# The Noun Phrase Accessibility Hierarchy Reinterpreted: Subject Primacy or the Absolutive Hypothesis?

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# THE NOUN PHRASE ACCESSIBILITY HIERARCHY REINTERPRETED: SUBJECT PRIMACY OR THE ABSOLUTIVE HYPOTHESIS?

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The aim of this paper is to re-examine constraints on relative clause formation in languages of the world. The main tasks of the study are thus two-fold: to present a new formulation of one of the main constraints on relativization, and to challenge an assumption of the most robust typological interpretation of relative clause constraints to date—the Noun Phrase Accessibility Hierarchy.*

In one of the most influential works in the language universals literature, Keenan & Comrie 1977 introduced the Noun Phrase Accessibility Hierarchy, an implicational scale for the relativizability of different grammatical roles. According to this, all languages adhere to the following scale:

(1) SUBJECTS > DIRECT OBJECTS > INDIRECT OBJECTS > OBLIQUES > GENITIVES > OCOMPS

That is, all languages that have a relativizing strategy can relativize on subjects; all those which can relativize on direct objects can also relativize on subjects; all which can relativize on indirect objects can relativize on direct objects and subjects, and so on down the hierarchy (cf. Maxwell 1979, Comrie & Keenan 1979). Western Austronesian languages—including Tagalog, Toba Batak, and Malagasy—have been held up as evidence par excellence for this hierarchy, inasmuch as relativization is restricted to subjects in these languages.[1]

As support for the Accessibility Hierarchy, Keenan 1975 investigated the inherent 'naturalness' of subject relativization by examining the frequency of relative clauses along the hierarchy in a variety of written English texts. He found, indeed, that subject relatives were more common than direct object relatives, which were more common than obliques, etc. In addition he found that the ratio of subject to object relatives was correlated with the complexity of the text; a higher ratio (greater difference) was displayed in more simple texts, and a lower ratio (smaller difference) in more complex texts. Thus— even in a language like English, which grammatically allows relativization of all points along the scale—the Accessibility Hierarchy manifests itself statistically.[2]

[1] But see Cena 1975 for some interesting Tagalog counter-examples to the Accessibility Hierarchy.

[2] I will use the terms 'subject/object relative' to refer to the grammatical role of the NP in the relative clause. Thus a 'subject relative' is a construction in which the NP in question holds the role of subject in the relative clause, as in *I have a cat that's really pretty.*

It is not my goal in this paper to question the whole of the implicational scale presented above, or to criticize Keenan's text-based study of English relatives. What I would like to accomplish is a re-examination of the far-left side of the scale. In particular, I would like to challenge the belief that the grammatical role of subject enjoys some sort of cognitive prominence unattained by other grammatical roles—what I call the 'subject primacy' hypothesis. The findings which form the bulk of this paper are part of a larger project on relative clauses in conversational English. I would also like to offer a new interpretation of part of the Accessibility Hierarchy, called the Absolute Hypothesis, which rests crucially on the Preferred Argument Structure Hypothesis of Du Bois 1981a,b, 1985, 1987.

### The distinction between subject and object relatives

**1.1.** DATA FROM ENGLISH CONVERSATIONS. The English data for this study are drawn from naturally-occurring conversations among friends and/or relatives. Some of the conversations are face-to-face, others over the phone; some are two-party, and others are multi-party.[3] All the relative clauses in these transcripts were examined, except for headless relatives.

Examination of the conversational data provides a new perspective on relative clauses, in particular on object relatives. In contrast to Keenan's findings for written English, where subject relatives consistently outnumbered object relatives, the ratio of subject to object relatives in my data is exactly 1:1. That is, in my corpus of over 100 relative clauses, drawn from hundreds of pages of conversation, there are exactly the same number of subject relatives as object relatives (46 of each). This finding appears to contradict Keenan's 1975 conclusions at two levels: first, if subjects are inherently easier to process, there should always be a preponderance of subject relatives, even in conversation; and second, if simple texts have the highest ratio of subject to object relatives, then conversation should have the highest ratio of all, being syntactically and structurally simpler than Keenan's written texts (Rubin 1978).

