Analyzing Multiple Advancements to 1

Douglas Fuller and John Verhonne
The Ohio State University

0. Introduction

The failure of passive rules to iterate and the infrequency with which passive rules apply in combination pose a problem for grammatical analysis. Relational Grammarians have proposed a universal law, the 1-Advancement Exclusiveness Law (henceforth, 1-AEX), which would have the effect of banning all iteration and combination of passive rules. Evidence from German, Lithuanian, Modern Irish and Classical Arabic indicates that the proposed law is too general, at least as presently formulated. Shall we therefore revise it, but retain its spirit? Perhaps, but let's our contention that any such revised law would be of little or no use.

Several independently motivated aspects of linguistic structure, in particular the intrinsic effects of the passive, the division of constructions into the lexical and the grammatical, and the existence of a multitude of conditioning factors in rules like the passive leave very little--perhaps nothing--which would require explanation via such a law.(8)

The issue is of theoretical interest because the 1-AEX is a global constraint on derivations: it forbids any two advancements to 1 within the derivation of the same clause. This sort of constraint couldn't be formulated within existing frameworks in competition with Relational Grammar (henceforth, RG)--including Lexical Functional Grammar, Generalized Phrase Structure, or Government Binding Theory. If the 1-AEX were necessary, it would provide prima facie evidence against all of these frameworks.

1. The Proposed Law

Perlmutter and Postal (1977) attempt to account for the noniterability or combinability of passive rules as an instance of a more general phenomenon: the 1-AEX. The theory proposed there regards grammatical relations as primitive elements which syntactic theory refers to in the statement of rules. Passive is formulated in this framework as resulting when an object "2" becomes a subject "1" in a transitive clause. Impersonal Passives are then simply the special case where a dummy 2 becomes a 1. Various markings may be associated with the passive, as Perlmutter and Postal (1977:412-13) note. They list the types repeated here as examples (1a)-(16).

(1a) Plain Personal Passives
Solche Sachen werden nicht gesagt
'Such things aren't said'

b. Reflexive Personal Passives
Solche Sachen sagen sich nicht
'Such things aren't said'

(1b) Plain Impersonal Passives
Es wird hier getanzt
'Dancing takes place here'

d. Reflexive Impersonal Passives
Es tanzt sich gut hier
'One dances well here'

Relational Grammar also acknowledges constructions in which indirect objects "3's" or oblique objects "O's" may become 1's. These rules, together with the passives, are referred to as "Advancements to 1." The 1-Advancement Exclusiveness Law disallows more than one advancement to 1 in a given clause. This requires in particular that no more than one of the four types of passives in (1) be represented in a clause.

We shall provide examples of sentences in German, Lithuanian, Irish and Classical Arabic where the 1-AEX appears to be violated. Constructions are instantiated in which "Reflexive Personal Passives" are used in personal or in impersonal passives. We shall refer to RG's "Reflexive Impersonal Passives" using their traditional designation, "medio-passive." We then refer to types (1a) and (1c) simply as "personal passives" and "impersonal passives," respectively. So that the constructions below might be seen as parallel to RG's (1b) category, please note that, although we drop the term "reflexive passive," all of the constructions we examine retain a marking that is elsewhere interpreted reflexively. Just as importantly, note that they need not be interpreted reflexively below (if they were understood reflexively, they wouldn't be passives).

2. Multiple Advancements to 1

A. German

Mediopassives and impersonal passiv as do intersect in German. Wackernagel (1926:147) cites (2). Note that from daher 'to annoy' is formed such a deverbal 'to get annoyed,' so that the source of the impersonal passive in (2) is unproblematic.

