Lou Hohulin and Austin Hale. “Notes on Keley-i Relational Grammar: I” 231–263
NOTES ON KELEY-I RELATIONAL GRAMMAR - I

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Recent efforts on the part of relational grammarians to establish the status of grammatical relations such as subject, object, and indirect object as primitives of linguistic theory look in many ways quite promising. The success of such an endeavour could simplify our grammars, contribute to their explanatory power, and provide us with a general theory of language that gives a more restricted and highly structured view of what a natural language can be, than have previous theories of similar scope.

This effort is a delicate one and there are numerous ways in which it could go wrong through no fault of the original insight itself. The degree to which the grammatical relations, subject, object, and indirect object have clearly identifiable properties differs greatly from language to language. A great deal of effort has been expended in attempts to come up with lists of properties that define such relations (Keenan, 1976) or that in some way attempt to say how one might recognize a subject if he ever saw one, for example, in a Malayo-Polynesian language. (Schachter, 1975).

If one firmly believes that subject, object, and indirect object are undefined primitives in linguistic theory, one might be tempted to say that the effort to construct property lists for these relations is misguided, since grammatical primitives need no definition. On the other hand, one may well ask what limits the theory places upon descriptions of particular languages that purport to make use of these primitives. Theoretically motivated heuristic is badly out of fashion these days and unless some workable constraints are placed upon the descriptions upon which the theory feeds, there will be the possibility that the identification of subject, object, and indirect object in different languages may differ not only because the languages themselves differ, but also because the analysts tacitly differ in their views of these relations. Typologies based upon such descriptions will contain too many types, covering not only valid differences between languages, but making room as well for nonanalogous treatments of the same relationships. The general view of language that results will contain too many options.

If we take seriously a goal posited by Johnson, 1977, namely that of discovering universal principles referring to grammatical relations at work in natural languages in order to incorporate them into general linguistic theory and thereby limiting the rules that any particular language can have, we must also take seriously the task of providing analogous descriptions for the languages upon which such a general theory is constructed.
This paper is the first in a series of papers in which we would like to contribute to the ultimate success of this relatively delicate undertaking. We will be exploring the consequences of the following assumptions for the description of Keley-i: 1) There are at least three systems that must be distinguished in the description of Keley-i, a system of referential relations, a system of semantic role relations, and a system of grammatical relations. 2) The system of referential relations includes focus and topicalization. 3) The system of semantic role relations involves case-like relations such as actor, experiencer, ambient, essive, causer, conveyed item, patient, site, instrument, benefactive, as well as time and place. 4) The system of grammatical relations involves the terms, subject, object, and indirect object as well as nonterms. These assumptions are laid out in chart form in Figure 1.

In this series of papers we will be viewing each of the relational systems represented in Figure 1 as conceptually independent, even though the sets often interact closely with one another. The properties of subject, object, and indirect object which are most syntactic in nature (and least referential and least related to semantic roles) are the properties that will be taken as central to the description of these grammatical relations. Again one may ask, why, if we are prepared to accept grammatical relations as primitives, do we feel compelled to describe them. The answer is that we wish to establish as firmly as possible the basis upon which we claim that our account of subject, object, and indirect object deserves to be viewed as the account most analogous to that given of these relations for languages in which they are far less problematical. It is not our intention to argue that Keley-i does or does not have a subject, object, or indirect object. This we assume.

There are several labels that have been particularly troublesome in discussions of Philippine languages that deserve a brief explanation at this point, namely, focus, topic, and subject. We do not intend to reiterate the history of their use (E. Cubar, 1975) but we, at the very least, need to say what we mean by these labels in Figure 1.

Focus has been used by some linguists to refer to a preposed constituent in preverbal or prepredicate position (see Schachter, 1973 for one example of this usage). Other linguists (Pike, 1963) have used the label, focus, to refer to the special relationship that exists between a verb and the constituent whose role relation to the verb is marked by the affix on the verb. We have chosen to use focused item to refer to the noun phrase which is singled out to be marked as definitely or specifically referential. In using the term, focus, we also have reference to the fact that when one of the noun phrases in construction with the verb is singled out as the focused item of the clause, this choice is registered in the verb by means of an affix that marks certain aspects of the semantic relationship that obtains between the verb and the focused noun phrase.
One of the most important factors involved in noun phrase candidacy for focus assignment is either definite or specific reference. (N. Cubar, 1973, C.K. Oh, 1971) A noun phrase is considered to be definitely referential if it refers to something which is known both to the speaker and the hearer. A noun phrase is considered to be specifically referential if it refers to a specific item even though it may not be known by the hearer. In our usage focus is a relationship not a constituent.

Topic has been used by some linguists to refer to a noun phrase whose role relation to the verb is marked by the affix on the verb. (See Schachter, 1973 for an example.) Topic has been used by others (Li, 1976; McKaughan, 1973) to refer to a noun phrase that is preposed to the predicate or to the main verb of a clause.

We have chosen to refer to the preposed noun phrase by means of the label, topic, whether this topic is the focused item of the verb or not. There will be instances in which a topic is also the focused item of a clause. And there will be other instances in which the topic is not the focused item and in which the focused item is not the topic. These two constituent relationships are clearly identified in Keley-i by means of verb morphology and word order. The distinction is also reflected in pronominal and demonstrative forms (see D. Hohulin and Hale, this volume). Keley-i is one Philippine language for which there needs be no confusion at this point.

Subject has been used to refer to the actor noun phrase (see, for example, McKaughan, 1962). Other linguists (or the same linguists at other times) have used subject to refer to the noun phrase whose role relation to the verb is reflected by verbal affixation (McKauhan, 1973, Keenan, 1976, Harmon, diss.). It has also been used to refer to the non-predicate equivalent of the ang-phrase in Tagalog, though this usage overlaps to a great extent with the usage of McKaughan, 1973. Our use of this term differs in various ways from all of these major uses and will be discussed at length in the course of these papers. The subject relation cannot be adequately dealt with apart from the various systems which impinge upon it.

As a starting point, however, it may be useful to note that there seems to be a strong tendency for certain semantic role relations to cluster about the subject relation (agents, causers, experiencers, essives, and ambients almost invariably turn out to be subjects) the object relation (conveyed items, patients, and sites almost invariably turn out to be objects), and the indirect object relation (beneficiaries and contrary to what might be expected, instruments, as well, almost invariably turn out to be indirect objects). This observation is only a starting point. It is not a definition (grammatical relations are taken here to be primitives). It is not even the basic description of subject in Keley-i since this correlation involves semantic roles rather than processes or properties that are essentially syntactic. As a starting point, however, it seems to be remarkably reliable for Keley-i
and may give the reader a better feel for subject in Keley-i than anything else that could be intelligibly presented at this point in our discussion.

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Figure 1. Systems distinguished as a starting point for the description of Keley-i
I. The Independence of Grammatical Relations in Keley-i.

One of the most helpful and germane discussions in our consideration of grammatical relations leading to this paper was that of Schachter, 1976. The fact that we end up disagreeing with his conclusions should not be allowed to hide the fact that his insights were pivotal in the development of our own thoughts on the matter.