We are thus left with a disconcerting problem. My data show that subjects outnumber objects by a ratio of 3:1 outside of relative clauses (a random sampling of clauses showed 720 subjects to 237 objects); but within relatives, objects are on a par with subjects—i.e., there are essentially equal numbers of subject relatives and object relatives in the corpus. This fact challenges the 'subject primacy' hypothesis, and suggests that the distribution of subject vs. object relatives has more to do with the various functions of each of those

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[3] These transcripts were graciously provided by Manny Schegloff. The notational conventions used are as follows:

  hh    inbreath
  //    overlap: two people speak simultaneously
  :     lengthening of sound
  ( )   micropause
  (0.2) length of silence, in tenths of seconds
  =     latching: one speaker starts talking exactly as another has just finished (no silence in
         between)

kinds of clauses, and with the general treatment of information flow in English, than with cognitive primacy.

In particular, I claim that the unexpectedly high frequency of object relatives stems from the following three facts, to be discussed further below.

(a) Patient relatives serve important discourse functions.[4]

(b) Subject (in general) is associated with pronoun-agent rather than full NP patient.

(c) There are no instances of agented passives in relative clauses in my corpus.

In English conversation, object relatives carry several critical discourse functions which make them as indispensable as subject relatives. To see this point, it may help to provide a brief sketch of the functions and forms of subject and object relatives in this corpus.[5]

The relative clauses which one finds in English conversation are quite different from those usually displayed in the linguistic literature. The head of the relative is often non-definite (*something, anyone, a guy* etc.); and object relatives, rather than appearing with full NP subjects, occur almost exclusively with pronoun subjects:

(2) *Have you heard about the orgy we had the other night?* (SN4:5)

By contrast, the kinds of relative clauses cited in many studies represent what is often thought to be the central function of relative clauses—identifying a previously introduced referent:[6]

(3) *I saw the dog that bit the cat.* (invented example)

In fact, I found only a few instances of such identifying relative clauses; and none of them had the structure of the sentence in ex. 3—definite head noun, transitive relative clause, and definite object.

The frequency distribution of subject and object relatives is sketched in Table 1.[7] Subject relatives make up 45% of the relative clauses in the conversational material. Of these subject relatives, 78% (36/46) are intransitive subjects—hereafter 'S-relatives', using Dixon's (1979) case role. A smaller group are transitive agent relatives—hereafter 'A-relatives'.

|  | N |
|---|---|
| Object relatives | 46 |
| Subject relatives | |
| S-relatives | 36 |
| A-relatives | 10 |
| TOTAL | 92 |

TABLE 1. Frequency of subject and object relatives.

[4] I use the term PATIENT to refer to the semantic role associated with what some would call the 'recipient' of the action of a transitive verb. OBJECT is used to refer to a particular grammatical role. Similarly, AGENT is a semantic role associated with the 'doer' of an action, while SUBJECT is a grammatical role.

[5] A more detailed description of the relative clauses in this corpus is being prepared in collaboration with Sandra Thompson.

[6] But see Schachter 1973 for a critique.

[7] For the purposes of this study, I have omitted the figures for prepositional and other oblique relative clauses.

Many of the S-relatives seem to have a descriptive function; i.e., they provide a characterization of the thing named by the head noun:

(4) *She's married to this guy who's really quiet.* (HG:12)

In keeping with their function of characterization, S-relatives are highly stative: 43% (15/36) of the S-relatives employ *be* as their main verb. The head noun tends to be non-definite (68%); and one often finds the pattern of a referent being introduced for the first time, with some kind of characterization (cf. Du Bois 1980):[8]

(5) *and he's got a spring that comes way up* (AD:30)
(6) *there's twins that– twins that live over there* (AD:15–16)

I found only 10 instances of A-relatives in the transcripts. These rare clauses seem to have the interesting function of linking the current utterance to the preceding discourse, using the object of the relative clause as the bridge:

(7) B. *Did they get rid of Kuleznik yet?*
    A. *No in fact I know somebody who has her now.* (TG:6)
(8) A. *Those were the days when I used to buy six pairs of shoes*
       (0.7) *every six months.*
       ⋮
    A. *And incidentally what kind of a home did I come from.*
       (0.4)
    D. *Surely not from a:: mansion with uh sixty-five different uh*
    A. *That has // nothing to do with it.*
    D. *m– s– manservants and mai::ds. and*
    A. *Those are the only people that pay u– have– buy six pairs of shoes?* (Party II:5)

The head NP's for these A-relatives fall into two classes: non-definites (either as main-clause objects or in existentials) or predicate nominals. Ex. 7 illustrates the first class, and 8 illustrates the second.

