

WORD ORDER IN TUVALUAN

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0. INTRODUCTION¹

Traditionally, Polynesian languages have been viewed by typologists and descriptivists as prototypical VSO languages. It has been known for some time, however, that many Polynesian Outlier languages² exhibit non-verb-initial sentential constituent order configurations (hereafter referred to as word order), although little is known in detail about the syntax of these languages, let alone about their word-order mechanisms (Chung 1978 and Clark 1976 both devote a few pages each to a discussion of word order in Outlier Polynesian, and an unpublished paper by Reedy (1977) investigates the question for Takuu). More recently, the work of a number of researchers, such as Ochs (1982) and Duranti (1981) on Samoan, Hooper (1986) on Tokelauan, and Alexander (1981) on Rapanui, has shown that, even in non-Outlier Polynesian languages, the pragmatics of word order offers a much more complex picture than is commonly assumed. The question of the distributional patterns of word-order configurations in Polynesian languages in general, thus, deserves more attention.

This paper is an investigation of word order in the seven dialects of Tuvaluan, all of which share the same syntax (but differ in their morphology - Besnier 1986), characterised by a high degree of freedom in the order of sentential constituents. This study provides a functional explanation for the attested word-order variations on the one hand, and, on the other hand, for the fact that a number of logically possible word-order configurations do not occur.

In this paper, I shall show that, despite the word-order freedom exhibited by Tuvaluan, there is a basic order, and that this order is verb initial. It will be shown that the non-basic word-order variants can be explained functionally as encoding the pragmatic role of the nominal constituents of the sentence. Furthermore, word order interacts with case marking in transitive clauses in such a way that post-verbal, ergatively-marked agents are always marked for high agentivity; besides being dependent on the pragmatic structure of the clause, word order is thus also governed by semantic notions. This complex account, as will be seen, provides an explanation for the fact that a number of word-order configurations are not attested. Finally, I shall consider the Tuvaluan data in the light of the claim that word-order variation similar to that exhibited by Tuvaluan is typically symptomatic of change in process. I shall show that, contrary to this position, word-order variation in Tuvaluan appears to be a stable phenomenon. In conclusion, it will be proposed that the account of Tuvaluan word-order variation proposed here may be extended to at least some of the Outlier languages. Because strong genetic connections between Tuvaluan and some

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Outlier languages have been suggested by Bayard (1967), Pawley (1967), and Howard (1981), special attention will be given in the last part of the paper to the relative roles of shared syntactic innovation and of independent developments to account for the word-order patterns encountered in the Polynesian language family.

1. THE DISTRIBUTION OF WORD-ORDER VARIANTS

In Tuvaluan, all constituent-order possibilities are grammatical, with the restriction that a transitive subject cannot precede the verb if no direct object follows the verb. Contrast, for example, the various grammatical word-order possibilities given the same set of three constituents in the transitive clauses in (1a-h) with the unattested variants in (1i-k), which are ungrammatical both with and without an ergative case-marker:³

(1) STV

- | | |
|--|---------------------|
| a. Ne ffuti nee loane te ika teelaa. | VSO |
| Pst <i>pull</i> Erg <i>Ioane the fish that</i> | |
| <i>Ioane caught that fish.</i> | |
| b. Ne ffuti te ika teelaa nee loane. | VOS |
| c. Te ika teelaa ne ffuti nee loane. | OVS |
| d. loane ne ffuti te ika teelaa. | SVO |
| e. Te ika teelaa ne ffuti. | OV (S deleted) |
| f. Ne ffuti te ika teelaa. | VO (S deleted) |
| g. Ne ffuti nee loane. | VS (O deleted) |
| h. Ne ffuti. | V (S and O deleted) |
| i. *(nee) loane ne ffuti. | *SV (O deleted) |
| j. *(nee) loane te ika teelaa ne ffuti. | *SOV |
| k. *Te ika teelaa (nee) loane ne ffuti. | *OSV |

Example (2) below illustrates the word-order possibilities for an intransitive sentence:

(2) STV

- | | |
|----------------------------|---------------|
| a. Koo fano loane. | VS |
| Inc <i>go</i> <i>Ioane</i> | |
| <i>Ioane has left.</i> | |
| b. loane koo fano. | SV |
| c. Koo fano. | V (S deleted) |

Several types of oblique noun phrases, such as temporal and locative expressions, also participate in this scrambling effect; others, such as comitative noun phrases and middle objects, which are shown elsewhere to be treated by Tuvaluan syntax as oblique noun phrases (Besnier 1981a, 1986), are fairly fixed in a post-verbal position. This discussion, however, will be restricted to the relative position of subjects, verbs, and direct objects.

The various word-order configurations are associated with different case-marking strategies, a fact that will prove important in this discussion. The facts can be summarised as follows: post-verbal transitive subjects are always marked with an ergative preposition *nee* (or *e* in the three Northern dialects), while all other noun phrases are either unmarked for case or marked by an absolutive/neutral preposition *a* (this morpheme, which is reviewed briefly in Wang

1976, appears to play many roles, one of which is the marking of contrastiveness). The ergative preposition *nee* (or *e*) can only mark post-verbal noun phrases. Thus, clauses involving the sequence VS follow an ergative-absolutive case-marking pattern, where ergativity is, as in many Polynesian languages, a fairly "shallow" phenomenon (Besnier 1981a), while SVO clauses follow a nominative-absolutive pattern, in which case relations are retrievable from the order of the constituents.

Table 1 below summarises the word-order configurations attested in Tuvaluan, and the case-marking strategy associated with each variant.

