Extraction limited to pivot

Normal top-down (“outside-in”) licensing:

\( \uparrow \text{TOPIC|FOCUS} = (\uparrow \ldots \text{PIV}) \)

(1) **Tagalog** (Austronesian>Malayo-Polynesian>Western; the Philippines)

a. **Matalino ang lalaki- ng bumasa ng diyaryo.**
   intelligent NOM man- LNK PERF.AGT.read ACC newspaper
   ‘The man who read a newspaper is intelligent.’

b. **Interesante ang diyaryo- ng binasa ng lalaki.**
   interesting NOM newspaper- LNK PERF.DO.read ERG man
   ‘The newspaper that the man read is interesting.’

c. ***Interesante ang diyaryo- ng bumasa ang lalaki.**
   interesting NOM newspaper- LNK PERF.AGT.read NOM man
   ‘The newspaper that the man read is interesting.’

d. ***Matalino ang lalaki- ng binasa ang diyaryo.**
   intelligent NOM man- LNK PERF.DO.read NOM newspaper
   ‘The man who read a newspaper is intelligent.’

(2) **West Greenlandic Inuit** (Eskimo-Aleut>Eskimo; Greenland)

a. **nanuq [Piita- p tuqu- ta- a]**
   polar.bear Peter- ERG kill- TR.PART- 3SG
   ‘a polar bear that Peter killed’

b. **miiraq [kamat- tu- q]**
   child angry- REL.INTR- SG
   ‘the child who is angry’

c. ***angut [aallaat tigu- sima- sa- a]**
   man gun.ABS take- PRF- REL.TR- 3SG
   ‘the man who took the gun’

(3) **Mam** (Mayan; Guatemala and México)

a. **Alkyee x- hi b’eet?**
   who RECENT- 3plABS walk
   ‘Who walked?’

b. **Alkyee- qa x- hi tzaj t- tzyu- 7n Cheep?**
   who- PL RECENT- 3pABS DIR 3sERG- grab- DIRS José
   ‘Who did José grab?’

c. ***Alkyee saj t- tzyu 7n kab’ xiinaq?**
   who RECENT.3sABS.DIR 3sERG- grab- DIRS two man
   ‘Who grabbed the men?’

d. **Alkyee saj tzyu- n ky- e kab’ xiinaq?**
   who RECENT.3sABS.DIR grab- APASS 3PL- OBL two man
   ‘Who grabbed the men?’
Chukchi (Chukotko-Kamchatskian; Chukchi Peninsula, NE Siberia, Russia)

a. E- tip'eyne- k- l?- in ēnewečqet ragt- g?a.
   NEG- sing- NEG- PART- ABS.SG woman. ABS.SG go.home- 3SG
   ‘The woman who was not singing went home.’

b. Ig? a- yo?- k- l?- eta enm- et m?n- ēlqan- mak.
   now NEG- reach- NEG- PART- to hill- to 1PL- go- 1PL
   ‘Now let us go to the hill which (someone) didn’t reach.’

c. En- agtat- k- l?- a qaa- k ēaček- a
   APASS- chase- NEG- PART- ERG reindeer- LOC youth- ERG
   help- PRES- 3sERG.3pABS woman- ABS.PL
   ‘The youth who does not chase the reindeer is helping the women.’

Other ways to license \textit{wh}-constructions

- Bottom-up (‘inside-out’) licenses extraction of non-PIVs
  \(\text{(GF)} = (\ldots \text{TOPIC} | \text{FOCUS})\)

- Pivots with a local discourse function can be assigned in situ

A language with no top-down (‘outside-in’) licensing

\textit{Imbabura Quechua} (Quechuan; Imbabura, Ecuador)

   Juan cow- ACC buy- NMNL- ACC think- 1
   ‘I think Juan bought a cow.’

b. Extraction of embedded PIV is * because of lack of licensing
   *Pi- taj ya- ngui wagra- ta randi- shka- ta ?
   who- Q think- 2 cow- ACC buy- NMNL- ACC
   ‘Who do you think bought a cow?’

c. … but extraction of non-PIV is ✓
   Ima- ta- taj ya- ngui Juan randi- shka- ta ?
   what- ACC- Q think- 2 Juan buy- NMNL- ACC
   ‘What do you think Juan bought?’

d. Local discourse function for PIV is allowed
   Pi- taj kan- paj mama- man ali wagra- ta kara- rka ?
   who- Q you- POSS mother- to good cow- ACC give- PST.3
   ‘Who gave your mother a good cow?’
The “That-Trace” Filter

(6)  
   a. I think Gabi hugged Pnina.  
   b. I think that Gabi hugged Pnina.

(7)  
   a. Who do you think Gabi hugged ___?  
   b. Who do you think that Gabi hugged ___?

(8)  
   a. Who do you think ____ hugged Pnina?  
   b. *Who do you think that ___ hugged Pnina?

Functionalist observation: finite subordinate clauses are only loosely connected to the higher clause.

Grammaticalization of this:

“finite subordinate clause”: marked by the complementizer that  
connection with higher clauses: property of PIV

\[ \therefore \text{that} \] is marked with a lexical constraint that its PIV must be an element of its own clause, not an element of a higher clause. This lexical constraint results in the that-trace effect.

In Hebrew, the effect shows up with the complementizer im ‘if, whether’, but not with še ‘that’.

(9)  
   a. Mi ata xošev še ___ xibek et Pnina ?  
      who you think that hugged ACC Pnina  
      ‘Who do you think hugged Pnina?’

   b. *Mi šaalta im ___ xibek et Pnina ?  
      who you asked if hugged ACC Pnina  
      Who did you ask if hugged Pnina?

Since this is grammaticalization, each language chooses whether and how to grammaticalize.