

## 8. The Self-Referencing Translatory Situation: the fMDg Verb (-Root)

In this section, certain special cases of the translatory situation and their representation in English and Atsugewi are presented in a graduated series. To begin with, the situation specified by the sentence

(232) the red leaf MOVED ADRIFT towards the brown leaf  
drifted

⇒ the red leaf drifted towards the brown leaf

is to be understood by the analysis developed in this paper as a translatory situation wherein the red leaf, as FIGURE, moves with respect to the brown leaf, as GROUND. Similarly, the situation specified by

(233) the brown leaf drifted towards the red leaf

is to be understood as translatory, where the brown leaf, as FIGURE, moves with respect to the red leaf, as GROUND.

Now let us consider the complex situation which consists of the previous two situations taking place concurrently, i.e., where, of the two leaves, each, as FIGURE, moves with respect to the other, as GROUND -- as suggested by the figure in (234):

(234)



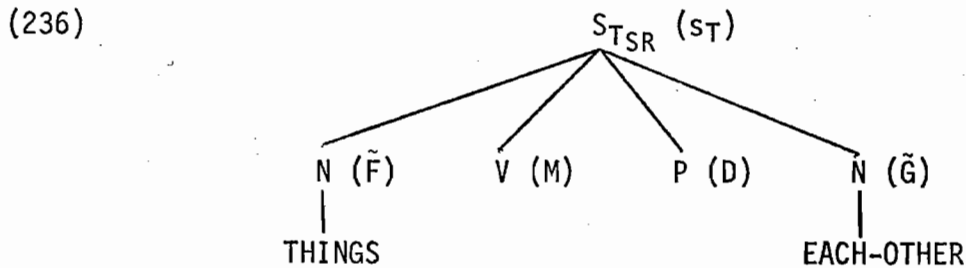
and which can be specified by the successively more-derived sentences in (235):

(235)

- (a) the red leaf drifted towards the brown leaf and (at the same time)  
the brown leaf drifted towards the red leaf
- (b) \*the red leaf and the brown leaf drifted (respectively)  
towards the brown leaf and the red leaf
- (c) the red leaf and the brown leaf drifted towards each other  
( the two leaves )

(for clarity, 'the two leaves' will henceforth be used in place of 'the red leaf and the brown leaf'). Such a situation, although analyzable -- and just now treated -- as conjunctive and hence complex, may also be analyzed as a simple translatory situation containing a composite FIGURE and a composite GROUND -- symbolizable as ' $\tilde{F}$ ' and ' $\tilde{G}$ ' -- i.e., consisting of a set of objects, as composite FIGURE, moving with respect to a set of objects, as composite GROUND. There is here the additional special circumstance that the  $\tilde{F}$  and the  $\tilde{G}$  are the same objects, i.e., the FIGURE constitutes its own GROUND, so that the new situation can be interpreted as a simple translatory situation consisting of a set of objects, as composite FIGURE, moving with respect to itself, as composite GROUND. Accordingly, we will henceforth refer to a situation thus analyzed and interpreted as a *self-referencing translatory situation* or, for short, an *SR situation*. The underlying syntactic structure which specifies such a situation will be referred to by corresponding terms

and symbolized as 'S<sub>TSR</sub>'; already partially particularized, this structure can be represented as in (236):



Homologously with an ordinary translatory sentence -- as exemplified earlier by the (actually effective, but treated as autic) sentence

he drove home (to his cottage in the suburbs) --

an SR sentence can contain a 'D $\tilde{G}$  satellite' in optional concurrence with an external 'D $\tilde{G}$  phrase':

(237) the two leaves MOVED ADRIFT TOWARDS EACH-OTHER ( TOWARDS EACH-OTHER )  
                   drifted                  together<sub>w</sub>                  towards each other

⇒ the two leaves drifted [closer and closer] together<sub>w</sub> (towards each other)

(here, *together* is given the subscript 'w' to indicate that it has its 'towards' meaning rather than its 'into adjacency' meaning, for which the subscript 'a' will be used; the expression *closer and closer* is indicated in brackets to help evoke a reading with the former meaning).

Also homologously with an ordinary translatory sentence -- as exemplified earlier by

the paint is peeling (off the wall) --



(240) the two leaves MOVED ADRIFT FROMWARDS EACH-OTHER  
 drifted (away-) from<sub>w</sub> each other

⇒ the two leaves drifted [further and further] from<sub>w</sub> each other.

As it happens, English has both a DĜ satellite and an FMDĜ verb appropriate to this particular exemplary situation:

(241)

the two leaves MOVED ADRIFT FROMWARDS EACH-OTHER (FROMWARDS EACH-OTHER)  
 drifted apart<sub>w</sub> (from<sub>w</sub> each other)

⇒

the two leaves drifted [further and further] apart<sub>w</sub> (from<sub>w</sub> each other).