Schachter seems to start with the assumption that if there is a subject in Philippine languages it must be reducible either to actor, to topic (which in our terminology is the focused item) or to a combination of actor in underlying structure and topic (focused item) in surface structure. Under the last alternative focused items which are also actors would be primary subjects, focused items which are not actors would be derived subjects. He has shown that subject is not reducible in any of these three ways. Subject cannot be identified in every case with an actor, nor can it be identified in every case with the focused item, and the problems involved are not entirely solved by a solution that takes the actor as the underlying subject and derives surface subjects by focus assignment. His argument rests crucially upon the fact that he can identify subjects in Philippine languages well enough to say that they do not reduce in any of these ways. To this point we are in general quite willing to agree with the major thrust of his argument. His next step, however, requires the assumption that the three alternatives given somehow exhaust the relevant universe of possibilities so far as the identification of subject in Philippine languages is concerned. Given this assumption his conclusion follows naturally enough, namely, that there is nothing in Philippine languages that corresponds to subjects in other languages. Given a different assumption, namely, that the subject relation might in principle be independent both of referential relations (which are basic for the consideration of focused items) and of semantic role relations (which are basic for the consideration of things like actors), his conclusion simply does not follow. Supposing, however, that instead of discovering what he did, Schachter had discovered that the focused item in Philippine languages was in every case and in every respect exactly what we would expect of the subject. On the basis of his assumption he would have probably been justified in claiming that Philippine languages did indeed have subjects, namely focused items. On the basis of our assumptions we probably would have been led on the same evidence to doubt whether Philippine languages had subjects at all. If subject is reducible to focused item, why does one need them both? If subject has no private life of its own, what claim can be made for its existence? In other words, what Schachter found strongly inclines us to believe that Philippine languages do have subjects, and that these subjects participate in a system of grammatical relations that is independent of the system of referential relations on the one hand and that is also independent of the system of semantic role relations on the other. Furthermore, if our assumptions turn out to be correct, the characteristics that will be central to a description of subject in Keley-i will be syntactic or grammatical characteristics rather than semantic or referential ones.
Consider now a few arguments from Keley-i that tend to support the view that grammatical relations have some right to an independent status within Keley-i grammar, even if the description also takes account of the necessary referential relations and semantic role relations.

A. Evidence from Keley-i Reflexives.

There are two kinds of reflexives in Keley-i, true reflexives and 'body' reflexives. Consider first the true reflexives.

True reflexives are formed by coalescing coreferential subject and object noun phrases into a single focused noun phrase and by attaching the prefix, nan- to the verb. Only underlying objects may participate in reflexivizations. Objects derived from indirect objects by indirect object advancement may not participate. Furthermore causative verbs do not undergo reflexivization.

1. Nampatey hi Juan.
   Refl, killed FN John.
   'John killed himself.'

2. Nanha-ad dak.
   Refl, placed F,I
   'I placed myself.' (More freely, 'I am living or staying somewhere.')</n
3. Nambullu ak.
   Refl, washed F,I
   'I washed myself.' (more freely, 'I washed my hands.')

(Refl stands for reflexive; FN, for focus marker; F, for focused form.)

In the informal description of this construction just given we have talked about subjects and objects. But now the question comes as to whether or not this is the best way for the grammar to refer to these constituents.

True reflexives in Keley-i provide fairly good evidence that grammatical relations such as subject, object, and indirect object cannot be reduced to referential relations such as focus and topicalization. That the reflexive is independent of topicalization seems clear from the fact that the focused noun phrase in the true reflexive construction can occur either post verbally as in Examples 1 - 3 or as a preposed topic as in Examples 1a - 3a.

1a. Hi Juan ey nampatey.
    FM John Lk Refl, killed
    'It was John who killed himself.'

2a. Hi-gak, nanha-ad.
    T,I Refl, placed
    'It was I who was living (some-
    where).'

3a. Hi-gak, nambullu.
    T,I Refl, washed
    'It was I who washed (my hands).'

(Lk stands for linker and T for topic form.)
The grammatical relation of focused noun phrase to reflexive verb is the same whether it is topicalized or not. In both cases it functions both as subject and as object. There seems to be no reason to make any reference at all to preposed topics in the rule for true reflexives.

Could the rule for true reflexivization be simplified by stating it in terms of focused and nonfocused items? Probably not. If the rule were to be rewritten as the coalescence of two noun phrases, one focused and the other nonfocused, we would get ungrammatical reflexives derived by the coalescence of objects with indirect objects.

4. Intudun Pedro eya elaw 'Peter taught my way to me.'
   OF, taught, NFM Peter this way
   kun hi-gak.
   my, NFM me

5. Sinuduan tuwak nan Pedro 'Peter taught me concerning
   OF, taught he, F, I NFM Peter
   ni meippanggup ni elaw ku.
   NFM concerning NFM way my

(Of F stands for object focus; NFM for non-focus marker - note that the non-focus marker ni which marks noun phrases is contracted to the verb and the possessive pronoun in example 4.)

In example 4 the direct object 'this my way' is the focused noun phrase and the indirect object 'to me' is the nonfocused noun phrase. In example 5 the advanced indirect object 'me' is the focused noun phrase, and the chomeur 'concerning my way' is the nonfocused noun phrase. By writing the rule to refer to focus and nonfocused noun phrases, unnecessary complexity would be introduced but it is also doubtful that any rule could be written which would not potentially produce ungrammatical reflexive constructions.

*6. Nantudu ak nan Pedro. 'Peter taught my way to myself.'
   Refl, taught F, I NFM Peter
   (The reflexive of example 4.)
   or
   *'Peter taught myself my way.'
   (The reflexive of example 5.)

Subject and object are crucially involved in reflexivization, and there is, in fact, very little evidence as to the focus status of the underlying forms. The attempt to restate the rule in terms of referential relations, whether topicalization or focus, seems an entirely futile enterprise. At least at this point grammatical relations cannot be reduced to referential ones.
Can the rule for true reflexivization be restated in terms of semantic role relations? The answer to that question is most likely yes. According to the summary statement in Figure 1, agents, causers, experiencers, essives, and ambients can only be subjects. Conveyed items, patients, and sites can only be grammatical objects. If this turns out to be correct, then it will always be possible to restate any rule which refers to subject as a rule that applies to agents, causers, experiencers, essives, and ambients. The cost in this case is not that the rule cannot be stated at all. Rather, the loss of a generalization is at stake.

In order to see to what extent a generalization is at stake here we need to determine what semantic role relations are involved in the true reflexive rule. Consider the following sentences.

1b. Pintey tu hi Juan. 'He killed John.'
   OF, kill he FM John

2b. Inha-ad ku libluh di det-al. 'I placed the book on the floor.'
   OF, placed I book LM floor

3b. Binulluan ku ngamay ni mahhiken. 'I washed (the dirt from)
   OF, washed I hands PM boy the hands of the boy.'