Table 1: Attested and unattested word-order configurations

intransitive clause	0/1-NP transitive clause	2-NP clause
VS SV VeS ⁴ V	VO OV VeS V	VeSO VOeS OVeS SVO
	*SV	*SOV *OSV

(e = ergatively marked; * = unattested)

The Tuvaluan dialects, unlike other Polynesian languages of the area, do not make productive use of pre-verbal clitic pronouns (although they are more productive in some dialects than in others); their use is restricted to a small number of set expressions, which are not relevant to the present discussion (see Besnier 1986 for further details). Furthermore, the suffixation of verbs with *-gina* (or, alternatively, *-gia* in Southern Tuvaluan), the productive reflex of the Proto-Polynesian suffix **(C)ia* (Clark 1976, 1977, Chung 1978, etc.), which, in Tuvaluan, "boosts" the transitivity of the verb, does not appear to have any effect on word-order configuration.⁵

It is important to distinguish between unmarked clause-initial noun phrases and another type of clause-initial noun phrase, marked with *ko*, the latter type being much more common in Polynesian languages than the former. The morpheme *ko*, whose exact role appears to vary from one language to the other, marks, amongst other things (such as predication), new-information focus in Tuvaluan, whether contrastive or not, as illustrated in (3). The term "focus" is used here to refer to "the essential piece of new information that is carried by a sentence" (Comrie 1981:57).

- (3) STV E isi ttino Nukufetau, e fakaigoa kiaa Taukiei. | suaa
 Nps exist the+man Nukufetau Nps named after Taukiei at other
 taimi laa, ko tena tama e nofo i Nukulaelae nei, fai mai ei kee fanatu.
 time then Foc his child Nps stay on Nukulaelae this say Dxs Anp Sbj go+Dxs
 There was a Nukufetau man named Taukiei. On one occasion, he told his son,
 who was living here on Nukulaelae, to come over.

The association of *ko* with the marking of new information is illustrated by the fact that *ko*-marked structures are typically encountered in answers to

information questions (a prototypical context for new information), in which the use of an unmarked preposed noun phrase, in contrast, would be infelicitous. As will be shown later, the pragmatic role associated with ko-marked noun phrases is thus diametrically opposed to that associated with unmarked noun phrases. Furthermore, ko-focused structures are, syntactically speaking, clefted constructions, while unmarked nominal arguments are not.

2. THE SYNTAX OF WORD ORDER

Despite the relative surface word-order freedom, evidence exists for positing VSO as both the underlying order and the syntactically basic order. The argument that follows echoes in part a similar discussion for Kapingamarangi by Chung (1978:15-20).

Excluding the possibility that Tuvaluan has the typologically marked OVS and VOS orders as underlying word order,⁶ and excluding verb-final structures because of the distributional restrictions noted above, SVO and VSO are the only possible underlying word orders for Tuvaluan syntax. It is to be noted that the implicational universals proposed by Greenberg (1966), Vennemann (1974 and 1975), and Hawkins (1983) do not provide any evidence for treating either order as basic. As pointed out by Hawkins (1983:16), word-order universals only contrast verb-initial and verb-final structures, leaving verb-medial systems to follow the patterns of one or the other.

First of all, in order to account for the relatively frequent object-initial and subject-final word-order variants (i.e. OVS), one needs to posit two separate movement processes if SVO is posited as the underlying word order (i.e. a rule of subject postposing and a rule of object preposing), while only one such process is needed if VSO is the underlying shape of the clause. The simplicity of the latter account provides one argument for preferring a verb-initial order to a verb-medial one.

Furthermore, subordinate clauses do not allow any nominal constituent to precede the verb. In such clauses, the order of the sentential constituents is strictly verb initial, whether the subject precedes the object or not. Compare, for example, the grammaticality of (4a), where the subordinate clause is verb initial, with its ungrammatical equivalent in (4b), in which the subject of the subordinate is preposed to the verb:

(4) STV

- a. Toku tamana ne fai mai kee fanatu koe. VS
my father Pst say Dxs Sbj go+Dxs you
My father said that you should come over.
- b. *Toku tamana ne fai mai koe kee fanatu. *SV

This is reminiscent of a similar constraint on subordinate clauses in German and Dutch, in which these follow a strict verb-final order. This fact has been argued by Bierwisch (1963) for German and Koster (1975) for Dutch to be a strong argument for positing the underlying syntax of these two languages as being of the verb-final type.

Relativisation provides further evidence for the verb-initial nature of the underlying syntax of Tuvaluan. One of the two relativisation strategies found in Tuvaluan grammar consists in replacing the relativised noun phrase by a

resumptive pronoun, as illustrated in (5a) below. The resumptive pronoun preferably precedes the direct object of the relative clause (VOS relative clauses, as in (5b), are unidiomatic); however, it cannot precede the verb of the relative clause, as shown by the ungrammaticality of (5c), even though the boundary between the relative clause and the head may be marked with an optional relativising demonstrative *teelaa* (singular relative head) or *kolaa* (non-singular relative head):

(5) NKL

- a. Teenei ttino e hai saale nee ia aku fekau. VeSO
this the+man Nps do often Erg he my errand
This is the man that does my errands.
- b. ?Teenei ttino e hai saale aku fekau nee ia. ?VOeS
- c. *Teenei ttino teelaa a ia e hai saale (nee ia) aku fekau. *SV(e)O
this the+man that he Nps do often Erg he my errand

The resumptive-pronoun relativisation strategy thus suggests that relativisation applies to a verb-initial structure, and not to a verb-medial configuration.

Main or independent transitive clauses in which the subject is preposed to the verb also involve pronominal copies. In these, the transitive subject is optionally co-referenced with a post-verbal ergatively-marked pronoun, as illustrated in (6). This type of construction is not only possible, but very frequent in unelicited discourse, and, in elicited sentences, judged to be preferred to corresponding structures without a post-verbal pronominal copy.

- (6) NTV Te loomatua ni fakavela e ia te tii. SVeSO
the old-woman Pst heat-up Erg she the tea
The old woman heated the tea up.

It thus appears, from the distributional patterns exhibited by these resumptive pronouns, that preposed transitive subjects are the result of a movement rule that leaves an optional pronominal trace in the underlying post-verbal position.

Similarly, the shape of imperative clauses in Tuvaluan suggests that imperative-formation is a process that discriminates between subject-initial and verb-initial structures. Imperative clauses are formed by deleting the tense-aspect marker immediately preceding the verb. The subject of an imperative clause need not be affected by imperative-formation as long as it follows the verb, as illustrated in (7a); in contrast, no pre-verbal subject is allowed to surface in imperative clauses, as attested by the ungrammaticality of (7b):

(7) STV

- a. Olo koutou keaattea ia maatou e fakalavelave! VS
go you-3 away because we-3 Nps busy
Go away, we are busy!
- b. *Koutou olo keaattea ia maatou e fakalavelave! *SV

Imperative formation, thus, provides further motivation for treating the underlying word order of Tuvaluan syntax as verb initial.

