1. Ergativity, Syntactic Typology and Universal Grammar: Some past and present viewpoints

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Liegt die Sache doch auch nicht gerade auf der Oberfläche.
F. N. Finck, 1907 [27]: 230

The purpose of this introductory chapter is a modest one, viz. to offer a few considerations, more speculative than data-oriented, on semantic and pragmatic determinants of central grammatical relations such as subject and object, with the intention of supporting the traditional, but traditionally controversial view that ergativity, one particular type of relational organization, ultimately has to be accounted for in semantic and pragmatic rather than superficial morpho-syntactic terms. As a by-product, these reflections are intended to encourage a revival of "ethno-psychological speculation", some 60 years after Edward Sapir's verdict, on the occasion of his penetrating review of Uhlenbeck, 1916 [659], that such speculations, formerly quite popular, were premature. This chapter thus does not provide a comprehensive introduction to all aspects of ergativity vis-à-vis current theories of grammatical relations—this task is admirably fulfilled by two recent papers (Comrie, 1978 [18], Dixon, 1979 [25]); it does, however, touch upon some of the major problems in this area, definitional and other, with an emphasis on typological similarity and contrast. Secondly, there will be no attempt to recount the entire history of ergativity studies—such can again be found elsewhere;[1] some attention will be focused, however, on some influential arguments intended to refute earlier speculations about

semantic-pragmatic and ethnopsychological determinants of ergativity, which, I contend, were not entirely successful. And thirdly, I do not wish to summarize the results of the present volume—although these introductory remarks obviously reflect, explicitly or implicitly, what in my opinion are significant implications of individual contributions.

Although the enormous variety of previous and contemporary efforts at conceptual clarification could invite oversimplification and, perhaps, trivialization, I think one can, with some justification, distinguish essentially two different approaches to ergativity, the paradigmatic-identificational and the syntagmatic-constructional.

According to an increasingly popular paradigmatic-identificational definition ergative (-absolutive) and (nominative-) accusative alignment can be distinguished as follows;

(1) a. A grammatical pattern or process shows ergative alignment if it identifies intransitive subjects (S_i) and transitive direct objects (dO) as opposed to transitive subjects (S_t).
b. It shows accusative alignment if it identifies S_i and S_t as opposed to dO.

Further typological configurations can easily be defined on the same model. More important than languages that allegedly have maximum relational differentiation ($S_i \neq dO \neq S_t$) are those with variable alignment of S_i ($S_i = dO$ or $S_i = S_t$) depending on semantic considerations such as dynamic *vs* static one-place verb or agentive *vs* non-agentive actant of a one-place verb.[2] It has been regarded as an advantage of this framework of paradigmatic identifications that it can be rationalized in functional terms (cf. Comrie, 1975 [15], Bechert, this volume), which, for example, exclude an *a priori* possible $S_i = dO$ identification.

It has long been recognized that different grammatical processes and patterns (such as case marking, verb agreement/cross-reference, perhaps constituent order) can reflect the two identificational alignments in (1), and also that different processes and patterns within one and the same language need not necessarily harmonize as to their alignment,[3] which throws doubt upon a global concept of "ergative language". There is a considerable variety of parameters determining splits between ergative and accusative alignment within a single language (see Dixon, 1979 [25] §3 for a summary of most of them and also Trask, this volume). Such splits may occur within systems of relational coding morphology (e.g. nominal case marking *vs* verbal agreement/cross-reference, as in Eskimo, Chukchee or Papuan languages; class *vs* person agreement, as in Caucasian languages or in Burushaski); between noun phrases of various semantic types, even within a single two-actant clause (e.g. highly agentive or animate *vs* less agentive/animate noun phrases, which

presumably accounts for splits between nouns and pronouns, as in Tangut or Papuan languages, or between 1st/2nd and 3rd, or 1st and 2nd/3rd person pronouns, as in many Australian, Caucasian or American Indian languages); between free and bound pronominal forms, as in some Australian languages; within tense, aspect and mood systems (e.g. imperfective *vs* perfective, present *vs* past, indicative *vs* imperative; it seems that in nearly all families of "ergative" languages, perhaps with the exception of Basque, pertinent examples can be found); and, finally, between different clause types (main *vs* subordinate, focused *vs* neutral, as in Mayan and perhaps a very few languages in Australia, America and the Ancient Near East). On the whole, "unrestricted formal ergative languages" (in the sense of Catford, 1976 [298]) appear to be the exception rather than the rule; in most cases ergativity is "functional" in so far as the choice between ergative or accusative alignment is contingent upon semantic-pragmatic or syntactic factors. And what is of particular importance, the choice of one or the other alignment within a split system is cross-linguistically anything but arbitrary; there are distinct affinities, for example, between nominal case-marking, less agentive/animate noun phrases, past tense, perfective aspect and ergativity on the one hand, and between verb agreement, highly agentive/animate noun phrases, present tense, imperfective aspect and accusativity on the other hand. A comparatively recent insight[4] is that grammatical rules other than those of relational encoding (e.g. identity deletions) may also have cross-linguistically variable alignment, and this recognition of a possibly "deeper" contrast between ergativity and accusativity in particular underlines an inherent weakness of the otherwise convenient definitions in (1).

If one wants to insist on the unity of the notion of subject irrespective of its occurrence in transitive or intransitive clauses, and if these identificational patterns were indeed to be regarded as decisive criteria for the homogeneity of grammatical relations,[5] (1a) could no longer be read as if based on translation equivalents biased in favour of the accusative alignment; the equivalent of an accusative-aligned subject behaves/encodes like or unlike the equivalent of an accusative-aligned dO, depending on its intransitive or transitive context. Instead, one would have to recognize that under the ergative alignment there are also no more than two different relations, and the one identified with S_i would have to be assigned subjecthood, given that S_i is a subject almost by default.[6] This consequence has not found unanimous approval; several attempts have been made recently to provide for two different relational frames of reference, each consisting of not more than two homogeneous relations—subject–object under the accusative alignment, and "agens-

patiens" (Bechert, this volume) or "ergative-absolutive" (Postal, 1977 [91]) under the ergative alignment—as simultaneous or alternative options made available to individual languages by universal grammar. It is not my intention to argue here that this move—if it is not purely terminological—begs important questions concerning the universal significance of the notion of subject; at least for the present purpose, I prefer to maintain the subject–object (-oblique) frame of reference as a typological invariant, for such grammatical systems that are in fact based on genuine grammatical relations, and now turn to the relationship between semantic and grammatical relations, since this is the point where the problems with definitions (1a and b) become more than terminological. If under the ergative alignment there is no subject in the sense that this notion has under the accusative alignment,[7] there might still exist a primary grammatical relation (Sasse, 1978 [97]) comparable to subject as to its primary syntactic status, but differing as to its semantic content. Such considerations are the point of departure of the syntagmatic-constructional approach.

The definitions (1a and b) presuppose that the translation equivalents of basic, unmarked transitive clauses under the ergative and the accusative alignment do not differ with respect to the mapping of semantic roles such as agent/patient (perhaps also experiencer/stimulus and possessor/possession—the presumably most common two-actant configurations) onto grammatical relations. Only if, on the model of the accusative alignment, the agent assumes the (primary) S_t relation, the patient the (secondary) dO relation, and the single actant of an intransitive clause, irrespective of its semantic role, the S_t relation, does the paradigmatic-identificational definition lead to the desired result. If, however, agents in two-actant clauses did not assume subject status—a possibility most strongly suggested by languages such as Dyirbal with allegedly deeper syntact ergativity—the alignment required by (1a) would no longer obtain in the intended manner; the non-agent S_t would then coincide with S_i, just as under the accusative alignment. Instead ergativity and accusativity would be distinguished on a syntagmatic-constructional basis, without the need of paradigmatic comparison of one- and two-actant constructions:

(2) a. Ergative construction:
transitive agent $\not\Rightarrow S_t$ (perhaps $\Rightarrow$ oblique relation, rather than dO)[8]
transitive patient $\Rightarrow S$ (perhaps S_t rather than S_i, if there is no dO)

b. Accusative construction:
transitive agent $\Rightarrow S_t$
transitive patient $\Rightarrow$ dO

The identificational patterns that (1a and b) are supposed to account for, moreover, are an automatic consequence of the different mappings in (2a and b). In so far as accusative-ergative splits such as those outlined above are of the either–or type, i.e. if an entire clause is construed either on the ergative or the accusative model (which is necessarily the case at least with tense, aspect, mood or clause-type splits), the syntagmatic-constructional approach does not meet with descriptive problems; it only predicts different role-relation matchings in the different tenses, aspects, moods or clause types. Both–and type splits, on the other hand, apparently are more difficult to deal with, since both the ergative and the accusative model show up simultaneously in a single clause. If a transitive clause in (Asiatic) Eskimo, for example, has ergative-style case marking and accusative-style verb agreement (cf. Vaxtin, this volume), the former rules would depend on a patient-S matching and the latter on an agent-S matching. Or analogously, in a basic transitive clause with a 1st person agent and a common noun patient in a language like Dyirbal (cf. Dixon, 1979 [25] §3.2), the agent is assigned nominative case according to the accusative model and the patient absolutive case according to the ergative model. In order to avoid the counterintuitive implication that a single transitive clause can have two different grammatical subjects at the same time, it would seem advisable to relativize this notion so that two noun phrases within a single clause may both be subjective, but to different degrees (cf. Keenan, 1976 [50], or Schuchardt, 1920:462: "jedes Objekt ist ein in den Schatten gerücktes Subjekt"), or to admit the concept of subjects (or primary grammatical relations) for various (morphological, syntactic, semantic-pragmatic) purposes, and to designate one of them—the agent if the construction is otherwise accusative, the patient if it is ergative—as basic.