(OF stands for object focus; FM, for focus marker; LM, for location marker; and PM, for possessive marker.)

In Example 1b the verb has the infix, -in- which is normal for focused object where the object is the affected patient. Example 2b has a verb with the prefix, in- which is normal for object focus where the object is the conveyed item. Example 3b has a verb with the infix, -in-, followed by the suffix, -an. This is normal object focus affixation where the object is a site. The rule for true reflexivization appears to take no notice of this set of distinctions; it applies in the same way to all three kinds of objects. To state the rule in terms of semantic roles rather than in terms of grammatical relations, so far as the object is concerned, would be to miss a generalization.

The case for the subject is not nearly so strong. True reflexivization can apply only to verbs which refer to actions that can be self-inflicted. The set of verbs is thus necessarily transitive, which could in any event have been predicted from the original statement of the rule in grammatical terms. This, then, eliminates essives and ambients from the set of possible subject roles to which the rule could apply. Another constraint upon this rule is that true reflexive cannot apply to verbs of experience and as previously stated, causative verbs do not undergo reflexivization. This reduces the eligible set of subject roles to agent only. The restriction on the application of true reflexive can be stated in terms of semantic roles, in which case the rule applies only to agents, and since agents can only be subjects in any event no reference need be made to subjects as such. On the other hand, the rule can
be stated in terms of subject with the stipulation that it cannot apply to experience and causative verbs. Certainly nothing is lost by writing the rule in terms of grammatical relations, but so far as the subject is concerned, no strong argument has yet been made in its favor.

The argument from true reflexives provides some very good evidence to support the claim that unless grammatical relations are distinguished from semantic role relations and from referential relations we stand to lose the ability to capture certain generalizations that could otherwise be simply stated.

Consider now the 'body' reflexives. 'Body' reflexives are simply transitive sentences in which there is a focused object which has the noun, annel 'body' as its head, and a pronoun that is coreferential with the subject of the sentence as its possessor. Examples 7 through 10 illustrate this construction.

7. **Inang-ang tu annel tud diggal.** 'He saw his body in a mirror.'
   OF, saw  he body  his, LM mirror  (Or 'he saw himself in a mirror."

8. **Ebuh annel tu tukanemnemnema.** 'It's only his body he thinks about.' (Or, it's only himself he thinks about."
   only body  his  OF, he is thinking

9. **Linena tu annel tu.** 'He oiled his body.'
   OF, oiled he body  his

10. **Tuka peta-gey annel tu.** 'He is elevating himself (over others).'
    he, Pres Caus, be high body  his

(OF stands for object focus; LM, for location marker; Pres, for present; and Caus, for causative.) The subjects of Examples 7 and 8 are experiencers, that of 9 is an agent, that of 10, a causer. The body reflexive construction is transitive. As a result essives and ambients do not figure as possible subjects. The only possible subject roles for transitive constructions are agent, experiencer, and causer. From the examples given above it can be seen that all the possible roles are involved. The rule applies without regard to semantic role relations. It applies simply to whatever can be the subject of a transitive sentence. To write the rule to apply to the semantic role relations would be to miss a generalization that could be captured by writing the rule in terms of grammatical relations.

This construction also provides evidence that subject cannot be reduced to the notion, focused item, without losing the analogy between the notion of subject in Keley-i and the notion of subject in non Philippine languages for which the relation is clear. According to Schachter (1976;503), in all clear cases (non Philippine languages) the subject controls reflexivization but may not itself be reflexivized. In examples
7 through 10 it is the 'body' reflexive form, amnel tu 'his body /himself' that is in focus. If the focused item in Keley-i is the subject, then it is a subject that runs counter to all the clear cases since it does not control reflexivization but is itself reflexivized. If we are to preserve the analogy between subjects in Keley-i and subjects in non Philippine languages for which the notion of subject is a clear one, then at least at this point we must reject the idea that the subject relation can be reduced to that of focused item. At least here the system of grammatical relations is independent of the system of referential relations.

We noted above that the evidence in favor of writing the true reflexive rule in terms of grammatical relations rather than in terms of semantic role relations was somewhat stronger for objects than it is for subjects. In the body reflexive construction the evidence for writing the rule in terms of grammatical relations is stronger for subjects than it is for objects. All examples thus far have the object, amnel plus possessive, as the patient.

There are other respects in which the true reflexive and the 'body' reflexive are complementary constructions to one another in Keley-i. For any given verb there is only one natural reflexive construction. For a few verbs it is possible to elicit both constructions, but one of the two is unnatural, and in all likelihood would never occur in natural discourse. Underived verbs such as patey 'kill', ha-ad 'place', and buulu 'wash hands' which have subjects with the role of agent and which express action that can be self-inflicted can undergo the true reflexive rule but not the 'body' reflexive rule. On the other hand, derived verbs such as linena 'oil (the body)' (from lana 'oil'), sinebun 'soap (the body)' (from tabun 'soap') and inagah 'apply medicine (to the body)' (from agah 'medicine') all of which have agents for subjects and express action that can be self-inflicted can undergo the 'body' reflexive rule but not the true reflexive rule. Finally, verbs such as aang-aang 'see' and nemnem 'think' which have experiencers for subjects can undergo the 'body' reflexive rule but not the true reflexive rule. In defining the domains of these two reflexive rules it seems necessary to refer to semantic role relations. Why it is that the true reflexive rule applies to all objects alike but only to certain roles of the subject, whereas the 'body' reflexive rule applies to all subjects alike but only to the patient role of the object will be an interesting matter for further study.

B. Evidence from Keley-i Reciprocals.

Informally the reciprocal construction in Keley-i can be described as involving 1) the coalescence of the subjects and the objects of their underlying (or entailed) predications into a single focused noun phrase and 2) the affixation of the verb with the form nan-in-CVr- (where CVr- stands for reduplication of the first consonant and vowel of the root). The key issue here is whether or not the statement as to which constituents trigger reciprocization, and which constituents
are coalesced in the resultant focused noun phrase is best made in terms of grammatical relations. If the rule must refer to subjects and objects to save a generalization or to be statable at all, then the reciprocal construction in Keley-i can form the basis for another argument in support of the view that grammatical relations are needed for a description of Keley-i and deserve independent status within that description.

Reciprocal sentences in Keley-i have a number of semantic entailments which need to be accounted for in any adequate description. Subjects and objects are understood to be coreferential sets of participants that are partitioned into at least two subsets, and the interpretation of the reciprocal involves a predication for each ordered pair of subsets. Thus the statement,

11. Nan-imbabaddang _di_ Juan _hi_ 'John, Bill and Mary helped one
    Recip, helped pl John FM another.'
    Bill _et_ hi Mely.
    Bill and FM Mary

entails six different predications:

12. Binaddangan _nan_ Juan _hi_ Bill.'John helped Bill.'
    OF, helped NFM John FM Bill

13. Binaddangan _nan_ Juan _hi_ Mely.'John helped Mary.'
    OF, helped NFM John FM Mary

14. Binaddangan _nan_ Bil _hi_ Juan. 'Bill helped John.'
    OF, helped NFM Bill FM John

15. Binaddangan _nan_ Bil _hi_ Mely. 'Bill helped Mary.'
    OF, helped NFM Bill FM Mary

16. Binaddangan _nan_ Mely _hi_ Juan. 'Mary helped John.'
    OF, helped NFM Mary FM John

17. Binaddangan _nan_ Mely _hi_ Bil. 'Mary helped Bill.'
    OF, helped NFM Mary FM Bill

A subject is not paired with itself, thus the construction does not entail the following predications.