To summarise, the four features of Tuvaluan syntax presented above all converge to yield the same conclusion: that the syntax of the Tuvaluan dialects is underlyingly verb initial.

Furthermore, there exists strong evidence for treating VSO as the least marked, or most basic constituent order. Typologists like Hawkins (1983) distinguish the notion of underlying word order from that of basic word order, the former being only one of the several criteria involved in the determination of the latter. According to Hawkins, three sets of criteria can be used to define basicness: overall frequency, structural frequency (i.e. the relative range of occurrence of a word-order variant over the different types of syntactic structures), and grammatical markedness (1983:12-16). As illustrated above, VSO is the structurally most frequent variant; it is also treated by the syntax (through the pronoun-resumption processes, for example) as the least marked variant. The fact that VSO satisfies these two criteria is sufficient motivation for treating it as the basic word order, despite the fact that the last criterion, overall frequency, is only satisfied for the more formal types of discourse.⁷

3. THE PRAGMATICS OF WORD ORDER

What, then, are the factors governing the occurrence of the various word-order configurations? In the light of Li and Thompson's (1976) typological criteria for distinguishing subjects from topics, the clause-initial nominal constituent in Tuvaluan presents itself as a prototypical old-information topic slot. Tuvaluan, for instance, exhibits "double subject" constructions (Li and Thompson 1976:480-481), in which an intransitive sentence surfaces with two nominal arguments. In such sentences, which are frequently encountered in languages in which topics play an important role, whether statistically or grammatically, the first noun phrase is a topic, syntactically independent of the rest of the clause. In Tuvaluan, these structures are most commonly of the shape NP V Poss N, where the first noun phrase and the possessive marker are co-referential:

(8) NEA Aku koa mmae toku piho. NP-VS
 I Inc hurt my head
 I have a headache.

(9) STV A ttamaa toetiiti koo too tena moe. NP-VS
 Cnt the+man+Spc almost Inc fall his sleep
 That guy almost fell asleep.

Li and Thompson further propose a number of cross-linguistic characteristics of topics. First, topics are often obligatorily definite; the clause-initial position in Tuvaluan is indeed restricted to definite noun phrases, as illustrated in (10) and (11), both of which are ungrammatical because the pre-verbal noun phrase is indefinite:

(10) NTV *Ni falaoa ni kai e aku. *OVeS
 some bread Pst eat Erg I
 (I ate some bread.)

(11) NTO *Se tino ni kai (e ia) te ika teelaa. *SV(eS)O
 a person Pst eat Erg he the fish that
 (Someone ate that fish.)

As further evidence for this restriction, we note that the subject of a possessive clause (i.e. the noun phrase referring to the possessed participant) is always indefinite when postposed to the verb; when moved to the beginning of

the clause, however, it is always marked for definiteness. Compare the following contrastive sentences, the second of which was uttered by someone who knew that the addressee had a hatchet (and hence marked the nominal element for old-information topicality). The possessive construction in (12b) is used as an indirect request:

(12) STV

- a. E isi sou takuu? VS
 Nps exist your hatchet
 Do you have a hatchet?
- b. Tou takuu e isi? SV
 your hatchet Nps exist
 Is your hatchet handy?

Li and Thompson's second criterion states that a topic need not have any selectional relation with the verb of the clause. The "double subject" constructions illustrated above show that this criterion applies to at least one type of topicalised structure in Tuvaluan.

Criterion 3 states that, cross-linguistically, topic selection does not depend on the verb. As illustrated by many of the above examples, Tuvaluan verbs play no role in determining which noun phrase in the clause gets fronted to topic position, this being determined entirely by the functional role played by the noun phrase in the discourse.

Verb agreement, also, is not triggered by the topic. In Tuvaluan, when the verb agrees in number with a nominal constituent (agreement being marked by consonant gemination), it is with the (intransitive) subject, and not with the clause-initial noun phrase; this is Li and Thompson's criterion 5. In sentences (13a-d), whether the verb is to be interpreted as transitive or intransitive is determined by whether agreement with the overt noun phrase takes place or not; the position of the nominal constituent in the clause has no effect on agreement:

(13) STV

- a. Ana puaka koo oti ne kkai katoa. (agreement) SV
 his pigs Prf eat all
 His pigs have all eaten.
- b. Koo oti ne kkai katoa ana puaka. (agreement) VS
- c. Ana puaka koo oti ne kai katoa. (no agreement) SV
 his pigs Prf eat all
 His pigs have all been eaten.
- d. Koo oti ne kai katoa ana puaka. (no agreement) VS

Finally, grammatical processes in Tuvaluan syntax refer, not to clause-initial constituents as a grammatical category, but to the categories defined by grammatical relations and, to a lesser extent, surface case (Besnier 1981a). One illustration will be provided here: quantifier float can be triggered from non-oblique nominal constituents (intransitive subjects, transitive subjects, direct objects), irrespective of their position in the sentence, as illustrated in (14a-c); in contrast, a quantifier cannot be launched from an oblique noun phrase, irrespective again of its position in the sentence ((14d-f)):

(14) STV

- a. Ne ttogi aku naifi katoa i te sitoa. V[Oq]
 Pst buy my knife all at the trade-store
 I bought all my knives at the trade store.
- b. Ne ttogi katoa aku naifi i te sitoa. [Vq]O
- c. Aku naifi ne ttogi katoa i te sitoa. O[Vq]
- d. I aso katoa e fano o fai uttanu. [NPq]V
 on day all Nps go Cmp do sprouted-coconut
 Every day he goes to gather sprouted coconuts.
- e.*I aso e fano katoa o fai uttanu. *NP[Vq]
- f.*E fano katoa i aso o fai uttanu. *[Vq]NP

All processes of Tuvaluan syntax behave in a fashion similar to quantifier float with respect to the position of the nominal constituents in the clause. This satisfies Li and Thompson's criterion 7.