The account in (2) in fact represents the most traditional approach to ergativity (cf. Gabelentz, 1860 [28]): the "passive" interpretation of the ergative construction—which at first sight appears quite plausible since (2a) exactly mirrors the role-relation matching of the marked passive voice corresponding to the basic accusative construction (2b).[9] More recently this view has been espoused again, especially with regard to languages such as Dyirbal and, more generally, as a diachronic explanation of ergative constructions.[10] Although this conception would seem to be a reasonable starting point for further empirical inquiry, we cannot yet begin to ask meaningful questions about the essence of ergativity if we do not first determine in some more detail the content of such (probably relative) notions as subject and object (or primary and secondary grammatical relation). In this context it is instructive to examine how Vogt, 1950 [123] attacked the passive interpretation of ergative

constructions as it can be found in Schuchardt's (1895 [396]) famous treatment of Georgian and other Caucasian languages. Schuchardt assumes different role-relation mappings in different Georgian tenses or aspects; in the present tense, the agent ("reales Subjekt") of two-place verbs is the grammatical subject ("ideales/psychologisches Subjekt") and is in the nominative (absolutive) case, whereas this same case encodes the patient ("reales Objekt") in the aorist. Schuchardt takes it for granted that case distinctions are congruent with relational distinctions (thus nominative = grammatical subject in the aorist), and since in many instances the verb stem, moreover, is morphologically simple in the aorist but has a "thematic" suffix in the present tense form, Schuchardt concludes that the Georgian verb is basically "passive".[11] (For a more detailed picture of Georgian see Boeder, this volume.) According to Vogt, Schuchardt's passive interpretation based on case-relation matchings is not wrong on empirical grounds; its fault is that it is arbitrary—but this, in Vogt's opinion, is characteristic of descriptive accounts of linguistic systems in general. If one takes verb agreement rather than case marking in Georgian as one's point of departure, the agent (and the single actant of intransitive verbs) can be designated as grammatical subject instead, since this role alone determines person and number agreement irrespective of tense, aspect or transitivity. (See Boeder, this volume.) According to this admittedly equally arbitrary view, case marking is not contingent on (and certainly not congruent with) grammatical relations alone, but also on verbal tense or aspect, which factor, however, is said not to affect the uniform matching of semantic roles and grammatical relations (agent ⇒ subject). Since Vogt's basic tenet is that "grammatical subject" is a purely formal notion, it is not surprising that non-uniqueness problems arise in both-and type splits of relational systems. His demonstration would, however, lose any force if it turned out that primary grammatical relations do in fact have distinctive, and not purely formal, properties, and that relational primacy can in fact be conditioned by such semantic factors as tense and aspect (as Schuchardt assumed without argument).

I only note in passing that ergativity has no doubt been approached from more angles than those outlined above. In particular, there also are theories of syntactic typology that make no direct reference to grammatical relations as such.[12] Trubetzkoy, 1939 [118], for example, holds that patient (dO) and transitive verb constitute a "syntagme détérminatif" in the accusative construction, whereas in the ergative construction the "syntagme détérminatif" consists of the agent and the transitive verb, the patient being a member of the "syntagme prédicatif", just like the agent in the accusative construction and the intransitive

actant in both systems. Accounts similar to this one (probably Tchekhoff's, this volume, notions of first and second modifier) to a certain extent resemble the syntagmatic-constructional approach in so far as they allow for variable role-relation (or role-function) mapping in different typological systems.

That ergative and accusative constructions differ as to which semantic role is chosen as (basic) grammatical subject is so far no more than a conjecture; but apart from conforming to a traditional position in typological research, it would also seem to be empirically testable, simply by determining the relational frames of the predicates of a language. It is true, there are some moot points concerning the identification of semantic roles to begin with; but in view of the limited inventory of roles initially required to cope with the most common one- and two-place predicates, these potential obstacles are perhaps negligible. What has to be realized, at any rate, is that there is not necessarily a one-to-one correspondence between ontological and linguistic categories. For example, such commercial or more abstract transactions as buying/selling and teaching/learning involve two participants that in the linguistic interpretation of such situations can both—although not simultaneously—assume an agentive role, which then determines the choice of the predicate (*buy* versus *sell*, *teach* versus *learn*). Analogously, one and the same situation can alternatively be perceived as involving an agent and a patient, and an experiencer and a stimulus (*look/watch* vs *see*; *frighten* often allows both interpretations). The different subjects of lexical converses of this kind thus do not correspond to opposite semantic roles, which alone would be crucial vis-à-vis the definition of ergative and accusative constructions in (2). What a survey of a language such as English shows is that the vast majority of predicates compatible with agent/patient frames not surprisingly conform to the accusative pattern. There are a number of verbs like *suffer* (versus *torment*), *receive* (versus *send*, *give*), *die* (*from*) (versus *kill*) that do imply an agent but nevertheless choose the opposite, patient, role as grammatical subject, in conformity with the ergative pattern (2a).[13] The situation in the other traditional "accusative" languages is on the whole quite similar (cf. Ancient Greek ergative verbs like *apothnḗskein hupó* "die from, be killed by" versus *apokteínein* "kill", *eũ akū́ein* "be praised" versus *eũ légein* "praise", *halō̃nai* "be captured" versus *haireĩn* "capture"; Latin *perire* "perish, be destroyed" versus *perdere* "destroy", *venire* "be for sale, be sold" versus *vendere* "sell", *vapulare* "be beaten"; German *er starb von meiner Hand* "he died from my hand, i.e. I killed him"); there may be certain differences, though, as to which particular predicates are the exceptions to the prevailing accusative type of sentence construction. On the assumption that

(2) in fact provides an adequate characterization of ergative and accusative constructions, these exceptional verbs in languages like English, Greek or Latin ought to be exactly analogous to the predominant pattern of an "ergative" language. A terminological remark is in order here. Up to now, we have been talking of **ergative** and **accusative constructions** (defined as in (2)); quite natural derivative notions then are **ergative/absolutive** and **nominative/accusative cases** and **(sets of) agreement/cross-reference markers**, and also **ergative** and **accusative predicates** (according to their occurrence in basic ergative or accusative constructions). A further derivative notion would be that of an **ergative** and an **accusative system**, based on the acknowledgment that one or the other construction is recognizably predominant within a language. A system can then be ergative or accusative to a degree, depending on how many predicates require an ergative or an accusative construction.[14]

So far I have avoided being explicit about semantic role-configurations other than agent-patient ones. It is not at all uncommon for relational rules of various languages (cf. Boeder, this volume, on Caucasian) to be sensitive to distinctions on the role level and to construe, for example, experiencer/stimulus predicates differently from both the ergative and the accusative pattern.[15] In semantically opaque relational systems (cf. Plank, 1978a), experiencer/stimulus and possessor/possession are sometimes said to be assimilated to agent/patient constructions (cf. Comrie, this volume), resulting in two opposite natural role classes agent-experiencer-possessor *vs* patient-stimulus-possession. Non-relational semantic features can indeed provide a rationale for this particular clustering. At least statistically, it would appear that agents rather than patients, experiencers rather than stimuli, and possessors rather than possessions are typically animate. If animacy or, equivalently, individuality or personal identity is a matter of degree, ranging from the speaker's own self over other human beings (with/without proper names), animate beings, (mobile/immobile) inanimate concrete entities to abstract concepts (possibly with language- or culture-specific differences in classification),[16] agents, experiencers and possessors are typically higher on this scale than their opposite numbers. The common denominator of subjectivization in different role configurations in accusative systems would thus be that high positions on the animacy scale have a clear privilege to subjecthood.[17] In English such verbs of experience and possession as *like* or *own/possess/have/lack* would then be instances of an (assimilated) accusative construction. Provided the present framework is basically correct, it could be extrapolated that subjectivization in ergative systems instead prefers the opposite end of the animacy scale.

Pertinent examples of assimilated ergative verbs of experience and possession are again available in English; *A crocodile frightened the field worker, Bright colours appeal to little children, This car belongs to Bloggs*, with non-subjects higher on the animacy scale than basic subjects, although without a noticeable passive-like touch characteristic of ergative verbs of activity.[18] The concept of an assimilation between different role structures formerly played a prominent role in syntactic typology; according to Finck, 1905 [588], 1907 [27], for example, a different direction of assimilation between predicates of activity and experience is what essentially differentiates languages such as Eskimo (agent/patient assimilated to experiencer/stimulus constructions) from languages such as German or English (assimilation the other way around). Notice, however, that this view differs from that presented above, in so far as different role configurations are designated as basic, as centres of attraction, in different typological systems, which then allowed Finck to speculate on different world-views and even material environmental conditions, depending on whether activities are linguistically represented on the model of experiences, or vice versa. What has constantly been ignored so far, however, is that the clustering assumed as semantically natural, viz. agent-experiencer-possessor *vs* patient-stimulus-possession, is not a universal theoretical necessity. On semantic grounds a grouping like agent-stimulus *vs* patient-experiencer ought to be possible as well; both agents and stimuli could be interpreted as in a way initiating events ("Ausgangspunkt", in Finck's terminology) that—in different ways, to be sure—affect patients and experiencers ("Ziel"). This then multiplies the possibilities of assimilating different role structures to each other, and predicates like *frighten* or *appeal* (*to*) can no longer be regarded as necessarily assimilated to the ergative construction; they might as well be assimilated to the accusative construction, on account of the initiating nature of their basic subjects. The question of what is the adequate empirical basis of syntactic groupings of different semantic role configurations in languages of various types cannot be settled here; I shall therefore concentrate on genuine agent/patient constructions.

