AIMS:

● Show that $X^\circ$-movement, esp. V-movement, does exist and that it is a narrow syntactic operation, not a PF-phenomenon ($\neq$ Kayne 1998, Nilsen 2000, Müller 2001, Chomsky 1999)

● Revise the Extension Condition

● Postulate a correlation between the Extension Condition and the presence of an EPP-feature
THE DATA:

English
(1) Peter read the book.

Welsh (Roberts 2000)
(2) Mi welais i Megan.
   Prt saw I Megan

German
(3) daß Peter das Buch gelesen hat
   that Peter the book read has
=> embedded clause
(4) Peter hat das Buch gelesen.
   Peter has the book read
=> main clause
(5) Dieses Buch hat kein Mensch
   This book has no human being
   gelesen.
   read
   "No-one has read this book."
=> topicalisation
THE FRAMEWORK:

Clause structure:
C-system: (Force) (Top) (Foc) (Fin)
I-system: (Ref) (Top) (Foc) T (Aux)
V-system: v, V
(not considering AdvPs)

structure of VP following Roberts (2000)

The *-parameter (Roberts & Roussou 1998, Roberts 2000)

● Heads are parametrised as to whether they require PF-realisation or not.
● a * symbolises the need for PF-realisation.
● * can be realised either by Merge or by Move.
The Extension Condition (Chomsky 1993, 1995)

- requires that syntactic operations extend the tree at the root
- only holds of substitution operations and not of adjunction operations (esp. X°-movement)
(1')  English – no Fin*

Note:
No long-distance agree possible, except for checking of verbal phi-features in languages with poor verbal morphology. All checking is done in head-head or Spec-head relations (looking into Spec is possible).
Merge:
If Fin* is satisfied by merger of a particle (Welsh) or of a complementiser (German embedded clauses), the Extension Condition is met.

(2') Welsh – Fin* satisfied by Merge

(tree taken from Roberts 2000, therefore different "design")
Note: The root-embedded asymmetry as illustrated in (4') and (3') is due to "checking" Fin* by Move or Merge, respectively.
(4') German main clauses – Fin* satisfied by Move

FinP
  /    \\
DP       Fin'
        /     \
Peter    Fin*    RefP
               /        \
               hat       DP
               /        \\
                Ref
                /     \
                hat       DP
                /        \
                 Ref
                 /     \
                 hat

TP
  /    \\
hat     vP
        /    \\nPeter   das Buch
gelese

T*
  /    \\
T'     AuxP
        /    \\
       vP     Aux
          /    \
         hat    [+phi, -part, +Fin]

V

VP
  /    \\
DP     v
       /    \\
Peter  [+Nom,+Ref]
das Buch
gelese
(5') German topicalisation

Dieses Buch hat keinen Menschen gelesen.
Move:
If Fin* is satisfied by V-movement, this operation alone does not satisfy the Extension Condition.

**SOLUTION:**

**EPP-feature:**
- "I need a Spec in order to extend my projection"
- Heads with a * that trigger X°-movement but have no other feature that requires XP-movement are automatically associated with an EPP-feature.
- Only T, Fin and Force can ever have an EPP-feature.
  - All other functional categories are discourse-related/interpretational and therefore only present if an XP needs to check a feature.
E.g. TopP is projected only if we have a topicalised XP.
– V-to-v movement does not affect the presence or absence of SpecvP because this presence or absence is determined by the type of verb (e.g. trans./unacc.).

The "New" Extension Condition
The Extension Condition is satisfied if as a result of all feature-checking on the given head the tree is extended at the root.

Relativised Minimality:
- All XPs that target the C-system are operators (subjects are underspecified and turn into operators once they are in SpecFinP), i.e. they are all of the same type
=> a topicalised XP cannot move across a subject in SpecFinP

=> Relativised Minimality rules out V3
=> The Extension Condition rules out V1

WHAT ABOUT THE "UNIVERSAL EPP" ON T?

● In most cases, what has been called the EPP reduces to [Nom]-Case checking in SpecTP
=> [Nom] is checked by a DP in SpecTP no matter whether T is overtly realised or not (see trees above)
● Only if no Nominative is assigned in a clause, T is associated with an EPP-feature (independent of
whether we have T or T*)
=> if we have V-movement to T*, the EPP is clearly needed
=> if we have T, we can say that one part of TP has to be realised for some semantic reason (e.g. to locate the event in time) – if it isn't T, it must be SpecTP (6)

(6) English expletive *there* checking EPP on T
Phrased slightly differently:
– Both EPP and Case (here [Nom]) trigger movement (Alexiadou & Anagnostopoulou 2001), so EPP is redundant if [Nom] is present (or the two features are collapsed)

– Null-subject languages may have T* which is satisfied by merger of inflectional affixes (cf. Alexiadou & Anagnostopoulou 1998)

=> subsequent movement of the verb stem to bind these affixes does not qualify as syntactic X°-movement which requires that SpecTP be filled but is a morpho-logical operation (yet part of narrow syntax)
CONCLUSION:

- All verbal $X^\circ$-movement is part of narrow syntax.

EITHER it is forced by the need to check some feature * (Q, Fin or phi) => then the head in question has to have an EPP-feature, or [-Nom] in the case of T

OR it is forced by the HMC (kind of look-ahead) as in T-to-Ref-to-Fin movement, where the Extension Condition is met anyway because Ref is only projected when a DP has to check its [+Ref]-feature.

OR it is morphologically triggered

- The EPP-feature is truly a feature which ensures that the projection is extended (i.e. its name is fully justified)
The need to satisfy the **Extension Condition** and the presence of an **EPP-feature** are correlated.

**REFERENCES:**