The above discussion shows that, in Tuvaluan, all clause-initial nominal constituents are topics (the same set of arguments can be shown to also apply to preposable oblique non-phrases), that the high incidence of non-basic configurations is due to the salience of the notion "topic" in Tuvaluan discourse, and, thus, that word-order freedom is pragmatically governed.

4. EXPLAINING *SOV, *OSV, AND *SV

It is now possible to provide a functional explanation for the absence of SOV, OSV, and transitive SV structures from the range of word-order possibilities. We shall first turn to the most readily accountable of these, i.e. the ungrammaticality of SOV and OSV configurations.

First of all, given the fact that the order of non-sentential constituents in Tuvaluan (noun-adjective, preposition-noun, etc.) is characteristic of a verb-initial grammar, the verb-final variants SOV and OSV, if they existed, would violate Hawkins' (1983) "principle of Cross-Category Harmony": according to this principle (and any of the variants that have been proposed for it - Lehmann 1973, Vennemann 1975, etc.), a language with basic verb-initial syntax will be typologically most "consistent" (Smith 1981) if it also has post-nominal adjectives, post-nominal genitives, and so on. Thus, in the paradigm of possible word-order configurations, SOV and OSV are the most anomalous from a typological perspective.⁸

Furthermore, if SOV and OSV were attested, they would be the result of the topicalisation of both the transitive subject and the direct object of the clause. Tuvaluan grammar, however, strongly constrains the occurrence of double topics in a clause: these may only occur if the first noun phrase is separated from the rest of the sentence by an intonational break, an adverbial determiner, and a demonstrative, and if that first noun phrase is a highly oblique, non-obligatory term of the sentence, such as, for example, a temporal or locative noun phrase (the second noun phrase, on the other hand, must be a non-oblique noun phrase):

- (15) NKL Te aso teelaa eiloo, a Toe ne vau kia aku. NP-SV
 the day that indeed Cnt Toe Pst come to me
 The other day, Toe came up to me.

The status of the first noun phrase in these constructions is that of left-dislocated elements (Duranti and Ochs 1979), a syntactic position to which only certain types of oblique noun phrases have access (such as locatives, temporal expressions, and some instrumentals).

These restrictions on the co-occurrence of more than one pre-verbal nominal constituent thus explain the fact that constructions with both a pre-verbal transitive subject and a pre-verbal direct object are not attested: a clause with two pre-verbal noun phrases requires one of these to be left-dislocated, a position to which non-oblique noun phrases do not have access.

Transitive SV constructions, if they were attested, would be the result of two separate processes: the preposing of the transitive subject to topic position, and the zero-pronominalisation (Besnier 1985) of the direct object. In terms of the "Hierarchy of Informational Value" proposed by Lakoff (1968) and refined by Cole (1974), a zero pronoun is the least explicit mode of reference for a nominal argument, and, thus, the most likely to refer to old information. However, it is well documented that, cross-linguistically, subjects are more likely topics than objects, all other things being equal (Givón 1977, Keenan 1976). Tuvaluan grammar may thus regard as pragmatically unnatural and grammatically anomalous a configuration that places an already highly topical argument (the subject) in a position where its topicality is further stressed, but where the object is marked for even greater topicality than the subject.⁹

5. WORD ORDER AND CASE MARKING

Other facts about Tuvaluan syntax, however, suggest that this functional explanation is not sufficient, and that other factors relating to the nature of case marking are at play. It will be shown here that the contrast between preposed transitive subjects and postposed transitive subjects involves not only the pragmatic notion of topicality, but also some of the semantic notions associated with high-transitive subjecthood. This conclusion is suggested by the co-occurrence of certain syntactic constraints involving word order with the semantic characteristics of these structural types, which will first be presented in this section.

As mentioned in section 1 above, no nominal constituent in the Tuvaluan clause is marked for case other than post-verbal transitive subjects (and a few post-verbal intransitive subjects, as will be shown below), which are marked with the ergative preposition *nee* (e in Northern Tuvaluan). The fact that this preposition can mark appropriate subjects only if they are post-verbal is important for the word-order syntax of Tuvaluan, as I shall demonstrate here.

In Tuvaluan, there is a class of verbs that can be used in the main clause of complex sentences in which the subject of the subordinate clause may be raised to the main clause (arguments for treating the resulting clauses as being derived through raising will not be presented here). With a small subclass of these main-clause verbs, the raised subject is obligatorily marked for the ergative case, whether the subordinate clause of which it is the underlying subject is transitive or not; these verbs behave syntactically like the Niuean verbs labeled "TS-ergative" by Levin and Massam (1986).¹⁰ The verb *maua* *able to* is one such verb; in (16), the raised subject of the intransitive compound ("object-incorporated") verb *ssali kaleve* is marked for the ergative case, this case assignment being required by *maua* in the upper clause:¹¹

- (16) STV E maua nee ia o ssali kaleve. [VeS[v]]
 Nps *able* Erg *he* Cmp *draw* *toddy*
He knows how to tap coconut toddy.

This subclass of raising verbs (which will be referred to as maua-type verbs) has two other important properties. First, the subclass includes the only raising verbs that denote notions involving the high agentivity of the subject in the action or state of the verb (capability, knowledge, and memory - see note 11 for an exhaustive list), where "high agentivity" is a cover term for volition and/or a high degree of direct physical activity and/or the affectedness of the object by the agent (i.e. the subset of transitivity parameters proposed by Hopper and Thompson 1980 that refer to the agentive nominal constituents). Secondly, raised subjects of maua-type verbs are rarely preposed to topic position (a position in which they would lose their morphologically overt case marker).

The second characteristic is not a restriction on the topicalisation of raised subjects. Indeed, raising verbs outside of this subclass (i.e. raising verbs that do not mark the raised subject ergatively) do not impose any restriction on the topicalisation of the raised subject. Furthermore, the restriction on the topicalisation of raised subjects is not an absolute rule with maua-type, but, rather, a tendency: in certain circumstances, such as when the raised subject is a first- or second-person singular pronoun (hence highly topical), it may be preposed, in which case it is interpreted as emphatically contrastive, as illustrated in (17):

- (17) STV Koe naa e maua o kake? [sv[v]]
you that Nps can Cmp climb
How about you, can YOU climb (trees)?

