The 1AEX can be reduced to selection

Jason Merchant

U Chicago

2015
the Hornucopia
(1) In languages with passives of intransitives (impersonal passives), at most unergative verbs can passivize; unaccusatives have no passive forms.

(2) There is no passive of unaccusatives.
What Larry taught me

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The 1AEX can be reduced to selection...
What Larry taught me

Perlmutter, D. & A. Zaenen (1984) The indefinite extraposition construction in Dutch and German. (SIRG 2)
Postal, P. (1977) Antipassive in French. NELS 7. (RB)
Seiter, W. (1978) Subject/direct object raising in Niuean. BLS 4. (RB, SIRG 1)

IV. Clause Union: GRs in causative constructions
****(1977) The interaction of clause reduction and causative clause union in Spanish. NELS VII.
*Gibson, J. & E. Panock (1986) Clause union, the stratal uniqueness law.

V. Ergativity
The following anthologies offer useful planks in an ergative platform:
And see also the useful ergativity bibliography prepared by Andrew G.
[cf. Studies in Ergativity, edited by Dixon and included in Garrett’s Bibe but not in the above]
George, L. (1975) Ergativity and relational grammar. NELS V.
Harris, A. (1975) Is Georgian ergative? LSA paper. [available from me.]
Woodbury, A. (1979) Greenlandic Eskimo, ergativity, and rel. grammar. (SSR)
What Larry taught me


Pullum, G. (1977) Word order universals and grammatical relations. (SSB, RB)
(Also various articles in the three Plunk anthologies; cf. Index in Plunk, ed. 1985)

VII. Non-RG approaches to GRs

A) Case grammar and case roles

(1968b,c) Lexical entries for verbs; Types of Lexical Information.
(both in Ohio State U. Working Papers in Linguistics No. 2, RA)
(1977) The case for case reopened. (SSB)

B) Thematic relations


(1967a) Functions of the Lexicon in Formal Descriptive Grammars.
(System Development Corp. technical memorandum. (RA)


*1976 Toward an explanatory semantic representation. Li 7: 89–150.


to be reseed together with:
Anderson, S. (1977) Comments on the paper by Wasow. [In some volume]

C) Lexical-Functional Grammar and allied frameworks


Emmonds, J. (1976) *A Transformational Approach to English Syntax*. The 1AEX can be reduced to selection.

D) Grammatical relations and θ-roles in REST/GB
[cf. also Jackendoff references under B]


E) Grammatical relations in Categorial/Montague Grammar


*1982b More on the categorial analysis of grammatical role.

(SNS)
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PACKET
A  B

1. More on thematic relations
      Also in MIT Lexicon Project Working Papers #13 (1986, RA)

2. More on unaccusatives

3. RG strikes back
WCCFL 3. (R)

2.3 *Grimshaw, J. (1987) Unaccusatives—an overview. NELS 17, 244-57. 
Van Valin, R. D., Jr. (1987) The Unaccusative Hypothesis vs. Lexical 
Semantics. NELS 17, 641-61. 
interface. CSLI report #123, Stanford U. 

3. RG strikes back
Perlmutter, D. (1982) Syntactic representation, syntactic levels, and the 
notion of subject. In Jacobson & Pullum, eds., The Nature of 
Syntactic Representation. Reidel. (CCL,RA)

passivization. (SIRG 2)

Language 65: 752-82.

4. Patient subjects and the English “middle”


in English. LI 15: 381-416. 
Fellbaum, C. (1985) Adverbs in Agentless Actives and Passives. CLS 21, 
Part 2 (Parasession on Causatives and Agentivity), 21-31.

Hale, K. & J. Keyser (1986) Some Transitivity Alternations in English (MIT 
Lexicon Project Working Paper #7) RA 
Hale, K. & J. Keyser (1987) A View from the Middle (MIT Lexicon Project 
Working Paper #10) RA 
Fellbaum, C. & A. Zribi-Hertz (ms., 1987) The Middle Construction in French 
and English: A Comparative Study of its Syntax and Semantics. 