(242)

the two leaves THINGS MOVED FROMWARDS EACH-OTHER (FROMWARDS EACH-OTHER)  
 separated<sub>w</sub> (from<sub>w</sub> each other)

⇒

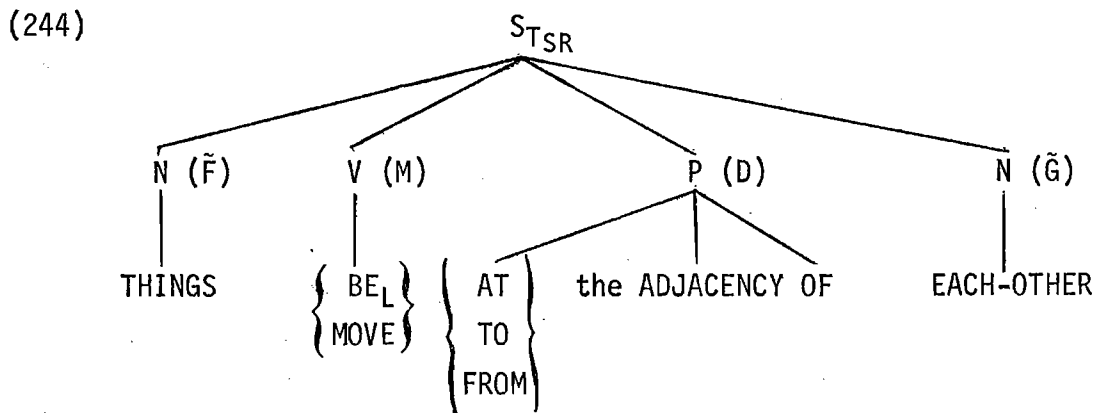
the two leaves separated<sub>w</sub> [further and further] (from<sub>w</sub> each other)

While the previous SR situations contained a fluxional spatial relation between two objects, there are also SR situations which contain only or additionally a fixed spatial relation between two objects, as suggested for the relation of 'adjacency' by the figures in (243):

(243) 

The latter situations are specified by an underlying structure containing a DIRECTIONAL prepositional complex, as illustrated for the case

of 'adjacency' in (244):\*



\* Although the matter was not gone into, all of the DIRECTIONALS used earlier in this paper are also, in proper underlying form, prepositional complexes. Several such complexes and their derivations are presented in the Appendix; three of these complexes and the surface prepositions into which they derive are shown now:

(i) AT a POINT which IS OF the INSIDE OF

⇒ ⇒ in

TO a POINT which IS OF the INSIDE OF

⇒ ⇒ into

FROM a POINT which IS OF the INSIDE OF

⇒ ⇒ out-of,

where *the INSIDE* means 'the inside-space'. It can be seen from (i) that the prepositional complex of (244) has been simplified from

(ii) { AT  
TO  
FROM } a POINT which IS OF the ADJACENCY OF,

where *the ADJACENCY* means 'the immediately adjacent/surrounding space'.

Based on the underlying structure in (244) -- with the appropriate selection of the alternative forms within the braces ( $BE_L$  [a mnemonic for 'be-located'] goes with *AT*, and *MOVE* with *TO* or *FROM*) -- the

following illustrative SR sentences which contain the specification for a fixed spatial relation between two objects are derived:

(245)

(a)     the two leaves WERE<sub>L</sub> AFLOAT AT the ADJACENCY OF EACH-OTHER  
                    floated<sub>L</sub>     [at]     next     to     each other  
⇒ the two leaves floated<sub>L</sub> [at] next to each other.

(b)     the two leaves WERE<sub>L</sub> AFLOAT AT the ADJACENCY OF EACH-OTHER  
                    floated<sub>L</sub>                             ATtogether<sub>a</sub>  
⇒ the two leaves floated<sub>L</sub> ATtogether<sub>a</sub>.

\* \* \*

(246)

(a)     the two leaves MOVED AFLOAT TO the ADJACENCY OF EACH-OTHER  
                    floated<sub>M</sub>     [to]     next     to     each other  
⇒ the two leaves floated<sub>M</sub> [to] next to each other.

(b)     the two leaves MOVED AFLOAT TO the ADJACENCY OF EACH-OTHER  
                    floated<sub>M</sub>                             Totogether<sub>a</sub>  
⇒ the two leaves floated<sub>M</sub> Totogether<sub>a</sub>.

(c)     the two leaves THINGS MOVED TO the ADJACENCY OF EACH-OTHER  
   met  
⇒ the two leaves met [while afloat on the water]

\* \* \*

(247)

(a) the two leaves MOVED AFLOAT FROM the ADJACENCY OF EACH-OTHER  
floated<sub>M</sub> from next to each other

⇒ <sup>x</sup>the two leaves floated<sub>M</sub> (away) from next to each other.

(b) the two leaves MOVED AFLOAT FROM the ADJACENCY OF EACH-OTHER  
floated<sub>M</sub> apart<sub>a</sub>

⇒ the two leaves floated<sub>M</sub> apart<sub>a</sub>.

(c) the two leaves THINGS MOVED FROM the ADJACENCY OF EACH-OTHER  
separated<sub>a</sub>

⇒ the two leaves separated<sub>a</sub> [while afloat on the water].

