

## A AGREES WITH B IN ACHENESE: A PROBLEM FOR RELATIONAL GRAMMAR

---

JOHN M. LAWLER

*University of Michigan*

### INTRODUCTION

The problem of dealing with verb agreement in a principled way in a generative framework has concerned linguists for some time.<sup>1</sup> At least since the non-publication of Postal (1967), in which some of the basic difficulties were outlined, there have been a number of lively discussions, including Morgan (1972) and Anderson (1974). More recently, work in progress in the development of Relational Grammar (RG) by David Perlmutter and Paul Postal<sup>2</sup> has attempted to provide, for the first time, a treatment of the phenomenon based on independently motivated principles, which, if they turn out to provide predictive

<sup>1</sup> Since this chapter was written, I have ceased to believe that a derivational model such as the one used here is a reasonable vehicle for investigating natural language (see Lawler 1975a for details and reasons). I have chosen, however, to leave the arguments and explication in this paper intact, even though I believe them to be seriously inadequate, for the reason that they are consistent with the usual tradition in which RG operates, and, as such, are stated in a mode relevant to the concerns of those interested in RG. In addition, I have nothing to replace them with at the present time (except for what may develop from the remarks in the concluding section), and do not wish to appear more incoherent than usual. For this intellectual cop-out, I beg the reader's indulgence.

<sup>2</sup> This study is concerned primarily with the ways in which Achenese agreement violates some of the principles that Perlmutter and Postal have proposed as universals of Relational Grammar. As such, it would be in order to cite the literature where these principles are proposed; unfortunately, at the present time Relational Grammar exists in the oral tradition exclusively, which makes sources a little hard to find. I will have reference here to an unpublished compendium of claims and hypotheses generated by Perlmutter, Postal, and Johnson, most of which is contained (if in print at all) in documents which threaten dire penalties for quotation. Much of this study is also due to personal communication from Paul Postal.

accuracy, will be a considerable improvement over—and a crucial weakening<sup>3</sup> of—transformational grammar.

The purpose of this study is to present some data on verb agreement and various syntactic rules in Achenese, an Indonesian language of northwest Sumatra.<sup>4</sup> The workings of Achenese agreement are unusual; they constitute a major counterexample to the treatment of verb agreement originally proposed by Perlmutter and Postal. They have since retreated from the position they originally held (Paul Postal, personal communication), in large part because of the evidence from Achenese. It seems to me to be important to present this data, not only because of its importance to Relational Grammar but because of its intrinsic interest and because it may stimulate some further research along certain lines which I will discuss below.

### AGREEMENT IN ACHENESE

Achenese (Ac) is related, and in many respects similar, to other Indonesian languages, although its phonology is unusual, perhaps due to continuing influence from Mon-Khmer.<sup>5</sup> The feature that will most concern us here is the

<sup>3</sup> I use “weakening” in its nonpejorative sense, the sense used by many linguists in discussing generative phenomena. Basically, all it means is that a theory of language should contain as little in the way of special ad hoc devices as possible. If it can be shown that agreement phenomena stem from independent (possibly perceptual) causes, the devices that in the past have been built into a grammar to account for them are no longer necessary, and the theory becomes simpler to state. It is this beneficial sense of “weakening” that is intended.

<sup>4</sup> Also known as Acehese, Bahasa Aceh, and Bat<sup>a</sup>a Aceh. There are very few sources of data on Achenese, and none in English on Achenese syntax. The sources I have been able to find are: Djajadiningrat (1934), a large Achenese–Dutch dictionary, whose phonology is not above suspicion; Makam and Burr (1971), a small preliminary English–Achenese and Achenese–English word list; Ishak (1968), a small treatise (in Indonesian) dealing primarily with morphology, on the Indonesian model; and Van Langen (1889), which is not particularly informative, either. Achenese is spoken by approximately two million people; it exists in several dialects. The dialect represented here is that spoken in the village of Montasi in Aceh Besar.

<sup>5</sup> See Collins (forthcoming) for further information on the substratum problem. The notation I use here is relatively phonetic. The system looks like the following:

Vowels			Consonants					
<i>Oral</i>								
	<i>F</i>	<i>C</i>	<i>B</i>	<i>L</i>	<i>D</i>	<i>P</i>	<i>V</i>	<i>G</i>
High	<i>i</i>	<i>ɨ</i>	<i>u</i>	<i>p</i>	<i>t</i>	<i>c</i>	<i>k</i>	<i>ʔ</i>
High mid	<i>e</i>	<i>ɛ</i>	<i>o</i>	<i>p<sup>h</sup></i>	<i>t<sup>h</sup></i>	<i>c<sup>h</sup></i>	<i>k<sup>h</sup></i>	
Low mid	<i>ɛ</i>	<i>ɛ</i>	<i>ɔ</i>	<i>b</i>	<i>d</i>	<i>j</i>	<i>g</i>	
Low		<i>a</i>		<i>b<sup>h</sup></i>	<i>d<sup>h</sup></i>	<i>j<sup>h</sup></i>	<i>g<sup>h</sup></i>	
<i>Nasal</i>				<i>t<sup>θ</sup></i>				<i>h</i>
High	<i>ĩ</i>	<i>ɨ̃</i>	<i>ũ</i>	<i>m</i>	<i>n</i>	<i>nɳ</i>	<i>ŋg</i>	
Low	<i>ẽ</i>	<i>ã</i>	<i>õ</i>	<i>m<sup>h</sup></i>	<i>n<sup>h</sup></i>	<i>nɳ<sup>h</sup></i>	<i>ŋg<sup>h</sup></i>	
				<i>m̃</i>	<i>ñ</i>	<i>ñɳ</i>	<i>ŋ̃g</i>	
				<i>w</i>	<i>y</i>			
					<i>l</i>	<i>r</i>		
					<i>l<sup>h</sup></i>	<i>r<sup>h</sup></i>		

language’s complete system of verbal agreement prefixes, a phenomenon which is present in only fragmentary form in most other Indonesian languages. I should perhaps caution the reader that I use the term AGREEMENT in a broad sense here; there are a number of implications of the Ac phenomena which call the normal senses of this common linguistic term into question. I will discuss some of these difficulties at the end of this chapter. In addition, I should mention that there is no phonological evidence of which I am aware that indicates unambiguously that the morphemes I have identified as ‘agreement’ are indeed prefixes rather than particles. Although their position is fixed with respect to the verb, there is virtually no internal sandhi in Ac that could be used to indicate the absence of a word boundary between these morphemes and the verb itself. The positional evidence that I have found is discussed below; for our present purposes, it makes little difference whether these are phonologically prefixes, although there are some implications that will be discussed later.

The following chart presents the free pronouns and agreement prefixes of Ac:<sup>6</sup>

Person	Singular		Plural	
	Pronoun	Prefix	Pronoun	Prefix
1	<i>lon</i>	<i>lon-</i> (polite)	<i>gitanyɔ</i>	<i>ta-</i> (inclusive)
	<i>ke</i>	<i>ku-</i> (impolite)	<i>kamɔ</i>	<i>mi-</i> (exclusive)
2	<i>drɔn</i>	<i>ni-</i>	<i>drɔnyɔ</i>	<i>ni-</i> (older than speaker)
	<i>gata</i>	<i>ta-</i>	<i>gatanyɔ</i>	<i>ta-</i> (same age)
	<i>kah</i>	<i>ka-</i>	<i>kahnyɔ</i>	<i>ka-</i> (younger)
3	<i>gɔpnyan</i>	<i>gi-</i>	<i>awa<sup>o</sup>nyan</i>	<i>gi-</i> (older or same age)
	<i>jih</i>	<i>ji-</i>		<i>ji-</i> (younger)

#### Footnote 5 continued

The following should be noted about this schema. High oral vowels are very high and tense; /i/ is rounded to [u] after labials; high mid vowels are also very high; final vowels diphthongize as follows: /e # / = [ey]; /o # / = [ow]; /ɛ # / = [æy]; /ɔ # / = [ɔw]; there are probably several different schwas—at least one appears to represent /ɔ/ around certain nasal consonants; the nasal vowels neutralize the high/low-mid distinction. There is a contrastive aspirated consonant for every plain consonant except [ʔ], [h], [t<sup>θ</sup>], [w], and [y]. /t<sup>θ</sup>/ is an interdental affricate which is a reflex of Proto-Indonesian \*ʃ; it patterns as a fricative. Glottal stop represents underlying /k/ finally, and also appears in other positions, where it does not represent /k/; I have chosen to mark it wherever it appears, in the interests of phonetic reality, and to make the data more usable. /p<sup>h</sup>/ is often realized as [p̚] or [p̚p̚]. There are three sets of nasals: plain, aspirated, and “funny”. These latter are nasal consonants pronounced in the appropriate place with significantly reduced nasal air flow, probably produced by partial closure of the velum; they are slightly longer than ordinary nasals, and do not produce the same allophones of vowels in their environment as do the plain nasals. They appear to be reflexes of certain nasal + voiced stop clusters in Proto-Indonesian, but no longer do they consist of a prenasalized stop. They are extremely difficult to produce and detect. Stress is on the last syllable, and normal delivery is at an extremely high rate of speed, with copious fast speech rules operating; I have not even attempted to represent these. As should be evident, the phonology of this language would repay some study.

<sup>6</sup> I should perhaps remark on the provenance of the categories of person and number represented in this chart. Except for the first person, there is really not a plural for the pronouns, and the first-person plural can profitably be regarded as an extension of the category of person (inclusive = 1

As might be expected from such a complicated paradigm, there are many asymmetries. The first-person-singular pronouns are differentiated, as far as I can tell, by social class, which may represent a weakening of an older register system. This differentiation does not appear in the first-person plural, where inclusive/exclusive is the only operative feature. The second and third persons are differentiated along age lines in both singular and plural. It is clear that the plural is derived from the singular here—*nyə* is a demonstrative, meaning ‘this’. In the third person, there are only two singular pronouns, as opposed to the three in the second person; *gəpnyan* is used for those older than the speaker, or of the same age, while *jih* is used for those younger. The third-person-plural pronoun is not differentiated by age itself, although the general third-person prefixes are used with it precisely as in the singular. *Awaʔnyan* actually means ‘those people’. In practice, the forms denoting older people are used to indicate respect, and there is undoubtedly a very complex pattern of usage involved; however, the morphological and syntactic facts are sufficient for our discussion.