Patient relatives, hereafter P-relatives, comprise 45% of the relatives in the corpus; these perform a set of functions which complement those performed by subject relatives. One of their primary functions in my corpus is what I will call ANCHORING, a term based on Prince's (1981) taxonomy of given and new information. She defines it as follows (236): 'A discourse entity is anchored if the NP representing it is LINKED, by means of another NP, or "Anchor", properly contained in it, to some other discourse entity.' The entity serving as anchor is never brand-new information.

P-relatives, in the form of object relatives, can serve to anchor, or show the contextual relevance of, what is mentioned in the head NP. Examples of this anchoring function are:

(9) B. *This man who I have for linguistics is really too much.* (TG:8)

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[8] In some cases, this format is used for story prefaces (Schegloff 1981): the characterization displays to the recipient what kind of story is about to be offered (funny, sad, wild) so the recipient can monitor the story for signs of that characterization and respond appropriately (laugh, cry, offer sympathy etc.)

(10) M. *So you dating Keith?*
　　 K. *He's a friend.*
　　 M. *What about that girl he used to go with for so long?* (SN4:29)

In 9, the referent described by *this man* is anchored by the referent mentioned
as *I*. In 10, *that girl* is anchored by *he* (i.e. Keith, who has just been introduced).

P-relatives of this sort (object relatives) are perfectly fitted to the task of
anchoring. They show their relevance to the context in a variety of ways. They
tend overwhelmingly to take pronoun subjects, usually 1st or 2nd person, but
occasionally 3rd person; these, by their very pronominal status, claim relevance
to something in the immediate context. They also tend to use a very low-
transitivity, semantically bleached verb as the relative verb (see Lambrecht
1987 for discussion of a similar phenomenon in French). In 75% of the cases
where the head noun is the subject of the main clause and object of the relative
clause (as in 9 above), *have* is the relative verb. *Have* in these situations is
ideal for indicating a highly non-specific relation between an already known
anchor (usually the speaker or the recipient) and a new referent.

While there are potentially an infinite number of ways to formulate reference
to something, the exact formulation chosen is inextricably tied to the immediate
context of utterance (Schegloff 1972). In these object relatives, the reference
is carefully formulated to include a display of how the something being ref-
erenced is 'related to us and what we have been talking about.'

We have now seen that P-relatives perform an important communicative role
in conversation. But how does this fact lead to the prevalence of object relatives
noted earlier? The three-way association in transitive clauses in English—be-
tween agent, pronoun, and subject, on the one hand, and patient, full NP, and
object, on the other—has been appreciated for some time (e.g. Givón 1979);
but the implications of these constellations for grammatical systems have only
recently been articulated, notably by Du Bois (but cf. Duranti & Ochs 1983).
According to him, languages have a Preferred Argument Structure, within
which only one argument per clause is a full NP. In a transitive clause, this
argument tends to be the P; in an intransitive clause, it is of course the S.[9]
A's are overwhelmingly pronominal (or zero). English, as a nominative/ac-
cusative language, codes A and S alike as subjects; we therefore find a strong
association in transitive clauses between {subject and agent-pronoun} and {ob-
ject and full NP patient}. Since agented passives are almost non-existent in
English conversation (Thompson 1987), these associations are extremely
stable.

Furthermore, these constellations are not disrupted in relative clauses. As
we have seen, English tends to relativize on S and P, with predictable gram-
matical results: S-relatives yield subject relatives, and P-relatives yield object
relatives, following our associations of {P, full NP and object} and {A, pronoun
and subject}.

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[9] Durie 1987 argues cogently that S is not a unified category; rather, some single arguments are
treated like A's, and some like P's. For the purposes of the present study, I have chosen to accept
a category of S, even though future research will undoubtedly suggest that further refinement is
necessary.

