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...the range of constituents that can be "questioned" is actually quite small and, with one possible exception, is restricted to Noun Phrase and probably to the Determiner constituent of NP.

(Katz & Postal 1964: 98)

- (1) Chukchi (Chukotka-Kamchatkan)
- req-ərken-əm igirqej gə-nin ekək?*  
**do.what?-PROG-EMPH right.now 2SG-POSS son.ABS**  
 'What is your son doing right now?'  
 (<http://privatewww.essex.ac.uk/~spena/Chukchee/chapter4.html>)

2

Certain interrogative pro-word types have been considered rare or even nonexistent.

This excludes the possibility of interrogative pro-verbs, as illustrated in (1), and must therefore be rejected.

3

...question words can "ask about" items belonging to major (or open) syntactic categories, but not minor (or closed) ones.

(Gil 2001)

...it is much more economical to split the questions into an interrogative word 'who?' or 'what?' + one of the two verbs with a generic meaning, i.e. 'be' and 'do'

(Hagège 2003)

3

This will allow for interrogative pro-verbs, but this is not very good either, for it fails to account for the fact that interrogative pro-verbs are a rare phenomenon.

Hagège (2003) advocates a principle of linguistic economy.

This cannot be a full answer either. Why would a two word construction be more economical than a one word construction?

4

### Aims:

- Elucidate further the issue of the rarity/ nonexistence of several types of interrogative pro-words against the background of a more general hypothesis on what constitutes a possible interrogative pro-word

### General hypothesis

- a statement on the generality of the presupposition going with constituent questions
- a claim on the relevance of the endocentric vs. exocentric distinction

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### Constituent questions & presupposition

- (2) *Who did John see?*
- (3) A constituent question is a question that asks for an instantiation of the variable  $x$  in an *It is known that (possibly) HAPPEN/EXIST (... x ...)* structure.

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All theories on constituent questions make room for the idea that a constituent question is based on a presupposition with a variable. In (2) the presupposition says that John saw somebody, and the variable is the 'somebody' whose identity the hearer is invited to disclose.

As the example of an interrogative pro-verb illustrated in (1) with Chukchi shows, it is important to allow the predicate of the constituent question as a possible variable. In order to account for this, we propose the definition in (3).

The structure is the presupposition that the situation under interrogation (possibly) exists, existed or will exist. The variable  $x$  constitutes the focus of the constituent question and of its possible answer, and it is formally expressed by an interrogative pro-word.

**6**

### Endocentric vs. exocentric distinction

Which elements can be variables that value of the HAPPEN/EXIST (...) predicate can depend on?

**phrasal level elements**

**Interrogative pro-phrasal elements:**

- Interrogative pro-noun phrase
- Interrogative pro-verb phrase
- Interrogative pro-adjective phrase
- Interrogative pro-numeral phrase
- Interrogative pro-adposition phrase
- etc.

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If we want to find out what categories of interrogative pro-words can exist in the languages of the world, we should first determine which elements can potentially be variables that value that of the HAPPEN/EXIST (...) predicate can depend on. Clearly, these are first of all phrasal categories. In other words, every phrasal level element can potentially be an argument of the HAPPEN/EXIST (...) predicate. Hence, an interrogative pro-element for any phrase level element can theoretically exist:

**7**

**SYNTAX:** phrasal categories      terminal categories

↕

**LEXICON:** ~~phrasal categories~~      words

**Endocentric vs. exocentric constructions:**

Only endocentric constructions can be reduced to their heads, that is to the terminal categories that we are looking for, without being simply elliptical (cf., among others, Hartman & Stork 1972: 76, Crystal 1985: 109).

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However, in the lexicon we are not dealing with phrases, but with words which correspond to terminal categories in syntax. Therefore, in order to find out which interrogative pro-words can exist, a good use can be made here of a distinction between endocentric and exocentric constructions.

**8**  
**+**  
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### Endocentricity principle:

Interrogative pro-words can be of endocentric phrase creating categories only

**Interrogative pro-adverb:** (4) *Where do you live?*

**Interrogative pro-adjective:** (5) *In what town do you live?*

**Interrogative pro-noun:** (6) *In what do you live?*

etc.