The properties exhibited by maua-type verbs suggest that these verbs tend to be accompanied by postposed (and, hence, ergatively-marked) subjects. This fact is posited to be associated with the semantics of these verbs, or, more precisely, with the fact that the actions or states they denote require that their grammatical subject be marked for high agentivity, a requirement that is fulfilled by the ergative marker *nee*.

Yet another type of structure, which will be called pseudo-ergative structures, suggests the same analysis. Pseudo-ergative structures involve an intransitive verb whose post-verbal subject is marked ergatively, as illustrated in (18) and (19):

- (18) STV A papa koo manogi ssogo ne mimi nee te puusi. [SV][veS]
 Cnt *mats* Inc *smell-of-urine* Pst *urinate* Erg *the cat*
The mats smell bad because the cat has been urinating all over them.
- (19) NGA Taatou koa hihui ni too e te vaiua. [sv][veS]
 we-3 Inc *wet* Pst *fall* Erg *the rain*
We were going to be rained on and drenched.

In these examples, the verbs *mimi* and *too* are canonically intransitive verbs, as they are not used transitively elsewhere. Transitivity is a well-defined concept in Tuvaluan syntax, in that a number of tests can be devised to distinguish highly transitive constructions from constructions that are low in transitivity (Besnier 1981a). The intransitivity of pseudo-ergative structures

is illustrated, for example, by the fact that verbs suffixed with the detransitivising suffixes of shape -(C)ia may be found in this type of construction:

- (20) STV A ia koo onosia nee te fenua. OV-CiaeS
 Cnt *he* Inc *ostracised* Erg *the island*
He is ostracised by everyone on the island.
- (21) NTO Aku ni osofia e toku taina. OV-CiaeS
 I Pst *pounced-on* Erg *my brother*
I was pounced on by my brother.

Furthermore, the fact that these constructions are "frozen" in an (NP)VeS configuration (where NP is the "affected" noun phrase, and S the ergatively-marked noun phrase) indicates that they are not transitive constructions, since the latter type always have SV(eS)O, VeSO, and VOeS alternatives. Further evidence for treating these constructions as intransitive constructions is provided by the fact that they do not undergo the nominalisation patterns associated with transitive clauses, and that their ergatively-marked participant cannot launch a quantifier, a process that all other transitive subjects can trigger (Besnier 1981a). Unlike canonical intransitive clauses, however, pseudo-ergative structures do not undergo subject-verb agreement, and, thus, do not behave entirely like intransitive constructions.

At the surface (case-assigning) level of syntax, the ergative case in pseudo-ergative structures thus denotes, not transitive subjecthood (the grammatical relation usually associated with ergativity), but high agentivity. Indeed, pseudo-ergative structures always denote situations in which the role of the ergatively-marked noun phrase is one of high, often negative, affect on another entity of the discourse. The association of a case-marking pattern with a semantic concept other than the usual notions of subject or object is reminiscent of the "split intransitive" (Merlan 1985) or "active" (Harris 1982) case-marking systems found in certain Amerindian languages, in which the subject of an intransitive verb is marked like a direct object if non-volitional, or like an intransitive subject if volitional.¹²

Returning to canonically transitive constructions, similar types of semantic contrasts can be established for clauses in which there is a choice of case-marking strategy. In pragmatically unmarked independent clauses, that is, in clauses where the nominal arguments are not in any particularly prominent topical position, the choice between a preposed, neutrally-marked transitive agent, and a postposed, ergatively-marked transitive agent is not only determined by topicality, as established in section 3, but also by the degree of agentivity of the subject. Thus, the high-low agentivity contrast is another of the determining factors distinguishing between preposed (morphologically unmarked) transitive subjects and postposed (ergatively-marked) transitive subjects, as attested by the contrast between (22a) and (22b) below:

- (22) STV
- a. Ne maua nee au a ika konei annafi. VeSO
 Pst *get* Erg *I* Cnt *fish these yesterday*
I caught these fish yesterday (with my own hands).
- b. Au ne maua a ika konei annafi. SVO
 I Pst *get* Cnt *fish these yesterday*
I obtained these fish yesterday (from someone, etc.).

Thus, the ergative case marker used in pseudo-ergative constructions and with maua-type verbs is not simply homophonous with the ergative marker used in independent clauses; rather, it marks, in all these syntactic contexts, the same type of semantic relation of the subject to the verb.

Furthermore, since topichood and high agentivity are not mutually exclusive concepts, the same subject may appear on both sides of the verb, as in sentence (22c), a commonly attested structure as pointed out earlier:

(22) STV

- c. Au ne maua nee au a ika konei annafi. SVeSO
I Pst get Erg I Cnt fish these yesterday
I was the one who caught these fish yesterday.

Finally, to return to the question of the ungrammaticality of transitive SV structures, Tuvaluan discourse exhibits a strong tendency to reduce transitive clauses to structures consisting of a verb and a single noun phrase. In fact, two-argument transitive clauses are very infrequent in natural discourse.¹³ Several strategies are used to achieve this preferential clause structure: one of the nominal arguments in transitive structures may be zero-pronominalised (as discussed earlier); the transitive agent may be referenced within the object phrase by a possessive pronoun, as in example (23) below;¹⁴ or a complex structure can be used, as in example (24), in which the subject is referenced overtly in the main clause, while only the object is overt in the subordinate clause:

- (23) STV Taku ika teenei ne ffuti annafi. OV
my fish this Pst pull yesterday
I caught this fish yesterday.

- (24) NEA A loane ni haga o ffuti te ika teelaa. [sv[VO]]
Cnt Ioane Pst apply-oneself Cmp pull the fish that
Ioane (applied himself and) caught that fish.

From a semantic point of view, the difference in the meaning of these "alternative" clause types and their two-argument, main clause paraphrases is minimal.

An important consequence of these tendencies is the fact that there is a choice, in any transitive sentence, as to which of the two non-oblique nominal constituents is to be expressed overtly. If a transitive subject is the overtly expressed nominal constituent, there always is a strong tendency to interpret its overt realisation as denoting high agentivity, as in example (25):

- (25) STV Teenaa laa, koo oti ne vvae nee ia. VeS
thus Prf divide Erg she
So SHE has already divided (it).