There is another serious drawback to the above line of reasoning by extrapolation that ergative systems preferably subjectivize inanimates rather than non-agents. The ergative agent/patient exceptions within the English accusative system alluded to above (*Bloggs died from cancer/a rock falling on him* versus **Cancer/?A rock killed Bloggs, Bill suffered pain/from a headache*) on the contrary have patient subjects that rank higher on the animacy scale than the agents (or causes).[19] While this confirms the impression that inherent lexical features such as (degree of) animacy can

interfere with subject formation,[20] it also prevents one from jumping to conclusions concerning preferably non-animate rather than non-agent subjects in ergative systems. What is important, rather, is to clearly separate the different levels of semantic analysis that are potentially relevant for relational syntax. In addition to relatively abstract semantic role frames of individual predicates, there are, secondly, non-relational nominal categories that can be projected on a scale of animacy (or a similar dimension), which is quasi-implicationally linked with role structures (e.g. if a participant in an event is highly animate, it is *a priori* likelier to be an agent than a patient). Since semantic roles are not to be considered as completely discrete, invariant and atomic categories, there are, thirdly, more or less prototypical properties of a relational nature that may, but need not, be possessed by participants playing the roles of agent or patient.[21] Control, volition and primary responsibility, for example, are typical properties of agents rather than patients, experiencers, instruments or local settings; and patients rather than agents, instruments, etc. typically undergo a recognizable change of state and are most thoroughly involved in, or affected by, an event. The systematic status of these prototype properties has often been disregarded, especially by theories (such as Fillmorean case grammar) that presuppose that subject and object selection is an entirely role-dependent lexical matter. There are some indications, however, that their contribution to relational primacy, vis-à-vis that of semantic roles, is not altogether negligible. English again serves to illustrate this point, although the situation in other languages may well be slightly different.[22] Role-relation mappings do not suffice to account for the subjectivization pattern in (a–c):

a. *Bloggs put up the tent in about two minutes.*
b. *The tent was put up (by Bloggs) in about two minutes.*
c. *A good tent puts up in about two minutes/* . . . puts up in my backyard.*

Both (a) and (b) are unmarked as regards the association of roles and their prototypical properties, and the agent also outranks the patient on the animacy scale. In (c), on the other hand, there is a patient that possesses the typical agent property of primary responsibility, which apparently enables this role to assume subject status.[23] What is significant is the syntactic difference between (b) and (c): In a prototypical agent/patient configuration, the patient has no claim to basic subjecthood; it can only be subjectivized in the derived construction of the syntactically marked passive voice. However, the marked role-property association in (c) does not seem to correlate with syntactic markedness; (c) does not look like a derived construction with non-identical basic

and derived subject. This could perhaps be interpreted as suggesting that basic subject choice in English is contingent on prototype properties, within the role frame provided by the predicate, rather than on semantic roles themselves, which come into play only for the purpose of derived subjectivization. To return to typological issues, notice that the English non-passive patient-subject construction illustrated by (c) is reminiscent of an ergative construction as defined in (2a). If such variable interactions between semantic roles, their prototypical properties, and relational primacy are indeed an analogue to what goes on in an ergative system, this could invite speculation about possibly different unmarked associations between semantic roles and prototypical properties in different typological systems. This extrapolation could even be made a bit more precise. There are some kinds of activity that apparently are more susceptible to an association of patienthood with primary responsibility than otherwise quite similar activities (cf. *The book is selling/*buying like hotcakes*; *Bread digests/chews/*eats more easily than shoe leather*); and such semantically well-motivated cases of patient primacy might then have been the point of departure of a generalized and partly de-semanticized patient ⇒ subject mapping characteristic of ergative systems.

This is the point where an attempt to come to terms with the concept of basic grammatical subject can no longer be put off. Perhaps the most profitable way to approach this question is to consider the typological criteria of subject- and topic-prominence (cf. especially Li and Thompson, 1976).[24] The typological classification of languages according to whether it is the subject-predicate or the topic-comment distinction that plays the major role in sentence structures is obviously a prerequisite for the ergative-accusative typology, which already presupposes that subjecthood (primary grammatical relation) is in fact a significant structural concept in the languages concerned. Li and Thompson, 1976 and Schachter, 1976, 1977 convincingly demonstrate that Chinese (but cf. Li and Yip, this volume), Lolo-Burmese (cf. also Bauman, this volume) and Philippine languages do not rely to any significant extent on subjects. To oversimplify matters somewhat, the relational syntax and morphology of such topic-prominent languages is concerned with faithfully rendering semantic role relations on the surface, and with designating one or the other semantic role as topic according to discourse requirements. In stating the pertinent rules (e.g. case marking, relativization, constituent order, reflexivization) and patterns of such languages, there is no need to refer to genuine grammatical relations; semantic relations and the pragmatic topic-comment distinction are about all that is necessary. Predicates determine the semantic role struc-

ture of a clause (as in subject-prominent languages), but each constituent of a sentence in principle has an equal claim to topicality, regardless of the predicate. Although there are no structural, predicate-related conditions on topic selection, it may still be registered on the predicate which particular role has been chosen as topic (as in Tagalog). Not much has been said so far about what topics are in the first place, apart from alluding to their pragmatic character. This area is notorious for terminological and also conceptual confusion, despite some notable recent efforts (e.g. Chafe, 1976) to sort out the various phenomena that such labels as topic or theme have been applied to. What is particularly important for our present purpose is not to confound the notion of topic with the strictly discourse-determined concept of old or given information (although there are obvious correlations), nor with focus of contrast. It is likely that cross-linguistically suitable definitions of topicality, at least for the time being, will have to rely on admittedly vague characterizations such as the following:

—"the topic sets a spatial, temporal, or individual framework within which the main predication holds" (Chafe, 1976:50), which implies "referential prominence" or "presupposed referentiality" (cf. Schachter, 1977) of topics;
—in communicating new knowledge, some particular is identified as a starting point, and the speaker then adds to the addressee's knowledge about it (Chafe, 1976:44, but with regard to the cognitive role of subjects).

It is immediately obvious that subject-prominent languages also have topics in this sense; in fact, the essential properties of topics normally converge on the primary grammatical relation of subject, as is shown, for example, by Keenan's (1976 [50]) list of "autonomy" properties of basic subjects. Clearly subject and topic are not two entirely unrelated notions; rather, the distinctive feature of subjects is that they are "grammaticalized topics", "integrated into the case frame of the verb" (Li and Thompson, 1976:484). The amalgamation of semantic roles and pragmatic prominence (topicality) into a primary grammatical relation, as a structurally significant concept, thus intimately connects the process of topic selection with the centre of the role frame, viz. the verb; and it is not surprising that grammatical voice oppositions such as active-passive, one of whose main functions is to allow for different topicalizations, play a marginal role at best in topic-prominent languages that do not have any basic, verb-related topicalization (cf. Li and Thompson, 1976:467).[25]

A crucial omission in this account brings us back to the ergative-accusative typology. If topics are grammaticalized, they are not integrated with an arbitrary actant of a predicate, but "sentence-level" syntax (topic-comment structure) is linked with "clause-level" syntax (role structure) (terms from Foley and Van Valin, 1977) in a principled manner. Or rather, in two different principled manners that have been claimed to exactly delimit the ergative and the accusative system; the accusative construction originates from the basic topicalization of the agent role in transitive clauses, and the ergative construction from a basic patient-topicalization.[26] If this is a correct reconstruction of the essence of the typological contrast between accusativity and ergativity, the definitions (2a and b) could be rewritten in a more revealing manner:

(3) a. Ergative construction: transitive patient ⇒ grammaticalized topic
b. Accusative construction: transitive agent ⇒ grammaticalized topic

The paradigmatic-identificational pattern (1) is again an automatic consequence, since single actants of one-place verbs are the default option for basic topicalization. Persuasive arguments for the empirical soundness of this position can be found in a number of recent articles, especially in Mel'čuk, 1977 [73], Van Valin, 1977 [119] (both concentrating on Dyirbal), and Sasse, 1978 [97] (who surveys a wider range of "ergative" languages).[27] On the other hand, there are also typologists who insist on ascribing relational primacy to the agent in an ergative construction; cf. in the present volume the contributions by Bechert, Kalmár, Li and Lang, and Larsen and Norman. It is beyond the scope of the present paper to make a serious effort at resolving this controversy; I only want to draw attention to an equivocation that often mars the validity of pertinent arguments (cf. also Dixon, 1979 [25] §5.4; Van Valin, 1977 [119]:700–703; Anderson, 1977 [6]). Even though primary grammatical relations originate from an amalgamation of semantic roles and the pragmatic centre (topic), there may still be rules in a subject-prominent language that are directly contingent on semantic roles, topicality, or even specific coding categories (such as morphological cases), without being sensitive to the syntactic relations of subject and object. Probably genuine imperative (rather than hortative, optative or the like) formation is one such process that exclusively affects agents (agent = addressee) rather than subjects, whereas coordination reduction and relativization are probably sensitive to topicality rather than basic subjecthood. Moreover, similar processes may be conditioned differently in different languages; thus Van Valin, 1977

([119]:701) claims that Equi in English is sensitive to topicality, but to agenthood in Basque. Such considerations then make it clear that in one sense the ergative-accusative typology is less encompassing than has sometimes been assumed; only such grammatical processes and patterns are of any typological significance that are demonstrably sensitive to genuine grammatical (rather than semantic) relations. Neglect of this limitation is a likely source of confusion concerning the identification of the primary grammatical relation in ergative systems.

By virtue of an integration of semantic and pragmatic categories, the primary grammatical relations in ergative and accusative constructions gain a distinct cognitive status; and ethnopsychological speculation could take advantage of the fact that this status is different in the two systems. Can it really be arbitrary—synchronically or diachronically—that in an ergative system there is an emphasis on the effect of an action on an object rather than on the action of the actor (Van Valin,1977 [119]:699)? Or does this patient-topicalization reflect a less anthropocentric world view, or socio-cultural conditions that taboo a linguistic emphasis on man as a wilfully responsible agent (Sasse, 1978 [97]:31), or even a "passive" mentality, whatever that means? In my opinion, such speculations that trade on topicalization differences are still premature; although ergative and accusative systems appear to differ from one another with respect to the lexicalization of basic topics by virtue of their association with the semantic role frame of predicates, topicalization by itself, I submit, is not the crucial differentiating factor.