*18. Binaddangan _nan_ Juan _hi_ Juan. *'John helped John.'
    OF, helped NFM John FM John

*19. Binaddangan _nan_ Mely _hi_ Mely. *'Mary helped Mary.'
    OF, helped NFM Mary FM Mary
For plurals which are not overtly partitioned it is not possible to reconstruct an explicit account of the entailed predications given only the surface structure of the reciprocal sentence. Thus in the sentence,

21. *Nan-imbabaddang idan emin. 'They all helped one another.'

Recip, helped they all

no enumeration of entailed predications can be made without an enumeration of the partitioned subsets which form the antecedent of 'they all'. It is still entailed, however, that 'they all' refers to a set with at least two discrete subsets, A and B, and it is entailed that A helped B and that B helped A. Whatever occurs as the object of one entailed predication must also occur as the subject of another entailed predication.

If syntax is to be involved at all in the account that relates the surface structure of a reciprocal to its semantic interpretation in Keley-i, it is fairly clear that the relevant regularities are best captured by rules that refer to grammatical relations, as distinct from referential relations or semantic role relations.

How should the grammar refer to the underlying constituents that are entailed or coalesced within the focused noun phrase? What underlying relationships are involved and what is the most general way to refer to these relationships? In the informal statement of the rule given above we have referred to these relations as the grammatical relations, subject and object. Could we have referred to them as the referential relations, focused and nonfocused? This seems unlikely. While it is often the underlying object that we find in focus in surface sentences that correspond to the entailments underlying the reciprocal, the designation 'nonfocused noun phrase' will not uniquely specify the subject. It is possible to have several nonfocused noun phrases in such an underlying sentence, only one of which is the subject. In such cases a rule of reciprocalsiation stated in terms of focused noun phrases simply would not work.

22. *Indawat nan Juan hu libluh nan Bil. 'John gave the book to

OF, gave NFM John FM book NFM Bill Bill.'

In example 22 there are two nonfocused NPs, the subject and indirect object, and a focused NP which is logically not eligible for reciprocalsiation because it is animate.

22a. *Indawatan nan Juan hi Bil ni libluh. 'John gave Bill a book.'

OF, gave NFM John FM Bill NFM book

In example 22a, the subject and indirect objects are again nonfocused noun phrases, and the direct object is the focused item.
23. **Indawatan nan Juan hi Bil ni libluh.** 'John gave Bill a book.'
    OF, gave NFM John FM Bill NFM book

23a. **Indawatan nan Bil hi Juan ni libluh.** 'Bill gave John a book.'
    OF, gave NFM Bill FM John NFM book

24. **Nan-indadawat di Bil nan Juan ni libluh.** 'Bill and John gave
    Recip, gave pl Bill NFM John NFM each other a book.'
    book

Could the rule refer to preposed topics? Since preposed topics are not required in the underlying forms, and since in any event a preposed topic may be not only a subject, an object, an indirect object, or a nonterm, to refer to a preposed topic in no way guarantees the relevant set of relations. If neither focus nor topicalization can be used to designate the relevant set of constituents to be coalesced in reciprocalsization, then it appears that referential relations as summarized in Figure 1 are not what are at stake in this rule.6

Could the rule refer to semantic role relations? Clearly it could, but the question is whether or not a single pair of such relations suffices to characterize coalescence. Consider the following examples.

25. **Nan-in-a-ang-ang ida.** 'They saw each other.'
    Recip, saw they

26. **Nan-in-a-amtaa.** 'They knew each other.'
    Recip, knew, they

27. **Nan-imbabaddang ida tuu.** 'The people helped each other.'
    Recip, helped Pl people

28. **Nan-in-hehhegnit ida.** 'They provoked each other.'
    Recip, provoked they

29. **Nan-indaddawat idan libluh.** 'They gave each other books.'
    Recip, gave they, NFM book

Examples 25 and 26 involve underlying semantic relations of experiencer and patient.
Example 27 involves underlying semantic relations of agent and site.
Example 28 involves underlying semantic relations of agent and patient.
Example 29 involves underlying semantic relations of agent and beneficiary.

It is clear, then, that the full range of semantic roles that cluster with transitive subjects can occur with the coalesced subject of the reciprocal in Keley-i. To formulate the rule in terms of agents and experiencers rather than in terms of subjects or in terms of patient, site, and beneficiary rather than direct objects would be to miss a generalization.
C. Evidence from Keley-i Topicalization.

There are four varieties of topicalization in Keley-i

1. Setting topicalization. In this variety of topicalization the setting is preposed without any cross reference or focus alteration of the main clause. Occurrence of a setting topic does not preclude the occurrence of expressions of time or location within the main clause.

30. Yad beley ni Malikanu
    TM country NFM American
    ida kamengapyan
    they are building, NFM

etteteng ni baley ni manuk.
large NFM house NFM chicken

31. Kewa-wa-wa ida kaum-igtang
    every day they are selling
    ni manuk da
    NFM chicken their

(TM stands for topic marker; depending on the form of the time noun phrase, the topic marker yan may or may not be required. Example 30 illustrates a place setting and example 31, a time setting.)

2. Introductory topicalization. The subject of a transitive verb can be topicalized by way of introduction within a discourse. In this variety of topicalization the introduced item is preposed, linked to the main clause by oy or juncture (,), and is cross referenced within the main clause by means of a nonfocused shadow pronoun. The focused item of the main clause is the object and the only constituent of the main clause that can stand in subject relation to the verb is the shadow pronoun which cross references the preposed topic.

32. Ya kalnero agda amta
    TM sheep not, they know
    anmenang-ang ni kennen da...
    look NFM food their

33. Hi apu hi Pungud
    FM grandfather FM name
    hiningbu tu hu alma.
    feasted he FM crab

3. Contrastive topicalization (primary). The subject of an intransitive verb or the object of a transitive verb can be contrastively topicalized. In this variety of topicalization, the contrasted item is preposed, linked to the main clause by hu or juncture (, ) and is cross referenced to the main clause by the normal focus affixation of the main
verb. Whatever the grammatical relation is that the contrasted topic bears with respect to the main verb, no other noun phrase of that relationship can occur within the main clause.

34. Yadda Malikanu limmaw di \\
    TM, Pl American SF;wentLM \\
    bulan.
    moon.

35. Hi Johnny hu dakatattakusi \\
    FM FM they, are fearing \\
    di Napayew.
    LM name-of-village
    'It is Johnny whom they are fearing in Napayew.'