These prefixes (as I will refer to them from now on, pace the previous remarks) precede all derivational prefixes on the verb (of which only three or four are productive, an extremely small number for an Austronesian language). The prefixes are required, at least in main clauses:

- (1) a. *Lon lon-jaʔ u- pikan.*<sup>7</sup>  
I 1s- go to-market  
‘I go to the market.’  
b. *Gəpnyan gi- jaʔ u- pikan.*  
he (old) 3o-go to-market  
‘He goes to the market.’
- (2) a. *Jih ji- langū krung*  
he(yng) 3y-swim river  
‘He swims the river.’  
b. *Jih ji- mi-langū.*  
he<sub>y</sub> 3y-X- swim  
‘He swims.’ (intransitive)  
c. *Jih ji- pi- langū aniʔ agam tʰi- blah deh krung.*  
he<sub>y</sub> 3y-caus-swim child male one-side far river  
‘He makes/made the boy swim across the river.’

In the sentences above, note that the agreement prefixes precede the derivational prefixes *pi-* ‘causative’ and *mi-* ‘X’. (I give no gloss except a place holder

and 2: exclusive = 1 and 3). Furthermore, the interplay of persons in Achenese (as in all Austronesian languages) is extremely complex, and even the categorization given here does not begin to measure the range of usages. See Becker and Oka (1973) for further discussion.

<sup>7</sup> In these examples, I mark prepositions like *u* with a hyphen for the same reason as the inflectional prefixes like *gi*. There is similarly no unambiguous phonological evidence that these are prefixes, but there is the same regularity in ordering.

for this morpheme because I have nothing to offer; in (2b) it functions like *ber-* in Indonesian, as an intransitivizer, but it has at least three other major functions, one of them as a transitivizer. Luckily, its mysteries do not intrude on the subject of this paper, and I will say no more about it, except to note that it should not be confused with the *mi-* agreement prefix for first-person-plural exclusive, since historically, grammatically, and functionally it is distinct from this homophonous morpheme.) The free pronouns may be deleted in some situations, chiefly contextual, where they have been mentioned in previous discourse; thus (1b) can occur grammatically without *gəpnyan* as an answer to the question *Hə gəpnyan gi-jaʔ* ‘where did he go?’. Ordinarily, however, the free subject is necessary unless special conditions hold. There are a number of particles which indicate aspectlike meanings: *ka* ‘perfective’, *təngəh*<sup>8</sup> ‘progressive’, etc. These must follow the free NP subject and precede the agreement prefix:

- (3) a. *Kamə mi- pajoh bu.*  
we(ex) lpex-eat cooked-rice  
‘We eat rice.’  
b. *Kamə təngəh mi- pajoh bu.*  
we(ex) prog lpex-eat cooked-rice  
‘We are eating rice.’  
c. *Kamə ka mi- pajoh bu.*  
we(ex) perf lpex-eat cooked-rice  
‘We (already) ate rice.’

Finally, the agreement prefixes may not occur except with predicates that are lexical verbs; adjectives and nouns are ungrammatical with them.

- (4) a. *Gəpnyan təngəh \*(gi-) ʔeh.*<sup>9</sup>  
he<sub>o</sub> prog (3o-) sleep  
‘He is sleeping.’  
b. *Gəpnyan (təngəh) \*(gi-) təngit.*  
he<sub>o</sub> (prog) (3o-) asleep  
‘He is (temporarily) asleep.’  
c. *Gəpnyan (təngəh) \*(gi-) mi-təngit.*  
he<sub>o</sub> (prog) (3o-) X-asleep  
‘He is (temporarily) sleepy.’  
d. *Gəpnyan (təngəh) \*(gi-) pi-mi-təngit aniʔ manya.*  
he<sub>o</sub> (prog) (3o-) caus-X- sleepy child tiny  
‘He (is making) makes the baby sleepy.’

<sup>8</sup> Literally, ‘middle’, which may explain some of the meaning.

<sup>9</sup> In this study I will use a notation involving parentheses and the usual asterisk for ungrammaticality as follows: *\*(X)* means that *X* is grammatical, and that its absence is ungrammatical; *(\*X)* means that *X* is ungrammatical, and that its absence is grammatical.

- e. *Gəpnyan* (\**gi-*) *guru lon.*  
 he<sub>o</sub> (3o-) teacher I  
 'He is my teacher.'

In example (4), (a) and (d) require the *gi-* prefix to agree with the *gəpnyan* subject, while (b), (c), and (e) do not allow agreement, since *'eh* 'sleep' is a lexical verb, while *tingit* 'asleep' is an adjective. The derivational *mi-* prefix changes the meaning to *sleepy* in (4c) but does not change the adjective to a verb; the causative *pi-* in (4d), however, forms a lexical verb again, and the agreement is required. Finally, the predicate in (4e), a noun phrase, blocks the agreement. Note that *tingəh* does not translate as 'progressive' exactly, since it can be used with stative predicates, even adjectives; here it means something like 'for the moment, temporarily'.

The Ac rule I will call PASSIVE is formed by promoting a direct object to subject and placing the old subject EN CHÔMAGE<sup>10</sup> in a *le-*phrase<sup>11</sup> following the verb:

- (5) a. *Gəpnyan gi- nging ani? agam nyan.*  
 he<sub>o</sub> 3o-see child male that  
 'He sees the boy.'  
 b. *Ani? agam nyan gi- nging le- gəpnyan.*  
 child male that 3o-see by-he<sub>o</sub>  
 'The boy is seen by him.'

(I translate these in present tense; they could just as easily be translated in the past.)

Note that the agreement prefix remains the same before and after Passive: the 3o prefix *gi-* is present in both sentences, even though the NP *ani? agam*, denoting a child, would govern the 3y prefix *ji-* if the verb agreed with it. Obviously, the agreement on the verb in (5b) is triggered by the underlying subject *gəpnyan*, now a chômeur, rather than the cyclic subject *ani? agam*. This is the problem.

<sup>10</sup> This is an RG term: the literal meaning is 'out of work'. A NP that is EN CHÔMAGE is called a CHÔMEUR: the word refers to a NP that has been 'demoted' from a status as subject, direct object, or indirect object to an oblique status by virtue of some rule. Thus English Passive creates a chômeur in the *by*-phrase, since the underlying subject becomes a nonsubject. We will have occasion to refer also to the natural class consisting of subject, object, and indirect object: these are called TERMS in RG (subject and direct object are called PRIMARIES, and direct object and indirect object are called SECONDARIES). One of the basic tenets of RG is that these grammatical relations are considered to be basic and undefined, and that one can profitably define many rules and processes in particular a well-defined set of cyclic rules, in terms of them.

<sup>11</sup> *Le* is cognate to Indonesian *oleh*, which originally meant *do*: this seems fitting and proper for the marker of an agent, somehow. It is also important to mention that ordinarily the *le*-phrase cannot be deleted, unlike an English *by*-phrase.

Some further examples:

- (6) a. *Gəpnyan ka gi- cəm lon.*  
 she<sub>o</sub> perf 3o-kiss I  
 'She (already) kissed me.'  
 b. *Lon ka gi- cəm le- gəpnyan.*  
 I perf 3o-kiss by-she<sub>o</sub>  
 'I've already been kissed by her'
- (7) a. *Drən ni- pajoh bəh- mamplam.*  
 you<sub>o</sub> 2o-eat fruit-mango  
 'You eat the mango.'  
 b. *Bəh- mamplam ni- pajoh le- drən.*  
 fruit-mango 2o-eat by-you<sub>o</sub>  
 'The mango is eaten by you.'

Perlmutter and Postal's original claim, which seems to be supported by evidence from most languages with verb agreement, was that such agreement could only be triggered by terms [i.e. by subjects (Su's), direct objects (DOs), or indirect objects (IOs)], and, further, that these must be cyclic terms of the clause in which the agreement takes place (i.e. the Su, DO, or IO AFTER all cyclic rules have applied within the relevant clause). This clearly implies that the verb should always agree with the derived subject after Passive; instead, as we have seen, in Ac the verb agrees with the original subject, even after Passive. The newer position they take is that agreement must be with EITHER underlying or cyclic terms, and Ac seems to fit this description, since the agreement is always with underlying subject.

## PASSIVE AS A RELATIONAL RULE

In order to show just what the facts are that have motivated this shift in the theory, we will establish the following points: (i) the NP preceding the verb and governing agreement in an active Ac sentence is the subject of that sentence; (ii) the NP preceding the verb but not governing agreement in a Passive Ac sentence is the subject of THAT sentence; (iii) the rule we call Passive in Ac is NOT a (nonrelationally defined) topicalization rule, which could not be expected to change agreement; (iv) the prefixes in question constitute agreement within the meaning of the act. The first two points amount to a claim that Passive is cyclic, since the typical way of demonstrating subjecthood for a given NP is to show that it feeds certain cyclic rules (normally Raising and Equi) which are defined on subjects only; this has the effect of requiring that any rule (Passive, in this case) which precedes the application of these cyclic rules is itself cyclic. In demonstrating the first two points, we will proceed by following a chain of

argument which leads to the conclusion that in Ac either Passive, Equi, and Raising are all contained in the cycle, or there is no cycle. The third point will be investigated by looking at two topicalization rules in Ac which seem to be the most likely candidates for identity with Passive, and showing that they cannot be identified with Passive, although there are some interesting interactions. The final point will be discussed at the end of the paper, and it will be suggested that, while the Ac prefixes do indeed fall in the category of 'agreement', the use of this term commits us to some assumptions which need to be further investigated.