We can now see that in English, cognitive salience aside, it is the critical functions of patient relatives,[10] along with the association of patient with object, that ensure the comparatively large number of object relatives in conversational discourse. I return to this point in §2.

It is important to acknowledge that Keenan & Comrie examined relative clauses with definite heads only. In the present study, I have included relatives with non-definite heads, since I believe these are legitimate members of the class we call relative clauses.[11] By including non-definite head relatives, and by looking at relatives in natural conversation, I hope to have provided a view of what relative clauses look like in everyday language.

**1.2.** PREDOMINANCE OF S- AND P-RELATIVES VS. A-RELATIVES. In the preceding section, we noted an unexpected fact: the predominance of S- and P-relatives over A-relatives in spontaneous English conversations. This finding runs counter to the predictions of the Accessibility Hierarchy, and is in need of explanation.

The explanation which I will offer here rests on the functional nature of relative clauses. In my research it seems clear that relative clauses serve to situate the referent that is being introduced as a relevant part of the on-going discourse; in a sense, they justify the introduction of the referent in the first place. Consider the following utterance:

(11) B.  *I didn't notice it but there's <u>a woman in my class who's a nurse</u>*
            *<u>and,  ·hh she said to me she said did you notice he has a</u>*
            *<u>ha:ndicap and I said wha:t. You know I said I don't see anything</u>*
            *<u>wrong with him, she says his ha:nds.</u>* (TG:8)

Here the woman's 'nurseness' is critical to her relevance to the following story. It is through her training as a nurse that she is presumably more attuned to physical handicaps—an attunement which the teller describes herself as lacking. If the teller had introduced this woman in some other way, e.g. as 'a tall woman', the relevance of the character to the preceding discourse and to the up-coming story would have been opaque.

A somewhat different example follows:

(12) H.  *and then the one that's bigoted, ·hhh she's*
            *married to <u>this guy who's, ( ) really quiet and</u>*
            *<u>inhibited and // it turns out</u>* ⎤
      N.  <u>*Uh hu:h*</u>                        ⎟ =
      H.  *=like she's frigid and everything* (HG:12)

In this passage, H is telling N the story of *The dark at the top of the stairs*, the theatrical version of which they are both going to see the evening of the phone call. H introduces her narration by saying that the story is 'just like the

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psychological background behind all these different people in this family'. As she outlines the story for N, she provides psychological commentary on each character. Prior to the fragment given above, H introduced an aunt in the following way: *the mother's ·hh sister is a real bigot.* But given the psychological framework of the story, it is not enough to say that someone is a bigot; we have to know the psychological reasons that lie behind her bigotry. H provides these reasons in the fragment I have presented above: this aunt is in a bad marriage with a man who is passive and inhibited—correlated no doubt with her own physical and mental frigidity. Note that it is not the fact that this aunt is married that is of interest to the story: it is the qualities of the person to whom she is married, and the consequences of these qualities for her own psychological problems (which include being bigoted). The husband is introduced en passant, as further psychological background for the aunt. It is exactly his characteristics that make him relevant here, and these characteristics are realized in a relative clause.

It follows, from this function of relative clauses, that such clauses will be structured to maximize the extent to which they situate a referent in the ongoing discourse. This appears to be accomplished in two ways:

(a) The relative clause provides a stative description of some aspect of the referent that situates it, and justifies its introduction.

(b) The relative clause provides a link via a referent that has already been introduced into the discourse.

Strategy (a) usually utilizes an intransitive relative clause structure, with the NP in question as subject: hence the large proportion of S-relatives. Examples of this structure are:

(13)  *she's married to this guy who's really quiet*
      *and he's got– a spring that comes up*
      *hey I got something that's wild*
      *and she hates anyone who isn't a Catholic*

As we saw in §1.1, Strategy (b) typically utilizes a transitive relative clause structure (exx. 9–10 illustrate this). But why does this produce a predominance of P-relatives rather than A-relatives?

