   Accordingly, let us note the structures of the embeddings in
the following strings.

a) Alice knew *whom she hit.*
    she hit whu- him (her, them)
    (NP + VB + *kw-* + P)

b) Alice knew the man *whom she hit.*
    -whu she hit him
    '(-*kw* + NP + VB + P)

a) I remember *whose house he visited.*
    he visited whu- his (her, their) house
    (NP + VB + *kw-* + P + NP)

b) I remember the woman *whose house he visited.*
    -whu he visited her house
    (-*kw* + NP + VB + P + NP)

The generally accepted view of etymologists seems to be that the relative forms developed from the interrogative ones. On this point, a commitment does not appear to be indicated, although it is evident that both types of wh- items must have originated from the *kw* etymorph.

The yes-no Question

Let us now return to the first assumption, that the *kw* constituent is a partly intonational etymon meaning "if you please" or "please explain." Let us replace it by some near modern equivalents in a yes-no question:

you are going, *huh? (eh?)*
vous allez, *quoi?*

In the yes-no question, this etymon seems to have given way entirely to an intonational morpheme and a transposition of the subject and verb:

sie gehen you will
gehen sie   will you

That a yes-no question is fully expressed by intonation alone can be seen in the following dialogue:

A: Mmm (_____/)
B: Mmm! (_____\)

The fact that the *kw* constituent in general (yes-no) questions has not retained a segmental form might be explained in the following terms:

The *kw* etymon was uttered on a rising tone, which became absorbed into the intonational contour of the string, i.e. into the stressed item, normally the VB:

> you are coming whu
> → you are coming huh?
>
> _____/
> → you are coming

(The transposition of subject and verb may be regarded as a later or secondary development.)

The stress in the above example is on the verb "come." If it were on "you," then the *kw* contour would fall together with "you":

> you whu are coming
> → you huh? are coming
>
> ___/
> → you are coming

Consequently, the question etymon could take various positions, as in the following examples:

> you whu are driving to town (not someone else?)
> you are whu driving to town (I thought you weren't)
> you are driving whu to town (not walking?)
> you are driving to town whu (not somewhere else?)

There is convincing evidence to support the supposition that the *kw* constituent is present in the deep structure of every yes-no question, even though it is deleted or rather, absorbed as a suprasegment, in the surface structure; for it emerges clearly in the surface structure of an *indirect* yes-no question as a definite wh- item:

> They won't say *whether he is going.*

$$\underset{\text{whether}}{kw} \underset{\text{he}}{\overset{\text{——}}{\underset{|}{S}}} \underset{\text{gó}}{\text{(ind ques)}}$$

This would prompt one to affirm that *all* questions are, in fact, wh- questions and that a better definition of the so-called "wh-question" would be in line with the German term "Erganzungsfrage"—"information question."

As we have already noted above, the position to be allotted to this constituent depends upon *stress,* thus upon semantic factors. Hence the difference between the following questions:

he whu is going → Is he going?
he is going whu → Is he going?

Thus, the placing of the *kw* constituent will depend upon semantic interpretation:

(It is not sufficient, then, to indicate *kw* merely as a constituent preceding the string.)[1]

Summary

We have posited a pre-IE morpheme which constituted an etymon in the earliest phases of the proto-Indo-European language system and combined with a pronominal item to form the wh-interrogatives. The wh- relatives would have had a similar, but not the same, origin, since they are irrevocably connected with an antecedent head noun whence they derive gender-number features.

The same etymon, existing originally in a segmental form, is present in the deep structure of the "yes-no" question as well. At an early period, it followed the stressed item in a question string, but in the course of time it became absorbed into the suprasegmental contour.

The wh- interrogative therefore has the form *kw-+ P;* while the wh- relative has the form *-kw + P.*

[1]About this study (contained in our paragraphs from *The wh- Items* to *Summary,* incl.), Prof. Naom Chomsky (M.I.T.) wrote:

> Dear Professor Odhner,
>
> Thanks for sending me your paper....I think what it proposes is essentially correct, but there should be some references to the quite extensive literature in the past 10 years that has been developing some rather similar suggestions, starting, perhaps, from Katz and Postal, *Towards an Integrated Theory,* 1964, which suggests a common wh- element (they call it Q) for all questions, and much since on questions and their relation to relatives....

In the literature, we would have liked to see more specific indications regarding the placement of the *kw* (Q) constituent, subject to semantic variation owing to stress features, in otherwise identical utterances.

The "yes-no" interrogative element originally had the form *kw,* following the stressed item of the question-string; but it is now embodied in a rising-tone feature on that item.

In the indirect "yes-no" question, the interrogative element has retained a segmental form, "whether," which precedes the string but is accompanied by the appropriate stress on the questioned item.

Significance

Regarding the meaning or significance of the sub-morphemic structure of *kw,* or the composition of its sounds, little can be said. The plaintive character of *w* (or Ψ) we have discussed previously[1]; the initial velar plosive *k* may emphasize an urge that the wish be heard or attended to, illustrating one of the natural uses of plosion in human speech.

In any case, the pleading character of the *question* does appear to be a universal element of human language. Further study would no doubt lead to the discernment of general principles regarding intonation, or the raising and lowering of the voice. It *is* of significance that in the deep structure of language, we approach the "universals" which govern human communication.

> Because he is in company with [angels and spirits], man is also with them in the universal language, and thus in the origins of words... (AC 5095)

> In some languages in the world some such natural words [as in the speech of spirits and angels] also occur; and the most ancient language was none other than such speech of spirits, which is entirely natural. Man's interior ideas themselves are also in that language, although man is ignorant of this; which is apparent from the fact that man after death when among spirits, speaks that language without instruction. (SD 4865 *ff.*)∎

*Alpha & Omega (SSA 1978), pp. 58-61