In the RG framework, one of the most interesting and potentially most useful claims is that there is a correlation between rules that are defined in terms of grammatical relations—which are claimed to be cyclic rules only—and those which are not—which for the most part are postcyclic.<sup>12</sup> This is a weaker version of the cyclicity hypothesis: Earlier versions postulated a strict distinction between all cyclic rules, which were all to be defined on the basis of grammatical relations, and all other rules, none of which were supposed to be so defined. The present version allows cyclic rules which are not defined on grammatical relations, but does not allow any postcyclic rules which are so defined. The differences in these hypotheses do not enter into our discussion, since it is clear that both "normal" agreement and the type of agreement encountered in Ac are defined on terms at some stage of the derivation, and therefore must, by either hypothesis, be cyclic processes. Therefore, in discussing the topics listed above, we will concentrate on proving cyclicity for Passive; in RG terms, this will involve showing that Passive is defined upon and changes grammatical relations—in particular, that a nonsubject becomes a subject.

Most of the proofs of cyclicity that have been advanced for rules hinge on the feeding of other rules which are assumed to be cyclic. The entire chain of reasoning is based on the assumption that there is a class of rules which can be stated most simply and with maximum explanatory value if a cycle is postulated. While this assumption has come under close scrutiny lately, and deserves further study in itself, it is not my purpose here to deny it, or even cast doubt upon it. Rather, I will give arguments based on this assumption which show that Passive in Ac is cyclic in that it changes grammatical relations.

Regardless of one's particular allegiance in generative theories, Equi NP Deletion (Equi) and Subject Raising (Raising), however formulated, are universally assumed to be cyclic in theories which have anything like them (so is Passive, but the nature and operation of the Ac Passive is what is at issue here). Various proposed alterations of the rules, such as Postal's (1970) own proposal that Equi simply marks pronouns for later deletion, do not affect their essentially cyclic nature. Although the mysteries of Ac complementation are far from

<sup>12</sup> Again, this interpretation is based on the oral tradition and on personal communications, most from Postal. I hope I have not misrepresented the substance of the claim.

solved, the broad outlines appear clear. Ac has two- and three-place predicates with Equi and at least two-place predicates with Raising (in this case, to object position). The status of one-place Raising predicates remains unclear, because, if they exist, they shade off into a class of auxiliaries, adverbs, modals, and aspectual particles which cannot be easily demonstrated to be predicates, for the most part, and which are, unsurprisingly, quite idiosyncratic in their syntactic behavior. Although I am quite prepared to believe that they are predicates, and that they take Raising to subject position, such a claim would require far more in the way of motivation and analysis than I am prepared to give here. In any case, the phenomena involving Raising to object position are quite conclusive.)

To take two-place Equi first, we will consider the predicates *hawa* 'want', *ci* 'try', and *u<sup>h</sup>aha* 'make an attempt, try'. *Hawa* is not a lexical verb and thus takes no agreement prefix; it also participates in some other constructions which emphasize its nonverbal status. In sentences like (8) below, however, it seems to function as a predicate with a complement, and Equi applies:

- (8) a. *Dɔ<sup>?</sup>to hawa (ba<sup>?</sup>) gi- p̄iret<sup>h</sup>a uring agam nyan.*  
 doctor want (irrealis) 3o-examine person male that  
 'The doctor wants to examine that man.'
- b. *Uring agam nyan hawa (ba<sup>?</sup>) gi- p̄iret<sup>h</sup>a le- dɔ<sup>?</sup>to.*  
 person male that want (irr) 3o-examine by-doctor  
 'That man wants to be examined by the doctor.'

As can be seen, Passive downstairs feeds Equi upstairs, and the *gi-* in both (8a) and (8b) agrees with *dɔ<sup>?</sup>to*, not *uring agam*. The status of *ba<sup>?</sup>* is unclear, but it appears to be functioning, in this context at least, as an irrealis marker on the lower S, corresponding to the degree of uncertainty expressed by the speaker as to the eventual outcome. *Hawa* with a *ba<sup>?</sup>* in the lower S can translate 'wish'. *Ba<sup>?</sup>* is one of the class of modallike particles mentioned above (in many contexts it seems to translate both deontic and epistemic *should*) which follows the free NP subject and precedes the agreement prefix; normally it does not appear in a main clause, probably due to a constraint requiring the presence of an intensional predicate to indicate the source of uncertainty.

*Ci* 'try' has a well-formedness condition not unlike that on English *try*: It requires Equi. However, while many English speakers find (9a) below acceptable, its best Ac equivalent, (9b), is completely ungrammatical. This is because the constraint on *ci* is apparently on the underlying structure—*ci* requires that the underlying subject of its complement clause be coreferential with its own subject. Given this constraint, it is not surprising to find that the complement of *ci* shows no agreement at all: A bare root is added immediately after *ci*, which bears the agreement prefixes, as in (9c). Note that the attempt to add

agreement prefixes here to the lower verb dooms the sentence to ungrammaticality:

- (9) a. *The man tried to be examined by the doctor.*  
 b. \**uring agam nyan ji- ci gi- p̄iret<sup>θ</sup>a le- dɔʔto*  
 person male that 3y-try 3o-examine by-doctor  
 c. *Dɔʔto gi- ci (\*gi-) p̄iret<sup>θ</sup>a uring agam nyan.*  
 doctor 3o-try (3o-) examine person male that  
 'The doctor tried to examine that man.'

(9b) is ungrammatical regardless of whether the *gi-* prefix is attached to the lower verb.

All of the data on two-place Equi up to this point could be explained on an analysis that treated *hawa* as an adverb or modal (since it is not a surface verb) and *ci* as an auxiliary verb. In both cases, an analysis along lines suggested by the Extended Standard Theory would have no difficulty explaining the places where agreement prefixes occur, since most variants of that theory treat adverbs and modals not as predicates with complements, but rather as constituents of one sort or another of the simplex S itself. Hence, the second predicate would have originated in the same simplex S as the first, and there would have been no complement to start with, and thus no Equi. While this analysis would do violence to the semantics and the logic, it will make the syntax workable, if complicated.

Unfortunately for such an analysis, however, there are also lexical verbs without the restrictions of *ci* which take undeniable complements, and which also take Equi. One such verb is *ut<sup>θ</sup>aha* 'make an attempt, try'. It is syntactically distinct from *ci* in not requiring deep coreference of subjects, but rather requiring merely that Equi be applicable at the appropriate stage of the derivation; Passive can thus feed Equi. In addition, it does not bind the complement so closely, requiring the usual agreement prefixes on the complement verb. Actually, this is closely related to the possibility of feeding with Passive, since virtually the only sign that Passive has occurred is the presence of the former verb agreement, and disallowing that would produce unacceptable ambiguity. As we shall see, Relativization provides a clear example of the importance of this interaction.

- (10) a. *Dɔʔto gi- ut<sup>θ</sup>aha (baʔ) gi- p̄iret<sup>θ</sup>a uring agam nyan.*  
 doctor 3o-try (irr) 3o-examine person male that  
 'The doctor made an attempt to examine that man.'  
 b. *Uring agam nyan ji- ut<sup>θ</sup>aha (baʔ) gi- p̄iret<sup>θ</sup>a le- dɔʔto.*  
 person male that 3y-try (irr) 3o-examine by-doctor  
 'That man made an attempt to be examined by the doctor.'

Note that in (10a) the agreement prefix *gi-*, corresponding to *dɔʔto*, is present on both verbs, representing the Equi of an underlying subject, while in (10b) the prefix *ji-*, corresponding to *uring agam*, is present on the higher but not the lower verb, representing the Equi of a derived subject, created by Passive. (10) provides clear evidence that Passive feeds Equi, and that therefore it is cyclic if Equi is.

Ac also has three-place predicates with Equi. Two such are *yu* 'ask, request' and *p̄i-ʔingat* 'remind' (literally, 'cause to remember'). Equi from object position can be fed by Passive in both cases. We begin by considering *yu*, which requires Equi:

- (11) a. *Uring inang nyan ji- yu dɔʔto (baʔ) gi- p̄iret<sup>θ</sup>a drɔn.*  
 person female that 3y-ask doctor (irr) 3o-examine you<sub>o</sub>  
 'The woman asked the doctor to examine you.'  
 b. *Uring inang nyan ji- yu drɔn (baʔ) gi- p̄iret<sup>θ</sup>a le- dɔʔto.*  
 person female that 3y-ask you<sub>o</sub> (irr) 3o-examine by-doctor  
 'The woman asked you to be examined by the doctor.'

Note that Passive can also occur on the higher cycle:

- (12) a. *Dɔʔto ji- yu le- uring inang nyan (baʔ) gi- p̄iret<sup>θ</sup>a drɔn.*  
 doctor 3y-ask by-person female that (irr) 3o-examine you<sub>o</sub>  
 'The doctor was asked by the woman to examine you'  
 b. *Drɔn ji- yu le-uring inang nyan (baʔ) gi- p̄iret<sup>θ</sup>a le- dɔʔto.*  
 you<sub>o</sub> 3y-ask by-person female that (irr) 3o-examine by-doctor  
 'You are asked by the woman to be examined by the doctor.'

In (12b) Passive applies twice—once on the lower cycle, producing, after Equi, an intermediate structure not unlike that of (11b), and once on the higher cycle, following Equi. The first application creates the conditions for Equi, and the second destroys them. This is the classic "rule sandwich" argument for cyclicity (although this particular example demonstrates that Equi rather than Passive is cyclic: Passive would have to be assumed to be cyclic for this particular argument to go through alone—the point is that a number of arguments of this type argue collectively for a well-defined set of cyclic rules, and both Equi and Passive belong to this group). Similar arguments will be given below for Raising and Passive. In (11) and (12), we take the woman to be younger than the speaker, while the doctor is older. Note that the prefix *ni-*, agreeing with *drɔn*, does not appear at all in (12b), even though *drɔn* is the cyclic subject of both clauses, because it is not the underlying subject of either, and thus cannot govern agreement.