4. Contrastive topicalization (secondary). The subject of a transitive verb or a nonterm (time or location) can be contrastively topicalized. In this variety of topicalization, the contrasted item is prepositional, linked to the main clause by ēy or juncture (, ) and is cross referenced to the main clause by means of special topic affixation. It is not possible to identify a focused item in sentences of this type.

36. Hi Juan nengikamdag ni \\
    FM John mixed NFM
    libluh mud libluh kun nahdem.
    book your book my last night
    'It was John who mixed your books with my books last night!'

37. Yad bebley ni Malikanu \\
    TM country NFM American
    dakapengapyain ettetenga \\
    they, are making large
    ni baley ni manuk.
    NFM house NFM chicken.
    'It is in the Americans' country, where they are making large chicken houses.'

38. Kewa-wa-wa dakapengigtangan \\
    every day they, are selling \\
    manuk da.
    chicken their
    'It's every day, they are selling their chickens.'

(Cf. examples 30 and 31. The morphology of the verbs signal whether the topicalization is setting or contrastive - secondary.)

The informal statement of topicalization rules has made considerable use of the grammatical relations, subject and object. The question now is whether the rules could be improved by replacing all reference to grammatical relations with references either to referential relations or semantic role relations.

Consider first the matter of introductory topicalization, in which the object must be focused if the subject is to be topicalized. Clearly, since the notion of focused item already has been used in the statement of the rule it will not do to attempt to replace the references to subject
and object with some further reference to the focused item. The card has already been played. Neither the referential relation of focus or topic is available for referring to that constituent which is identified in the informal statement of the rule as the object.

The rule can be rewritten in terms of semantic role relations. Consider, however, the following examples.

39. **Hi apu**  
    **hi Pungud hiningbu**  
    *FM grandfather*  
    *FM name*  
    *OF,feasted*  
    'Grandfather Pungud, he feasted the crab.'

    **tu hu alma.**  
    *he FM crab*

40. **Ya kalnero agda amta**  
    *TM sheep*  
    *nct,they OF,know*  
    'Sheep, they don't know how to look for their food.'

    **anmenang-ang ni kennen da.**  
    *look*  
    *NFM food their*

41. **Hi Tomas impeamta tu illian mi.**  
    *FM Thomas Gaus,know he our*  
    *coming our*  
    'Thomas, he made known our coming.'

Example 39 involves topicalization of an agent. Example 40 involves the topicalization of an experiencer. Example 41 involves the topicalization of a causer. The rule applies to all nonfocused transitive subjects in the same way and takes no account of the semantic role relations that the subject happens to stand in. To write the rule in terms of semantic role relations would be to miss a generalization.

Consider next the matter of primary contrastive topicalization. This rule applies both to subjects of intransitive verbs and to objects of transitive verbs. It applies only to focused constituents. Since focus has already been used to identify one condition on the focused constituent it clearly cannot be used again as a substitute for the designation of grammatical relations, subject or object.

The rule can be rewritten in terms of semantic role relations. Consider, however, the following examples.

42. **Hi Pablo limmaw di Kiangan**  
    *FM Paul SF,went LM village*  
    'It was Paul, who went to Kiangan yesterday.'

    **ni kaalman.**  
    *NFM yesterday*

43. **Hi Mely bimmunget tep**  
    *FM Mary Angry, SF because*  
    'It was Mary, who was angry because they stole her book.'

    **sinekew da libluh tu.**  
    *OF, stole they book her*
44. **Ya kulet intanem inad**
   TM cabbage OF, planted mother, LM
   'Cabbage was what mother planted in the rice field.'

   **payew.**
   rice field

45. **Hi Pablo dimpap ni pulit**
   FM Paul OF, arrested NFM police
   'Pablo was the one whom the police arrested yesterday.'

   **ni kaalman.**
   NFM yesterday

46. **Ya balwasim binalbalan inan**
   TM clothing, your OF, washed mother
   'Your clothing is what mother washed today.'

   **nunya.**
   today

Example 42 has the agent of an intransitive verb as its topic. Example 43 has the experiencer of an intransitive verb as its topic. Example 44 has the conveyed item of a transitive verb as its topic. Example 45 has the patient of a transitive verb as its topic. Example 46 has the site of a transitive verb as its topic. The rule applies to intransitive subjects and to transitive objects without regard to the semantic roles they play. To rewrite the rule in terms of semantic role relations would be to miss a generalization.

Secondary contrastive topicalization was presented above as applying to transitive subjects in clauses in which no focused item could be identified. Focus apparently plays no role at all. The rule could be rewritten in terms of semantic role relations. We have, however, many examples such as the following:

47. **Hi Pablo nengiha-ad ni libluh mud**
   FM Paul placed NFM book your placed your book in the chest.

   **caban.**
   chest

48. **Hi Juan nengamatn illian mi.**
   FM John knew, NFM coming our
   'John is the one who knew about our coming.'

49. **Hi Juan nengipematan illian mi.**
   FM John Caus, known, NFM coming our
   'John is the one who made known our coming.'

Example 47 has a topic which is an agent. Example 48 has topic which is an experiencer. Example 49 has a topic which is a causer. The rule applies to all transitive subjects without regard to the semantic role relationships involved. To rewrite the rule in terms of semantic role relations would be to miss a generalization.
Figure 2 summarizes the respective domains of these four rules for topicalization.

<table>
<thead>
<tr>
<th>Rule</th>
<th>Constituent Topicalized</th>
<th>Nonterm</th>
<th>Subject of</th>
<th>Object of Transitive or Subject of Intransitive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Time/Place</td>
<td>Transitive</td>
<td></td>
</tr>
<tr>
<td>1. Setting (ST)</td>
<td>ST applies</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(normal focus)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Introductory (IT)</td>
<td>---</td>
<td>IT applies</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(object focus)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Contrast-1 (CT1)</td>
<td>---</td>
<td>---</td>
<td>CT1 applies</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(topic is focused)</td>
<td></td>
</tr>
<tr>
<td>4. Contrast-2 (CT2)</td>
<td>CT2 applies</td>
<td>CT2 applies</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(no focus)</td>
<td>(no focus)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. Domains of application for topicalization rules in Keley-i
It should be noted before passing on that there is no overlap in the environments to which introductory topicalization, primary contrastive topicalization, and secondary topicalizations can apply. The following are the terms which are accessible to topicalization in Keley-i. For each term or constituent type there is only one of these three rules that can apply.

- Subject of a transitive, object focus clause: IT can apply
- Subject of a transitive, non-object focus clause: CT2 can apply
- Subject of an intransitive, subject focus clause: CT1 can apply
- Object of either a transitive or intransitive (derived to transitive) object focus clause: CT1 can apply

It may be observed that nonfocused subjects can be topicalized but that non-focused objects cannot.

On the basis of their complementary domains of application, one might want to argue that these three rules should be considered as subparts of a single topicalization rule for terms in Keley-i. One reason for arguing this is the observation that Rule CT1 otherwise appears to violate the accessibility hierarchy if taken as a rule by itself. Transitive objects are accessible to Rule CT1 but transitive subjects are not. Rule CT1 has something ergative about it.

