peripheral participants are indicated by peripheral, concrete case forms.

(78) Central and peripheral case forms

Central		Peripheral
m > u >		OBL
ERG/ACC	ABS/NOM	DAT, LOC, INSTR, BEN

Now the functional question is more imperative and general: What is the function of all splits? On the one hand, they concern the participee insofar as it is its semantic content which determines and governs the verb hierarchy and the TAM splits. On the other hand, these splits concern the participants insofar as it is their semantic content which governs the empathy (saliency) hierarchy. In general, all splits concern the relation of participation in that they either characterize the naturalness of the semantic relations between participants and participee (cf. Silverstein 1976) or else separate central from peripheral participants (cf. TAM and verb splits). Thus they apply to the dyad ACTOR/UNDERGOER and to the distance of all possible participants from the participee.

5. Verb serialization

Verb serialization is a phenomenon which has its home in the Kwa languages of Africa like Ewe and Yoruba, and in South East Asian languages like

Chinese, Vietnamese and Thai. All these languages can be said to be typologically isolating, i.e. they have scarcely any morphology. An introductory example (cf. Lord 1973:269):[5]

(79)　é　nò　tsī
EWE　he drank water

(80)　é　kú
　　　he died

(81)　é　nò　tsī́　éyẽ̀ wò kú
　　　he drank water and he died

(82)　é　nò　tsī́　kú
　　　he drank water died　　'He drowned'.

In (81) there is no necessary connexion between the two VPs. But in (82), a Serial Verb Construction (SVC), both VPs are necessarily components of a "closed event", viz. drowning. The question immediately arises: When is an event closed?

Avoiding the term "closed event", Foley defines SVCs as "constructions in which verbs sharing a common actor are merely juxtaposed, with no intervening conjunctions" (Foley MS., quoted in Kuhn 1981). But then, even a sentence like Latin *veni vidi vici* would be a SVC. Formal criteria alone are as impotent as are semantic-functional criteria alone when it comes to a sufficient definition of SVCs. That is why we need a systematic elaboration of restrictions

---

5　Examples (79)-(82) are identical to sentences (1)-(4) from Lord (1973).

and their interaction as well as an outline of an explanation of the phenomena described (cf. Kuhn 1981). One can posit the following restrictions:

A. Argument restriction

The AG or OBJ of the first verb is correferential with the AG of the second verb, but the AG of the second verb does not appear as one of its NPs, being at most represented in it by means of agreement. It holds for (83) that OBJ = AG:[6]

(83)　Kofi de　　aburow gu　　nsum
AKAN　Kofi takes corn　　flows water-in

　　　'Kofi pours corn into the water' (22)

It is this constellation which shows affinities to causative constructions:

(84)　a. utsi ikù
　　　　door close　　'The door is shut' (25a)

　　　b. iwyi awá utsi ikù
　　　　child took door shut
　　　　'The child shut the door' (25b)

B. Tense, aspect, mood and polarity restrictions

"Verbs in SVCs are subject to the restriction that all of them have the same tense or aspect and also agree in mood and polarity" (Kuhn 1981:16). In Yoruba the verb 'come' has two

---

6　Examples (83)-(92) were taken from Kuhn (1981); the numbers following these examples refer to that work.

allomorphs, *bɔ̀* in the Continuative aspect (which follows immediately after the continuativity marker *Ń*) and *wá* for aspectually unmarked contexts (cf. (85a,b)). In a SVC which is marked by *Ń* and has 'come' as its second verb, the form *bɔ̀* must be used in spite of the fact that *Ń* does not immediately precede it (cf. (85c)). That is, the aspect extends over the whole series.

(85) a. mo wá   láti Ekó
YOR   I came from Lagos (29a)

      b. mò Ń bɔ̀/*wá láti Ekó

         'I am coming from Lagos' (29b)

      c. mò Ń   mú ìwé bɔ̀/*wá
            I CONT take book come

         'I am bringing a book' (29c)

An extreme case of agreement from Twi is:

(86)   mede   aburow migu   nsum
TWI   I-take   corn   I-flow water-in

       'I pour corn into the water' (31)

We have here an OBJ=AG interpretation, but the second verb assumes Person and Number together with the other verbal categories, which is quite remarkable since it is the First Person Singular and the verb *gu* 'flow' requires a plural form or a mass noun as SUBJ:

(87)   *migu   nsum
TWI   I-flow water-in

(88)   aburow gu   nsum
TWI   corn   flow water-in (32)

The polarity condition asserts that "the combined verbs of a SVC cannot be negated independently of each other, but in case of a negated SVC all of them must be marked" (Kuhn 1981:18).