The semantic role configuration of a sentence (or rather: clause) is determined by the predicate; a characteristic role frame is firmly associated with each predicate in the lexicon. This does not yet imply, however, that via this inherent role frame the predicate can determine the choice of topic and comment, not even in subject-prominent languages. Something like a topic-comment frame is not a necessary constituent part of lexical entries of predicates; on the basis of lexical representations of predicates, no restrictions are imposed on potential topic-comment organizations. Although in subject-prominent languages the choice of semantic roles and of basic topic could appear to be synchronized to some extent, it is important to realize that topicalization primarily is not accomplished in terms of semantic roles at all. Rather, particular actants of a sentence are topicalized either under the control of such discourse or background factors as givenness or definiteness, or according to their own relative degree of salience or topicworthiness[28]—properties that certainly are not derivable from lexical entries of predicates. Relevant factors that increase the likelihood of an actant being chosen as the actual topic are, for example, that the actant refers to the

speaker (1st person pronoun) rather than the hearer (2nd person) rather than another human rather than a non-human participant; that the actant denotes an active, mobile, dominant rather than a passive, immobile entity; or, in gestalt terms, the figure rather than the ground. Another set of factors, likewise not predictable from the role frame of the predicate, also appear to contribute to the relative salience of an actant: the prototypical properties related to, but not firmly connected with, particular roles. If one actant of a two-place predicate denotes the primarily responsible or wilfully acting participant, it is *ceteris paribus* more salient than the other actant; the more involved in, or affected by, an event a participant is, the better are its chances of attaining relational primacy, provided there is no other actant more salient on other grounds. Such hierarchies and property weightings supposedly reflect universal tendencies in what speakers are likely to talk about, to communicate new knowledge about, or to select as framework for predications. Some of these parameters have obvious psychological and perhaps physiological interpretations; others are admittedly vague or highly impressionistic. The evidence available so far cannot exactly be called conclusive as regards the universal validity of salience scales, although drastic language- or culture-specific idiosyncracies are not to be anticipated either.[29] A more likely source of variation is that different languages, rather than reversing particular scales, rank the various salience principles or prototype properties differently with respect to each other.

From this perspective, the problem of grammaticalizing topics, the hallmark of subject-prominent languages, appears in another light. If lexical entries of predicates, in addition to their semantic role frame, acquire an inherent orientation towards a basic topical actant, rather than remaining structurally neutral in this respect, it ought to come as a surprise if different languages should make as radically different choices as suggested in (3), given that the ranking of pragmatic and semantic salience is to some extent universally determined. The expectation is rather that if there is a common essential factor favouring the salience of a participant in activities (primary responsibility, for example), ergative and accusative verbs of activity should both decide on the actant possessing this feature as the basic, grammaticalized topic (analogously for verbs of experience and possession), which would eliminate topicalization as the differentiating typological parameter. The factors primarily relevant for topicalization are categorically distinct from such relational notions as agent, patient, experiencer; there are nevertheless certain affinities between them: a typical agent is human, active, mobile, primarily responsible; a typical patient is less animate, inactive, at best an accessory, but more involved in the activity than a non-patient (e.g.

the local setting of the activity), and more thoroughly affected by the activity than the agent. If a basic topic is to be drawn into the permanent lexical frame of a predicate, such quasi-implicational affinities would seem to provide a convenient anchoring point. And this, I believe, is the real crux of the typological difference between accusative and ergative systems. Some of the affinities mentioned are indeed likely to be universal (e.g. agent-human), others, I submit, are language- or rather culture-specific. A likely candidate for typological variation in the case of activity verbs is the feature of primary responsibility: in accusative systems, the participant primarily responsible for the successful execution of an activity is, typically, the agent; in ergative systems, it is typically the patient.[30] Thus, the constitution of primary grammatical relations is brought about as in (3a and b) (patient-topic *vs* agent-topic), but not on account of different basic topicalizations, but only secondarily via different associations of semantic roles and salience features. This account suggests that universal grammar has to envisage two syntactically relevant kinds of semantic and pragmatic variation: (a) the same salience categories associated with a certain semantic role may be ranked differently with regard to the determination of basic topicality in different languages (e.g. in Modern English the most important basic topic feature in the case of activities and experiences is primary responsibility, whereas in German and early English, "good" basic topics characteristically possess a high degree of animacy); (b) the same salience categories may be associated with different semantic roles (e.g. primary responsibility is an agent feature in accusative systems, but a patient feature in ergative systems), without ranking differently in the determination of topicality.

Notice, incidentally, that the pattern of both-and type splits between ergative and accusative case marking according to the semantic content of noun phrases partly fits into this picture rather well. The hypothesis advocated here was that agents in an ergative construction from our point of view are not exactly prototypical agents since they lack the salience property of primary responsibility, which is possessed by patients instead. Now, split patterns determined by the lexical semantics of actants turn out to be anything but arbitrary cross-linguistically (cf. Silverstein, 1976 [108]). In general, the lower its degree of animacy or agentivity, the more likely a transitive agent is marked ergatively (non-zero affix); and the higher its degree of animacy, the more likely a transitive patient is to be marked accusatively (non-zero affix). According to Silverstein, this distribution can be explained in functional terms; it is most economical to overtly mark a participant only if it plays an unaccustomed role. With highly animate, prototypical agents, the risk

of confusion with a patient is relatively low, which makes a special case marker superfluous (hence: nominative encoding, typically zero). Only non-typical, inherently "bad" agents have to rely on a special case marker to safeguard against being mistaken for patients, and analogously for patients. While concerned only with the superficial encoding of grammatical relations, this functional account agrees with the above hypothesis in assuming an inverse correlation of ergativity with agentivity.[31] The agreement is less perfect as regards patients, but this may be due to Silverstein's emphasis on split systems. According to his functional hypothesis, "good" patients, i.e. those low on the animacy hierarchy, ought to remain unmarked; but the assumption above was that absolutive (morphologically typically zero-affixed) patients in ergative systems in fact resemble "good" accusative-type agents in that they possess the property of primary responsibility.

This account is largely speculative; and rather than being firmly grounded on empirical evidence from ergative systems, it outlines a programme for future typological research into the semantics and pragmatics of grammatical relations. As yet, there is probably not much pertinent evidence available, since recent typological studies tended to avoid getting entangled in the finer aspects of the interplay of morpho-syntax, semantics and pragmatics (but cf. Foster, this volume). However, the position outlined above appears compatible with the recently accumulated evidence in favour of the topicality of patients in ergative systems, and below I shall survey a few additional phenomena that show how relational primacy is contingent upon semantic and pragmatic factors other than semantic roles. And this position in my opinion also provides a more reasonable starting point for attempts at finding socio-cultural determinants of (the origin of) ergative- and accusative-type languages than some previous linguistic characterizations of these two types. If we try to imagine socio-cultural contexts, in terms of kinds of activity most thoroughly determining the daily life of the individual, that could possibly have favoured an identification of primary responsibility either with the agent or the patient role, a look at the major developmental stages of mankind might prove instructive. Cultural evolution, in the broadest terms possible, can be considered as a succession of two stages with essentially different economic organization; the hunting and gathering stage followed by the agricultural mode of production. Hunting-gathering societies typically take possession of whatever the natural environment provides, whereas in agricultural economies, man actively shapes his environment, and here a more complex social organization is required to cope with tasks (such as planning) more complex than the mere distribution of natural food resources. The

difference, in a nutshell, is that at the former stage man is at the mercy of his environment, whereas at the latter stage the environment, to some extent at least, is at the mercy of man. That radically different socio-economic conditions make their impression on cultural value systems and collective worldviews is beyond reasonable doubt; that they are also reflected in language is more controversial, at least if one wants to go beyond truisms like the numerous Eskimo words for "snow" or different kinship terminologies. With regard to the more intricate problem of relational typology, an explanation in perhaps not implausible socio-cultural terms could be as follows. In the activities that are culturally most distinctive in hunting-gathering as well as agricultural societies, man is typically involved as an agent; but whereas the agent is likely to be regarded as that participant that is primarily responsible for the successful execution of these activities in an agricultural society, an environmentally more strongly restricted and determined hunting-gathering society is more likely to ascribe primary or ultimate responsibility to factors that are not controlled by the agent. In so far as this account postulates different conceptions of prototypical agenthood, it resembles certain previous efforts to explain the origin of an ergative construction in terms of "primitive" mentality; cf. Uhlenbeck, 1916 [659]:213:

> Voor het primitieve taalgevoel is de eigenlijke agens een verborgen macht. Deze werkt door middel van den schijnbaren agens, het primaire instrument [=ergative actant], dat zelf weer gebruik kan maken van een secundair werktuig.

or Erichsen, 1944 [587]:69:

> l'homme, à un stade où son développement spirituel est encore peu avancé, se sent un instrument docile, à la merci de la nature toute-puissante.

or Entwistle, 1953:214:

> Savage man apparently feels that most events are not due to his own volition.

The present explanatory sketch, however, attempts to improve on such ethnopsychological speculations,[32] whose object often is to account for the common morphological similarity of the ergative and instrumental cases, in an important respect: it more elaborately identifies the actual **linguistic** difference between ergative and accusative systems, which is not a matter of particular morphological case marking patterns. These suggestions are still overly crude; they apparently gain some support, however, from the geographic distribution of "ergative" languages and from

the (original) socio-cultural status of the peoples that speak them. Wagner, 1978 [124] is the most recent attempt at proving that the ergative construction is characteristic of the oldest type of language in the world. What is less amenable to such an explanation is the conspicuous absence of ergativity in African languages (other than Hamito-Semitic perhaps) —after all, Africa is one of the areas which originally had, and still have, hunting-gathering societies; and secondly, the emergence of ergative constructions without any obvious socio-cultural stimulus (other than perhaps language contact), as in the Indo-Iranian languages.