(2) ... nun wird sich wo anders gelegert
now AUX self where else annoy(prt)

'Now people can get annoyed somewhere else'

Other examples are possible, as in (3) (cf. sich versammeln 'to gather') and (4) (cf. sich erinnern 'to remember'):

(3) Jetzt wird sich in anderen Zimmer versammeln
now AUX self in other room gather(prt)

'People should gather now'

(4) Jetzt wird sich auch Geld erinnert
now AUX self of money remind(prt)

'People should now remember the money'

These are all impersonal passives of medio-passives. In an analysis where the impersonal passive is an advancement to 1, they require two advancements to 1 in the same clause, and are therefore counterexamples to the 1-AEX. Something like the two-level stratal diagram in (5) would be required:
personal/impersonal passives, corresponding to (9a):

(9) a. Hanu ne -past\-t
  house(gen) not-build(past\-3sg)
  'They didn't build a house'

b. Hanu ne -past\-t-a
  house(nom) not-build-past\-pass\-masc\-nom\-sg.
  'The house has not been built'

c. Hanu ne -past\-t-a
  house(gen) not-build-past\-pass\-neut.
  'A house has not been built' ('No house has been built')

The 1-AUX should prohibit sentences in which the medio-passive and the passive combine. However, we find examples of medio-passives in both personal and impersonal passives. (10) is the impersonal passive of a medio-passive:

(10) buv\-t skolint\-s-me\-st
    lend\-past\-pass\-medio
    'People were borrowing'

Passives using the past tense form -t-, and those using the prefixed perfective are possible as well. Further examples are much easier to find here than in German because the (reflexive) medio-passive is much more common. Geniščiāt (1976) and (1976), Herbon (1982), and Timmerlake (1962) contain further examples. We provide one further sentence, interesting because it would stand as a counterexample to the 1-AUX even if the analysis of impersonal passives as 2-to-1 advancement were abandoned. From prin\-t, 'remind' we may derive prin\-t-a 'be reminded (remember.)'

(11) is the personal passive of this medio-passive.

(11) susirink\-t buv\-t pri-si\-m\-t
    sent darbin\-kai
    meeting\-loc be(3sg) pr\-medio\-remind\-pass\-pl too old workers\-nom.
    'The old workers were remembered at the meeting as well!' (82)

C. Irish

(12) is an example of the construction known in traditional Irish grammar as the "autonomous form."

(12) Bhus\-\-laith go tobna \-
    strike\-aut suddenly him\-acc
    'He was suddenly struck'

Postal and Perlmuter (1978\-9) treat this as an impersonal passive, i.e. as a 2-to-1 advancement. Although there is no motivation for this treatment in Irish surface syntax, and in fact Comrie (1977) has analysed the cognate Welsh construction as a deconstruction from 1, Perlmuter and Postal's treatment does avoid violation of RG's proposed "Motivated Chomage Law," according to which a term (noun phrase) may not be deleted except when another term assumes its grammatical role. If this law holds, then
the Irish autonomous form must be analyzed as an advancement to 1.
In addition to this form, Irish has a genuine passive as well, as in
(13b).

(13) a. Buailim an gachar
strike he(nom) the dog(obj)
'He strikes the dog'

b. Té an gachar bui aite sige
is the dog(nom) struck at-him
'The dog has been struck by him'

(14) Táínid bui aite sige
are(pl) struck at-him
'We have been struck by him'

The nominal object is clearly marked as subject in passives both by verb
agreement (a plural is shown in (14)) and by its position immediately after
the finite verb. The nominal subject is optionally expressed in the
passive as the object of the preposition as 'at' or, less frequently, le
'with, by means of.'

The passive construction has its own autonomous forms:

(15) Táibh, bui aite
be(out) struck
'Some have been struck' (Christian Brothers' Grammar)

(16) Táibh, briste
be(out) broken
'Some have been broken'

In the analysis in which autonomous forms are derived through an advance-
ment to 1, (15) and (16) involve two advancements to 1. The regularity of
the autonomous passive formation may be attested to by fact that it is
included in the verbal paradigms in the Christian Brothers' Grammar.

D. Classical Arabic

Classical Arabic has two kinds of passives which can interact with
each other in the following way. First, basic and derived transitive verbs
can form medio-passive constructions, basic verbs by an -i- prefix or -a-
infinitive, and derived verbs by a -a- prefix. The medio-passive will be
transitive if the active form is ditransitive. The verb in (17a) is simply
transitive, so it forms an intransitive medio-passive as in (17b). (Roman
numerals are traditional category labels.)