Speakers of English choose lexical and syntactic patterns which allow the relativized-on NP to be anchored by another argument within the relative clause. A's tend not to be relativized on: their preferred status is WITHIN the relative clause—as pronoun subjects, serving as anchors. This means that P-relatives will by far predominate over A-relatives, because the other NP in a P-relative (i.e. the A) is a better anchor than is the other NP in an A-relative (i.e. the P). Recall, in fact, that A-relatives in my corpus were chosen only when the P argument (or the whole VP, as in 8, *buy shoes*) served the function of linking the relativized-on NP to the preceding discourse. But P's very rarely represent given information, and are therefore unable to serve as anchors to the preceding discourse; hence A-relatives will tend also to be fairly rare.

Support for the proposed association between A as good anchor and P as poor anchor (outside of relative clauses) is given below in Table 2. This table

provides raw figures and percentages which suggest correlations between A and pronoun (good anchor) and P and full NP (less likely to be good anchor). It is clear from these figures that A is much more likely to be a good anchor than P: A's are nearly four times more likely than P's to be pronominal.

|   | PRONOUN | FULL NP |
|---|---------|---------|
| A | 177 (87%) | 26 (13%) |
| P | 40 (23%) | 136 (77%) |

TABLE 2. Distribution over anaphoric devices for A and P arguments in transitive main clauses.

We would expect, given the hypothesized role of A's in object relatives, that it would be even more likely for A's in object relatives to be pronominal than for A's outside of relative clauses. Table 3 presents the figures for rate of pronominalization within object relative clauses and for transitive main-clause subjects.

|   | PRONOUN | FULL NP |
|---|---------|---------|
| A in object relative | 43 (93%) | 3 (7%) |
| Transitive main clause subject | 177 (87%) | 23 (13%) |

TABLE 3. Distribution over anaphoric devices for A's in object relative clauses and transitive main clauses.

There is a slight tendency, as predicted, towards higher pronominalization of A's in object relatives than outside relatives; however, the difference is not statistically significant. But it should be kept in mind, when considering these figures, that the collection of relative clauses is of small size, and the level of pronominalization in main clauses is already extremely high. Hence we are very probably seeing a ceiling effect: fully 100% of the A's in object relatives would have to be pronominal in order to reach statistical significance.

To see if the effect would be more visible in a text-type in which pronominalization and reference to people are somewhat less rampant than they are in conversation, I decided to examine A's in an issue of *Consumer Reports*. Object relatives had already been collected from one issue of *CR* for a larger study of relative clauses. This issue contained discussions of personal computers, wood stoves, loans, and a variety of other non-human products. The figures for the comparison of A's in object relatives and in transitive main clauses from this issue are given in Table 4.

|   | PRONOUN | FULL NP |
|---|---------|---------|
| A in object relative | 20 (91%) | 2 (9%) |
| Transitive main clause subject | 72 (35%) | 132 (65%) |

TABLE 4. Distribution over anaphoric devices for subjects of object relative clauses and of transitive main clauses.

In this text-type it seems clear, with the ceiling effect and other potentially confounding factors minimized, that object-relative-A's serve an anchoring role not fully shared by main-clause transitive subjects ($\chi^2 = 28.47$, $p < .001$). Although these data are not from conversation, I believe that they provide indirect support for the hypothesis proposed above that (in conversation) the

A in a two-argument relative clause serves to anchor the referent which is introduced via the relative clause.

Further, if we examine P's in and out of relative clauses, the proposed function of P as anchor in A-relatives also receives support. Recall that I postulated above that the P in an A-relative serves as a link to the preceding discourse (or to the non-discourse context). If this is true, we should expect that P's in A-relative clauses will exhibit a higher rate of definiteness than their counterparts outside of relative clauses. The relevant figures are given in Table 5.

|  | DEFINITE | NON-DEFINITE |
|---|---|---|
| P in A-relative | 7 (70%) | 3 (30%) |
| Object in main clause | 79 (45%) | 97 (55%) |

TABLE 5. Definiteness of P's in A-relatives and in transitive main clauses.

Note that, while the difference is not quite significant at the 0.05 level ($z$ = 1.47, p-value is .07), the trend is clearly in the predicted direction—and would most likely have been significant with a larger collection of A-relatives. The P of an A-relative is much more likely to be definite than is a main-clause object; this is indicative of the greater prominence of the anchoring role in the former than in the latter.