*P̄i-ʔingat* 'remind' takes either a full S as complement, or an S with subject deleted by Equi from the upstairs object as governor. The former type translates

as an English *that*-clause, while the latter translates as an infinitive; the distinction is signalled in Ac by the presence or absence of Equi:

- (13) a. *Lon lon-pi-ʔingat dɔʔto gɔpnyan ka gi-piret<sup>0</sup>a jih.*  
 I ls- remind doctor he<sub>o</sub> perf 3o-examine he<sub>y</sub>  
 ‘I reminded the doctor<sub>i</sub> (that) he<sub>i</sub> had (already) examined him<sub>j</sub>.’
- b. *Lon lon-pi-ʔingat dɔʔto jih ka gi-piret<sup>0</sup>a le- gɔpnyan.*  
 I ls- remind doctor he<sub>y</sub> perf 3o-examine by-he<sub>o</sub>  
 ‘I reminded the doctor<sub>i</sub> (that) he<sub>j</sub> had (already) been examined by him<sub>i</sub>.’
- c. *Lon lon-pi-ʔingat dɔʔto (baʔ) gi-piret<sup>0</sup>a jih.*  
 I ls- remind doctor (irr) 3o-examine he<sub>y</sub>  
 ‘I reminded the doctor to examine him.’

In (13a) and (13b), *gɔpnyan* and *dɔʔto* can be coreferential (on one reading, just as in English—the coreferentiality is by no means forced, since *gɔpnyan* could as easily refer to a third individual who had been previously mentioned in discourse), and it is this reading that is intended; thus the indices. The perfective marker *ka* forces there to be no Equi, since the application of this rule would be semantically anomalous with a perfective, producing a sentence like \**I reminded the doctor to have already examined him*. Without the *ka*, however, the sentences are grammatical. Note that Passive can occur downstairs, as in (13b), and that the irrealis marker *baʔ* is optional with Equi, as might be expected. In other cases, the application of Passive downstairs can feed Equi:

- (14) a. *Lon lon-pi-ʔingat jih dɔʔto baʔ gi-piret<sup>0</sup>a jih.*  
 I ls- remind he<sub>y</sub> doctor irr 3o-examine he<sub>y</sub>  
 ‘I reminded him<sub>i</sub> (that) the doctor<sub>j</sub> should examine him<sub>i</sub>.’
- b. *Lon lon-pi-ʔingat jih jih baʔ gi-piret<sup>0</sup>a le- dɔʔto.*  
 I ls- remind he<sub>y</sub> he<sub>y</sub> irr 3o-examine by-doctor  
 ‘I reminded him<sub>i</sub> (that) he<sub>i</sub> should be examined by the doctor<sub>j</sub>.’
- c. *Lon lon-pi-ʔingat jih (baʔ) gi-piret<sup>0</sup>a le- dɔʔto.*  
 I ls- remind he<sub>y</sub> (irr) 3o-examine by-doctor  
 ‘I reminded him to be examined by the doctor.’

(Note that in (14a) and (14b) the irrealis marker seems to function as a modal.) Finally, Passive can apply freely upstairs after Equi:

- (15) a. *Dɔʔto lon-pi-ʔingat le- lon (baʔ) gi-piret<sup>0</sup>a jih.*  
 doctor ls- remind by-I (irr) 3o-examine he<sub>y</sub>  
 ‘The doctor was reminded by me to examine him.’

- b. *Jih lon-pi-ʔingat le- lon (baʔ) gi-piret<sup>0</sup>a le- dɔʔto.*  
 he<sub>y</sub> ls- remind by-I (irr) 3o-examine by-doctor  
 ‘He was reminded by me to be examined by the doctor.’

(15b) shows once again the cyclic rule of Equi preceded and followed by Passive.

Ac also has two-place Raising predicates; the distinction between these and three-place Equi predicates is controversial, mirroring as it does the well-known dispute summarized (and, to my mind, convincingly settled) in Postal (1974). Lacking the intimate knowledge of the language necessary to construct arguments with garbage NPs like *there*, nonreferential *it*, and idiom chunks. I rely in the following on the meaning of the sentences, and on my informant’s reactions to their pragmatic acceptability.

*Dawa* ‘consider, claim, argue’, unlike three-place predicates like *yu* or *pi-ʔingat*, can form objects not representing underlying receivers; this is especially true in the cases with downstairs Passive:

- (16) a. *Gɔpnyan gi-pi-ʔingat jih ji- cu limō nyan.*  
 he<sub>o</sub> 3o-remind he<sub>y</sub> 3y-steal cow that  
 ‘He<sub>i</sub> reminded him<sub>j</sub> to steal the cow.’
- b. *Gɔpnyan gi-dawa jih ji- cu limō.*  
 he<sub>o</sub> 3o-consider he<sub>y</sub> 3y-steal cow  
 ‘He<sub>i</sub> considers him<sub>j</sub> to steal cows.’
- (17) a. \**Gɔpnyan gi-pi-ʔingat limō nyan ji- cu le- jih.*  
 he<sub>o</sub> 3o-remind cow that 3y-steal by-he<sub>y</sub>  
 ‘He<sub>i</sub> reminded the cow to be stolen by him<sub>j</sub>.’
- b. *Gɔpnyan gi-dawa limō nyan ji- cu le- jih.*  
 he<sub>o</sub> 3o-consider cow that 3y-steal by-he<sub>y</sub>  
 ‘He<sub>i</sub> considers the cow to be stolen by him<sub>j</sub>.’

It is difficult to form pairs for contrast between *pi-ʔingat* and *dawa*, since the most natural sentences with the latter use *ka* for “sequence of tenses”, while this particle is difficult to get with Equi on *pi-ʔingat*. Nevertheless, (17a) is quite unacceptable, since it means that the cow is the addressee of the reminder: (17b), however, is fine (although better with *ka* downstairs), and does not involve the cow in the performance of a speech act in any way. Derived objects can also be passivized:

- (18) a. *Hakem gi-dawa jih ka ji- cu limō nyan.*  
 judge 3o-consider he<sub>y</sub> perf 3y-steal cow that  
 ‘The judge considers him to have stolen that cow.’

- b. *Hakem gi- dawa lĩmō nyan ka ji- cu le- jih.*  
 judge 3o-consider cow that perf 3y-steal by-he<sub>y</sub>  
 'The judge<sub>i</sub> considers that cow to have been stolen by him<sub>j</sub>.'
- c. *Jih gi- dawa le- hakem ka ji- cu lĩmō nyan.*  
 he<sub>y</sub> 3o-consider by-judge perf 3y-steal cow that  
 'He is considered by the judge to have stolen that cow.'
- d. *Lĩmō nyan gi- dawa le- hakem ka ji- cu le- jih.*  
 cow that 3o-consider by-judge perf 3y-steal by-him<sub>j</sub>  
 'That cow is considered by the judge<sub>i</sub> to have been stolen by him<sub>j</sub>.'

(18) provides a "sandwich" argument for Raising and Passive; here again the rule that is shown to intervene between successive applications is not Passive, but another rule, Raising. However, it is possible to construct sentences in Ac where Passive intervenes between two applications of other cyclic rules, although these require somewhat longer sentences. In (19), below, there are three clauses: The matrix clause contains *ut<sup>0</sup>aha*, which governs Equi from the subject, the next lower clause contains *dawa*, which governs Raising to object. The derivation of (19) requires that Raising occur on the *dawa* cycle, followed by Passive on the same cycle, followed by Equi on the (higher) *ut<sup>0</sup>aha* cycle:

- (19) *Jih ji- ut<sup>0</sup>aha ba' gi- dawa le- hakem ji- cu lĩmō nyan.*  
 he<sub>y</sub> 3y-attempt irr 3o-consider by-judge 3y-steal cow that  
 'He made an attempt to be considered by the judge to have stolen the cow.'

Just as in the (rather cumbersome but grammatical) English translation, Passive intervenes in the derivation between two cyclic rules. This, together with the preceding arguments, shows that (at least) Equi, Passive, and Raising are included in the cycle in Ac, which should surprise no one.

In order to argue, then, that in Ac Passive is not cyclic, one would have to contend that Equi and Raising are not cyclic either, or that they do not exist. Neither is likely to be a welcome alternative to anyone who places any faith at all in the cyclic principle; the Ac rules of Equi and Raising are too similar to those of English to allow one to discard them with impunity because they interact with Passive, a rule that does NOT behave very much like the Passive of English. If, then, Passive is cyclic, as seems to be the case, and if Ac Equi and Raising have only subjects as victims—which is common to all Austronesian languages, not to mention most others—this means that Passive creates a new subject and demotes the old one. But it is clear that the agreement on the passivized verb is with the underlying subject in all cases, even though it is a *chômeur* after Passive has applied; this is the evidence which led to the re-statement of the Agreement Law.

## PASSIVES AND FRONTING

One possibility that might be proposed to account for the Ac agreement facts is that Passive might not be, in fact, an ordinary subject-creating rule in Ac (and therefore is probably misnamed here), but rather would insert a "dummy" NP<sup>13</sup> of some sort, with the consequence that the agreement would remain on the former subject, typically moved to a nonsubject position. The classic example is, of course, English *there*-insertion. This phenomenon is handled by a wrinkle in Perlmutter and Postal's Agreement Law, to the effect that a special relationship obtains between the dummy and the shifted NP subject (which Perlmutter and Postal call IN-LAWS), and that agreement is allowed between the verb and the in-law (shifted) NP, even though the dummy has other properties of a subject, e.g. that of feeding Raising. There is little hope of making this work the same way in Ac, since it is clear that the derived subject after Passive is NOT a dummy (at least not as Perlmutter and Postal define it): it has clear reference and originates as a term in the original active S. There is, however, a phenomenon similar to *there*-insertion in English in which a referential NP functions in some way as a subject but does not govern agreement; as we will see, it is paralleled exactly in Ac, with one significant difference.