One of the most prominent, or notorious, efforts to link relational typology with socio-economic development was the japhetitic theory, or "new teaching of language", by N. Ja. Marr and his school. Rather than directly summarizing the basic tenets of this theory that postulated a stadial development of language contingent upon the conditions of economic production, an essential part of which allegedly is the displacement of the ergative by the accusative sentence construction,[33] I should like to give a brief review of an influential critique of this theory, viz. Kuryłowicz, 1946 [65], which is sometimes interpreted as having demonstrated beyond reasonable doubt that the ergative and the accusative constructions are merely superficial morphosyntactic variants and entirely equivalent in semantic and pragmatic respects. Kuryłowicz characterizes the accusative and ergative constructions essentially as in (2) and (3) above; in particular, he accepts that in the ergative construction the patient is the primary grammatical relation ("le point de départ"). The passive construction that can, but need not, be found in "accusative" languages, is marked grammatically and/or stylistically; grammatically its function is to make the agent omissible, and stylistically its function is to topicalize ("sujet psychologique") the patient. The only difference between the accusative-type passive and the ergative construction is that the latter is not derived or stylistically marked. Kuryłowicz then goes on to counter the japhetitic claim that the accusative construction is a later development possible only after the stage had been overcome at which all objects were considered inert and there consequently was no voice opposition with a nominative capable of expressing different, "active" and "passive/inert", semantic roles (Kacnel'son, 1936 [45]:92), with a demonstration that ergative and accusative systems as a whole are entirely parallel. He tries to achieve this purpose by pointing out that ergative systems need not lack a voice opposition either; rather, languages such as Chukchee or Eskimo-Aleut have a derived, stylistically marked "inverse" construction that topicalizes and subjectivizes the agent.[34] This mirror image of the accusative-type passive has lately become known as "antipassive".[35] Since within

each system there is only a stylistic difference between the basic and the derived topicalization, and since both systems allow agent as well as patient topicalization, Kuryłowicz concludes that accusative and ergative systems cannot reflect "une différence de mentalité", at least not synchronically. However, what about diachrony? Might it not be that at the moment of the constitution of either an ergative (patient ⇒basic subject) or an accusative (agent ⇒ basic subject) construction differences in mentality had given the casting vote? This Kuryłowicz denies on the basis of a partly hypothetical argument concerning the theoretical possibilities of type change. If a two-voice accusative system loses its basic active voice (which allegedly happened in Indo-Iranian;[36] cf. Pirejko, this volume), the remaining construction is an ergative one; and, inversely, if a two-voice ergative system loses its basic voice, what remains is an active accusative construction.[37] The former development indeed contradicts any unidirectional stadial hypothesis; but it would seem questionable whether an actual loss of ergativity—as in Burushaski (cf. Tiffou, 1977 [721]; Trask, this volume), in South Caucasian (cf. Boeder, this volume), Tibeto-Burman (cf. Bauman and Kepping, this volume), or probably Indo-European (cf. Schmidt, this volume) languages—typically occurs in the manner suggested by Kuryłowicz, which throws some doubt on the overall plausibility of his parallelism hypothesis. Even if Kuryłowicz' views on type change are descriptively adequate in certain cases, their mechanistic character prevents them from attaining any explanatory adequacy; but what in my opinion is even more damaging is that Kuryłowicz refuses to deal with basic topicalization in other than "stylistic" terms. I agree that intra-systemically basic and derived topicalization could probably be taken for a "stylistic" difference, but inter-systemically the emphasis on stylistics overlooks essential lexical differences. Although mirror-image retopicalizations are possible in the accusative and the ergative system, these subject-prominent systems differ in their choice of a basic topic—and this is a lexical matter as soon as it involves the basic orientation of predicates. Kuryłowicz' position would rather be appropriate for topic-prominent systems, but it cannot account for the grammaticalized and indeed lexicalized integration of semantic and pragmatic categories into a primary grammatical relation. And if it is exactly this integration that eventually reflects differences in mentality, along the lines suggested above, a theory like that envisaged by Kuryłowicz could not provide any convincing counter-arguments, simply on account of its failure to take into consideration the relevant linguistic phenomena. Now, differences in relational primacy need not necessarily be conditioned by the socio-cultural or material environment of the language user; patterns

of cognitive salience that presumably are less culture-specific are another important factor—but phenomena like those to be dealt with immediately are likewise beyond the scope of Kuryłowicz' "stylistic" theory.

There is enough evidence available from reasonably well-understood accusative systems to incontrovertibly demonstrate that certain salience properties entail relational centrality. Independently of active-passive voice oppositions, there often exist more than one alternative syntactic constructions, involving essentially identical semantic role frames, with different roles in the syntactic core relations (primary: subject; secondary: (direct) object), depending upon the relative salience of the participants assuming the various roles. In addition, voice oppositions may also be exploited for the purpose of increasing the relational status (essentially: advancement from secondary to derived primary relation) of contextually or inherently salient participants. The advancement of patients to subjecthood (topicality), if they outrank agents on the criterion of primary responsibility, has already been dealt with above; and holistic "transformations" are another, familiar example (cf. Anderson, 1971, Rohdenburg, 1974). Semantic roles such as local or temporal setting that are syntactically construed as oblique or adverbial relations, are capable of assuming a core relation instead if the implication is that an event pertains to the local/temporal setting in its entirety; *Bloggs loaded the wagon with hay*; *The kitchen was hanging with/full of cobwebs*; *The Midlands were thundery yesterday*; *Tuesday was even more foggy than Monday*; *1977 witnessed two big firms go bankrupt* (versus *In 1977, we witnessed . . .*, which does not exclude the possibility of more bankruptcies in this year which we did not happen to witness). The shades of the holistic-partitive meaning opposition are sometimes elusive; their common denominator, nevertheless, quite clearly seems to be a salience parameter alluded to above: the degree to which a participant is involved in, or affected or effected by, an event. It is easy to find numerous other instances where relational syntax reflects rankings of participants in this dimension; to mention only a few:

a. oblique advances to direct object: *He shot (at) the the girl*; *He climbed (up) a tree*; *He built (at) a house*;
b. indirect advances to direct object: *I taught Bloggs Chukchee (*but he didn't learn any)*;
c. object can advance to intransitive subject of surface-contact verbs only if there is an implication of a change of state: *I touched/hit/broke/smashed/shattered/cracked the window with a stick—The window *touched/*hit/broke/smashed/shattered/cracked*;
d. "instrument" can advance to subject only if in immediate contact with patient: *A bullet/? A gun killed Bloggs*;

e. advancement to passive subject only if the implication is that something is actually done to something: *The bridge has been walked under by generations of lovers* (versus * . . . *was walked under by my dog*); *I was approached by the stranger/ *the train* (cf. Bölinger, 1977);
f. actants in the partitive case or in the scope of negation in languages such as Finnish (Itkonen, this volume) or Russian are generally more peripheral than the syntactic core relations (e.g. lack verb agreement).

Although not necessarily reflected in the relational syntax of accusative systems, aspectual and/or temporal differences also correlate with the involvement parameter. Perfective or completive aspects, for example, differ from imperfective/prospective/potential/future/progressive/habitual aspects in describing a state, rather than an ongoing or potentially occurring activity, or preferably a change of state already accomplished, the involvement of the participants having already reached its maximum degree at the completion of the event. Under these circumstances, the patient is likely to be particularly salient since it is typically the condition of the patient, rather than the agent, that is recognizably different after the completion of an event (*John has killed Bill/has melted the ice*).[38] Two further salience factors at least ought to be mentioned: Contextual givenness increases the topicality potential, although it is typically responsible for derived rather than basic, lexical topicalization; and animate participants in general have easier access to syntactic core relations than inanimate ones (cf. a striking German example, with inanimates being excluded even from the dative indirect object relation: *Er entwich dem Wärter/*dem Gefängnis* versus *Er entwich aus dem Gefängnis/ *aus* (**von*) *dem Wärter* "he escaped the guard/from the prison"; for details of such alternations between dative and prepositional phrase cf. Matzel, 1976).

