

9. The Temporal Situation: the FM/fMDg Verb (-Root)

In this section we consider the complex situation -- a particular case of what will be termed the *temporal situation* -- in which a set of objects or a single whole object is moving or located with respect to itself while it is moving or located with respect to the rectilinear space in which it exists. The former portion of the situation is of course specified by a self-referencing translatory structure, where the set or whole is the composite FIGURE or FIGUROID; the latter portion is specified by an ordinary translatory structure, where the set or whole is simply the FIGURE. The whole situation will be specified by a particular case of a new type of structure, to be termed a *temporal structure* and symbolized 'S_t'.*

* Without going into details, it may be noted that the temporal structure -- which specifies the location in time of one event with respect to another -- is in most respects homologous with the locative (rather than motional) translatory structure -- which specifies the location in space of one object with respect to another. Note, e.g., the temporo-spatial homologies between the following sentence-pairs:

the explosion took place (at a point) during the performance

the fly was located (at a point) along the branch

explosions took place all during the performance

flies were located all along the branch

the performance went on (lasted) for three hours/until 11 o'clock

this road goes (extends) for three miles/to the next town

This particular case of the temporal structure could be represented as in (264):

(264) $S_t: S_{TSR}$ OCCUR DURING S_T ,

however, we will hold that for the particular case of the temporal situation under consideration and for the particular kind of surface sentence ultimately to specify it, the inverse of (264) is the correct underlying structure, as represented in (265), where the inverse of the bathic temporal-DIRECTIONAL preposition *DURING* is represented by the backward-spelling of that form:

(265) $S_t: S_T$ OCCUR GNIRUD S_{TSR} .

Either way, the constraint must be imposed that the \tilde{F} or f of the S_{TSR} be the same object(s) as the F of the S_T .

To illustrate, we take the situation of cows coming together into a herd while moving into a pen, and derive one temporal structure which specifies this situation as in (266):

(266)

(a) it, that the cows MOVED into the pen,

OCCURred GNIRUD

it, that the cows ANIMALS MOVED TO a HERD OF EACH-OTHER
 herded^M

(TO the ADJACENCY OF EACH-OTHER)
 T₀ together_a

(b) ⇒ the cows OCCURred to MOVE into the pen GNIRUD it,
 o_o MOVED

that they herded^M (T₀ together_a)

(c) ⇒ the cows o_o MOVED into the pen ELIHW herding^M (T₀ together_a)

(d) ⇒ the cows o_o MOVED ELIHW herding^M (T₀ together_a) into the pen
 herded^M (T₀ together_a)

(e) ⇒ the cows herded (together) into the pen.

In this example, the two embedded structures have for simplicity been treated as autic, even though they are properly effective (the cows MOVED themselves into the pen). [If the reader cannot use *herd* as in (266e), the sentence in (e) may be embedded in an inductive structure with an AGITANT:

I herded the cows (together) into the pen.]

In (266c), the bathic subordinating conjunction ELIHW has been used as the inverse of *WHILE*. The prose effect of the structure containing this form can perhaps be best rendered by the surface sentence

(267) the cows moved into the pen, herding together the while.

As an additional example of the type in (266e), but one which is overtly effective (containing an explicit FIGURE as direct object) we give the sentence in (268):

(268) she gathered the acorns (together) into her apron.*

*In (266) there has now finally been shown in a little detail that pattern of derivation first referred to as typical for English as far back as section 2. Thus, e.g., the derivation superficially indicated in (10) can now be shown in greater detail as:

(a) it, that the bottle MOVED into the cove,
 OCCURRED GNIRUD
 it, that the bottle
 WAS_L ON a LIQUID-SURFACE [+ further specifications]
 floated^L

(b) ⇒ the bottle OCCURRED to MOVE into the cove GNIRUD
 oMOVED
 it, that it floated^L

(c) ⇒ the bottle oMOVED into the cove ELIHW floating^L

(d) ⇒ the bottle oMOVED ELIHW floating^L into the cove
 floated_M^L

(e) ⇒ the bottle floated into the cove.

Although no example of one was given in the preceding section, English has FMDG verbs which specify a composite FIGURE's being in a configuration rather than its moving into or out of one. One such verb has, again, the surface shape *herd*, as in

(269) the cows were herding^L (ATtogether_a) in the pasture.

Thus, we now adduce another example of the type of temporal situation under discussion, one in which cows are together in a herd while moving along a corridor, and derive one temporal structure which specifies this situation, as in (270):

(270)

(a) it, that the cows MOVED along the corridor,

OCCURred GNIRUD

it, that the cows ANIMALS WERE, AT a HERD OF EACH-OTHER
herded^L

(b) \Rightarrow the cows OCCURred to MOVE along the corridor

oMOVED

GNIRUD it, that they herded^L

(c) \Rightarrow the cows oMOVED along the corridor ELIHW herding^L

(d) \Rightarrow the cows oMOVED ELIHW herding^L along the corridor

herded^L_M

(e) \Rightarrow the cows herded along the corridor.

(the reader may again require that the sentence in (270e) be embedded in an inductive matrix).

The verbs which are inserted at the (d) stage of both (266) and (270) -- i.e., $herd_M^M$ and $herd_M^L$ -- will be designated as 'FM/FMDG' verbs in accord with their specificational characteristics.

Examples of the type of temporal situation under discussion wherein a FIGUROID moves into or out of a shape while moving or located

in rectilinear space are provided for the autic and effective case by (271) and (272):

(271) the frond coiled (up) into its sheath [as the night grew colder]

(272) I folded the blanket (up) into the gift box.

The verbs appearing in these sentences are appropriately designated as 'FM/fMDg' verbs. There appear, however, to be no SR sentences in English in which -- homologously with (269) -- an fMDg verb specifies that a FIGUROID *is in* a shape, nor temporal sentences in which -- homologously with (270e) -- the FM/fMDg verb specifies that a FIGUROID *is in* a shape while moving or located in rectilinear space.

In contrast with English, Atsugewi enjoys the full range and free use of all the just-noted sentential types. Thus, in an SR sentential-verb, any fMDg root may as freely specify a FIGUROID's being in a shape as its moving into or out of a shape (correspondingly appearing, of course, with either a locational or motional Dg suffix); and for a temporal sentential-verb there always corresponds an FM/fMDg root of the same shape which can as freely specify a FIGUROID's being in, as its moving into or out of, a shape while located or moving in rectilinear space. In the derivation leading to the temporal type of sentential-verb, however, there is the restriction that, in moving, the fMDg root may not bring with it any Dg suffix such as might appear at the surface beside the DG suffix of the S_T -- this in contrast with English, where, e.g., *up* can move along with *coil* to appear beside *into its sheath in*

the frond coiled (up) into its sheath

(or where *together* can move along with *herd* to appear beside *into the pen* in the homologous sentence-type

the cows herded (together) into the pen).

The three Atsugewi FM/fMDg roots which correspond to the three fMDg roots of section 17 are presented in section 18 of Part III. For each, examples are given both where the FIGUROID is specified as moving into or out of a shape and where it is specified as being in a shape while otherwise moving or located.