- (20) a. *The Constitution entrusts the power to regulate education to the states.*  
 b. *The Constitution entrusts the states with the power to regulate education.*  
 c. *The power to regulate education is entrusted \*(to) the states (by the Constitution).*  
 d. *The states are entrusted \*(with) the power to regulate education (by the Constitution).*  
 e. *To the states is entrusted \*(with) the power to regulate education (by the Constitution).*

(20) is a fine example of how RG deals with vexatious problems in satisfying ways, up to a point. (20a) is the base S; subject, direct object, and indirect object are in their normal order. The indirect object is marked by *to*. (20b) is an example of Dative with the indirect object having been promoted to direct object, and the direct object having been put en *chômeur*, and marked (in this

<sup>13</sup> In this context, a "dummy" NP is a word filling an NP slot and having some of the properties of a term (in this case, the subject), but without reference, and therefore not possessing all of the properties of a term. Besides *there*, English has nonreferential *it* in *it's raining* and the *it* of Extraposition in *it's obvious he's lying*. In this sense, we will show that the subject of Ac Passive cannot be a dummy, since it originates as a term and keeps its reference throughout the derivation.



case) by the preposition *with*. Note that in (20b) there is no *to* on the dative *states*, a consequence of its promotion. (20c) and (20d) are the respective passives of (20a) and (20b); the necessity of *with* in (20d) shows the feeding of Passive by Dative, and simplifies the Passive into: PROMOTE DO TO SU. (20e), however, presents something of a problem. In this sentence, the indirect object has been fronted, triggering subject–verb inversion; i.e. the subject derived by Passive, *power*, follows the verb, and the verb agrees with it, rather than with the dative that precedes the verb; this can be shown by pluralizing *power*:

- (20) f. *To the states*  $\left\{ \begin{array}{l} \textit{is} \\ \textit{are} \end{array} \right\}$  *entrusted the power*  $\left\{ \begin{array}{l} \emptyset \\ \textit{-s} \end{array} \right\}$  *to regulate education.*

This is reminiscent of *there*-insertion, the more so since the prepositional phrase *to the states* appears to feed Raising:

- (20) g. *To the states seems to have been entrusted the power to regulate education (by the Constitution).*

Postal has pointed out (personal communication), however, that *to the states* will not feed B-Raising:

- (21) a. *\*Frank considers to the states to have been entrusted the power to regulate education.*

although the grammaticality increases when the prepositional phrase winds up in a subject position by virtue of later Passive:

- (21) b. *?To the states is thought/believed to have been entrusted the power to regulate education.*

In addition, the prepositional phrase does not behave as a subject should with respect to question formation:

- (21) c. *\*Is to the states entrusted the power to regulate education?*

Postal proposes to deal with these data (and others) by an analysis on which the subject of (20e) is a null dummy in-law of *power*. In this view, the fronting of the dative prepositional phrase *to the states* is a topicalization, and there is a constraint on the occurrence of null dummies in English, to the effect that, in surface structure, they must be immediately preceded by topics. Since topics occur only initially, this will explain why (21a) is worse than either (20g) or (21b), and since the topic is NOT the subject, it will explain why (21c) is also bad. This analysis will cover the agreement of *entrust* with *power(s)* under the

‘in-law’ section of the Agreement Law, since a dummy has been inserted. Moreover, Postal suggests that an independently needed constraint—to the effect that dummies (of whatever type) may only insert in intransitive constructions—explains the fact that Dative Preposing will not work on an active version of (20e). In (22), Passive has not applied, the construction is transitive, and *Constitution* cannot be inverted grammatically:

- (22) *\*To the states entrusts the Constitution the power to regulate education.*

Sentences where Passive has applied, however, are intransitive, and dummies can be inserted.

An alternative solution (and one that is less likely to displease) is to claim that the dummy is not null, but *there*, which has been deleted because its function (that of holding open the subject slot) is no longer necessary after the topicalization. Both these analyses, however, result from the necessity in RG of having an identifiable subject present at all stages of the derivation; I will suggest below that this is not an altogether obvious requirement, and may lead to unpleasant consequences (as it has here, for anyone who does not like empty nodes). Further, as we will see, an analogous treatment of Ac phenomena will not work: thus Postal’s analysis loses generality.

A rule similar to Dative-Preposing exists in Ac; we will call it Fronting (FR). FR has the effect of moving a NP, not necessarily a term, with its attendant prefixes/prepositions, if any, to the front of the sentence. It is the likeliest candidate for a topicalization rule to identify Passive with; the data below show, however, that it interacts with Passive and must be considered as an independent rule, just as the English data above show that, whatever the formal nature of the Dative Fronting rule, it is not to be identified with Passive, although it interacts with Passive. The subject, IF IT IS A DERIVED ONE (i.e., if Passive has applied), may optionally be inverted to follow the verb—note the similarity with the condition on the English rule above.<sup>14</sup>

- (23) a. *Gəpnyan ka gi-bre buku nyan ki-kamə.*  
 he<sub>o</sub> perf 3o-give book that to-we<sub>ex</sub>  
 ‘He gave the book to us.’  
 b. *Buku nyan ka gi-bre ki-kamə le- gəpnyan.*  
 book that perf 3o-give to-we<sub>ex</sub> by-he<sub>o</sub>  
 ‘The book was given to us by him.’

<sup>14</sup> By this observation I do not intend to claim that the conditions are identical and caused by the same circumstances. Nevertheless, coincidences should always be viewed suspiciously, and it seems possible that the rule producing (20f) may require “unlocking” of the normal word order by Passive before the more opaque word order is created. If true, this type of explanation may also apply to Ac, since the function of Passive—in that language, at least—seems to be to signal that the underlying subject is not the cyclic subject. See Lawler (1975b) for details.

- c. ***Ki-kamɔ*** *gɔpnyan ka gi-bre buku nyan.*  
to-we<sub>ex</sub> he<sub>o</sub> perf 3o-give book that  
'(It's) **to us** (that) he gave the book.'  
***Ki-kamɔ*** *buku nyan ka gi-bre le-gɔpnyan.*  
to-we<sub>ex</sub> book that perf 3o-give by-he<sub>o</sub>  
'(It's) **to us** (that) the book was given by him.'
- e. \****Ki-kamɔ*** *ka gi-bre gɔpnyan buku nyan.*  
to-we<sub>ex</sub> perf 3o-give he<sub>o</sub> book that  
'(It's) **to us** (that) gave he the book.'
- f. ***Ki-kamɔ*** *ka gi-bre buku nyan le-gɔpnyan.*  
to-we<sub>ex</sub> perf 3o-give book that by-he<sub>o</sub>  
'(It's) **to us** (that) was given the book by him.'

FR produces strong contrastive stress on the fronted element (indicated here by boldface), and has approximately the meaning of (in this case) 'to us, and to no one else (as may have been suggested)'. In example (23), (c), (d), and (f) are ungrammatical with this stress without the *ki-*. (23e) is ungrammatical because the underlying subject is inverted, exactly like (21). The important thing to note in (23) is that agreement in ALL cases—active, passive, and fronted—is with the underlying subject, *gɔpnyan*. Incidentally, it might be thought that (23f) represents not a passive, but an alternative fronting, with the subject displaced into a *le*-phrase; an analysis like this could claim that the subject is simply moved, not demoted, and that the *le*-phrase is not a *chômeur* at all. This claim would be helpful to anyone desiring to identify FR and Passive, since the creation of a *le*-phrase by another rule would be highly suspicious. This analysis is vitiated, however, by the fact that no *le*-phrase can occur unless there is an underlying direct object which can feed Passive. That is, on this analysis, one might expect FR to be able to operate on (24a) to yield (24b); but it cannot, because *ja?* is intransitive, and (24c) is ungrammatical. Therefore, the occurrence of the *le*-phrase has precisely the same cooccurrence restrictions as the Passive.

- (24) a. *Uring agam nyan ji- ja? t<sup>0</sup>ikula ngən-moto.*  
person male that 3y-go school with-car  
'The man goes to school by car.'
- b. \**Ngən-moto ji- ja? t<sup>0</sup>ikula le- uring agam nyan*  
with- car 3y-go school by-person male that  
'(It's) **by car** (that) is gone to school by the man.'
- c. \**T<sup>0</sup>ikula ji- ja? le- uring agam nyan ngən-moto*  
school 3y-go by-person male that with-car  
'**School** is gone to by the man by car.'

- d. *Ngən-moto uring agam nyan ji- ja? t<sup>0</sup>ikula*  
with- car person male that 3y-go school  
'(It's) **by car** (that) he goes to school.'
- e. \**Ngən-moto ji- ja? uring agam nyan t<sup>0</sup>ikula.*  
with- car 3y-go person male that school

(24d) is grammatical, and is the only way FR can apply to the instrumental (or means) adverbial *ngən-moto* of (24a), since Passive will not apply, and (24b) cannot be derived without it. (24e) is ungrammatical, however, since the subject has been moved after the verb. FR with subsequent subject inversion does not operate on intransitives generally: In Ac, it seems to be restricted to passive sentences, so that this type of inversion only occurs in a sentence with a *le*-phrase. Postal's hypothesis regarding the applicability of dummy-insertion in intransitives clearly does not apply here, and thus loses some of its appeal. Even if he is correct about the English cases, the alternative *there*-deletion analysis I suggested above can explain the same facts without necessarily making any claims about Ac, since *there*-insertion dummies are a language-specific phenomenon, and one would not expect a corresponding situation to obtain in Ac.

The agreement of verb with underlying subject in (23) is in sharp contrast to the English case, where the agreement in (20e) and (20f) is with the derived subject *power(s)*, the product of Passive. Otherwise, the rules seem to share many properties.