(17) a. Active (I)

<table>
<thead>
<tr>
<th>jasala-hum</th>
<th>bayna yaday-hi</th>
</tr>
</thead>
<tbody>
<tr>
<td>drew back(he) between hands-his</td>
<td></td>
</tr>
</tbody>
</table>

b. Medio-Passive (I)

<table>
<thead>
<tr>
<th>injazal</th>
<th>bayna yaday-hi</th>
</tr>
</thead>
<tbody>
<tr>
<td>drew back(they) between hands-his</td>
<td></td>
</tr>
</tbody>
</table>

Second, these medio-passive constructions can passivize by the regular
ablaut passive (traditionally known as the ma7θu passive) either imper-
sonally, as in (17c), or, if they happen to take an accusative, personally,
as in (18c).

(18) a. Active (II Causative)

<table>
<thead>
<tr>
<th>llam attacker-hu</th>
<th>t-θiba</th>
</tr>
</thead>
<tbody>
<tr>
<td>taught(he) the-medicine(acc)</td>
<td></td>
</tr>
</tbody>
</table>

b. Medio-Passive (V)

<table>
<thead>
<tr>
<th>ta'allama</th>
<th>t-θiba</th>
</tr>
</thead>
<tbody>
<tr>
<td>learned(he) the-medicine(acc)</td>
<td></td>
</tr>
</tbody>
</table>

C. Personal Passive

<table>
<thead>
<tr>
<th>tu'llamma</th>
<th>t-θibbu</th>
</tr>
</thead>
<tbody>
<tr>
<td>learned(pass/pe) the-medicine(nom)</td>
<td></td>
</tr>
</tbody>
</table>

'Medicine was learned'

(Wright 1 38 B, C, ren a)

Especially clearly in the case of the personal passive of a transitive
medio-passive (18c), an accusative object has been promoted to subject and
then replaced by the promotion of a second accusative to subject position.
If the impersonal passives are analyzed as promotions as well, then they
also involve two successive accusative-to-nominative advancements.

3. Analysing Multiple Advancements to 1

We believe that these counterexamples are genuine (although we
recognize that this is ultimately a matter of analysis, and not simple
observation), and that they demonstrate the need to revise or abandon the
1-AXX. Any possible revision must justify itself by its explanatory
power, however. The existence of several independently motivated factors
which limit the ability of passive-like rules to iterate or apply in
combination suggests that the explanatory power of any revised 1-AXX
will be very limited.

A. The Intrinsic Effects of the Passive

One very general constraint on the applicability of passive rules
arises from their category-changing nature. Passives remove an accusative
object (or occasionally other objects) without supplying a replacement.
Once the object has been removed, it can't be removed again. Thus all
iteration and a good deal of combined application is impossible. This is
true in all theoretical frameworks, including NO. Once a 2 has been
advanced to 1, there is no opportunity for subsequent 2-to-1 advancement
(unless a subsequent rule were to create a new object, of course).

Similarly, in those languages where impersonal passives are formed
only from verbs which do not take accusative objects, it is clear that
personal passives of impersonal passives would be unthinkable. Less
obviously, impersonal passives ought not to combine with each other in
application since they apply to verbs which take subjects to remove the
need for subjects. This is also something that only needs to be done once.
The only multiple application of passive-like rules which we would
expect to find, given the intrinsic effects of such rules, would be the
impersonal passive of personal (medio-)passives, the personal passive of
the personal (medio-)passive of a ditransitive verb, etc. These are
exactly the sorts of examples added above.

B. The Lexical/Grammatical Distinction

Still, we don't find every imaginable combination of rules. For
every, although there are numerous instances of syntactic passive rules
applying to the outputs of medio-passive rules, the opposite order doesn't
occur. (Thus it is clear that examples such as (2) or (18) are not
medio-passives of passives, but rather vice versa. For example, all such
examples have well-formed medio-passive sources, and they show the meaning
one would expect from the construction derived from medio-passive via
passive.)