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### Endocentricity principle:

Interrogative pro-words can be of endocentric phrase creating categories only

~~Interrogative pro-adposition:~~ (7) *\*WH<sub>ADPOSITION</sub> the town do you live?*

~~Interrogative pro-auxiliary~~      **Interrogative pro-relator**

~~Interrogative pro-conjunction~~

etc.

**NO COUNTEREXAMPLES REPORTED!**

9

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**0**  
**+**  
**1**  
**1**

### What about verbs?

**centricity dilemma**

Verb Phrase

```

graph TD
    VP[Verb Phrase] --> E[endocentric]
    VP --> X[exocentric]
    E <--> IV[intransitive verb]
    X <--> TV[transitive verb]
  
```

**What does this tell us about interrogative pro-verbs?**

- IPVs are not ruled out completely
- IPVs must be less common than other types of interrogative pro-words
- If an IPV is possible in the language at all, it will first of all be intransitive

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**Typically intransitive predicates & endocentricity principle = OK!**

**Non-verbal predicates**      **Interrogative pro-“non-verbal predicates”**

Nominal predicates      Interrogative pro-nominal predicates

Adjectival predicates      Interrogative pro-adjectival predicates

etc.      etc.

- mestopredikativy* ‘pro-predicatives’ (Dragunov 1952)

(8) Tuvaluan (Austronesian, Oceanic; Besnier 2000: 425)

*Ne aa taulua olooga ki motu?*

NPST what your go:NMLZ to islet

‘How did your trip to the islets go?’ (lit.: ‘What (was) your going to the islets’)

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The endocentricity parameter turns out to be somewhat difficult to apply to verb phrases in a straightforward way.

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- Interrogative pro-“non-verbal predicates” are often called “interrogative verbs” in grammars

**(predicative) interrogative pro-predicates**

```

    graph TD
      A["(predicative) interrogative pro-predicates"] --> B["interrogative pro-“non-verbal predicates”"]
      A --> C["interrogative pro-verbs proper"]
  
```

- Interrogative pro-“non-verbal predicates” are much more frequent than interrogative pro-verbs proper
- BUT much depends on the analysis!

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- Languages where all interrogative pro-words function as predicates

...wh-questions in Salish generally take the form of clefts ... in which the wh-word evidently is not in a complementizerlike position, but rather is the predicate of the higher clause of a biclausal construction. (Kroeber 1999:247)

(9) Thompson (Salishan; Kroeber 1999:263)  
*swét k=wík-t-xw*  
 who ART=see-TR-2SG.TR.SBJ  
 ‘Who did you see?’

**non-verbal predicative interrogative pro-non-predicates**

13

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```

    graph TD
      A["predicative interrogative pro-predicates"] --> B["interrogative pro-“non-verbal predicates”"]
      A --> C["interrogative pro-verbs proper"]
      B <--> D["non-verbal predicative interrogative pro-non-predicates"]
      C <--> E["verbal interrogative pro-non-predicates"]
      D --> F["predicative interrogative pro-non-predicates"]
      E --> F
  
```

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- ‘say what?, say how?’

(10) Kolyma Yukaghir (Yukaghir; Maslova 1999:480)  
*qu monohot-ček*  
 wow say.what-Q.2SG  
 ‘Wow, what have you said?’

- ‘go where?’  
 Aneityum (Austronesian, Oceanic; Lynch 2000:78): *hanid?*
- ‘do how?’  
 Sie (Austronesian, Oceanic; Crowley 1998:238 ): *ovsoc?*
- etc.

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These are interesting in itself but few universally valid predictions can be made on them, except observing their rarity and noting down most common collocations

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```

    graph TD
      A["verbal interrogative pro-non-predicates"] <--> B["do not question the event itself"]
      C["interrogative pro-verbs proper"] <--> D["question the event itself"]
  
```

‘do what?’, ‘do what to [smb/smith]?’, ‘what happen?’, ‘what happen to [smb/smith]?’

(11) Kayardild (Tangkic; Evans 1995:371)  
*nyingka ngaaka-wath?*  
 2SG.NOM what-INCHOATIVE  
 ‘What are you doing?’