D. Evidence from Keley-i Relativization.

For three of the four varieties of topicalization in Keley-i there is a corresponding variety of relative clause.

There are introductory relative clauses in which the noun phrase head is cross referenced by a nonfocused shadow pronoun which is the subject of the relative clause and in which there is a focused object.

50. Kameikkellabut hu tuum agtu 'A person who does not re- being jailed FM person,RM not,he spect the flag is jailed.'
    lispituha  bandelah
    OF,respecting flag

51. Dinanglelan idan dakek 'The many people who went OF,made slippery they,NFM many before made this trail
    ni tuum limmaw (ida)
    NFM person,NFM SF,went they
    la eya dalan.
    past this trail
There are primary contrastive relative clauses in which the head of the noun phrase is cross referenced by normal focus affixation on the verb of the relative clause. The relativized noun phrase within the relative clause can be either the subject of an intransitive verb, as in Example 52 and 53 or the object of a transitive verb, as in Example 54, in this type of embedded relative clause construction.

52. **Huuya duntug ni kaumöebduk.**
   this mountain RM explodes
   'This mountain explodes.'
   (volcano)

53. ...
   **mandaddan tuun**
   Refl,prepare person, RM
   nambebley di neiwnup diman.
   SF,lives LM near there
   '...a person who lives near there will prepare himself (to leave).'

54. **Sillak ku etan libluh tun**
   OF,lost I that book his, RM
   binneh ku et baydan
   OF,borrowed I and OF,paid
   nan ama.
   NFM father
   'I lost his book which I borrowed and so my father paid for it.'

There are also secondary contrastive relative clauses in which the head of the noun phrase is cross referenced by means of special affixation on the main verb of the relative clause. The relativized noun phrase in this construction can be either the subject of a transitive verb within the relative clause as in Example 55, or nonterms as in Examples 56 and 57.

55. **Huuya hu agik ni**
   this FM brother, my RM
   *This is my brother who advised me in Antipolo."
   nenagun ni hi-gak di
   advised NFM me LM
   Antipolo.
   name-of-place

56. **Inang-ang mi hi Pinkihan eman**
   OF,saw we FM name then
   *We saw Pinkihan then that time when Pugung had killed him."
   ni nematyany nan Pugung ni hi-gatu.
   RM had killed NFM name NFM him

57. **Umalaw hi Tomasa di bebley ni**
   SF,go FM name LM village RM
   'Thomasa will go to the village where her in-laws formerly lived.'
nanha-adan idan ammed ni ahwatu.
lived they parents NFM mate,her

It appears that very nearly the same set of rules that form preposed
topics can be used to form relative clauses in Keley-i.

One minor difference between the two constructions is in the linking
particle that is involved in each. Preposed topics are linked to their
main clauses with ey, hu or juncture (,), whereas noun heads are linked
to their relative clauses in one of two ways. Where a relative clause
is used to identify the head, the particle ni is used, as in Examples
50 through 57 above. Where a relative clause is used to describe the
head or provide additional information about the head, the particle e
is used. In the examples that follow we have the set of examples in e
that correspond to the set in ni given above.

58. Neikelabut hi Tomas e agtu
SF,jailed FM Thomas RM not,he
lispituha bandelah.
OF,respecting flag

59. Dinanglelan nan Tomas
OF,made slippery NFM Thomas
e limmaw lad Kiangan eya
RM SF,went past village this
dalan.
trail

60. Huyya duntug di Taal e
this mountain LM name RM
kaumbebduk.
explodes

61. ...mandaddan hi Tomasa e
Refl,prepare FM name RM
nambeley di neihnu diman.
SF,lives LM near there

62. Sillak ku libluh Bert ni
OF,lost I book name NFM
Math pakegatang ni kaalman.
just bought NFM yesterday

'Thomas, who was not respecting the flag, has been jailed.'
'Thomas, who went to Kiangan earlier, made this trail slippery.'
'This is the mountain Taal, which explodes.'
'Thomasa, who lives near there, will prepare herself (to leave).'
'I lost Bert's Math book, which was just bought yesterday.'
63. **Dimmateng** di Pedro e **nengi-lin** SF,arrived Pl Peter RM brought

**killum di baley.** pig LM house

'Pedro and his companions, who brought the pig to our house, arrived.'

64. **Inang-ang mi hi Pinkihan ni** OF,saw we FM name NFM

**katlu e aggew ni nenuntukan** Wednesday RM day NFM socked

**nan Pedro ni hi-gatu.** NFM Peter NFM him

'We saw Pinkihan on Wednesday, the day that Pedro socked him.'

65. **Umlaw hi Tomasa di Baguio e** SF,go FM name LM city RM

**nanha-adan ida lan ammed** lived they past parents

**ni ahwatu.** NFM mate,her

'Tomasa will go to Baguio, where her in-laws formerly lived.'

The arguments which support the view that grammatical relations have a legitimate right to be recognized independently of referential and semantic role relations and which can be posed on the basis of relative clauses are entirely parallel to those just constructed on the basis of topicalization. It is possible, for example to show that any of the semantic role relations that a transitive subject can have can be used to identify the relativized noun phrase of an introductory relative clause.

66. **Dinanglelan idan dakel ni** OF,made slippery they many NFM

**tuun limmaw (ida) la eya dalan.** person SF,went they past this trail

'The (many) people who went before made this trail slippery.'

67. **Kayyaggud hedin wada um-alin** good if there is SF,come

**mittuduh ni inamtatu** teacher NFM knows,he

**mengituttuddun Algebra.** teach

'It would be good if (there is) a teacher who knows how to teach Algebra will come.'

68. **Um-ali etan tuun impeamtatu** SF,come that person Caus,known,he

**baluh ni olden ni Gubirnu.** new NFM laws NFM government

'A person who will make known the new laws of the Government will come.'
In Example 66 the agent is relativized out of an introductory relative clause, in Example 67 the experiencer is relativized and in Example 68 the causer. Relativization of subjects from introductory relative clauses thus works without regard to semantic role relations. To state the rule in terms of semantic role relations is to miss a generalization. It must, however, take account of grammatical relations since only subjects of object focus transitive verbs can be relativized in this way.

It is also possible to show that for primary contrastive relativization the rule takes account of grammatical relations but not of semantic role relations, since there are no restrictions on the latter. Any role that can be the subject of an intransitive verb can be relativized.

69. Nabwel etan detag ni ingkamdug
    spoiled the meat RM OF,mixed
    mud pukdu.
you,LM beans

70. Lawah elaw etan ni tuum
    bad custom the NFM person,RM
    kaum-ameh edum ni edum tuu.
    SF,envies other NFM other person

Any role that can be the object of a transitive verb can be relativized.