Thus, while the cognitive primacy of grammatical subjects undoubtedly contributes to the special status of subjects in various linguistic processes (especially in languages like English), it is the functional role of relative clauses— and the interaction of this functional role with the semantic cases S and P— that contribute to the unique behavior of relative clauses cross-linguistically.

## THE ABSOLUTE HYPOTHESIS AND CONSTRAINTS ON RELATIVIZATION

**2.** On the basis of the data above, I would like to put forward a reinterpretation of the left side of the Accessibility Hierarchy. According to this, which I call the Absolute Hypothesis, every language which has a strategy for relativizing must be able to relativize on at least S and P. Note that this formulation of the constraint differs from that of Keenan & Comrie in that S and P cut across their categories of subject and object, thereby disturbing the two leftmost points on the Hierarchy.

The Absolute Hypothesis nicely accounts for several of the critical phenomena brought to light by the Accessibility Hierarchy. First, it explains the very interesting prediction of the Accessibility Hierarchy that there will be no languages which relativize on direct objects but not on subjects. In the Accessibility Hierarchy framework, this fact is accounted for with the 'subject primacy' hypothesis. In the current study, this constraint is easily explained without recourse to the notion of inherent cognitive primacy.

To see this, we must remember that P- and S-relatives make up the overwhelming majority of relative clauses (roughly 90%). In a language with the category of direct object, S and A will be treated as a class apart from P (in other words, a nominative/accusative pattern). If such a language were to restrict relativization to objects, then S-relatives would have no natural way of being represented—since S and P in such a language do not form a category—

and approximately half of the relatives expressed in a language like English would thus not be possible. A nominative/accusative language, then, in order to allow both S- and P-relatives, must allow relativization on both subject and direct object.

In addition, we can now understand why Dyirbal, at least according to Dixon 1972,[12] can relativize on S's and P's, without also having to relativize on A's. All languages must be able to relativize on S and P at least: for nominative/ accusative languages, this means relativizing on S, A, and P. But for Dyirbal, a wonderfully ergative language (again, at least as analysed by Dixon), this means relativizing on only S and P.

Dyirbal is not alone in this restriction; Larsen & Norman 1979 report a similar phenomenon for Mayan languages (see also Smith-Stark 1976). According to their study, 'ergative subjects' cannot be relativized in Mayan. They comment on the problems that these findings pose for the NP Accessibility Hierarchy:

> '... restrictions on the extractability of ergatives would appear to run counter to universal tendencies. Recent investigations have revealed that processes such as relative clause formation are sensitive to a hierarchy of grammatical relations ... Note that the Accessibility Hierarchy would not lead us to expect that there would be languages where not all subjects were equally accessible, or where some subjects were less accessible than direct objects. Yet precisely this is the case in Mayan and Dyirbal: transitive subjects are less accessible to relativization than either intransitive subjects or direct objects.' (359–60).

The re-interpretation offered here thus seems to provide some new insights into the arena of constraints on relativization.[13]

But what of the psychological evidence that Keenan & Comrie 1977 present in support of the 'subject primacy' hypothesis? Do we have any reason to suppose that this experimental evidence—which suggests that people respond more quickly and accurately to subject relatives than to object relatives— contradicts the Absolute Hypothesis? My answer is, of course, no.

The prevalence and apparent naturalness of object relatives in my English data results from the KIND of object relatives these were: they tended to contain pronominal subjects and often semantically weak verbs (like *have*), and performed the role of anchoring. The object relatives that were presented to the experimental subjects, by contrast, were not of the kind I found in conversation; they were, in fact, the prototypical two full-NP relatives that occur in the linguistic literature (e.g. *the ball that the cat chased*), and hence not the kind of object relatives found in my corpus. The experimental findings thus do not transfer to the conversational data.

### THE WESTERN AUSTRONESIAN LANGUAGES

**3.1.** SUBJECTS, AGENTS, AND RELATIVES IN TAGALOG. The Absolute Hypothesis clearly makes interesting and correct predictions about the nature of relativization in nominative/accusative languages and in ergative languages. In

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[12] Keenan & Comrie 1977 suggest that another analysis of Dyirbal is possible.