Vis-à-vis the assertion that the accusative-ergative distinction essentially is a matter of systematically different role-topic relationships, such patterns are of considerable typological interest. In addition to the hypothesis advanced above that (some) ergative systems do not arise from different basic topicalizations *per se* but rather from an association of the topicality-determining property of primary responsibility with the patient rather than the agent role, they suggest another potential source of ergativity, due to an increase in pragmatic and semantic salience of semantic roles other than agent. Split ergative systems other than those determined by an animacy hierarchy would seem to be particularly pertinent here, since the ergative construction is invariably found in those parts of those languages that increase the salience of non-agents (e.g. in the perfective aspect or past tense, with thoroughly involved or thematic, contextually given non-agents). This has led to proposals (e.g.

by Comrie, 1977 [17], Sasse, 1978 [97], Trask, this volume) that ergativity, while in general marked vis-à-vis accusativity, is indeed unmarked with this particular distribution of salience over semantic roles, and may therefore well have originated under these circumstances, with the possibility of its later generalization, after it has been de-semanticized, to the entire relational system. Before turning to a brief survey of the evidence from ergative systems, it is appropriate to first clarify exactly how the salience of non-agents interferes with the relational syntax of accusative systems. I illustrate with the feature "degree of involvement/affectedness". It ought to be clear that this is indeed a property characteristic of non-agents, and unlike "primary responsibility" presumably not transferable to agents either. This is nicely demonstrated by the English particle *up*, which is used to emphasize the total involvement of a participant.[39] On account of its meaning, *up* is role- or property-(involvement) rather than relation-sensitive, and is oriented towards particular kinds of patients; since patients in English can occur as intransitive subjects (*The riverbed dried up*) and as transitive objects (*We ate up the bread*), this orientation looks as if it conforms to the paradigmatic-identificational ergative pattern, which obviously is typologically irrelevant because the orientation of *up* involves no reference to grammatical relations in the first place.[40] Now, if patients or other non-agents (local/temporal setting, instrument) possess the salience property of total involvement, do they in fact have unlimited access to the primary grammatical relation—which supposedly is the prerequisite for the origin of a (split) ergative system? I think not. They can assume the basic primary relation of intransitive subject, but they cannot syntactically outrank a prototypical agent if there is one, except in a derived voice such as the passive (cf. (e) above). If a "holistic" non-agent ends up as transitive subject, there is no agent in the role frame of the predicate (see above: *1977 witnessed . . .*) and/or the non-agent possesses the additional salience features of responsibility or capability, otherwise typical of agents (*This garage parks 5 cars*; *The tunnel's roof was dripping water*). I conclude that in an accusative system like English agents or rather primarily responsible/capable participants still have a privilege to the basic primary grammatical relation, even if non-agents themselves are salient on the involvement criterion. Salience of non-agents alone, although increasing their relational centrality, thus does not seem to be a sufficient cause for the origin of an ergative system, or of an ergative-like subsystem within a predominantly accusative system. An additional inhibiting factor could be at work here, viz. the force of syntactic analogy that prevents constructions with salient patients from diverging too far in basic relational organization from the in general

unmarked salient-agent model, in particular if a derived voice is available for this very purpose.[41] However, this does not rule out in principle the possibility of an ergative system originating under circumstances of patient-salience. A derived voice may happen to be re-interpreted as a syntactically basic construction;[42] or if ergative systems developed from topic-prominent rather than subject-prominent languages (e.g. languages of the active type, as argued for by Klimov), there originally may have been no opposition of basic and derived (passive or antipassive) voices available to express differences in salience or to provide an unmarked syntactic model with a salient agent in the primary relation; or, lastly, since the relative weighting of salience properties presumably is not universally invariable, ergative constructions may reflect a state where agentive participants, whether prototypical or not, could be outranked in salience by a participant with the feature "high degree of involvement", perhaps on account of a relatively peripheral status of agents in general.[43]

To justify the assertion that ergativity is indeed a frequent concomitant of those kinds of non-agent salience that were mentioned in the preceding paragraph, here is a random sample of languages with coexisting ergative and accusative (or accusative-like) constructions, or with an ergative construction and an alternative antipassive voice, contingent upon the salience of the patient. The affinity between ergativity and perfective aspect and/or past tense is too familiar a phenomenon to require additional illustration; this universal tendency is empirically substantiated in many contributions to this volume (cf. Kibrik on the accusative agreement in the "continualis" in Daghestanian languages; Comrie and Nedjalkov on the decrease of ergativity in the Chukchee past tense/perfective aspect; Blake on the antipassive to express characteristic activities performed on indefinite/generic patients, and on alternations between ergative and non-ergative constructions according to whether an action has been successfully completed or not, in Australian languages; Larsen and Norman on accusative constructions in the incompletive/progressive aspect in Mayan; Boeder, Steiner, Pirejko, Tchekhoff on similar phenomena in Kartvelian, languages of the Ancient Near East, Indo-Iranian and Tongan, respectively; perhaps also Li and Yip on the Mandarin Chinese *bǎ* construction that preferably is in the perfective aspect). That thematic salience (givennes, anaphoricity) of non-agents likewise correlates with an ergative rather than an accusative construction is shown in Kalmár's contribution with respect to Eskimo, where the antipassive, the neutral text-initial construction with a syntactically less central patient (no verb agreement), is used with rhematic (new, non-anaphoric) patients. Sasse, 1978 [97]

mentions Ostyak (Khanty) as a similar case, but Gulya, 1970 [242] has examples of ergative constructions with anaphoric as well as non-anaphoric (contextually given *vs* new) patients; he, on the contrary, claims that the ergative is used to emphasize the agent, which in all of his examples is definite.[44] Although the Finnish "inverted" ergative system (Itkonen, this volume) also involves questions of thematic organization (existential, i.e. new, subjects pattern like direct objects), and although what has occasionally been interpreted as an ergative construction in Mandarin Chinese includes a thematic patient (Li and Yip, this volume), the typologically significant influence of the salience feature "total involvement" on syntactic centrality appears to be more widespread.[45] Although the ergative nature of the Mandarin *bǎ* construction is questionable, it is perhaps no coincidence that not every two-place verb admits this construction, but only those with thoroughly affected, "disposable" patients or patients in a relation of "conceptual wholeness" (e.g. "he broke of-the-chair-*bǎ* a leg"; cf. Li and Yip, this volume, Li, 1974 [455], Chu, 1976 [451]). Adyghe and other Northwest Caucasian languages have contrasting constructions with verbs that differ in how thoroughly the patient is affected by the activity they denote: "the warrior (erg) dagger (intr) the enemy (abs) killed" *vs* "the warrior (abs) dagger (instr) the enemy (oblique) stabbed"; in other West Circassian languages one and the same verb may occur in analogous constructions with the same difference in meaning, reminiscent of the English pattern (a) mentioned above: "the boy (erg) the field (abs) is ploughing" *vs* "the boy (abs) the field (oblique) ploughs", i.e. "the boy is trying to plough the field; is doing some ploughing in the field" (Anderson, 1976 [5]:21–22). Each time the ergative construction is used with salient, thoroughly affected patients; it implies, according to Catford, 1976 [298]:46, "a tight, penetrating, effective relation between the verbally expressed activity and its object". Similarly in Samoan, where verbs like "listen", "be able to", "look" require an accusative construction, and verbs like "hear", "succeed", "catch sight of" an ergative construction, which, according to Milner, 1973 [552]:631, "emphasizes **totality** (and/or the **consequence**) of an action rather than the **action itself**". Tchekhoff (1973 [563a] and this volume) reports similar meaning nuances from Tongan: "John shot Mary" *vs* "shot at Mary"; completion, intensity or thoroughness, however, is here indicated by a perfective aspect marker alone, without any noticeable change in syntactic construction, and, somewhat surprisingly in the present context, the agent is obligatory in the perfective, but optional in the imperfective. Wagner, 1978 [124]:65 quotes some examples from Lorimer's works on Burushaski that would seem to lend themselves to a

holistic *vs* partitive interpretation: "foot-upon dog (stem form) bit" (partitive) *vs* "foot (stem form) dog (erg) bit" (i.e. foot was affected more thoroughly). In Pitta-Pitta, which is not exactly a paradigm instance of an "ergative" language (Blake, this volume), there nevertheless coexist different constructions; in particular, there is no ergative marking in the future tense and with verbs like "like", "be jealous of", the common semantic denominator being non-impingement; and the antipassive is also used to impart this same interpretation of a relatively low degree of affectedness ("to feel like VERBing" rather than "to VERB", in Blake's terminology). It is only natural that a patient is less thoroughly, if at all, affected when occurring in the scope of negation; this is reflected, for example, in the relational syntax of Yugulda (Blake, 1978 [498]§2.1.1), where the patient of a negated two-place verb is in a less central oblique relation.

Rather than being an idiosyncratic feature of only a few languages, as suggested by Anderson, 1976 [5]:22, this appears to be a recurrent pattern in "ergative" languages; the ergative, or an ergative-like, construction is contingent upon the presence of a particularly salient patient, whereas an alternative accusative-like, or derived antipassive, construction is available if patients of two-place predicates lack the salience property of complete, direct or permanent involvement. Given the provisos mentioned above concerning the weighting of (non-salient) agents and (salient) patients, further empirical work is necessary to determine the exact typological circumstances under which salient patients could acquire the privilege of assuming the primary (basic rather than derived) grammatical relation. In the light of the evidence available, and on the assumption that the typological difference between accusative and ergative systems is a matter of different basic topicalizations, it is at least not implausible to regard patient-salience as a potential source of ergativity, in addition to the other, more culture-specific source suggested earlier that was based on different conceptions of prototypical agenthood and patienthood in ergative and accusative systems.

This chapter has accentuated the semantic and pragmatic determinants of relational typology, and the possibilities of cross-linguistic semantic and pragmatic variation that have to be allowed for by universal grammar. This choice of emphasis may have entailed an undue neglect of certain morphosyntactic concomitants of different typological systems,[46] and of syntactic details of possible historical developments of ergative constructions from passives or perfective/possessive structures; and it may, in the opinion of those advocating a paradigmatic-identificational approach to relational typology,[47] appear to overestimate the actual difference between ergative and accusative systems.

Even if it should turn out that synchronically (some) ergative and accusative systems are merely superficial variants differing in the apparently arbitrary alignment of intransitive subjects with transitive subjects or objects, regardless apparently of any semantic or pragmatic considerations, I would still be prepared to contend that such a state of affairs is unlikely to be stable diachronically, and in particular that it is highly likely to reflect a historically prior state with clearer semantic and pragmatic determinants of relational organization that may have changed from overt to covert categories by force of syntactic surface analogy. I thus agree with Klimov, 1973 [53] that relational typology ultimately has to be seen in a diachronic perspective, and in the context of an adequate theory of type change. Such obviously idealized types as those presented in this chapter would then find their proper place as possible extreme points in the development of natural languages and of the socio-cultural conditions under which they are spoken.

Notes

[1] Cf. Klimov, 1973 [53]; Seely, 1977 [106]; Royen, 1929 [96]:864–939, for the early phase.