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[HL6]

Impersonal Passives and Spontaneous Chômage

1. **GERMAN impersonal passives**
   a. Wir tanzten gestern.
      we danced-1PL yesterday.
   b. Es wurde gestern (von uns) getanzt.
      it was-3sg yesterday by us danced
   c. Gestern wurde (von uns) getanzt.
      'There was dancing yesterday (by us)'

2. **GERMAN dative passives**
   a. Der Lehrer half dem Schüler.
      the teacher[NOM] helped the student-DAT
   b. Es wurde dem Schüler (vom Lehrer) geholfen.
      it was-3sg the student-DAT by-the teacher helped
   c. Dem Schüler wurde (vom Lehrer) geholfen.
      'The student was helped (by the teacher)'

3. **LATIN impersonal passives**
   Curritur.
   run-3SG-PASV

   'There was running' [lit., '[it] was run]

4. **LATIN dative passives**
What Larry taught me

7. **FRENCH indefinite (intransitive) extraposition**

   Des femmes sont arrivées ==> Il est arrivé des femmes.
   some women-F.PL are arrived-3F.PL it is arrived-M.SG
   ='There arrived some women'

   a. On a mangé des pommes.
      one has eaten-3SG some apples
   b. Des pommes ont été mangées.
      were eaten-3PL
   c. Il a été mangé des pommes.
      it has been eaten-3SG

   7'. Il a été dormi hier soir.
   It has been slept-3SG yest. evening
   ='There was sleeping [lit., it was slept] last night'

8. **TURKISH dative/comitative passives**

   a. Ahmet kadın-la konuş-to.
      A.(Nom) woman-with talk-PAST(3SG.)
      'Ahmed talked with the woman'
      woman-with talk-PASV-PAST(3SG.)
      'The woman was talked with'
   c. Ben(im)-le konuş-ul-du(-*m).
      I-with -1SG
      'I was talked with' [lit., '[it] was talked with me']

9. **MODERN ARABIC oblique passives**

   a. Bahada 'ani l-muwazzafin.
      he-locked(3SG) for the-employees-ORI
      [lit., 'he was locked by the employees']
The impersonal passive in Dutch and German

Jason R. Merchant
5/6/1991

Linguistics 491b: The Senior Essay
Prof. Laurence Horn
Yale University

“Though this be madness, yet there is method in’t” (Hamlet II.ii.204)

1 Introduction

In this paper, I discuss two competing analyses of the impersonal passive construction in Dutch and German within the Relational Grammar framework: the spontaneous demotion analysis proposed in Keenan (1975) and the advancement analysis argued for in Perlmutter (1978). I conclude
Passives of transitives (‘personal passives’):

(3) De kinderen eten de kaas.
   the children eat the cheese

(4) De kaas werd door de kinderen gegeten.
   the cheese was by the children eaten
   ‘The cheese was eaten by the children.’
Passives of intransitives (‘impersonal passives’):

(5) De kinderen schaatsen op het ijs.
    *the children*   *skate*   *on the ice*

(6) Er werd door de kinderen op het ijs geschaatst.
    *there was*   *by*   *the children*   *on the ice skated*
    roughly: ‘There was skating on the ice by children.’

(7)
... One gate there was only (Milton) ... The best name would probably be “existential there”, as it generally indicates (vaguely) the existence of something on which fuller information is to follow... It is not absolutely necessary that the sentence contains [sic] a “subject” though this seems to be the invariable rule in English: in Danish we have such passive construction as der danses ‘there is dancing’, cp. the G. es in es wird getanzt. (Otto Jespersen Analytic Syntax 1937:130, UChicago Press)

(7) Die Griechen tanzen → Von den Griechen wurde getanzt / Es wurde (von den Griechen) getanzt.

But passives of some intransitives (the *unaccusatives*) fail to be well-formed:

(8)  In dit weeshuis groeien de kinderen erg snel.

*In this orphanage* *grow* *the children* *very fast*

‘Children grow very quickly in this orphanage.’

(9)  *In dit weeshuis wordt er door de kinderen erg snel gegroeid.*

*In this orphanage* *is* *there by* *the children* *very fast* *grown*

(Intended: ‘There is very quick growing by children in this orphanage.’)

