

- (6) a. *there arrived a strange package in the mail
 b. *how many packages did there arrive in the mail
 c. there were several packages placed on the table
 c'. ?there were placed on the table several (large) packages
 d. hoeveel mensen zijn er aangekomen Dutch
 how-many men have there arrived
- e. **Th/Ex**: English seems to bar surface order **[V-DO]** \Rightarrow extraction of DO (left/right) edge by obligatory thematization/extraction rule **Th/Ex** (unlike e.g. OS, w/o 'surface semantics effects')^[20]

(7) *Generalisation*^[20]

In transitive construction, something must escape the *vP*.

(8) *English TEC*^[21]

- a. ?there entered the room a strange man
 b. ?there hit the stands a new journal

(9) *Hypothesis*^[21]

Th/Ex is an operation of the phonological component.

(10) *Th/Ex of XP bars subsequent movement of XP/extraction out of XP*^[21f.]

- a. *[how many packages]₃ did there arrive t_1 in the mail t_2 ?
 b. *[how many men]₃ did there [arrive t_1] t_2 ?
 c. *[what]₃ are there [books about t_{what}]₂ being sold t_1 (in Boston these days)?

\Rightarrow Input to & output of Th/Ex are inaccessible to syntactic processes!^[22]

Q: Why should/how could NS care about phonological movement (look-ahead)?

EN (= nominal extracted by Th/Ex) must still obey Case Filter (*qua* Agree) and interface operations (binding absorption)^[23]

- (11) a. * he_i thought there were [_{EN} songs about John_i] being played t_{EN} on the radio
 b. $they_i$ thought there were [_{EN} songs about [each other]_i] being played t_{EN} on the radio
 c. who_i thought there were [songs about [each other]_i] being played t_{EN} on the radio

Simpler alternative: EN output of Th/Ex immune to all NS- and LF-operations; **copy (= 'trace', t_{EN}) is accessed**^[23]

- (12) a. Th/Ex is an operation of the phonological component.
 b. Traces are inaccessible to Move, but accessible to some other operations.

Locus of Th/EX = vP_{def} (weak vP): substitution in [Spec, vP] (left) vs. adjunction to vP (right)

Q: How can Th/Ex – a Phon operation – apply at a 'non-phase' (weak phase)? How can NS-operations (substitution/adjunction) apply in a non_NS 'component' (Phon)?

f. **Trace** = EN w/o [μ F]s and [PF]s (removed by S-O)^[23]

Argument: Inaccessibility of t = inaccessibility to Move = inaccessibility to Agree, pied-piping and/or Merge \Rightarrow ECs accessible to Merge (Pro, *pro*), hence t inaccessible to Agree or pied-piping \Rightarrow active t accessible to Agree (EN must satisfy Case Filter) \Rightarrow head(t_{active}) must disallow pied-piping and Move; inactive t is additionally inaccessible to Match^[24]

(13) *Sub-cases of (12b)*^[24]

- a. EC disallows pied-piping.
- b. Inactive trace disallows Match.

(14) **Th/Ex**^[24]

- a. Th/Ex is an operation of the phonological component. (*English-specific*)
- b. Pied-piping requires phonological content. (*UG-specific*)

g. **Rightward Th/Ex** \approx extraposition (non-iterative)(15) *Problem case*^[25]

?there are [many fish]_{DO} expected [to be caught t_{DO}] (*iterative Th/Ex?*)

Source: existential [*there be NP*] \Rightarrow NP = reduced relative

(16) there are [_{NP} many fish (that are) expected to be caught]

\rightarrow 'there are many fish such that they are expected to be caught'

 \Rightarrow Extraction islands^[46](17) a. there is [_{NP} a building likely to be demolished]

a'. *how is there [_{NP} a building likely to be demolished t_{how}]

b. there is likely to be [_{EN} a building] demolished t_{EN}

(*Th/Ex*)

b'. how is there likely to be [_{EN} a building] demolished $t_{EN} t_{how}$