71. Nabwel etan detag ni ingkamdug
    spoiled the meat RM OF,mixed
    mud pukdu.
you,LM beans

72. Imbeng ku etan papil ni
    OF,threw I the paper NFM
    ingkal mud lata.
    OF,removed you,LM can

73. Inha-ad kud caban etan
    OF,placed I,LM chest the
    balwasin binalbalan mun
    clothing,RM OF,washed you,NFM
    kaalman.
yesterday

Thus, to write primary contrastive relativization as a rule based on semantic role relations would be to miss a generalization. The rule must,
however, take account of grammatical relations since only the subject of an intransitive verb and the object of a transitive verb can be relativized in this way.

74. \textit{Intu-dak ni gubirnu etan} \textit{OF,sent NFM government the} nengibegan buwis. person,\textit{RM asked tax} \textit{tuum}'The government sent the person who asked for the tax.'

75. \textit{Dinuntuk nan Juan hi Pedro e} \textit{OF,socked NFM John FM Peter RM} ag neminhed ni hi-gatu. not like NFM him \textit{ag} 'John socked Peter, who doesn't like him.'

76. \textit{Imbunget ama hi Buyyakaw} \textit{OF,scolded father FM} e nempipealmet ni hi-gatu. \textit{FM Caus,displeased NFM him} \textit{e}'Father scolded Buyyakaw, who had caused him to be displeased.'

To write the rules in terms of semantic role relations would be to miss a generalization. The rule must, however, take account of grammatical relations since it can apply only to the subjects of transitive verbs and to nonterms.

Another point also becomes obvious at this juncture. Contrary to what has been claimed for many other Philippine languages (Schachter 1976:500) it is not possible in every instance to claim that the focused item (or in Schachter's terms, topic) is what can be relativized. In introductory relativization the focused item is left within the relative clause and some other, nonfocused constituent is relativized. In secondary contrastive relativization both nonterms (which cannot be in focus) and terms are relativized in the same way, and it is not possible to make any sure statement about the focus status of noun phrases in the underlying structure to which relativization applies. Of all the types of relativization presented here only primary contrastive relativization conforms to the claim that only focused item can be relativized. This, then, for Keley-i constitutes another kind of evidence that grammatical relations such as subject and object cannot be replaced by referential relations such as focused item. It also counts as a counterexample to the claim that in all Philippine languages it is only the focused item of the underlying relative clause that is accessible to relativization. For Keley-i it simply is not the case.

E. \textbf{Evidence from Keley-i Complementation}.

For each of the three varieties of topicalization in Keley-i, there is a corresponding variety of verbal complementation. Consider first the
purpose complement of intransitive verbs of motion. Purpose complements are introduced by the complementizer, ni.

**Introductory purpose complementation** has an object focus transitive verb. Instead of a deleted shared subject in the complement, the complement clause has a shadow pronoun which is typical for both introductory topicalization and introductory relativization.

77. **Manda-guh** hak ni nak
    SF, stop by I Cmp I
    *I will stop by to drink his wine."

    inumen bubud tu.
    OF, drink wine his

**Primary contrastive complementation** has an intransitive verb (either by derivation with the affix um- applied to an inherently transitive verb or an inherently intransitive verb) and the deleted shared subject is focused upon by the verb of the complement clause.

78. **Manda-huh** hak ni an-um-inum. 'I will stop by to get a drink.'
    SF, stop by I Cmp Pur, SF, drink

79. **Manda-guh** hak ni man-iyatu. 'I will stop by to rest.'
    SF, stop by I Cmp Pur, SF, rest

Primary contrastive topicalization can involve either the subject of an intransitive verb or the object of a transitive verb. Since purpose complementation seeks access only to subjects, there is no parallel to the topicalized object construction so far as purpose complements are concerned.

**Secondary contrastive complementation** has a transitive verb with non-deleted nonfocused object. The verb has special topic affixation, and the shared subject is coreferentially deleted.

80. **Manda-guh** hak ni anmengium 'I will stop by to drink his
    SF, stop by I Cmp Pur, drink wine.'

    ni bubud tu.
    NFM wine his

The informal statement of the rules for complementation has identified the constituent deleted from the various complements as the underlying subject. Could this reference to a grammatical relation be replaced by reference to a referential relation? On our analogy the deleted item is a topic, but it will not do simply to say that the underlying topic is what is deleted under coreference since objects and non-terms can be topicalized as well as subjects and the rules we are concerned with here delete only the subjects of complements.
Reference to focus will not serve to identify the relevant constituent so far as introductory complementation is concerned, since the subject in this instance is only one of several nonfocused constituents that are potentially present in the underlying complement clause. Even where it is the focused item that is deleted under coreference, as in primary complementation, subject is only one of several constituents that can be in focus.

Semantic role relations will do the job, but at greater cost. The deleted subject of an intransitive complement clause can be an agent, as in Example 81, and experiencer as in Example 82.

81. **Umlaw wak di wawang ni**  
    SF, go I  LM river  Cmp  
    anmangkaykay.  
    SF, swim

82. **Umlaw wak ni anman-iskul.**  
    SF, go I  Cmp SF, learn  
    'I will go to learn.'

The deleted subject of a primary contrastive complement clause can be an agent as in Example 83, or an experiencer as in Example 84.

83. **Manda-guh hak ni an-um-inum.**  
    SF, stop by I  Cmp pur, SF, drink

84. **Manda-guh hak ni**  
    SF, stop by I  Cmp

    an-um-ang-ang ni elan kun  
    pur, SF, 1c0k cmp get I

    lumban.  
    grapefruit

(Note that the shared subject is deleted as expected in the first complement clause, but in the second complement clause, the subject is explicit.) Thus the rule cannot be written adequately in terms of referential relations and to write it in terms of semantic role relations would be to miss a generalization since the rule applies to verbal subject roles without regard to their semantic role relations.

F. **Argument from Keley-i Indirect Object Advancement.**

Where referential prominence is to be given to a specific or definite indirect object, the indirect object is made a focused item. In order to do this, however, the indirect object must be advanced to direct object, since only nuclear terms can be placed in focus. The underlying direct object which is replaced by the advanced indirect
object then becomes a chomeur and is marked as a nonfocused item. In Example 88, indirect object advancement has not applied.

88. Indawat nan Juan (hu) 'John gave the book to me.'
    OF, gave NFM John Fri

    libluh ni hi-gak.
    book NFM me.

In Example 89, indirect object advancement has applied.

89. Indawatan da-ak nan Juan 'John gave me the book.'
    OF, gave he, me NFM John

    ni libluh.
    NFM book

The key question with respect to indirect object advancement that we wish to pose here is how the advanced constituent should be referred to. Since the rule itself precedes focus placement we will not want to formulate the rule in terms of focused and nonfocused constituents. Even if we were to do so we would have to distinguish among several possible kinds of nonfocused noun phrases since the rule will not apply to all nonfocused noun phrases. Topicalization is not involved and thus referential relations do not seem to be the relevant means for identifying the constituent that is to be advanced.

The constituent could, of course, be identified in terms of its semantic role relations. An indirect object may be either a beneficiary or an instrument. The indirect object advancement rule, however, applies to both.