(10) The **Unaccusativity Hypothesis**: Certain intransitive clauses have an initial 2 but no initial 1. (Some surface subjects are underlying objects.)

Gorillas exist. = 

![Diagram](image)
The Unaccusativity Hypothesis:
Certain intransitive clauses have an initial 2 but no initial 1. (Some surface subjects are underlying objects.)

Gorillas exist. =
Dozens of phenomena that diagnose a split in intransitives (Assamese case, Hidatsa agreement, N-incorporation in S.Tiwa, German split phrases, Russian genitive of negation, Russian distributive *po*, Georgian case-marking in II series, Italian *ne*-cliticization, Hebrew/Tzotzil possessor raising, resultatives, Jim’s ‘crude’ test, Hittite clitics....)
(12) The 1-Advancement Exclusiveness Law (‘1AEX’ to its friends): No clause can involve more than one advancement to 1.
8. **Conclusions for the Grammar of Dutch and Universal Grammar**

What must be stated in the grammar of Dutch to account for the data on impersonal passives presented here? Under the proposal advanced here, the grammar of Dutch needs only:

(92) a. a statement that impersonal passives of intransitive clauses are possible in Dutch.

b. a rule stating the conditions under which the dummy appears in the surface string.
The contrasts between grammatical and ungrammatical impersonal passives presented here follow entirely from principles of universal grammar. They are:

(93) a. the universal advancement analysis of impersonal passives imposed by the Motivated Chomage Law
   b. the predictability of initial unergative vs. unaccusative strata in accordance with the strong version of the Unaccusative Hypothesis sketched in (17c)
   c. the l-Advancement Exclusiveness Law
   d. the Final l Law, the Relational Succession Law, and the Active Dummy Law, which together ensure that every clause with an unaccusative stratum involves an advancement to l (cf. fn.5)
8 Conclusion

This paper examined the impersonal passive construction in Dutch and German, and some arguments for and against the advancement analysis originally proposed in Perlmutter (1978).

It was shown that the crucial independent motivation for the 1AEX, namely the data from Dutch and German indefinite extraposition, was flawed. Of course, it can be claimed that the 1AEX does find support from the fact that it correctly predicts some of the workings of impersonal passives. On the other hand, the advancement analysis of a dummy inserted as a 2 and advancing to 1 has been claimed to receive support from the 1AEX; but this reasoning is circular. The 1AEX works with the advancement analysis and the P&P’s (1977) universal characterization of passive because that was what it was designed to do. Independent motivation for it is weak or non-existent.
Geometric casting of unaccusativity

The 1AEX can be reduced to selection

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The Internal Subject Hypothesis

Kitagawa, Koopman and Sportiche, Kuroda, Rosen, Speas, Woolford, Zagona, McCloskey, Chomsky, Bobaljik ...

TP

NP₁

gorillas

t₁

V

eat

NP

bananas
The Internal Subject Hypothesis, Kratzer’s version

(13) $[Voice_{act}] = \lambda x \lambda e[Agent(x)(e)]$
The Internal Subject Hypothesis, Kratzer’s version

$(14) \quad [Voice_{act}] = \lambda x \lambda e[Agent(x)(e)]$

Generative semantics + formal semantics = this!
The Internal Subject Hypothesis, Kratzer’s version

The 1AEX can be reduced to selection
Kratzer’s Voice + Unaccusativity = Uh-oh...

Nothing blocks passives of unaccusatives:

(15) *Gorillas are died.

\[
\begin{array}{c}
\text{TP} \\
\text{NP}_2 \\
\text{gorillas} \\
\text{T} \\
\text{VP} \\
\text{V} \\
\text{are} \\
\text{VoiceP} \\
\text{Voice} \\
\text{[passive]} \\
\text{VP} \\
\text{V} \\
\text{died} \\
\text{t}_2 \\
\end{array}
\]
Nothing blocks passives of unaccusatives:

(16) *Gorillas are died.
Recent approaches to the passive and split voice

Wurmbrand; Bruening; Legate; Alexiadou, Anagnostopoulou, and Schäfer; Kallulli; Collins; Embick ...