Indeed, if the transitive subject is to be expressed overtly but not marked for high agentivity, it is normally expressed through zero-pronominalisation, through a possessive marker, or through any other way that would not require it to be marked ergatively. Thus, a transitive subject serving as the sole constituent of a clause must be postposed to the verb, where it is marked for the ergative case to denote high agentivity.

6. IMPLICATIONS AND CONCLUSION

It has been shown that word order in Tuvaluan is used to mark the pragmatic structure of the clause, with the clause-initial (pre-verbal) nominal element denoting topicality. Furthermore, subjects marked for the ergative case (because they are raised to a main clause with a maua-type verb, or because they are within a pseudo-ergative construction, or because they are post-verbal transitive subjects) denote high agentivity, in contrast to the various other ways of denoting subjecthood. Word-order variation in Tuvaluan, thus, requires a complex explanation, involving the pragmatic structure of the sentence on the one hand, and the semantic value of the ergative morpheme on the other hand.

It is commonly assumed in the literature on word-order change that word-order variability, particularly when it is as widespread as in Tuvaluan, is inherently unstable, and, in the unmarked case, leads to the reanalysis of one of the word-order variants as the new basic order of the syntax. This assumption is evident in the various motivations that have been proposed as triggering word-order changes: the resolution of relational ambiguity at the sentence level (Lehmann 1973, Vennemann 1975), the reanalysis of topichood as subjecthood (Givón 1977), the reanalysis of "afterthoughts" as objects (Hyman 1975), and the competition of different word-order configurations between main and subordinate clauses (Parker 1980) all involve, in one way or another, the notion that grammatical optionality, which is more often than not created by the encoding of pragmatic information in the sentence, is a transitional state.¹⁵ To use Givón's (1979) words, yesterday's pragmatics is today's syntax.

Is Tuvaluan undergoing a change from VSO to SVO involving the "grammaticalisation" of its pragmatic structure? I suggest here that, as far as one can argue for or against change in process, this is not the case.

Positing such a change in process would indeed be a tempting analysis. From a typological perspective, historical evolution from VSO to SVO is both common and natural: word-order changes involving the reanalysis of the topic slot as the subject slot have been reported to have occurred in Indo-European languages (Vennemann 1974) and Semitic languages (Givón 1977); and the change from verb-initiality to verb-mediality is, according to Keenan's (1979) "Subject-Frontness Hierarchy", given in (26) below, part of a wider change motivated by both processing factors and typological frequency:

(26) [less "preferred"]
 ----->
 SVOX > VSOX > VOSX > VOXS
 <-----
 [pressure to change]
 [typological frequency]

Keenan's (1979) Subject-Frontness Hierarchy

However, Tuvaluan does not appear to fit any of the descriptions of transitional systems that have been proposed to date. Furthermore, the complex interaction of semantic and pragmatic factors in word-order choice appears to indicate that the system is in fact stable.

First of all, we note from Table 1 that the Tuvaluan word-order system is such that the only configurations that would involve relational ambiguity are ungrammatical. The identification of the subject and the object depends on the

following principles: if a transitive verb has only one morphologically unmarked nominal constituent (whether it be preposed or postposed), it is an object; if two morphologically unmarked nominal constituents are present (in a NP-V-NP configuration), the first is to be interpreted as the subject, the second as the object; finally, in all other possible cases, the subject is marked with *nee*. Thus, the Tuvaluan system exhibits no possible relational ambiguity that would motivate a word-order change.¹⁶

Secondly, it was shown in this paper that word order is dependent both on the relative topicality of each nominal constituent, and on whether the agent is to be marked for high agentivity. The high topicality of any nominal constituent is marked by preposing it to the sentence-initial position, while high agentivity is associated with the post-verbal position. Thus, if the topic slot is to be reinterpreted as a subject slot, the grammar will have to forgo its current capability of marking a subject for high agentivity, since subjects will be obligatorily pre-verbal. Object topicality will also have to be marked in some way other than through a movement process, and it will have to reanalyse the currently ungrammatical transitive SV structures as grammatical. This topic-as-subject reanalysis, thus, is structurally very "costly", and is unlikely to be taking place.

Finally, no morphologically complex structure is involved in the word-order inventory of Tuvaluan (such as the verb serialisation in Chinese, posited by Li and Thompson as the trigger for word-order change in that language). Nor is there a configurational discrepancy between the basic and underlying word order of main and subordinate clauses: the difference between main and subordinate clauses is that, while word-order variations are possible in the former, they are not in the latter, a state of affairs that appears to be common in Australian languages (Mallinson and Blake 1981:129).

The Tuvaluan word-order system thus appears to be a highly "efficient" system, in that it allows the encoding of an appreciable amount of semantic and pragmatic information with a minimal amount of morphology, while avoiding any possibility for grammatical ambiguity. Furthermore, motivational elements traditionally associated with diachronic processes of word-order change are not attested in Tuvaluan. The system therefore is a diachronically stable phenomenon, in contrast to the situations of word-order change in process documented in the literature. In Tuvaluan, yesterday's pragmatics remains today's pragmatics.

To conclude, it is suggested here that many of the same patterns presented here for Tuvaluan may also be characteristic of at least some of the Polynesian Outlier languages. Indeed, the same degree of word-order variability is found to be at play in several of these languages. This suggests that, in those languages, word order also marks pragmatic structure. Consider the following examples, from Anutan, Tikopian, Takuu, Luangiua, and West Futuna-Aniwa respectively, in which the same degree of variability in word order is illustrated, and in which the same patterns of interaction between case marking and word order appear to be at play (at least in the languages with ergative case-marking):

(27) ANU (Feinberg n.d.)

- a. Te penua ne oro o taa te marara. [SV[VO]]
the people Pst go Cmp strike the charcoal
The people went and painted themselves with charcoal.
- b. Nga manumanu ne taamate e Motikitiki. OVeS
the animal Pst kill Erg Motikitiki
Motikitiki killed the animals.

- c. Natou umu ne tao. OV
their oven Pst bake
(They) baked (the food in) their underground oven.