[13] The use of the term ergative subject here may be somewhat problematic, since it is not at all clear that ergative NP's should be treated as subjects. Nonetheless, Norman & Larsen raise a very important point concerning the status of the A in relativization in ergative languages.

this section I would like to demonstrate how it illuminates relativization in Western Austronesian languages, a family where relative clause patterns differ from those of any other.[14] In leading up to the discussion of relative clause constraints in these languages, I explore the basic grammatical roles they exhibit.

As early as 1976, the notion of subject as a descriptive category was called into question for the Philippine languages. Schachter 1976 points out that, in languages which utilize traditional grammatical roles, subject is the prototypical realization for agents and topics; in the Philippine languages, however, agents are rarely 'subjects' (i.e. cross-indexed on the verb).[15]

More recently, it has been found that the 'subject' NP in Tagalog is, for the most part, not the most topical referent in the clause. In a text count of clauses in some Tagalog oral narratives, I found that A's were significantly more topical than P's, even though the P's were coded as 'subject'. The relevant figures of this count, using Givón's 1983 measure of look-back (distance in clauses to most recent previous mention of relevant referent) are given in Table 6. These figures clearly indicate that, in a two-argument clause, the agent is significantly more topical than the so-called subject.[16]

|         | REFERENTIAL DISTANCE<br>(in clauses) |
|---------|--------------------------------------|
| Agent   | 2.88                                 |
| Patient | 10.01                                |

TABLE 6. Referential distance for agents and patients in canonical transitive clauses.

The following passage illustrates the high topicality of agents (indicated in boldface).

(14) a. *Kanya    ang ginawa    **niya**    ay*
         therefore TRG what-done (by)him INV

   b. *umalis    **siya** sa  ilalim ng  pulpit,*
         AT-come  he    OBL under LNK pulpit

   c. *h-in-arap **niya**    ang pare,*
         PT-face   (by)him TRG priest

   d. *at    s-in-abi **niya** ...*
         and PT-say  (by)him
              'Therefore, what he did was to come out from under the pulpit, face the priest and say ...'

Compare this pattern with those for English—where, as we have seen, the following clustering emerges:

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[14] The Tagalog data used in this study come from Bloomfield's Tagalog texts (1917), a set of orally produced narratives (mostly of a traditional nature). The Toba Batak examples are taken from orally produced narratives collected as part of a field methods class at UCLA; see Schachter 1984 for details.

[15] Keenan & Comrie 1977 acknowledge that, for this reason, Tagalog could represent a problem for the 'subject'-only position on the Hierarchy.

[16] These figures are taken from Cooreman et al. 1984. The higher the number, the lower the topicality of the referent.

(15) subject A pronoun
     object P full NP
     subject S full NP

In Tagalog, by contrast, P and S are still largely full NP's; but it is the P of a transitive clause, rather than the A, that is cross-indexed on the verb. The A, although very often a pronoun, will be treated as something like an oblique. Following recent work on Tagalog and Toba Batak, I use the neutral terms TRIGGER and NON-TRIGGER for what have previously been called subject (or focus) and oblique, respectively (see Schachter 1984 for a discussion of these terms):

(16) non-trigger A pronoun
     trigger P full NP
     trigger S full NP

An example of this pattern follows:

(17) *s-in-ipa niya    ang kuba*
     PT-kick (by)him TRG hunchback
       'He kicked the hunchback (the hunchback was kicked by him)'

Note that this sentence is best translated into English with an active sentence; while it may share some of the structural properties of the English passive, it does not share the functions of that passive (Cooreman et al. 1984). The same principle is illustrated by 14c–d above.

As predicted by the Preferred Argument Structure hypothesis, the anaphoric realization of the roles A, P, and S remains constant across these two languages, but the grammatical marking of them is quite different.

**3.2.** BATAK is extremely similar to Tagalog (and apparently Malagasy, see Keenan 1976) in preferring the so-called passive for cases where the patient is definite and/or specific, and the so-called active for those fairly rare cases where the patient is non-referential and/or non-specific. In Batak, as in Tagalog, most transitive clauses thus code patient as trigger—i.e., the patient is cross-indexed on the verb—with pronominal non-trigger agent, as follows (PT = patient trigger, FOC = focus particle):

(18) *Tor di-tangkup **imana**   ma tali on.*
     then PT-catch  (by)him FOC rope this
       'Then he catches this rope.'