These restrictions make it clear that formal closedness is crucial for SVCs - so that in a SVC one cannot speak of two VPs. The semantic criterium is parallel: two events that - because of the tense restriction - are either simultaneous or related by an immediate sequence make up one closed event; and again, one closed event results from the identity of main roles (argument restriction: "several predications are carried out over a limited number of possible arguments", Kuhn 1981:20). From the functional standpoint we have to answer the question of what SVCs are good for. Their function seems to be the introduction of participants (arguments):

(89)   mo   mú   ìwé   wá   ilé
        I   took book came home

       'I brought a book home' (1)

In this sentence *mú* 'took' introduces a PAT and *wá* 'came' a LOC. Like in all SVCs, the two verbs in (89) do not have the same value: *wá* is the main verb and *mú* (as devoid of meaning) is a 'function verb'. Thus *mú* introduces an argument (PAT) not provided by the main verb upon which

the predication depends. There is evidence for this weighting:

(90) mo fi ọgbọ̀n   gé igi
YOR I   took cleverness cut tree

    'I cut the tree cleverly' (34)

The verb *fi* is in the same position as *mú* in (89) and has clearly not kept its original meaning — together with the argument introduced by it, *ogbòn*, it does not yield a genuine predication (something like 'take up the cleverness'). The *fi* phrase seems to be an adverbial phrase of manner. It does not work like INSTR; there is such a thing — a more concrete use of *fi* — which can even be added to the sentence above, viz. after the adverbial:

(91)   mo fi ọgbọ̀n   fi àdá   gé igi
      I took cleverness took machete cut tree

    'I cleverly cut the tree with a machete' (35)

If we consider that a SVC refers to a global event consisting of several 'subevents', then we can often interpret the relative position of the verbs in the sentence as iconically mirroring the position in time of the 'subevents' within the global event. But this interpretation fails for (90), whereas it is at least possible in (92):

(92)   Oyě mú ìwé wá   fún mi
        Oye took book came give me

    'Oye brought me a book' (36)

In (92) *fún* 'give' is a BEN marker; the verb is devoid of sense and subserves case marking. Hence its affinities with the preposition 'to/for' in other languages (Givón 1975a:112):[7]

(93)   mo sọ fún ọ
        I said give you

    'I said to you'[8]

There is diachronic evidence for such affinities, insofar as prepositions can result from serial verbs.

The development from SVCs to prepositional constructions takes place gradually so that languages in transition may have both. We would like to sketch the relation between both as given in Givón 1975a. In the following example from Yatie *abà* introduces an argument and the sentence is a SVC:

(94)   ìywi abà utsi ikù
YAT   child took door be shut

    'The child causes the door to shut' (211)

According to Givón 1975a, *abá* possesses prepositional properties side by side with its verbal ones, so that (94) can also be interpreted as (95):

---

[7] Examples (93)–(97) were taken from Givón (1975a); the numbers following these examples refer to that work.

[8] Cf. German (dialectal) *Ich sagte für dich*.

(95) ìywi abà utsi ikù
YAT   child ACC door shut

'The child shut the door' (212)

The verb *ikù* in (94) is intransitive, i.e.
monovalent, and it is *abà* that makes possible
the introduction of a further participant.

To the extent that the (quasi-)verb *abà* is
degraded to a preposition ("depletion", Givón
1975a:94) the semantic content of the full verb
ikù, the main predicate, is widened
("enrichment", Givón 1975a:94). Thus, *ikù*
becomes transitive in (95). The reanalysis in
(95) precedes the morphosyntactic development
insofar as the original sentence admits both
interpretations, (94) and (95).

Serial verbs introducing ACC arguments quite
easily lose their original meaning or even
disappear:

(96) erì opuru-mo   àki tọbọụ pịrị-mi
IJO   he crayfish-the take boy give-ASP

'He gave the crayfish to the boy' (215)

(97) erì opuru-mọ-ni tọbọụ pịrị-mi
IJO   he crayfish-the boy   give-ASP

'He gave the crayfish to the boy' (216)

It was mentioned above that SVCs subserve the
introduction of participants which do not result
from the meaning of the main verb, i.e.
especially INSTR, BEN, etc. Hence the affinities
to European language PPs which assume a similar
function. According to Givón 1975a, who compares
data from the Niger-Congo and from Chinese,
there are certain correlations between verbs and
prepositions (cf. Givón 1975a:93), which are
shown in table (98) on next page: SVCs correlate
with (or become) prepositions in the case of
local relations. An example of such complex SVCs
is:[9]

(99) khǎw yíp thoychaat ɔɔk   càak tûu
THAI he grasp flag   go out depart cupboard

'He grasped the flag out of the cupboard' (71)

Although correlations between serial verbs and
adpositions can often be observed, the latter
may also have a different origin.

Adpositions, and especially prepositions, can
result either from serial verbs (as shown above)
or from relational nouns (in the case of static
local relations). Evidence for the latter is the
coexistence of adpositions and the corresponding
relational nouns found in Thai:

(100) mii   tôn máphráaw tôn nyɳ nâa   rooɳrian
THAI exist tree coconut CLF one front school (6)

'There is a palmtree in front of the school' (6)

The word *nâa* 'front' exists also as the
independent relational noun *nâa* 'face'.