(28) TIK (Early 1981:114-118)

- a. Te ua ne too, te raa ne saa. SV
the rain Pst fall the sun Pst shine
The rain fell, the sun shone.
- b. A taagata ne kai te ufi. SVO
the men Pst eat the yam
The men ate the yam.
- c. Te ufi, ne sori e a kuou ki ei. OVeS
the yam Pst give Erg Art I to Anp
I gave him the yam.

(29) TAK (Reedy 1977)

- a. Te lani raa e uri. SV
the sky that Nps blue
The sky is blue.
- b. Te poi raa e oso te manu. SVO
the dog that Nps catch the bird
The dog caught the bird.
- c. Te poi raa e osofia te manu. SV-CiaO
the dog that Nps catch+Cia the bird
The dog caught the bird.
- d. Te manu raa e osofia te aa? OV-CiaS
the bird that Nps catch+Cia the what?
What caught the bird?

(30) LUA (Salmond 1974)

- a. Ke poi la me a'e ke uŋa la. SV
the dog that say up the crab that
The dog said (to) the hermit crab
- b. La me a'e ke uŋa la. VS
then say up the crab that
Then the hermit crab said
- c. Keerŋaa ko'o lua la e 'ila ka'upu hoo kahi. SVO
thus Num two those Nps look girl Num one
The two looked intently at one of the girls.
- d. Sipuŋi e moe se loŋo ŋaa kamali'i kaahao vaa loko ke manava
Sipuŋi Nps sleep Neg feel the children play in inside the belly
 aia la. [SV][VO]
his that
Sipuŋi slept, not feeling the children playing inside his belly.
- e. Keerŋa ŋoo loŋo ka'upu la. [VS(O)]
then Cmp feel girl that
Then the girl felt (something).

(31) WFU (Dougherty 1983)

- a. Ko to te ua. VS
Inc fall the rain
It's raining.

- b. Ta kiri pepa ni safifi. SV
the skin paper Pst curl
The sheet of paper has curled.
- c. Ta tao nei kofia te kamkama. SVO
the spear Pst pin the crab
The spear pinned the crab.
- d. A tama Pau ne fujia e kirea ta uorukago. SVEsO
the people Pau Pst catch Erg they the tuna
The people of Pau caught, they did, a tuna.
- e. Ta fakau ro fano, avau kan fakaoa. [O][sv]
the person Irr go I Fut reward
The person who goes, I will reward (him).

Dougherty (1983:119) analyses the double mention of the agent in example (31d) as correlating "with the emphasis on the potency of the subject", which is the same claim as that made here for the corresponding phenomenon in Tuvaluan. West Futunan appears to differ from Tuvaluan, however, in allowing the clefting of an object noun phrase immediately before a preposed subject (sentence (31e)).

In contrast, for a number of Polynesian Outlier languages, the only attested word-order configuration is SVO. In those languages, verb-mediality appears to have become the only possible word-order configuration, and, presumably, the syntactically basic order. This is illustrated by Mele, an Outlier spoken in the Vila Bay of Efate Island, Vanuatu:

(32) MEF (Clark 1975a and b)

- a. Napoonaa ti tamaffine naa kuu-tere. SV
then the girl that Inc run
Then the girl started running.
- b. T'nuufine takua kaia waawa neana. SV
The+old-woman say to uncle her
The old woman told her uncle.
- c. Maasai raaraku te paki. SVO
Maasai unload the canoe
Maasai unloaded the canoe.

Crucially, the Outlier languages that are documented as having reanalysed their basic word order to strict verb-mediality are precisely those with a long history of contact with non-Polynesian Oceanic ("Melanesian") languages which have a strict SVO surface syntax: Mele-Fila, Emae, and perhaps some other Outliers. The influence of non-Polynesian languages on these Outliers, as shown by Clark (1978, 1986), is very strong at all levels of structure. Interestingly, West Uvea, despite the fact that it has received considerable influence from Iaa, a neighbouring non-Polynesian language, does not exhibit the strict SVO ordering attested for Outliers of the Mele type, as illustrated in (33) below, a feature that can probably be explained by the fact that Iaa is essentially VOS (Moyse-Faurie and Ozanne-Rivierre 1983):

(33) WUV (Besnier, field notes)

- a. E kitea a de kulii de hoto. VeSO
Nps see+Trn Erg the dog the hen
The dog sees the hen.

- b. De kulii e/ide kitea de hoto. SVO
the dog Nps/he+Nps see+Trn the hen
The dog sees the hen.
- c. De hoto e kitea a de kulii. OVeS
- d. De hoto e kitea. OV

In the light of Smith's (1981) remarks to the effect that word order is a syntactic feature that is very readily diffused across genetic boundaries, we may thus infer that the strict verb-medial systems developed by languages of the Mele type is the result of non-Polynesian influence, and, thus, is independent of the pragmatically-governed word-order variability exhibited by Tuvaluan, Tokelauan (Hooper 1986), and some Outliers.¹⁷

NOTES

1. This paper is based on field work conducted in Tuvalu in 1980-82. I thank Pat Clancy, Bernard Comrie, Ed Finegan, Jack Hawkins, Will Leben, and Elizabeth Traugott for having greatly contributed, at various stages, to the development of the ideas presented here. This paper also benefited from suggestions and comments by James Alexander, Joseph Finney, Michael Goldsmith, Ray Harlow, Robin Hooper, Ken Cook, Jacob Love and Françoise Rivierre, and by various members of the Linguistics Department at the University of Southern California, where it was also presented in September 1984. I am grateful to the Fondation de la Vocation (Paris) for supporting part of the field work on which this paper is based and to the Government of Tuvalu for permission to conduct research.
2. The Polynesian Outlier languages are spoken on a set of widely dispersed islands of Melanesia and Micronesia, namely: Takuu, Nukumanu, Nukuria (in Papua New Guinea's Northern Solomon Province), Luangiua, Sikaiana, Rennell, Bellona, Tikopia, Anuta, Pileni-Taumako (in the Solomon Islands), Mele-Fila, West Futuna-Aniwa, Emae (in Vanuatu), West Uvea (in New Caledonia's Loyalty Islands), and Nukuoro and Kapingamarangi (in the Federated States of Micronesia).
3. Examples are preceded with a three-letter abbreviation of the name of the dialect from which they are taken, a list of which may be found in the appendix, along with a key to the abbreviations used in interlinear glosses. Most contrastive sets of examples cited in this paper were elicited; non-contrastive examples were all taken from spoken or written textual sources.
4. This structural type is that of "pseudo-ergative" constructions, discussed in section 5.
5. In a survey of word-order variation in the Nanumaga dialect of Tuvaluan, Finney (1983) focuses precisely on one of the few verbs (*iloa to know*) that allow clitic subject pronouns. The number of grammatical and ungrammatical variants for this type of verb is thus much greater than those considered in this paper (in that one has to allow for the co-occurrence of a clitic pronoun with a full noun phrase, with a free pronoun, etc.).