[2] According to Klimov (1972 [52], 1977 [61] and this volume) this semantically based alignment is characteristic of languages of the "active" type, the alleged diachronic antecedent of both the ergative and the accusative type. This alignment is particularly common among American Indian languages, where it was already recognized by Uhlenbeck, 1916 [659] and Sapir, 1917 [659]. It is doubtful, however, whether such languages ought to be treated on a par with the ergative and the accusative type at all, as suggested by the paradigmatic-identificational approach, because they presumably do not involve genuine grammatical relations such as S_t, S_i, dO, but rather purely semantic relations.

[3] Thus, Sapir, 1917 [659] observed that verb suppletion, determined by the number of S_t and dO, but not S_i, in Shoshonean languages works ergatively, whereas pronominal classification in the same languages is in accordance with the accusative pattern. Pott, 1873 [92], even earlier, recognized that singular and plural actants may align differently, and his explanation is of particular interest in the light of recent proposals of a scalar concept of animacy or agentivity (see below): "weil doch in der mehrheit das thätige subject nicht mit solcher bestimmtheit hervortritt, als bei den einzelwesen der fall ist" (p. 89).

[4] Essentially due to Dixon, 1972 [503].

[5] Dixon, 1979 [25] most emphatically insists on the necessity of distinguishing three syntactic core relations rather than only two; and there is also some evidence from accusative systems that S_t and S_i do not always behave uniformly (cf. Reis, 1974 [235]). Probably this issue is terminological rather than substantial; if our interest is in basic rather than derived relations, "subject" is perhaps more likely to be regarded as a uniform category.

[6] Although there have been proposals to treat S_i as an "initial" dO; cf. Sapir, 1917 [659], Postal, 1977 [91]:277 (referring to his earlier work on Mohawk), Silverstein, 1972 [626]. This move might be rather appropriate for active-type languages (but cf. note 2 above) or for languages with one-place verbs that can be used personally or impersonally (German *ich friere/mich friert* "I (nom/acc) am cold").

[7] This is the tenet of Gołab, 1969 [31], Bechert, 1971 [283], Van Valin, 1977 [119], Wagner, 1978 [124] (who considers the ergative construction impersonal), among others; the difficulties with the identification of grammatical subjects in Basque led Uhlenbeck, 1907 [709]:32 to adopt a similar stance: "Misschien zoude het beter zijn de termen *subject* en *object* in Bascologische geschriften geheel te vermijden". What is important, however, is not to confound "absence of accusative-type subject" with "absence of subject in general", as has recently been emphasized by Sasse, 1978 [97].

[8] Cf. Johnson, 1976 [44] for a more thorough differentiation of the "Oblique Analysis" (agent ⇒ initial oblique) and the "Inverse Analysis" (agent ⇒ initial dO). The present paper sympathizes with the Oblique Analysis; "transitive agent" is to be understood, therefore, as "agent of a semantically two-place predicate".

[9] In view of recent proposals to analyse the ergative construction as a derived, obligatorily passivized construction it is perhaps worth mentioning that earlier passive theories did not regard the ergative construction as derived, either synchronically or diachronically. Cf. especially Schuchardt: "Jedes Verb ist von Haus aus indifferent, das heisst weder aktivisch, noch passivisch. . . . Aktiv und passiv sind . . . keine dem Vorgangswort innewohnenden Eigenschaften; vielmehr bezeichnen *aktivisch* und *passivisch* Relationen, in denen es zu anderen Satzelementen steht" (1925 [705]:12). "Umkehrung ist zwar statisch vorhanden, aber nicht genetisch, beides ist gleich ursprünglich" (1921). Interestingly, Schuchardt (1921) considers the active representation of activities (agent ⇒ subject) semantically unmarked ("eine getreue Wiedergabe der Wirklichkeit"), but since pragmatic factors (topicalization, "das persönliche Interesse") in his opinion play a dominant role, the passive representation (patient ⇒ subject) may be chosen as well, given the appropriate circumstances; and, to avoid confusion, a language in the end has to decide on one representation or the other as its basic construction. Passive interpretations of the ergative construction were also prevalent in the Marrist tradition in the Soviet Union, and they were also occasionally misunderstood as claiming that the ergative construction corresponds to an accusative-type passive voice; cf. Friedrich, 1933 [426] on Urartian, and Meščaninov's (1935 [436], 1937 [436a]) rectification, where the categorical difference of passive structure (*vs* active structure, which is the typologically relevant distinction on the discourse level) and passive form (*vs* active form, the two voices of the active structure) is emphasized (cf. Salvini, 1968 [438]).

[10] On Dyirbal cf. Keenan and Comrie, 1977 [50a], Mel'čuk, 1977 [73], Dik, 1978 [24], all basing their analyses on Dixon, 1972 [503]. As regards diachronic interpretations of ergative constructions as former passives, Hale, 1970 [509] proved particularly influential.

[11] The view that pure verb stems can either have passive or active meaning was later abandoned by Schuchardt; cf. Footnote 9.

[12] Cf. Trubetzkoy, 1939 [118], Martinet, 1958 [71], Tchekhoff, 1978 [113], whose analyses are in terms of modifiers of the predicate; in the same spirit may be those approaches that regard the predicate of an ergative construction as a noun (or verbal noun, cf. Wagner, 1978 [124]) rather than a verb.

[13] *Boil, open* etc. differ from these ergative verbs in so far as they are syntactically incompatible with an agent if the patient is chosen as basic intransitive subject: **the*

door opened by John, but: *the door opened because of the wind*, with a less agentive cause.

[14] This lexically defined concept of degrees of ergativity/accusativity has to be distinguished from other, currently more common degree notions (cf. Part 4); according to these, a language is the more ergative, the more grammatical (morphological, syntactic) rules conform to a paradigmatic-identificational ergative pattern.

[15] In general, there seems to be a tendency to constructionally identify agent/patient and possessor/possession configurations in ergative rather than in accusative systems. In this volume Larsen and Norman, Pirejko and Foster address themselves to this issue; cf. also Sasse, 1978 [97]. It will be argued below that ergatively marked agents lack prototypical agentivity features or are inherently less salient than patients, and this might be the common denominator they share with possessors, which are also low on the agentivity scale. Cf. Moravcsik, 1978 [85] for a similar observation.

[16] Cf. especially Silverstein, 1976 [108], Comrie, 1978 [18], Dixon, 1979 [25].

[17] This is another fairly traditional insight (cf. Thomson, 1909; Royen, 1929 [96]:590: "Eine Person ist vor allem agens, ein Impersonale vor allem patiens") that has been rediscovered only recently.

[18] This fits in well with Finck's (1907 [27]:239) assertion that different constructions of verbs of activity and of experience are an issue entirely independent of the passivism (ergativity) in a language.

[19] Although there might be an analogous tendency in the other predominantly accusative systems mentioned above (cf. Latin *fame perire* "die of hunger"), it is not necessarily a hard and fast rule (cf. Latin *Marcus ab reo fustibus vapulavit* "Marcus was whacked (active) with cudgels by the defendant").

[20] There are languages where this parameter alone determines the relational ranking or re-ranking, e.g. Navaho (cf. Foster, this volume, Footnote 16 with references).

[21] The notion of prototypical properties is of course familiar from cognitive-psychological work on categorization (cf. Rosch, 1977); it was applied to relational grammar by Lakoff, 1977, and Fillmore, 1977 also supplemented his original case grammar framework by analogous concepts ("saliency").

[22] In German, for example, the lexical feature of animacy appears to be more important than the prototype property of responsibility for subject selection with two-place verbs; this might account for the fact that non-agents, even if primarily responsible, subjectivize much less liberally in German than in English. However, this is only a tentative generalization derived from Rohdenburg's extensive survey of "secondary" basic subjectivizations in English and German. If German does subjectivize responsible patients, the basic patient-subject is as a rule accompanied by a reflexive marker: *Dieses Buch verkauft sich gut* "this book sells (itself) well"; *Brot kaut sich leichter als Leder* "bread chews (itself) more easily than leather". This use of the reflexive to indicate marked subjectivization or topicalization is reminiscent of the antipassive in some Australian languages (e.g. Dyirbal, Yidiny, Pitta-Pitta), which is also signalled by a reflexive marker on the verb. The typologically interesting difference is that in predominantly accusative systems (like that of German) the reflexive shows up in a more ergative-like construction, whereas in predominantly ergative systems the reflexive is characteristic of a (derived) non-ergative construction.

[23] Cf. van Oosten, 1977, Lakoff, 1977; and also Foster, this volume, on Ozark English. More generally on "secondary" subjectivization in a non-derived voice Rohdenburg, 1974, and on "usurpations" of subjecthood by non-agents de Vries, 1910.

[24] An earlier attempt to base syntactic typology on subject-prominence was Lewy, 1942 (revived by Lehmann, 1974).

[25] Van Valin, 1977 [120] argues in more detail that only "reference-dominated" languages, as opposed to "role-dominated" languages, display syntactically significant voice oppositions; more critical is Jacobsen, 1977 [120].

[26] Notice that this would automatically account for most of the "exceptions" to word order universals; many of the allegedly non-occurring or excessively rare (Greenberg, 1963:61) VOS, OVS and OSV languages in fact are "ergative" languages (cf. Sasse, 1978 [97], Pullum, 1977 [93]), and their O's, unlike accusative-type O's, are topics according to our hypothesis! Not all ergative systems, however, are patient = topic-initial, which does not necessarily prove our hypothesis wrong, since basic topicality is not the only, and perhaps not even the most important, factor determining linear constituent order; thematic organization (given-new) or emphasis may very well favour non-topics in initial position.