The typical Batak treatment of highly topical referents is further illustrated below (note the similarities to the Tagalog passage given earlier):

(19) a. *Muruk ma antong sipartari-gepeng on.*
       angry FOC FOC   horse-dancer   this
    b. *Tor di-tait imana  ma antong rukkungna i.*
       then PT-pull (by)him FOC FOC   neck.his   ART
         'This horse dancer got angry. Then he pulled the guy's neck (i.e. another guy's neck).'

Batak lacks the extremely complex semantic/syntactic verb morphology of Tagalog; but with regard to the prototypical associations between semantic

case role and grammatical role, it is very much like what I have already described for Tagalog. Thus the languages which exhibit something like a subject-only constraint on relativization also exhibit somewhat unusual relationships between semantic and grammatical roles.

**3.3.** SOME COMPARISONS. Although Tagalog and Batak are distinct from English in their syntactic treatment of various semantic roles, they do share with English a high rate of P-relatives. But while English associates P with object. Tagalog and Batak associate it with trigger status, even outside of relative clauses.

What is the consequence of these facts for relative clauses? We know that S-relatives will have to appear as S-trigger relatives, since there is only one argument available for trigger status. Now, if there is a high ratio of P-relatives (and a very small percentage of A-relatives), and if patients are associated with trigger status while (pronominal) agents are associated with non-trigger status, then—just from what we've already seen of Tagalog and Batak structure—we would expect P-relatives to be realized in patient-trigger form. Of course, it is OBLIGATORY to have the patient as trigger in this case; but the point remains that, without knowing this absolute restriction on relative clause formation, we could have predicted something like it on the basis of the statistical tendency, exhibited outside of relative clauses, to associate {patient, full NP, trigger} and {agent, pronoun, non-trigger}.

My claim here is thus that the trigger-only constraint on relative clauses is not an odd fact about Tagalog or Batak: it follows from constraints which operate throughout these languages, having to do with the functional structure of discourse, information flow, and the nature of anaphora.

We can thus see that the factors discussed here—the importance of S- and P-relatives and the special relationship in Western Austronesian languages between P and trigger—provide an interesting account for the phenomenon of the so-called subject-only constraint on relativization. Given the functions of A-, S-, and P-relatives, we know that P- and S-relatives will form the bulk of relatives. According to the Absolutive Hypothesis, a language with normal nominative/accusative patterning could not afford to restrict relativization to cross-indexed NP's (in this case, subjects). Such a restriction would basically limit relatives to S- and A-relatives—in most nominative/accusative languages, the passive is not widespread enough in spontaneous conversation to overcome this—and would exclude the critical group of P-relatives. A language like Tagalog, by contrast, associates P and S with trigger status, and therefore can afford to restrict relatives to triggers. We can thus predict that, if any other languages with a 'subject'-only constraint on relativization are found, they will be syntactically closer to Tagalog than to English.[17]

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[17] Givón (1979:156) offers another plausible account for the subject-only constraint: 'only languages in which promotion to subject results in coding the verb for the semantic case of the topic/subject will have the subject-only constraint in relativization.' A discussion of the possible relationships between Givón's hypothesis and the one offered here is beyond the scope of this paper.

CONCLUSION

**3.** The aim of this paper has been to re-examine cross-linguistic constraints on relative clause formation from a discourse perspective; in so doing, I have postulated the Absolutive Hypothesis, which states that a language must be able to relativize on S and P, if it has a strategy for relativization at all. The reasons for this constraint on relativization were found to arise from constraints on conversationally appropriate strategies for introducing referents into the discourse.

Moreover, I argue that the Absolutive Hypothesis challenges certain assumptions underlying the Keenan–Comrie NP Accessibility Hierarchy. In particular, the assumption that 'subjects' (S and A) are most easily relativized-on because of a special cognitive status is challenged on two counts: (a) it seems to be the category ABSOLUTIVE, rather than SUBJECT, which occupies the leftmost position on the accessibility hierarchy; and (b) it is the discourse function of S- and P-relatives, rather than a special cognitive status, which gives them prominence in languages across the world.

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