VoiceP

Subject

Voice [agent]

vP

v_{caus} VP
A proposal

Transitive
Gorillas eat bananas
VoiceP
  Voice
  vP
    NP
      v_{tr}
      VP
        V
          NP

Unergative
Gorillas dance
VoiceP
  Voice
  vP
    NP
      v_{unerg}
      VP
        V
          NP

Unaccusative
Gorillas die
VoiceP
  Voice
  VP
    V
      NP

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The 1AEX can be reduced to selection

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In **High/Big Ellipses** (sluicing, fragment answers, gapping, and stripping), elided material and antecedent phrase must match in voice.

(17) Sluicing
   a. *Someone murdered Joe, but they don’t know who by. <he was murdered>  
   b. *Joe was murdered, but they don’t know who. <murdered him>
A syntactic argument for separating Voice from VP

In Low/Little Ellipses (verb phrase ellipsis), elided material and antecedent phrase may mismatch in voice.

(18) Passive antecedent, active ellipsis
   a. The system can be used by anyone who wants to. <use it>
   b. This information could have been released by Gorbachev, but he chose not to. <release it> (Hardt 1993:37)
   c. This problem was to have been looked into, but obviously nobody did. <look into this problem> (Kehler 2002:53)

(19) Active antecedent, passive ellipsis
   a. The janitor must remove the trash whenever it is apparent that it should be. <removed>
   b. “No-one can hypnotize me.” “Usually the people who are certain they can’t be are the easiest to do it to.” <hypnotized> (corpus)

VP-ellipsis: Voice mismatch allowed
This problem was to have been examined, but obviously nobody did. 
$\left[ DP \text{ This problem } \right]_1$ was to have been

$\text{VoiceP}$

$\text{Voice}$

$\left[ \text{Passive} \right]$ 

$\text{vP}_A$

$\text{v} \text{trans}$

$\text{VP}$

$\text{examined}$

$\text{DP}_1$

$\text{this problem}$

$\text{VoiceP}$

$\text{TP}$

$nobody_2$

$\text{did}$

$\text{Voice}$

$\left[ \text{Active} \right]$ 

$\text{vP}$

$t_2$

$\text{v} \text{trans}$

$\text{VP}$

$\text{examine}$

$\text{DP}_1$

$\text{this problem}$

$\text{vP}_A = \text{vP}_E$
A syntactic argument for separating Voice from VP

**Sluicing: Voice match required**

*Someone murdered Joe, but we don’t know {by whom/who by}.

\[ TP_A \neq TP_E \]
A proposal

Transitive
Gorillas eat bananas
VoiceP

Unergative
Gorillas dance
VoiceP

Unaccusative
Gorillas die
VoiceP

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Two problems:

1. What’s the difference between English (passives of unergatives: no) and German/Dutch (yes)?

   Answer: A lexical difference, encoded by selectional features: English Voice[pass] selects for $v_{tr}$, German/Dutch Voice[pass] for $v$.

2. How do we capture Perlmutter's Generalization?

   Answer: Voice[pass] selects for $v$. There is no $v_{unacc}$, so it can't be selected for. Perlmutter's Generalization emerges from the lexicon.
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   **Answer:** *Voice[pass]* selects for $v$.
   - There is no $v_{unacc}$, so it can’t be selected for.
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Selection/subcategorization

= a way of ensuring that the right things go together

**Selector ... Selectee**

(20) We rely \{on / *in\} him.