A well-known strategy for dealing with this sort of asymmetry in rule
application is to assign the different rules to different components of the
grammar; in this case the lexical and syntactic components suggest
themselves. The medio-passives examined above have the traits one
associates with the lexicon: they are applied early, and are less regularly
produced. The other passives might then be regarded as part of the
syntactic component. (This assignment of the rules to different components
might be effected in any of several different schemes elaborating the
relationship of syntax to the lexicon. In Dowty's (1970) system, we would
assign medio-passives to the lexicon and passives to the syntactic
component. In Kassem's (1980) system, we might regard medio-passives as
minor lexical rules, the other constructions involved being major lexical
rules. The strategy is clear.)

Assigning the rules to two different components explains why we find
only one order of joint application: the lexical medio-passive applying
before the syntactic passive rules. It might also tempt us to reformatulate
the l-AEX to apply only within components, since this would restrict
predicted interaction of rules at most pairs of rules from the different
components. It isn't clear that this prediction holds. The Irish data in
(13), (16)) above show the interaction of two very productive syntactic
processes, and suggest that it would be best to avoid a l-AEX in the
syntactic component. In Classical Arabic we find that some lexical
medio-passives, such as (18), can form lexical passive participles, as in
(19):

(19) al -mutawakkil
the learned(pst)
'the [thing] learned'

Impersonal examples are also possible:

C. Other Conditioning Factors

To be cautious, perhaps one could retreat to a revised l-AEX which
only allows 2 advancements to l per component, or maybe a maximum of two
per clause derivation. Such a restriction, as far as we can tell, wouldn't
be counter-intuitive, but neither would it be required to explain
anything. The hitch here is that there are several further factors which
independently restrict the interaction of passive-like processes.

For example, auxiliary verbs don't have passive forms in most
languages, and this fact can be used to explain why passive auxiliaries
don't show passive forms themselves. This restriction would be a suffi-
cient explanation for the failure of iteration in (English) passives. No
appeal to a constraint on multiple advancement is required.

As a second sort of example, consider the productive ablatu passive
process on verbs in Classical Arabic, which (under one possible analysis)
changes doubly transitive verbs to (personally) passive transitive verbs,
transitive verbs to (personally) passive verbs, or impersonal passives.
ACVC- vowel pattern (for the perfect), where all the vowels in A are a,
to a UCC- vowel pattern, where all the vowels in U are u.

(21) ACVC-  -->  UCC-
(acct)           (pass)

If the passive has applied, the input category of a verb may allow
iteration, but the input vowel pattern will not. There is definitely no
iteration of the process, but neither is there any need to block it. Since
the ablaut process depends on a change from one vowel pattern to another,
the process in effect self-bloops. The output form cannot serve as an
input form. The important point is that no appeal to a l-AEX is required.

In fact, we know of no clear cases where any inflectional process,
either ablaut or affix, repeats itself (though we are aware of the
importance of the analysis of causative constructions in this question).
Inflectional marking seems to be present or absent simpliciter.

D. Conclusion

The data presented here suggest that the l-AEX doesn't hold in its
strongest form. This is independent of whether one accepts the SC analysis
of impersonal passives as a sort of advancement (cf. (11) and (18c)). We
propose that many disparate factors serve to constrain the iteration and
interaction of passives and passive-like rules. These include the
intrinsic effects of such rules, their (natural) separation into lexical
and syntactic components, and the myriad incidental conditioning factors
which seem inevitably to accompany such rules. There seems no need to
invoke a law to restrict what little interaction might remain. [33]

NOTES

1. We are grateful to David Dowty for comments on this paper.

2. Since this material was first committed to paper (Jan. 1982), we
have received objections to some of its claims in draft materials which
are not clearly intended for quotation. Because of this, we shall discuss
the objections without identifying the source. Both objections amount to
neither discarding nor revising the 1-AEX, but rather to revising the
analyses which seem to contradict it.