[27] Mel'čuk, 1977 [73] argues at length, on the basis of data from Dixon, 1972 [503], that Dyirbal conforms to (3a), but then contests, without much empirical argument, that other"ergative" languages (such as Georgian, Dargwa, Kurmanji, Chukchee) do so, too. According to Mel'čuk, Dyirbal and these other languages have a "non-nominative" construction, which is defined in terms of surface case marking: the grammatical subject (patient in Dyirbal, agent/causer in Georgian etc.) is marked by a case other than the accusative-type nominative. In a "genuine" ergative construction, according to Mel'čuk, the grammatical subject corresponds to the "logical subject", which in our terms is characteristic of an accusative construction (3b). Mel'čuk's terminological differentiation thus implies that the typological distinction of ergativity *vs* accusativity is entirely a matter of case marking. While admitting the possibility that not all "ergative" languages are as thoroughly ergative, in the sense of (3a), as Dyirbal, I still do not believe that Mel'čuk's position is in agreement with the empirical evidence from many traditional "ergative" languages; cf. in this volume Comrie and Nedjalkov on Chukchee, Boeder on Georgian, Pirejko on the early ergative phase in Indo-Iranian. Kibrik, this volume, also postulates a semantic basis of the ergative construction in Archi: the patient, or rather "factitive", the "closest participant in the situation", is said to be construed as grammatical subject, but is nevertheless claimed to be comment rather than topic—which would in fact contradict our hypothesis that a subject by definition is a grammaticalized topic. Moreover, the entire ergative = passive tradition speaks against Mel'čuk's position, as does the following random sample of informal characterizations of ergative constructions: In the Urartian preterite "steht nicht der Urheber, sondern das Ziel der Handlung im Blickpunkte des Geschehens" (Friedrich, 1933 [426]); in Sumerian, the patient is the primary, and the agent the secondary participant, essentially external to the basic verbal event (Foxvog, 1975 [425]); in Greenlandic Eskimo, "das Objekt [i.e. logical object] bildet den Mittelpunkt des Satzes" (Finck, 1905 [588]); in Njamal and other Pilbara languages (Australia), "the focus is on the person or thing "related" to the happening as its grammatical and literal "subject". The person who caused the happening is of less importance and stays instrumental or lateral" (Brandenstein, 1967 [499]:4); in the ergative constructions of the Caucasian languages, at least historically, "gerade das nächste Objekt [patient] (und nicht das Subjekt!) stellte das wichtigste Glied des gegebenen Syntagmas dar" (Čikobava 1970 [310]:273).

[28] Important recent discussions of this point may be found in Hawkinson and Hyman, 1975, Givón, 1976, Foley and Van Valin, 1977, Fillmore, 1977 and, within cognitive-psychological frameworks, in Osgood and Bock, 1977 and Ertel, 1977. For the related concept of empathy cf. Kuno and Kaburaki, 1977.

[29] It cannot be excluded, however, that certain cultural factors interfere with univer-

sal topicworthiness hierarchies; an obvious example is politeness, which to a certain extent may suspend the natural tendency of "speaker-first".

[30] Typical agents are often characterized as those participants that (may) initiate and control an activity. If such characterizations also apply to agents in ergative systems, this would not necessarily conflict with the present hypothesis, because the initiating and controlling participant (agent) may still be not identical with the participant regarded as primarily responsible for the successful execution of an activity (patient).

[31] For similar views cf. Comrie, 1978 [18] §§2, 4.2.1 and Moravcsik, 1978 [85] §2.1. On the other hand, if an ergative marker is extended to actants of one-place verbs, this often happens in a principled manner: usually, highly agentive intransitive subjects acquire the ergative marker first (cf. Boeder, this volume, on Kartvelian)—and this could seem to imply a positive correlation between ergativity and agentivity. A way out of this predicament would be to assume that the basis of such analogical extensions is the agent role rather than the prototypical agent properties (such as primary responsibility).

[32] Seely, 1977 [106]:196–197 gives a brief survey of former attempts to account for ergativity in terms of "primitive mentality". Notice that Martinet (this volume) seems to have abandoned his former views (1962 [155a]:72) on ergativity as reflecting a less advanced stage of cultural and economic development in favour of a culture-independent functional account of ergativity and accusativity as two essentially arbitrary variants of distinguishing the actants of a two-place predicate.

[33] It has to be kept in mind,though, that Marr's stadial theory admits the possibility of a language keeping its ergative construction as a relic even at an advanced stage of socio-economic development; Georgian is a case in point.

[34] Kuryłowicz' account also includes "absolute" constructions (omission of transitive patient in accusative systems, and of transitive agent in ergative systems), but these can be disregarded for the present purposes.

[35] There presently exist quite different conceptions of "antipassive"; the common denominator of most of them is a formal one: antipassive is a derived, detransitivized construction. However, even this is controversial; cf. Kalmár (this volume), who argues that the Eskimo antipassive is neither derived nor intransitive. Kuryłowicz' neat pattern is somewhat complicated by recent insights that antipassive and passive need not necessarily be in complementary distribution; there are ergative systems with both passive and antipassive (Mayan, for instance; cf. Dayley, 1977 [618]), and even accusative systems have been claimed to possess an antipassive in addition to a passive (cf. Postal, 1977 [91], Heath, 1976 [36]).

[36] Other alleged instances of a drift from accusativity to ergativity, accomplished by the loss of an original active voice, are Australian and Polynesian; but here the actual direction of the development as well as the mechanisms that effected it are much more controversial. On Polynesian cf. Hohepa, 1969 [545] *vs* Clark, 1976 [542], Foley, 1976 [544], Milner, 1973 [552]. On Australian cf. Dixon, 1977 [505], Blake, 1978 [498] and this volume.

[37] Comrie, 1978 [18] §3 adopts a similar view on type change. Although he was less specific concerning mechanisms of change, Hugo Schuchardt also saw no reason to subscribe to a unidirectionality hypothesis: "der Passivismus selbst entsteht bald aus dem Aktivismus, bald geht er in ihn über" (1925 [705]:15).

[38] Similar semantic explanations are given by Comrie, 1977 [17], Dixon, 1979 [25], Van Valin, 1977 [119]:699. The explanations provided by Trask (this volume) and Wagner, 1978 [124] are also comparable; they involve a contrast between "state" (affinity to ergativity) and "action" (affinity to accusativity). An earlier salience-

based account may be found in Regamey, 1954 [215]:373: "Lorsque nous envisageons une action transitive par rapport au patient, nous constatons l'effet de cette action, ce qui est accompli. Cette action s'est déjà détachée de l'agent, elle a été transférée sur le patient. Par contre, l'action imperfective, qui n'a pas encore été achevée, qui est en train d'être réalisée, relève de l'agent plutôt que du patient".

[39] Cf. Moravcsik, 1978 [85] §2.2 on an allegedly ergative patterning of *up*; a more accurate semantic description of *up* is given by Whorf, 1956.

[40] Compare the orientation pattern of the adverb *well*: *Bloggs drove the car well* (S_t orientation); *The car drove well* (S_i orientation); *The car was driven well* (*by Bloggs*) (oblique agent orientation). Although the absence of dO orientation could induce one to assume an accusative-type pattern, this would again be fallacious. *Well* is rather oriented towards the primarily responsible participant, and the apparent relational orientation pattern is only an epiphenomenon. On *well* cf. Dixon, 1976, Lakoff, 1977: 250–251.

[41] On affinities between the perfective aspect, with a relatively salient patient, and the derived passive voice see Comrie, 1977 [17], Bechert, 1978 [9].

[42] Markedness reversal (Plank, 1977 [90]) might be the appropriate theoretical concept to account for this. Less abstract motivations for such reinterpretations are discussed by Trask (this volume).

[43] Arguments about the origins of ergative constructions often rely on evidence derived from the morphological identity of the ergative case marker (cf. Trask, this volume, Anderson, 1977 [6]): If the ergative marker is identical with, or related to, an instrumental case, a passive voice is assumed as source of the ergative construction; if the ergative marker is identical with, or related to, a genitive, dative or locative case, a possessive or perfective source is assumed. However, there are numerous problems with such accounts. The actual functions of the case markers involved often cannot be ascertained with a reasonable degree of certainty, in particular if they have to be historically reconstructed. Secondly, even closely related languages often appear to select their ergative markers more or less arbitrarily from a set of oblique markers available (cf. Boeder, this volume, on Kartvelian). A less committal but more generally applicable assumption would be that the ergative is simply some sort of general oblique marker (cf. Dixon, 1976 [504a], Comrie, 1978 [504]), and this would be consonant with the hypothesis of a relatively peripheral status of agent in an ergative construction.

[44] It has occasionally been suggested that ergative markers in fact are, or derive from, emphatic particles (e.g. by Trombetti, 1923 [117] and Tagliavini, 1937 [400]). Such a source appears also compatible with the views advocated in this chapter; a topical patient may very well co-occur with an emphatic or contrastive agent. Compare Boeder, this volume, and Plank, 1978c for some discussion of affinities between emphasis or intensification and ergativity.

[45] Incorporation could be another syntactic process contingent on "total involvement" of a non-agent; at least this is how I interpret examples like those from Chukchee given in Nedjalkov, 1976 [261]: "hill (loc) flowers (abs) bloom" *vs* "hill (abs) flower-blooms".

[46] I have largely ignored, for example, certain purely syntactic functions of such processes as antipassivization, which are often used to make a transitive agent more accessible to other syntactic processes (such as relativization or extraction rules). However, notice that this very function is additional evidence for the hypothesis advocated here, viz. that ergative agents are not in the central grammatical relation.

[47] Incidentally, a crucial assumption underlying functional paradigmatic-identifica-

tional approaches (e.g. Comrie, 1975 [15]), viz. the absolute necessity of overt S_t-dO distinction, has been called in question in Plank, 1978b.

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