Not the least of these shared properties is the fact that in Ac Raising can be fed by FR:<sup>15</sup>

- (25) a. *Hakem gi- dawa kɪkamɔ ka gi-bre buku nyan le- gɔpnyan*  
judge 3o-consider to-we<sub>ex</sub> perf 3o-give book that by-he<sub>o</sub>  
'The judge considers **to us** to have been given the book by him.'
- b. ***Ki-kamɔ*** *gi- dawa le- hakem ka gi- bre buku nyan le- gɔpnyan*  
to- we<sub>ex</sub> 3o-consider by-judge perf 3o-give book that by-he<sub>o</sub>  
'(It's) **to us** (that) is considered by the judge to have been given the book by him.'

And there is even a dative Passive to which to compare it: Ac datives may undergo Passive, but they do not drag the *ki-*, which is deleted, much like the

<sup>15</sup> It is also possible that (25b) results from passivization of the entire object clause followed by FR and Extraposition (or Heavy NP Shift). The details of this analysis are not important here, since the same possibility applies to the corresponding English example. It does raise the possibility, however, that FR is cyclic, which would be interesting from an RG standpoint, since FR operates on nonterms like instrumentals.

to of English datives. Whether this means that Dative<sup>16</sup> feeds Passive in Ac is an open question, but it is not relevant here; what is relevant is that the *kɪ-* is dropped, and, further, that contrastive stress is not grammatical on these derived subjects:

- (26) a. *Kamɔ ka gi-bre buku nyan le-gɔpnyan.*  
 we<sub>ex</sub> perf 3o-give book that by-he<sub>o</sub>  
 ‘We were given the book by him.’  
 b. \**Kɪ-kamɔ ka gi-bre buku nyan le-gɔpnyan.*  
 c. \**Kamɔ ka gi-bre buku nyan le-gɔpnyan.*

Subjects derived from datives by Passive, like any derived subjects, may undergo Raising:

- (27) *Kamɔ gi-dawa le-hakem ka gi-bre buku nyan le-gɔpnyan.*  
 we<sub>ex</sub> 3o-consider by-judge perf 3o-give book that by-he<sub>o</sub>  
 ‘We are considered by the judge to have been given the book by him.’

Postal proposes an analysis of FR similar to that which he gives for (20e), in which FR is viewed as a pair of rules—Topicalization plus an optional Dummy

<sup>16</sup> The existence of an Ac rule of Dative is problematical, since it would be entirely opaque. That is, it would never apply unless the promoted indirect object would be further promoted to subject by some other rule, like Passive. The following sentence is ungrammatical, although (26a) is acceptable:

- (i) \**Gɔpnyan ka gi-bre kamɔ buku nyan.*  
 he<sub>o</sub> perf 3o-give we<sub>ex</sub> book that

(i) would be the result of application of a rule of Dative, but no such sentence exists. There are sentences in which an indirect object seems to be promoted to direct object but whether they argue for Dative is doubtful; more likely they are results of incorporation or predicate raising:

- (ii) a. *Gɔpnyan gi-bre bu kɪ-kamɔ.*  
 he<sub>o</sub> 3o-give cooked-rice to-we<sub>ex</sub>  
 ‘He gave rice to us.’  
 b. *Gɔpnyan gi-bre bu kamɔ.*  
 he<sub>o</sub> 3o-give-cooked-rice we<sub>ex</sub>  
 ‘He gave us rice.’

- (iii) \**Gɔpnyan gi-bre buku kamɔ.*  
 he<sub>o</sub> 3o-give-book we<sub>ex</sub>

(iia) is the normal form; (iib) is the form with *bu* appended to the verb, forming a unit meaning *feed*: the indirect object *kamɔ* is then usable without *kɪ-*. That this is idiosyncratic is shown by the ungrammaticality of (iii), where the direct object is not *bu*.

Insertion rule which makes a null dummy subject and inverts the previous (derived) subject. We have seen that, if this analysis is viable at all, it must be restricted to Passive sentences, not just intransitives, as Postal suggests, and that, unlike English, there is no evidence that the dummy could be anything else but a null, since Ac has nothing corresponding formally to the *there* of *there*-insertion—in fact, it has no dummies of any kind. Further, (25) shows that the restriction Postal proposes for the English null dummy does not hold for Ac, since fronted NPs behave exactly like subjects with respect to all types of Raising, and are not restricted to occurring first in a tensed clause. Finally, invoking a dummy of any sort (null or otherwise) to handle FR will NOT explain two facts: (i) FR with inversion can occur ONLY with a subject derived from Passive—i.e. FR must be fed by Passive if inversion occurs; and (ii) the agreement in a sentence with FR, with or without inversion, with or without Passive, is always with the underlying subject, never with the fronted NP (which is consistent with Postal’s analysis), and never with the inverted subject (which is not). In the light of these data, I find it hard to accept Postal’s treatment of FR: in fact, I believe that the evidence argues for treating Ac Fronting differently from that of English, even though they are similar in many respects, and even though they seem to be pragmatically and functionally almost identical. The dummy analysis of English Fronting seems plausible, but dummies do not seem to buy much in Ac. In any event, we can certainly conclude that FR is not the same rule as Passive in Ac, and no dummy analysis can explain the agreement facts in Passive sentences.

## PASSIVE AND SUBJECT PRECLITIC

In addition to FR, there is an Ac rule which topicalizes subjects and has interesting consequences and interactions with Passive. We will call this rule Subject Preclitic (SPC). There is a double condition on its application: First, the underlying subject must not be present as subject; this may be accomplished through Passive, or through Equi or Raising on the next cycle (which argues against SPCs being cyclic). Second, there must remain an agreement prefix on the verb [this will of necessity have reference to the (absent) underlying subject]. The effect of SPC in these circumstances is to replace the agreement prefix with a free noun or pronoun coreferential to the underlying subject. Some examples:

- (28) a. *Kamɔ ka gi-ning le-gɔpnyan.* (Passive)  
 we<sub>ex</sub> perf 3o-see by-he<sub>o</sub>  
 ‘We were seen by him.’  
 b. *Kamɔ ka gɔpnyan-ning.* (Passive plus SPC)  
 we<sub>ex</sub> perf he<sub>o</sub>- see  
 ‘We were seen by him.’

- (29) a. *Gəpnyan gi- ut<sup>θ</sup>aha baʔ gi- pula pade.* (Equi)  
 he<sub>o</sub> 3o-attempt irr 3o-plant rice-plant  
 'He made an attempt to plant rice.'
- b. *Gəpnyan gi- ut<sup>θ</sup>aha baʔ gəpnyan-pula pade.* (Equi plus SPC)  
 he<sub>o</sub> 3o-attempt irr he<sub>o</sub>- plant rice-plant  
 'He made an attempt to plant rice (himself).'
- (30) a. *Kamə gi- dawa le- hakem ka mi- cu limō nyan.* (Raising)  
 we<sub>ex</sub> 3o-consider by-judge perf lpex-steal cow that  
 'We are considered by the judge to have stolen the cow.'
- b. *Kamə gi- dawa le- hakem ka kamə-cu limō nyan.* (Raising plus SPC)  
 we<sub>ex</sub> 3o-consider by-judge perf we<sub>ex</sub>- steal cow  
 that  
 'We are considered by the judge to have stolen the cow (ourselves).'

Some notes on SPC: There are no agreement prefixes on the verbs in the clauses where SPC has applied—the prefixes that were there [in the (a) examples of (28)–(30)] have been replaced with NPs (in this case, pronouns, which are, naturally, more common than are full nouns).<sup>17</sup> The presence of agreement prefixes would render the (b) examples ungrammatical. Note also the position of the particles *ka* and *baʔ* in regard to that of the fronted pronouns: As has been noted above, there are extremely strong restrictions on the placement of these particles—they must FOLLOW the subject and PRECEDE the agreement prefixes—and the cliticized pronouns are definitely in the agreement prefix position, not that of the subject. Any other order of these pronouns and particles produces ungrammaticality. In the examples I have indicated this filling of the prefixal position by a hyphen, but I should repeat that there is no phonological evidence available to show these clitics to be morphological prefixes, as differentiated from particles, any more than there is for what we have been calling agreement prefixes. The same strong restrictions on placement, however, will allow us to consider them just as much prefixes as the others. Those with stronger commitments to consistent linguistic terminology than the author may prefer to refer to both types as clitics. Another thing to note in (28b) is the absence of the *le*-phrase, which is normally obligatory in the passive: this agent phrase is ungrammatical in a sentence with SPC, which suggests that in this case, at least, SPC may actually move the NP from the agent

<sup>17</sup> Full nouns do, however, occur. Cf:

- (i) *Uring nyan dʔto- p̄iret<sup>θ</sup>a.*  
 person that doctor-examine  
 'That man was examined by the doctor.'

phrase.<sup>18</sup> This possibility need not affect our discussion, since the important fact is that the underlying subject NP, or some pronoun coreferential with it, shows up in the agreement prefix position, where it is obviously not a term. In (28b), for example, it is clear that *kamə* (the NP promoted by Passive, and raised into the matrix S), rather than *gəpnyan*, is the cyclic subject of the lower S.

The semantic/pragmatic force of SPC is difficult to convey properly in English translations, but it approximates that of FR for nonsubjects.<sup>19</sup> That is, (28b) is appropriate when one desires to point out some particular individual who did the seeing, so as to make no mistake that it was done by anyone else. I have indicated this as contrastive stress in (28b), but in (29b) and (30b), where there is no NP in English to carry the stress, I have indicated it by the emphatic reflexive, although I have no idea how close these constructions actually are pragmatically. The English translations should be taken as very loose approximations.

Further evidence that SPC is a replacement, rather than a movement plus deletion, comes from the places where it CANNOT apply—any S that lacks an agreement prefix will not undergo SPC. Equi with *ci*, for example, leaves no agreement marker on the lower verb, so SPC cannot apply:

- (31) a. *Jih ji- ci pula pade.*  
 he<sub>y</sub> 3y-try plant rice-plant  
 'He tried to plant rice.'
- b. \**Jih ji- ci jih- pula pade.*  
 he<sub>y</sub> 3y-try he<sub>y</sub>-plant rice-plant  
 'He tried to plant rice (himself).'