(101) dichǎn tôɳ láaɳ nâa
THAI I   must wash face

'I must wash my face' (13)

---

9 Examples (99)-(102) were taken from Kölver (1983); the numbers
   following these examples refer to that work.

(98) Givón's Verb-Preposition Correlations

Case	Verbs	Prepositional Meaning
ACC	take, get, do	ACC
LOC	go, come	to
	exit, leave	out, from
	enter	into, in
	be at, live, sit	in/at/on
	rise, climb	up
	fall, descend	down
DAT/BEN	give, present, send	to/for
BEN	benefit, help	for
INSTR	take, hold, use, be with	with
Associative (COMIT)	be at, be with, join, meet	with
Conjunction	be at, be with, join, meet, add, repeat	with, and

(103) Paul's Chinese Coverb Continuum

Parameter	*yòng* use	*dào* arrive	*zài* be there	*gēn* follow	*gěi* give	*bǎ* tak
Negation	+	+	+	+	+	+
Yes-No Q	+	+	+	+	+	-
Dur ASP	±	-	-	±	-	-
Exp ASP	+	-	-	-	-	-
Perf ASP	±	±	-	-	-	-
	INSTR	DIR	LOC	COMIT	BEN	PAT/DO

Quasi Full Verb <---------> Function Verb

It is not always the case that both systems coexist, as in (100) and (101). Thus *bon* 'upper/on' exists only as relator or adposition, and no longer as an independent noun:

(102)   takrâa yùu bon chán
THAI   basket stay on shelf

'The basket is on the shelf' (11)

A static relation inheres in relational nouns (which include body part and kinship terms); that is why they are apt to yield prepositions denoting static local relations. On the other hand, verbs, which typically denote events and actions, are apt to yield adpositions which designate directional relations.

The so-called 'coverbs' of Chinese make for a special sort of SVCs. The standard grammar of Li/Thompson (1981) considers them to be prepositions. Paul (1982) studied their verbal properties. The result of her study can be summed up in table (103) on the opposite page; the parameters of verbality are to the left and the correlating semantic relations are on the last line (cf. Paul 1982:124).

Such a result does not quite correspond to the ideal feature distribution of a "squish", but a continuous transition between Quasi Full Verb and Function Verb appears clearly.

The matrix in (103) can be functionally interpreted as follows: a full verb is used to introduce a new argument when the participant to be introduced is most loosely bound to the participee (i.e. INSTR). In other words, INSTR

has to be understood as a kind of secondary predication side by side with the main predication - paraphrasable by "and X was there" (cf. Seiler 1974). On the other side, a function verb is used to introduce a new argument when a close connexion exists between the participee and the participant to be introduced (i.e. PAT).

Diachronically, there are two aspects of the same process: secondary verbs (SVCs) become prepositions and SVCs are built anew.

On the basis of Paul's research (1982), as summed up in (103), we can make the following predictions: the new SVCs begin with INSTR, widen out to DIR, LOC, COMIT, BEN and PAT while, at the same time, they become increasingly preposition-like.

We find evidence for this process in Kru (cf. Givón 1975a:74ff.), a language which only possesses SVCs for INSTR. Ijo has SVCs for all case relations side by side with the remains of an older, frozen postpositional system for expressing DIR, COMIT and LOC. But only SVCs are productive.

A further hypothesis, closely connected with the above prediction, is that SVCs may be hierarchically ordered with regard to the semantic roles of the introduced arguments in the following way:

INSTR
　　　　 >　 DIR　 >　 LOC　 >　 BEN　 >　 PAT
COMIT

I.e., if there is a SVC for the case role X, then there is one for all case roles to the left of X.

The above hierarchy is rooted in the distinction between inherence and predicativity and therefore in the degree of closeness between participants and participee. The inherence of a given function with regard to the main verb is inversely proportional to the predicativity of the means which characterizes that function. With decreasing inherence of a relation there is a increasing need to establish it, hence special means to do so. Verbs, in contrast to prepositions, are such special means. That is why the relations INSTR/COMIT are introduced by Quasi Full Verbs whereas those arguments which stand in the relation PAT to the participee are introduced by function verbs or prepositions. Between both extreme points, INSTR/COMIT and PAT, there is a continuum (shown in (103)) in which verbs (which correlate with INSTR/COMIT) lead into prepositions (which correlate with PAT).

6. Causativization

6.1 The concept of causativization

At the most abstract level causativity is a relation between two propositions - the cause and its effect, or $[P_c(ause)]$ and $[P_e(ffect)]$ to use Givón's symbols (1975b). As a matter of fact, the order of the terms yields two inverse