90. Intudun Juan Math 'John taught Math to me.'
    OF, taught, NFM John

    ni hi-gak.
    NFM me

91. Intuduan tuwak nan Juan 'John taught me Math.'
    OF, taught he, me NFM John

    ni Math.
    NFM

92. Bineyuk bu hilin 'I pounded the pepper with
    OF, pounded, I FM pepper

    la-lun Tomasa.
     pestle, NFM name

    Tomasa's pestle.'
93. **Imbayuk** la-lun
    OF, pounded, I pestle, NFM
    Tomasa di hili.
    name NFM pepper

'I pounded with Tomasa's pestle.'

Example 90 has a beneficiary as an indirect object. In Example 91, that indirect object has been advanced to direct object. In Example 72 the indirect object is an instrument. In Example 73 that indirect object has been advanced to direct object. The rule applies to indirect objects without regard to their semantic role relations. To refer to the advanced constituent in terms of semantic role relations rather than in terms of grammatical relations is to miss a generalization.

G. **Argument from Keley-i Passive.**

In discourse contexts in which a transitive clause is to be derived as a descriptive clause giving prominence to an object (whether it be an underlying direct object or a direct object that has been advanced from indirect object) and where all referents to the underlying subject is to be suppressed, the passive rule may apply. When the passive rule applies to an underlying transitive clause, the object is advanced to subject position immediately following the verb, the underlying subject is obligatorily deleted, and the verb is marked with the affix from the me-set which is appropriate to its root class. The rule may apply to the structure which underlies Example 94 to produce Example 95.

94. **Indawat** nan Juan (hu)
    OF, gave NGM John FM
    libluh ni hi-gak.
    book NFM me

'John gave the book to me.'

95. **Neidwat** libluh ne
    Pass, gave book NFM
    hi-gak.
    me

'The book was given to me.'

The rule may also apply to the indirect object of a sentence that has undergone indirect object advancement. Thus the structure which underlies Example 94 can undergo indirect object advancement yielding Example 96.

96. **Indawatan** da-ak nan Juan
    OF, gave he, me NFM John
    ni libluh.
    NFM book

'John gave me a book.'
This, in turn, is within the range of the passive rule which can apply to produce 97.

97. **Neidwatan nak ni libluh.** 'I was given a book.'
   Pass, gave I NFM book

The informal statement of the rule has been in terms of grammatical relations. It is difficult to see how the rule could have been described in terms of either focus or topicalization. It could, however, have been stated in terms of semantic role relations. We could have said that the passive rule will delete either an agent, as in 98a or an experiencer, as in 99a.

98. **Intudun** Juan Math
   OF, taught, NFM John

   ni hi-gami.
   NFM us

98a. **Neituttudu** Math ni
   Pass, taught NFM

   hi-gami.
   us

99. **Inamtan** Bahingawan
   OF, knew, NFM name

   hu impahding ku.
   FM OF, did I

99a. **Neamta** impahding ku.
   Pass, known OF, did I

'What I did was known.'

But this would be to miss a generalization since the rule applies to all the subject roles that can occur in a transitive sentence without regard to their semantic role relations.

We could also have said that the passive rule will apply to a conveyed item as in 100, or to a patient as in 101, or to a site as in 102, or to an instrument as in 103, or to a beneficiary as in 104.

100. **Inha-ad** ku libluh di
   OF, placed I book LM

   lamesaan.
   table

100a. **N'eiha-ad** libluh di
   Pass, placed book LM

   lamesaan.
   table

101. **Ingkal** kun emin
   OF, removed I all

   begah di lunay.
   rice LM sack.

'I removed all of the rice from the sack.'
101a. Na-kal  
    emin begah  
    Pass, removed all rice  
    'All the rice was removed from the sack.'

di lunay.  
LN sack

102. Dinahdahan kun emin ubi.  
    OF, peeled I all sweet potato  
    'I peeled all of the sweet potatoes.'

102a. Nedahdahan emin ubi.  
    Pass, peeled all sweet potato  
    'All the sweet potatoes are peeled.'

103. Imbayuk  
    la-lun  
    OF, pounded, I pestle, NFM  
    'I pounded with Tomasa's pestle the pepper.'

Tomasa.

(A more natural English construction to equate the Keley-i construction when an indirect object - instrument- has been advanced to direct object is the following; I used Tomasa's pestle to pound the pepper.);

103a. Neibeyu  
    la-lun  
    Pass, pounded pestle, NFM  
    'Tomasa's pestle was used to pound the pepper.'

Tomasa di hili.  
NFM pepper

104. Intuduan  
    tuwak nan  
    OF, taught he, me NFM  
    'John taught me Math.'

Juan ni Math.  
John NFM

104a. Neituduan  
    nak ni Math.  
    Pass, taught I NFM  
    'I was taught Math.'

But this would be to miss a generalization since the rule applies to whatever can be a direct object, either inherently or by advancement, and it applies without regard to semantic role relations.

FOOTNOTES

1. The people who speak Keley-i are Ifugao and they distinguish themselves from neighboring groups of Ifugao by means of the geographic
designation, Antipolo Ifugao. For technical linguistic and anthropological purposes we refer to the language as Keley-i Kallahan. The language is spoken by approximately 5000 people in Ifugao Province south of Kiangan.

We wish to express our appreciation to our language assistant, Alberto Maddawat, who is a native speaker of Keley-i. His intuitions about the language are in large part responsible for the naturalness of the examples cited.

Also, we want to thank Jerry Morgan who introduced the first author to relational grammar theory and assisted her in her early attempts to apply the theory to Keley-i data.

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Thomas (this volume) clearly states the terminological problems which exist, and indicates that differences in usage have resulted in a terminological confusion that is more far reaching than is recognized.

Another factor involved in focus assignment in Keley-i is prefocus. We distinguish a prefocus, or a favorite relationship between a verb and a particular noun phrase. The prefocused item for verbs is best identified in terms of grammatical relations since the favorite relationship of intransitive verbs is the subject relation, that of transitive verbs is the object relation. A direct object may have the semantic role of conveyed item, patient or site, and these prefocused semantic roles may be distinguished by the morphology in interrogative, imperative and topicalization constructions. The semantic roles of subject are not distinguished by préfocus. Although semantic relations, and the préfocus of a given verb place constraints on focus assignment, the factor which casts the deciding vote as to which of the eligible noun phrases may undergo focus assignment is one that relates to the referential structure of discourse. For a discussion of préfocus in Blaan, see Rhea, 1972; for discussion of focus ranking in Tboli, see Porter (this volume).

There are extensive morphophonemic changes in Keley-i. The first author and Michael Kenstowicz described these changes from a generative viewpoint in a paper to appear in Southeast Asian Linguistic Studies.

Of course, we do realize that coreferentiality of the coalesced noun phrase is involved, but this is a separate constraint on the rule.

By arguing for formulating rules in terms of subject and objects we are not denying or dismissing lightly the fact that logical semantics and role relationships place definite and fairly obvious constraints on grammatical rules.
REFERENCES


Porter, Doris. 1977. Focus ranking in Tboli discourse. Studies in