First, it is objected that mere coincidence of structure among several
sentence types should not be taken as proof that they are to be accounted
for via the application of the same rules. For example, it can be
objected that there might be two rules in Lithuanian which both make use of
"passive" participles, the auxiliary verb būti, and the genitive case to
mark denoted notional subjects. If this is true, then some apparent
imperative passives (e.g. (8) above) may be outputs of a rule spontaneously
denoting subjects, and this rule may just "happen" to be associated with
the same marking as the 2-1 passive rule which obviously must be invoked
to account for (9), etc. If this split in superficially identical sentence
types is genuine, then one shouldn't be surprised to find examples where
the Lithuanian imperfective passive (marking) is found together with real
1 advancement marking.

The proper immediate response to this objection is to plead that the
burden of proof really ought to be borne by the proponents of deep
divergence. Superficial identity of structure is not conclusive proof that
idiosyncratic rules have been at work--here the objection is correct--but it
certainly ought to count as good evidence.

BG can counter here with analyses in which a single set of principles
is seen to account for the unity of structures associated with the two
different rules. (This is possible when principles of marking and
structure are not linked to rule application.) For example, one can claim
that the relevant aspects of structure simply mark all clauses in which
denominations from subject have taken place. This is a rule which needs access
to several levels of structure--a global rule--but these are de rigueur
anyway in BG. Without this power, no very convincing counteranalyses would
be likely. (The interesting aspect of this objection is the suggestion,
appearsly SOP in BG, to split up principles of marking from other rule
effects. There are surely interesting consequences of this decision.)

Second, it is objected that medio-passives are a form of mysterious
"middle voice," and not passives. In particular, a verb in middle voice
such as (ii) isn't felicitously paraphrased with 'notional object is
verb-ed by someone or something.' 

(i) The door was opened
(ii) The door opened

Therefore, the objection continues, the combination of medio-passive and
passive should not be taken as violating the 1-AEX. As long as middle
voice is so poorly understood, one shouldn't discard putative universals on
the basis of its behavior.

The argument from failed paraphrase isn't convincing. The traditional
Arabic grammarians explain the failure of paraphrase here. In particular,
they suggest that (i) isn't paraphrased by (ii), but that it ought to be
paraphrased by (iv):

(iii) The door was opened by someone or something
(iv) " " " " " " , but not by itself

(iii), on the other hand, is paraphrased (minimally) by (ii), so long as
one understands (iii) as allowing the possibility that the door opened
itself. Better would be:

(v) The door was opened by someone or something, perhaps by itself

(in a modern formulation, we should probably wish to add that the extra
phrase 'but not by itself' in (iv) etc. are conventional implicatures--and
this is enough to explain why (iii) is not felt to paraphrase (ii). (iii)
is a passive, and it therefore bears the conventional implicature 'but not
by itself,' while (ii) does not. This is enough to destroy the paraphrase
relationship.)

Let's not lose track of the main point, however, which is not the
distinction between passive and middle voice. No matter how BG ultimately
distinguishes passives and medio-passives, the real issue here is whether
it can provide an analysis of middle voice (medio-passives) which isn't
advantageous to 1. Any such analysis would strike us as inaccessible, since
the middle voice amounts to the expression of a notional object as the
subject--if it is related to the active at all. But any analysis in
which middle voice involves 2-1 advancement--whether this is formally
distinct from passive or not--relieves the 1-AEX.

We don't therefore see that the proposed revisions are either
appealing or very likely to allow the 1-AEX to be salvaged.

3. The 1-AEX has been claimed to lead to important predictions in
conjunction with the Unaccusative Hypothesis, but this has been refuted by

REFERENCES

Blacheor and Gaudetroy-Deconinck (1952) Grammaire de L'Arabe Classique,


Camme, B. (1977) "In Defense of Spontaneous Denomination: The Impersonal
Passive," in P. Cole and J. Sadoek, eds., Syntax and Semantics 8: Grammatical

Dowty, D. (1978) "Applying Montague's Views on Linguistic Metatheory to the
Structure of the Lexicon," in Jacobson et al., eds., Papers from the