6. Two languages spoken in the immediate neighbourhood of the Tuvalu, Gilbertese (Kiribati) and Standard Fijian, are often quoted in the literature as instances of VOS languages. Little data on Gilbertese syntax is currently available, although Cowell (1951) and Trussel (1979) both describe Kiribati transitive clauses as strictly following a VOXS order. It is much less clear that Fijian syntax is that of a VOS language than it is usually assumed. Some of the problems associated with positing Fijian as a subject-final language are pointed out by Keenan (1978). Geraghty (1983) suggests that the statistical predominance and unmarked nature of VOS is not a characteristic of any dialect of Fijian, but of Pidgin Fijian, of foreigner talk and of the Fijian obtained in linguistic elicitation situations (see also Geraghty 1978 and Moag 1978). The VOS hypothesis for Fijian is, according to Geraghty, "a fabrication wrought by generations of informants and grammarians guided more by translations than by spoken Fijian" (1983: 391). Further research is needed on the subject. It is a fact, however, that VOS is reported as the basic order of many languages of the greater Austronesian area, for example: Palauan (Georgopoulos 1986), Toba Batak (Cumming 1986), Malagasy (Keenan 1978), and many New Caledonia languages (Moysse-Faurie and Ozanne-Rivierre 1983).
7. This will not be illustrated here. A preliminary statistical investigation of the problem is outlined in Besnier 1981a; a more sophisticated computer-assisted stylistic analysis of word-order variation is in progress.
8. Verb-final variants are nevertheless attested in languages that are basically verb initial, as illustrated by the actor-emphatic construction in Maori and other Eastern Polynesian languages (Harlow 1986).
9. The Government and Binding framework developed by Chomsky (1981) and refined by his students would provide the following syntactic explanation for the non-occurrence of transitive SV structures in Tuvaluan: it has been shown by Huang (1983) that, in zero-pronominalising languages like Chinese, zero objects are not "true" pronouns, but traces (empty categories) bound by non-realised (deleted) object topics; thus, transitive SV clauses would involve the co-occurrence of an overt subject topic and of a non-overt object topic, which could be ruled out by extending the restriction on double topics to situations in which one of the topics is non-overt. It has been shown elsewhere, however, that zero objects in Tuvaluan share many properties with zero pronouns (Besnier 1983); thus, the Government-Binding account outlined above, however attractive, is problematic.
10. Unlike their Tuvaluan counterparts, as will be seen below, Niuean TS-ergative verbs do not appear to form a semantically-defined class.
11. The following list exhausts all maua-type verbs attested to date: maua *can, able to*, iloa (*mentally*) *able to, skilled at*, fai *to mean to, to act in order that*, STV masaua and NTV manatua *to remember*, STV kkafi (*physically*) *able to, strong enough to*, and mafai *capable of/to*.
12. Closer to home, Rapanui (Easter Island) is analysed by Alexander (1981) as exhibiting a split intransitive, or active, case-marking pattern, in which the morpheme cognate to the ergative case preposition in Western Polynesian languages denotes volitional subjecthood, while the non-overt case marking of a subject, whether transitive or intransitive, denotes non-volitionality. Coincidentally, Rapanui also exhibits a certain amount of word-order freedom (Alexander 1981), although it appears to be underlyingly verb initial (Chapin 1978).

13. A sample count over a 508-clause corpus of informal, non-elicited conversational discourse yielded, from a total of 300 main or independent clauses, only 14 (5%) main or independent clauses with two non-oblique nominal arguments.
14. In this type of structure, the possessive marker on the object does not denote any possessor-possessed relationship between the semantic subject and the object. In sentence (23), for instance, the fish may have been someone else's as soon as it was caught. Furthermore, the encoding of an alienable-inalienable distinction in Tuvaluan possessive morphology (see Besnier 1981b) allows a high vs low agentivity distinction to be marked in these structures.
15. The same conclusion is suggested informally by Chung (1978):
- It is tempting to suggest that [the] discrepancy [between the basic word order and the most frequent word order in Kapingamarangi] reflects an incipient word order change, and Kapingamarangi may eventually reanalyse its most frequent word order - SVO - as the basic word order. Similar changes may well have occurred in other Outlier languages, which according to Clark (1976) have SVO as their only surface word order. (1978:20)
16. Explanations for language change that invoke relational ambiguity have also been criticised by Li and Thompson (1974:211) and Moravcsik (1978), amongst others.
17. It is also likely that the West Uvean system illustrated in (33) is also the result of influence from Iaai, and not an innovation shared with Tuvaluan, Tikopia, Anutan, etc.

APPENDIX

Abbreviations

ANU	Anutan	Art	article
FUN	Funaafuti	Cmp	complementiser
LUA	Luangiua	Cnt	contrastive marker
MEF	Mele-Fila	Dxs	deictic adverb
NEA	Nanumea	Erg	ergative case
NGA	Nanumaga	Foc	focus marker
NKF	Nukufetau	Inc	inchoative
NKL	Nukulaelae	Nps	non-past
NTO	Niutao	Num	numeral marker
NTV	Northern Tuvaluan	Prf	perfective
STV	Southern Tuvaluan	Pst	past
TIK	Tikopia	Sbj	subjunctive conjunction
TUV	Tuvaluan	Spc	specific
WFU	West Futunan	Trn	transitivising suffix
WUV	West Uvean	2	dual
		3	plural
		+	morpheme boundary

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