(21) #Sincerity may admire the boy. (McCawley)
Selection/subcategorization

= a way of ensuring that the right things go together

Selector ... Selectee

(25) We rely {on / *in} him.
(26) #Sincerity may admire the boy. (McCawley)
(27) rely, V, [ _ [PP on ... ] ]
Selection/subcategorization

= a way of ensuring that the right things go together

Selector ... Selectee

(30) We rely {on / *in} him.
(31) #Sincerity may admire the boy. (McCawley)

(32) \( \text{rely, V, } [\_ [\text{PP on } ... ] ] \)

(33) \( \text{rely } \begin{bmatrix} \text{cat} & [V] \\ \text{infl} & [...] \\ \text{sel} & [\text{on}] \end{bmatrix} \) or \( \text{rely } \begin{bmatrix} \text{cat} & [V] \\ \text{infl} & [...] \\ \text{sel} & [\text{Pform : on}] \end{bmatrix} \)
Selection/subcategorization

= a way of ensuring that the right things go together

Selector ... Selectee

(35) We rely \{on / *in\} him.

(36) #Sincerity may admire the boy. (McCawley)

(37) \(\text{rely, V, } [\_ [PP on ... ]]\)

\[
\begin{array}{c}
\text{cat} [V] \\
\text{infl} [...] \\
\text{sel} [on]
\end{array}
\] or \[
\begin{array}{c}
\text{cat} [V] \\
\text{infl} [...] \\
\text{sel} [Pform : on]
\end{array}
\]

(38) \(\text{rely:} : = \text{on} - \phi \ V\)
(40) We rely \{on / *in\} him.

(41) \textit{rely} \[
\begin{array}{ll}
\text{cat} & [V] \\
\text{infl} & [...] \\
\text{sel} & [on]
\end{array}
\]

(42)

\[
S \rightarrow \begin{array}{c}
we \\
\text{VP} \\
\text{V} \rightarrow \text{rely} \\
P \rightarrow \text{him} \\
\text{on}
\end{array}
\]
Selection/subcategorization

(43) Merge($\alpha$, $\beta$)
For any syntactic objects $\alpha$, $\beta$, where $\alpha$ bears a nonempty selectional list $\ell = <F_1, ..., F_n>$ of selectional features, and $\beta$ bears a categorial feature $F'$ that matches $F_1$, call $\alpha$ the head and
a. let $\alpha = \{ \gamma, \{ \alpha, \beta \} \}$
call $\gamma$ the projection of $\alpha$, and
b. if $n > 1$, let $\ell = <F_2, ..., F_n>$, else let $\ell = \emptyset$, and
c. let $\gamma = \begin{bmatrix}
\text{cat} & [\text{cat}(\alpha)] \\
\text{sel} & [\ell]
\end{bmatrix}$
English passive

\[
\text{Voice[pass]} \left[ \begin{array}{c}
\text{cat} \\
\text{sel}
\end{array} \right]
\]

\[
\begin{array}{c}
vP \\
v_{tr} \\
V \\
eat \\
bananas
\end{array}
\]
English passive

Voice[pass]

\[
\begin{array}{c}
\text{cat} & \text{[Voice}_{pass}\text{]} \\
\text{sel} & \text{[v}_{tr}\text{]} \\
\end{array}
\]

\[
\text{vP} \\
\text{v}_{tr} \\
\text{VP} \\
\text{V} \\
\text{eat} \\
\text{NP}_1 \\
\text{bananas}
\]

\[
\rightarrow \text{Merge}
\]

\[
\text{VoiceP} \\
\text{vP} \\
\text{v}_{tr} \\
\text{VP} \\
\text{V} \\
\text{eat} \\
\text{NP}_1 \\
\text{bananas}
\]
English passive

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English passive

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English passive

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English passive

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German passive of intransitive (unergative)

\[
\text{Voice[pass]} \left[ \begin{array}{c}
\text{cat} \\
\text{sel}
\end{array} \right] [Voice_{pass}]
\]

\[
\text{vP} \quad \text{VP} \\
\text{v_{unerg}} \\
\text{V} \\
\text{tanz}
\]
German passive of intransitive (unergative)

Voice[pass] cat [Voice\textit{pass}] sel [v]

\[
\text{vP} \rightarrow \text{Merge}
\]

\text{VoiceP} \quad \text{vP} \quad \text{V}\text{tanz}

\text{Voice[pass]} \quad \text{vP} \quad \text{VP} \quad \text{V}\text{tanz}

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German passive of intransitive (unergative)