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**Does an interrogative pro-verb provide the most uncontradictory solution to the centrality dilemma?**

**NO**

- Due to the endocentricity principle, if an IPV is possible in the language at all, it will first of all be intransitive
- A construal that categorizes as *endocentric* phrase creating is expanded to stand for *exocentric* phrases of *one and the same* category

↓

- It categorizes as both *endocentric and exocentric* phrase creating at the same time

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**What could be a better solution?**

- Use an interrogative pro-word of another category, e.g. ‘what?’, ‘how?’ (cf. *where?* both for AdvP & AdpP)
- Create a VP with it by means of a general non-interrogative verb, like ‘do’, ‘happen’

**division of labour**

+ ‘what?’: (12) a. – *What did he do?*  
 b. – *He swam/ He killed a bird.*

+ ‘how?’: (13) Tohono O’odham (Uto-Aztecan; Madeleine Mathiot, p.c.)  
*s’aa-m ?e-vua?*  
 how-2PL are-doing  
 ‘What are you doing?’

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‘do’ + ‘how?’ is considerably less common than ‘do’ + ‘what?’. In all probability, this is due to the strong ambiguity between a question on manner and a question on the action itself that ‘do’ + ‘how?’ tend to involve. With ‘what?’ ambiguity may arise, when the general non-interrogative verb it comes together with is polysemous between ‘do’ and ‘make’.

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**Cross-linguistic frequency:**

'do' + 'what?, how?'      interrogative pro-verb

**90%**      10%

**NB: A language can have both strategies**

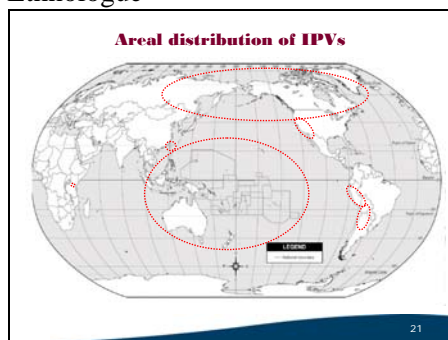
(14) Kuot (East Papuan; Lindström 2002:13-14, 216)

a. *-amani* 'do what?'

b. *Mani lə u-me a-kosar...?*  
what REL 3M.SBJ-HAB 3M.OBJ-make-Ø  
'What does [that brother of yours] do...?' (B: 'He just fools around.')

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If a language has both strategies, it is counted as an instance of IPV. Counts have been made on a sample of some 350 languages of more than 70 language families/phyla (according to Ethnologue

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2

Pacific Rim divided in 3 areas: (1) Austronesian+Papuan+Australian, (2) Paleoasiatic+Tungus+Eskimo-Aleut+Salish+a few other families in North America, (3) Aymaran&Quechuan families. Plus, probably, Hadza polysemy between 'do how?' & 'do what?'. Languages in other parts of the world reported, for instance, by Hagège 2003 have proven to be instances of smth else than IPVs.

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**Common sources of IPVs**

**IPVs often have a rather transparent etymology**

- Compounding (incorporation) 'do' + 'what?, how?' (e.g., Aymara)
- Conversion (verbalization) of 'what?' (e.g., many Australian languages)
- Semantic change/polysemy: 'be how?, do how?' → 'do what?' (e.g., Hadza, Watjarri)
- Semantic change: 'do' → 'do something?', 'do what?' (?Salish languages)

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### What about transitive interrogative pro-verbs?

- Possible only when an intransitive IPV is present
  - Regular transitivizing mechanisms must be available
- (15) Paamese (Austronesian, Oceanic; Crowley 1982: 159)
- a. *raise gosaa?*  
rice do.what:3SG:REALIS  
'How is it going with the rice?' (lit.: 'What is the rice doing?')
- b. *ko-gosein tuu-mali?*  
2SG-do.what.to:REALIS brother-2SG.M  
'What have you done to your brother?'

only intransitive IPV

intransitive &amp; transitive IPVs

**75%**

25%

20

### Correlations

- A good deal of head-marking
- A good deal of "verby" features:
  - extensive use of verbalization (rather than nominalization)
  - widespread incorporation
  - often other kinds of predicative interrogatives are present as well
- Genetic (& areal) predisposition

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Correlations are rather tentative.

Australia & Head-marking: Non-Pama-Nyungan vs. Pama-Nyungan

Verbalization – often as conversion!

This seems to confirm the idea that IPVs do not constitute the preferred way of questioning the VP