With *ut<sup>θ</sup>aha*, however, which leaves an agreement marker [as we have seen in (29)], SPC can apply.

The interaction of SPC and Relativization is particularly revealing. Ac Relativization, like that of Austronesian languages in general, operates on subjects only. The relative marker *nyeng* follows the head noun and the subject of the clause which follows is deleted under coreference with the head. The

<sup>18</sup> I wish to ignore here the entire question of whether SPC is actually a movement rule in any sense. That reason why I want to avoid this issue is that it is a nonissue. If movement rules can be analyzed as *copy + delete*, which seems likely, then we could have two analyses in theoretical contrast, which are in actuality identical: (i) the movement rule hypothesis, suggested in the text, which says that the NP is copied into the agreement slot and deleted in its original *le*-phrase slot; and (ii) another analysis which says that the underlying subject is copied into this slot, and that the token of that NP in the *le*-phrase is deleted because it is redundant. Note that both these accounts resolve to *copy + delete*, and they are in fact the same account. This reminds one of the classic scholar who spent his life proving that the Iliad and the Odyssey were not written by Homer, but by another Greek of the same name.

<sup>19</sup> FR cannot apply to subjects— that is, there cannot be contrastive stress on a subject, since this would be the only sign that FR had operated.

interesting fact is that normally there is no agreement marker present on the verb in a relative clause:

- (32) a. *Urĭng ināng nyeng nging kamɔ ji- jaʔ tʰikula.*  
 person female rel see we<sub>ex</sub> 3y-go school  
 'The woman who saw us goes to school.'
- b. \**Urĭng ināng nyeng ji- nging kamɔ ji- jaʔ tʰikula.*  
 person female rel 3y-see we<sub>ex</sub> 3y-go school
- c. *Urĭng ināng \*(ji-) jaʔ tʰikula.*  
 person female (3y-) go school

(32a) is grammatical and (32b) is ungrammatical, even though they differ only in the absence or presence of the agreement marker in the relative clause; this agreement marker is required in a matrix clause like (32c), which is ungrammatical without it. The only exception to this restriction is when Passive has applied; then the agreement marker is REQUIRED in the relative clause. In other words, there is never any optionality as to whether there can be an agreement marker in a relative clause. If Passive has not applied, it is forbidden, while if it HAS applied, it is required. This has the odd result that the only agreement markers that show up in relatives are those that do NOT agree with the head, since Passive will leave agreement with the *chômeur* agent.

If SPC is claimed to work when the underlying subject is absent, as in Equi, then it ought to work in relatives. It does, but only when Passive has applied, since only then is there an agreement prefix to replace. Thus (33a) is grammatical while (33b) is not: (33b) is derived (putatively) from (32a), which has no agreement marker—hence, the application of SPC blocks. (33a), on the other hand, is derived from the passive relative in (33c) which has an agreement marker:

- (33) a. *Urĭng ināng nyeng kamɔ-ning ji- jaʔ tʰikula.*  
 person female rel we<sub>ex</sub>- see 3y-go school
- b. \**Urĭng ināng nyeng jih- nging kamɔ ji- jaʔ tʰikula.*  
 person female rel she<sub>y</sub>-see we<sub>ex</sub> 3y-go school
- c. *Urĭng ināng nyeng mi- nging le- kamɔ ji- jaʔ tʰikula.*  
 person female rel lpex-see by-we<sub>ex</sub> 3y-go school  
 'The woman who was seen by us goes to school.'

Note that (33a) lacks the *le*-phrase of (33c).

While it might be objected that (33a) is a simple example of Relativization of object—rather than a more complex derivation involving Passive and SPC—the position of the aspectual markers, as usual, shows that the NP

*kamɔ* is in the agreement slot—rather than in that of the subject NP. Consider (34):

- (34) a. *Bəh- mamplam nyeng tingəh mi- pajoh le- kamɔ mangat.*  
 fruit-mango rel prog lpex-eat by-we<sub>ex</sub> delicious  
 'The mangoes that are being eaten by us are delicious.'
- b. *Bəh- mamplam nyeng tingəh kamɔ-pajoh mangat.*  
 fruit-mango rel prog we<sub>ex</sub>- eat delicious  
 'The mangoes we are eating are delicious.'
- c. \**Bəh-mamplam nyeng kamɔ tingəh pajoh mangat.*
- d. *Kamɔ tingəh mi- pajoh bəh- mamplam.*  
 we<sub>ex</sub> prog lpex-eat fruit-mango  
 'We are eating mangoes.'

(34c) is ungrammatical because of the positions of *kamɔ* and *tingəh*, normally exemplified in (34d), which is not, of course, a relative.

Postal (personal communication) has suggested that SPC is in fact a case of subject incorporation (with which I agree), and that it should operate only on transitive subjects after Passive. It is certainly true that that is one environment for its application, but it is equally true that SPC can operate on intransitives, provided the subject has been moved or deleted from its normal position. Naturally, Passive cannot apply to intransitives, but Equi can:

- (35) a. *Drɔn ni- utʰaha baʔ ni- jaʔ u- jakarta.*  
 you<sub>o</sub> 2o-attempt irr 2o-go to-Jakarta  
 'You tried to go to Jakarta.'
- b. *Drɔn ni- utʰaha baʔ drɔn- jaʔ u- jakarta.*  
 you<sub>o</sub> 2o-attempt irr you<sub>o</sub>-go to-Jakarta  
 'You tried to go to Jakarta yourself.'

Postal is correct, however, in pointing out that SPC fits the normal pattern of subject incorporation, particularly in regard to the fact that the underlying subject (the 'launching pad' for incorporation, in Perlmutter and Postal's terminology) cannot appear as subject after incorporation. It is also important to note that incorporated subjects are no longer terms, any more than are the agreement prefixes they replace (and it is extremely clear from all the data that SPC does in fact replace the agreement morpheme with a noun phrase).

We conclude, then, that SPC interacts with Passive in interesting ways, but does not itself create or destroy subjects; that it can be only a replacement rule; and that it does some fairly weird things to our notion of "agreement" surely this is a strange thing to do with prefixes: Ordinarily in language, inflectional bound forms and lexical free forms go their separate ways, bound together, of course, with a complex web of cooccurrence restrictions and

interactions. It is strange to see a syntactic rule convert one into the other; it raises serious questions about the status of the agreement markers, which we will discuss below.

### AGREEMENT AND THE NOTION OF SUBJECT

There are some interesting reasons for the behavior of the Ac agreement morphemes in relation to Passive, which are discussed elsewhere (cf. Lawler 1975b). What is more interesting for our purposes, however, is the question that arises upon looking closely at the strange behavior of these prefixes, particularly at the phenomenon of replacement by NPs that SPC illustrates. That question is, of course, the one we are left with: Do these morphemes constitute verb agreement in any sense of that term familiar to linguists? If the answer is yes, then it is necessary to allow agreement with underlying terms, as well as with cyclic ones; if the answer is no, then the next question is: What are they? It is clear that they have coreference, in at least the same limited sense as agreement morphemes; it is equally clear that they behave in all other ways like agreement morphemes, and that any analysis that calls them something else because they do not agree with the right NPs is circular and ad hoc, and not worth discussing. It seems that some discussion of what we mean by agreement is in order.

Perhaps the clearest cases of verb agreement are found in languages like German, where in most cases the verb encodes morphologically the information as to the identity of the subject, and where the free NP subject is also required. Thus:

(36) *\*(Ich) spreche Deutsch.*

The verb *spreche* '(I) speak' unambiguously marks the subject as first-person singular, but the free pronoun *ich* 'I' is still required. In Spanish and Latin, on the other hand, there is also encoding of the subject, but free NP subjects are not required if there is sufficient context for determining their identity; in particular, first-person subjects are never required:

(37) *(Ego) loquor latine.*

(38) *(Yo) hablo español.*

If they are present, in fact, the sentence takes on a different function, since their use signals emphasis.

These phenomena are easy to account for in a generative framework, by adding rules to delete the free subject NPs which govern agreement with their verbs, but these cases should make us uneasy as to just what we mean by agreement when often there is nothing left to agree with.

Some similarities of Ac agreement with these cases might lead someone concerned for the survival of a stronger Agreement Law to postulate that the morphemes we have been calling agreement are actually not that, but rather are pronouns. Certainly there are plenty of resemblances, syntactic and phonological, to the Ac pronouns. And such an analysis could be made to handle the SPC facts, and even the pragmatic force of SPC (on an analogy with the emphatic use of Romance pronouns) in a satisfying way.

Unfortunately, such an analysis puts one in the position of requiring that ALL Ac sentences with lexical verbal predicates (and NO Ac sentences with lexical nonverbal predicates) contain an additional NP, coreferential with the underlying subject, but not a term at any stage of the derivation. This is strange, not to say unheard of. In addition, there seems to be no way to prevent an analysis like this from being applied to (say) Turkish, where the pronouns would become postclitics on the verb, and would therefore undergo the usual harmonizing. A pronoun analysis of Turkish, however, would have to state that the pronouns were not always coreferential with the underlying subject, but rather with the cyclic subject, and the dilemma would be faced again in a different form. And in any language, including Ac, in which such an analysis is proposed, there would have to be a wealth of pronoun-deletion rules to take care of the places where agreement does not take place. Obviously such an analysis could be advanced for Ac alone, on the grounds that Ac agreement morphemes behave differently from those of other languages, but calling them pronouns (or anything else) does not explain the situation—it gives it a different name, a far different thing, and one which linguists should eschew as an explanatory device.