The structure of the sentence is as follows:

```
VoiceP
  Voice[pass]
    vP
      v
        v_{unerg}
          VP
            V
              tanz
```

The 1AEX can be reduced to selection.
German passive of intransitive (unergative)

\[ \text{VoiceP} \rightarrow \text{Merge} \]

\[
\text{Voice[pass]} \quad \text{vP} \\
\quad \text{VP} \\
\quad \quad \text{V} \\
\quad \text{tanz}
\]

\[
\text{VoiceP} \quad \text{VP} \\
\quad \text{Voice[pass]} \\
\quad \quad \text{vP} \\
\quad \quad \quad \text{VP} \\
\quad \quad \quad \quad \text{V} \\
\quad \quad \quad \text{tanz}
\]
German passive of intransitive (unergative)

![Diagram of German passive of intransitive (unergative)]
German passive of intransitive (unergative)

\[
\begin{align*}
\text{Voice[pass]} & \quad \text{VP} \\
\text{Voice[pass]} & \quad \text{vP} \\
\text{V} & \quad \text{werd} \\
\text{VP} & \quad \text{vP} \\
\text{V} & \quad \text{werd} \\
\text{VP} & \quad \text{vP} \\
\text{V} & \quad \text{tanz} \\
\text{VP} & \quad \text{vP} \\
\text{V} & \quad \text{tanz}
\end{align*}
\]

\[\text{Merge}\]
German passive of intransitive (unergative)

The 1AEX can be reduced to selection
Argument ‘demotion’ or ‘suppression’ is due to elimination of selection features:

\[(44) \quad EX(X[sel:<F_1, \ldots, F_n>]) = X[sel:<F_2, \ldots, F_n>]\]

Applied to \(v_{tr}P:\)

\[(45)\]

```
  vP[sel:<>]
  |    
  vP[sel:<N>]
    v_{tr}  VP
         V  NP_1
      eat  bananas
```
Cross-linguistic differences

*English:*  
\[
\text{Voice[pass]} \left[ \begin{array}{c}
\text{cat} \\
\text{sel} \\
\text{[Voice}_{pass} \text{]} \\
\text{[v}_{tr} \text{]} \\
\end{array} \right]
\]

*German:*  
\[
\text{Voice[pass]} \left[ \begin{array}{c}
\text{cat} \\
\text{sel} \\
\text{[Voice}_{pass} \text{]} \\
\text{[v]} \\
\end{array} \right]
\]
The end

Thank you, Larry!
Some definitions

1. A grammar $G$ consists of a pair of a set of lexical elements $L$ and a set of operations $O$:
   $$G = < L, O >$$

2. A derivation on a numeration $D_N$ is a pair:
   $$D_N = < N, < PM_1, ..., PM_n >>,$$
   where
   
   1. $N$, called the Numeration, is a nonempty set of lexical elements drawn from $L$ and a possibly empty set $S$ of phrase markers $PM$ (each of which is itself the result of a separate convergent or semi-convergent derivation), and
   2. $< PM_1, ..., PM_n >$ is an ordered $n$-tuple of phrase markers $PM$.

3. A derivation $D_N$ is said to be convergent (or to converge) iff
   
   1. $PM_n$ contains no unvalued (: _) features
   2. $PM_n$ contains no strong (*) features
   3. $PM_n$ contains no selectional features
   4. All elements in the Numeration have been Merged
   5. For each adjacent pair of phrase markers $< PM_k, PM_{k+1} >$ in $D_N$, there is an operation $\omega \in O$ such that $\omega$ applied to $PM_k$ yields $PM_{k+1}$.