Another, similar, analysis that might be advanced to account for the behavior of Ac agreement morphemes is that they constitute subject incorporation. In view of the fact that SPC is clearly a subject-incorporation rule, there might appear to be some plausibility to this approach. However, this vanishes upon closer examination. First, it is unusual, to say the least, for a language to have two such rules—one is rare enough. Second, subject incorporation is typically an optional process (like SPC); if we consider the agreement morphemes as subject incorporations, we make the process obligatory for all verbs (and block it for all nonverbs). Third, unlike SPC, the agreement morphemes can occur (and in many cases MUST occur) with a free NP subject coreferential to them: this is also not usual. Finally, this approach suffers from one of the fatal defects of the prior analysis, namely, there is in principle no way to distinguish this case from any other case of verb agreement, and thus to be forced to say that ALL verb agreement is subject incorporation in any language. While such a view may or may not have anything to recommend itself in solving the difficult problems of agreement, it certainly does not buy us anything in Ac as a way of explaining the behavior of the agreement morphemes.

Having demonstrated that the problem of Ac agreement remains, no matter what tack is taken, I would like to suggest how I think it should be handled.

While there is much that is attractive about RG, I think some serious rethinking is in order on the nature of agreement (as well as other topics).

Recent work by Ross<sup>20</sup> has demonstrated amply, I believe, the necessity for theories of grammar to handle nondiscrete phenomena in nondiscrete ways. Much of the problem with agreement in RG is derived from a strict adherence to discrete categories like 'term', 'subject', 'agreement', etc. It seems much more likely that such notions are not discrete at all, but consist of clusters of properties<sup>21</sup> shared to greater or lesser degree among the NPs in an S: Austronesian languages are well-known to exploit some of the latitude inherent in this schema.

If we posit such an approach to agreement (restricting ourselves for the moment to agreement with subjects—however that latter term is to be defined), we find ourselves constructing a continuum of agreementlike phenomena. The heuristic model I have been using to attack this problem is the following: Consider a syntagma like (39):

- (39)  $N_1-N_2-V$   
(order of elements irrelevant)

where  $N_1$  represents a noun (phrase) that is relatively more free and  $N_2$  one that is relatively less free, and where  $N_1$  is coreferential with  $N_2$  (I use 'free' here in a notional sense, meaning 'close to the verb'; this may manifest itself as morphological affixation, pronominalization, restriction in choice of lexicalization as compared to  $N_1$ , etc.) Obviously, such a schema includes subject incorporations and other nonagreement phenomena, but I suspect we may profit from linking them with agreement in this way. We can then take the known properties of subjects, and check various instances of this syntagma to see how they are distributed. At one end of the continuum are the undoubted cases of agreement, like the German or Spanish cases (note that this proposal is not intended to distinguish between these two phenomena; that appears to be a separate and independently vexing problem), where  $N_1$  has virtually all of the properties associated with the notion "subject," and  $N_2$  has none. The other end is not so easy to see, but one guess might associate it with sentences such as (40):

- (40) *My old man, he can do anything.*

where many, if not all, of the properties of "subject" have transferred from  $N_1$  to  $N_2$ . It is interesting to note that the subject properties that have transferred in (40) are largely syntactic, not pragmatic. Tomlin (1975) notes that there is good reason to separate these two large groups of subject properties in order

<sup>20</sup> For example, Ross (1972, 1973, 1974, and 1975). For further discussion of the implications of Ross's work, see Lawler (1975a).

<sup>21</sup> Such as the list composed by Keenan (1974). For further discussion of the concepts involved in subject properties, and particularly of the different types of properties, see Tomlin (1975).

to deal with ergativity; here we may have some more evidence regarding the nature of these properties. On such a scale, Ac would be located somewhere in the middle.

It is, of course, an open question as to whether such a continuum can even be constructed; yet surely it is possible to investigate phenomena along these lines, and undoubtedly we would learn something by doing so. One of the benefits might be an ordered list of the properties associated with the notion "subject" (or several such lists, each giving different types of properties), if there turns out to be a relatively smooth distribution of transfers throughout the continuum. If such a list is possible, we will have a definition of "subject" which is empirically sound and which also provides a weighting of the relative strengths of its constituent parts. On the other hand, we might find large discontinuities in the list, which could tell us something useful about the nature of the properties and their dependencies, or conceivably that some of the properties do not define "subject" so much as something else. (As noted above, there may also be some hope of distinguishing pragmatic notions like "topic" or "theme" from syntactic ones like "subject" by this means.) Finally, it may be that there is considerable chaos in the transfers, which will tell us something useful (though not very pleasant) about our notion of "subject"—namely, that it is very largely a fiction. In addition, a study along these dimensions opens the possibility that some historical changes may be more conveniently explicated in terms of the hierarchy, with, for example, pronouns becoming more like agreement markers, or vice versa.<sup>22</sup>

In the paragraphs above, I have no more than sketched out some speculations about agreement phenomena, broadly defined. I do not expect what may emerge from more serious investigation to resemble these hypotheses, but I do think I have shown that much more serious investigation is in order, and that a rethinking of many of our traditional terms and categories is necessary in order to be able to even recognize the important data, let alone deal with it in a responsible and satisfying manner.

## ACKNOWLEDGMENTS

This chapter derives originally from a field methods class at the University of Michigan in 1974-75; I wish to express my deep appreciation to our informant and guide through the mysteries of Achenese, Drs. Idris Ibrahim, of Syiah Kuala University, Banda Aceh, without whose linguistic sophistication and firm command of English subtleties we would have floundered forever. The hard core of the class, students and other interested parties, contributed much in the way of questions, analysis, corrections, and elicitation of data. In particular, I would like to thank Russ Tomlin, Phil Tedeschi, Roger Mills, Roy Cayetano, and Jeff Dreyfuss for their help. I also wish

<sup>22</sup> See Lawler (1975b) for a discussion of a change which has apparently proceeded along these parameters. Other possible examples are the use of the "copula" *hu/hi* in Modern Hebrew, or the possible derivation of the *i*-predication marker in Melanesian Pidgin from English *he*.

to thank Ann Borkin, Charlie Pyle, Ed Keenan, and Sandy Chung for helpful comments and suggestions, and Elli Hirschey and Katie Feeny for their typing of the manuscript. Paul Postal deserves special credit for noticing the theoretical anomalies in the Achenese Passive, and for encouraging me to describe the data, at the expense of theories, if necessary. Finally, I wish to express here a special sense of gratitude, not limited to this or any other single undertaking, to Pete Becker, without whom not. None of the above are responsible for errors of fact, theory, or analysis in this paper, which are my own exclusively, nor should any of them be construed as agreeing with me.

## REFERENCES

- Anderson, S. (1974) "On Dis-Agreement Rules." *Linguistic Inquiry* 5, 445-451.
- Becker, A. L. and I. G. N. Oka (1973) "Person in Kawi: Exploration of an Elementary Semantic Dimension" mimeographed, University of Michigan, Ann Arbor, Michigan.
- Collins, V. (forthcoming) *The Austro-Asiatic Substratum in Achenese*, Doctoral dissertation, University of California, Berkeley, California.
- Djajadiningrat, H. (1934) *Atjehsch-Nederlandsch Woordenboek*, 2 vols., Landsdrukkerij, Batavia.
- Ishak, D. (1968) *Tatabahasa Atjeh*, P. T. Sakti, Banda Aceh.
- Keenan, E. (1974) "A Subject Properties Check-list," mimeographed, University of California, Los Angeles, California.
- Lawler, J. (1975a) "Elliptical Conditionals and or Hyperbolic Imperatives: Some Remarks on the Inherent Inadequacy of Derivations," in R. E. Grossman, L. J. Sam, and T. J. Vance, eds., *Papers from the Eleventh Regional Meeting of the Chicago Linguistic Society*, University of Chicago, Chicago, Illinois.
- Lawler, J. (1975b) "On Coming to Terms in Achenese: The Function of Verbal Dis-Agreement," in R. E. Grossman, L. J. Sam, and T. J. Vance, eds., *Papers from the Parasession on Functionalism*, Chicago Linguistic Society, University of Chicago, Chicago, Illinois.
- Makam, I. and R. P. Burr (1971) *An Introductory English-Achenese Achenese-English Dictionary*, manuscript, Fakultas Keguruan, Syiah Kuala University, Banda Aceh.
- Morgan, J. (1972) "Verb Agreement as a Rule of English," in P. M. Peranteau, J. N. Levi, and G. C. Phares, eds., *Papers from the Eighth Regional Meeting of the Chicago Linguistic Society*, University of Chicago, Chicago, Illinois.
- Postal, P. (1967) "A Agrees With B," in *Linguistic Anarchy Notes*, Series G (Wonders of Excessive Power), No. 1, ditto, IBM Thomas J. Watson Research Center, Yorktown Heights, N.Y.
- Postal, P. (1970) "On Coreferential Complement Subject Deletion," *Linguistic Inquiry* 1, 439-500.
- Postal, P. (1974) *On Raising*, M.I.T. Press, Cambridge, Massachusetts.
- Ross, J. R. (1972) "The Category Squish: Endstation Hauptwort," in P. M. Peranteau, J. N. Levi, and G. C. Phares, eds., *Papers from the Eighth Regional Meeting of the Chicago Linguistic Society*, University of Chicago, Chicago, Illinois.
- Ross, J. R. (1973) "A Fake NP Squish," in C. J. N. Bailey and R. Shuy, eds., *New Ways of Analyzing Variation in English*, Georgetown University Press, Washington, D. C.
- Ross, J. R. (1974) "There, There. (There, (There, (There, . . . )))," M. W. LaGaly, R. A. Fox, and A. Bruck, eds., *Papers from the Tenth Regional Meeting of the Chicago Linguistic Society*, University of Chicago, Chicago, Illinois.
- Ross, J. R. (1975) *Nouniness*, in *Kaigai Eigogaku Ronsoo*, Eichosha, Tokyo.
- Tomlin, R. (1975) "Some Implications of Subject Properties, Passive, and Ergative Languages," to appear in *New Ways of Analyzing Variation, Etc.*, Georgetown University Press, Washington, D. C.
- Van Langen, K. F. H. (1889) *Handleiding voor de Beoefening der Atjehsche Taal*, Martinus Nijhoff, 's Gravenhage.