4. A phrase $P$ (including a sentence) is well-formed iff there is at least one convergent derivation for $P$.

5. The Minimalist Program, in essence $= min|O|$ (Minimize the number of operations in $O$).

---

1 A derivation $D_N$ is semi-convergent iff it satisfies conditions 2-5 of this definition.
Some definitions: Operations

(46) Adjoin(α, β)
For any syntactic objects α, β, where neither α nor β has any unchecked selectional feature, call α the host, and
a. let α = { γ, { α, β} }
call γ the label (or projection) and
b. let γ = α

(47) Agree(X,Y; F) (read: ‘X triggers agreement on Y with respect to F’ or ‘Y agrees with X in F’ or ‘X controls agreement on target Y for F’)
For any syntactic objects X and Y in a phrase marker, where X bears a feature F with value Val(F) and Y bears a matching\(^2\) unvalued\(^3\) inflectional feature F\(^\prime\): __, and either X c-commands Y or Y c-commands X,
   a. let Val(F\(^\prime\)) = Val(F)

(48) Move\(_{head}\)(X, Y) (read: ‘Y moves to X’)
If Y is a head with feature F, X a head with a matching feature F, and X c-commands Y, and F is a strong inflectional feature on either Y or X, then
   a. let X = {X, {Y, X}} and
   b. let F\(^*\) = F\(<^*\)\>, and
   c. let Y = <Y>

(49) Move\(_{phrase}\)(Y, X) (read: ‘Y moves to specXP’)
If X is a projection with a feature F, Y a maximal projection with a matching feature F, and X contains Y, and F is strong (marked F\(^*\)) on X or Y or both, then
   a. let X = {X, {Y, X}} and
   b. let all occurrences of F\(^*\) on X, Y = F\(<^*\)\>, and
   c. let Y = <Y>

\(^2\)A feature F matches a feature F\(^\prime\) iff F=F\(^\prime\).
\(^3\)A feature F is unvalued iff Val(F)=∅.
(50) This thermostat can’t be relied on easily.
(51) a. *This thermostat doesn’t rely on easily.
b. *This thermostat doesn’t rely easily.
(52) Cf. This thermostat doesn’t install easily.
(53) a. These people don’t deceive easily.
b. *These people don’t lie to easily.
(54) a. Large murals don’t paint easily.
b. *Large murals don’t work on easily.
Pseudopassives vs. *pseudomiddles

(55) Most kids can’t play this minuet on this flute easily.

(56) a. This minuet can’t be played on this flute easily (by most kids).
    b. This flute can’t be played on (by most kids).
    c. *This flute can’t be played this minuet/anything on (by most kids).
    
    Cf. This candy can’t be given the children./*These children can’t be given candy to.

(57) a. This minuet doesn’t play easily (on most flutes).
    b. This flute doesn’t play easily. (for me, *by me)
    c. *This flute doesn’t play on easily.
    d. *This flute doesn’t play anything on easily.

Huddleston 2002a:308n63; Keyser and Roeper 1984:400; Pollock 1979:126-127n22; Roberts 1987:222

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Conclusion: *on assigns accusative case (or selects NP[acc]) only when embedded under a local Voice[Act].

Middle formation is lexical in a way that passive (including pseudopassive) is not.
(58) This topic should not have been gone into at all.
(59) This topic has been worked on by many linguists.

- It’s about Voice (in the traditional sense), not $v_{tr}$ or [acc], or Kratzer’s (Legate, Alexiadou, etc.) Voice. A verb doesn’t need an external argument, or the ability to assign [acc], to occur in the (pseudo)passive.

(Speculation: such freakish behavior necessarily piggybacks on the resultative participle? What about deponents like ergazome ‘work’ and kimame ‘sleep’?)
No pseudo-able adjectives

(60) a. This paper is unreadable.
    b. This show is unwatchable.

(61) a. He’s an often relied-on substitute host.
    b. He is very reliable (*on).
    c. *This show is unlookable at.

Like pseudomiddles:

   dependable (*on), dispensable (*with), laughable (*at).
No pseudo \textit{-able} adjectives

(63) a. This paper is unreadable.
    b. This show is unwatchable.

(64) a. He’s an often relied-on substitute host.
    b. He is very reliable (*on).
    c. *This show is unlookable at.

Like pseudomiddles:

\textit{dependable (*on), dispensable (*with), laughable (*at)}.

And in compounds:

(65) a. a drug-independent (*from) life; his drug-independence (*from)
    b. a drug-dependent (*on) life; his drug-dependence (*from)
    c. a time-sensitive (*to) matter; the matter’s time-sensitivity (*to)