\* \* \*

We now come to the significant case of a situation which, in order for it to be specified by a syntactic structure, can be treated only as a self-referencing translatory situation and not also as a conjunction of simple translatory situations. We have such a situation where the FIGURAL (and, hence, GROUND) objects do not admit of a definite specification as to number (such as 'two') but rather are *innumerate*, i.e., of unknown number, 'many', or the like; and consequently where the spatial relations among the objects can be specified not as a sum of simple relations between, say, pairs of objects, but only, when considered together as a gestalted whole, as a *configuration*. The sentences in (248) provide immediate examples of the specification of such *innumerate SR situations*, as they will be termed:

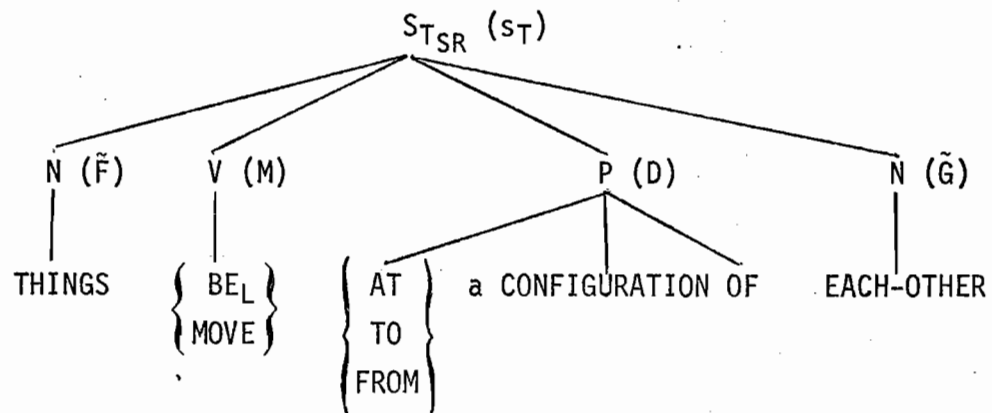


(248)

- (a) the leaves floated<sub>L</sub> in a circle/circular configuration
- (b) the leaves floated<sub>M</sub> into a circle
- (c) the leaves floated<sub>M</sub> out of the circle [that they were in]

The general form of the underlying structure which specifies an innumerate SR situation can be represented as in (249):

(249)



In (250) are two further examples of innumerate SR sentences, both containing the  $D\tilde{G}$  satellite *together<sub>a</sub>*, and both containing an expression -- for the one, a  $D\tilde{G}$  phrase, and for the other, an  $\tilde{F}MD\tilde{G}$  verb -- based on the bathic CONFIGURATIONAL noun *HEAP*:

(250)

(a)     the leaves MOVED AFLOAT TO the ADJACENCY OF EACH-OTHER  
                                   floated<sub>M</sub>   T<sub>O</sub>together<sub>a</sub>  
   TO a HEAP OF EACH-OTHER  
   into a heap [of][each other]

⇒ the leaves floated<sub>M</sub> T<sub>O</sub>together<sub>a</sub> into a heap.

(b)     the leaves MANY THINGS MOVED TO a HEAP OF EACH-OTHER  
   heaped  
   TO the ADJACENCY OF EACH-OTHER  
   T<sub>O</sub>together<sub>a</sub>

⇒ the leaves heaped T<sub>O</sub>together<sub>a</sub> [by the river bank].

We now proceed to the case of an SR situation which, in order for it to be ultimately specifiable by a surface structure, must be treated at a still less analytic level than in the case just considered. We have such a situation where the FIGURAL (and, hence, GROUND) 'objects' not only admit of no definite specification as to number but also of none as to identity (such as 'leaves'), being, rather, *indiscrete* -- but where these constitute a single larger object which *is* specifiable as to identity; and consequently where spatial relation can be specified not as a configuration of the FIGURAL/GROUND 'objects' but only as the *shape* of the single larger object. With regard to such an *indiscrete SR situation*, as it will be termed for the indiscrete 'parts' of a whole contained therein, it is important to note that it is the 'parts' which are the real composite FIGURE/GROUND, i.e., which for all their indiscreteness must nevertheless be understood as the

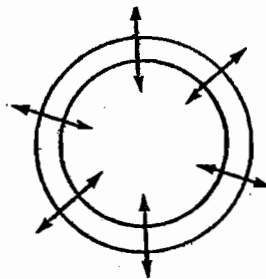
'objects' moving or located with respect to each other, even though it is only the whole which can have a vadic lexical item to specify it. Accordingly, the semantic functions performed by the whole cannot be considered those of 'FIGURE' and 'GROUND', but will be given the new terms *FIGUROID* and *GROUNDROID*, to be symbolized as 'f' and 'g'. As an example, a situation in which a balloon expands or contracts (for it to conform with our basic notion of a translatory event) must be understood at the more analytic level, where the indiscrete 'parts' of the balloon, as composite FIGURE, move away from or towards each other, as composite GROUND -- as suggested by the figure in (251a) -- even though the situation (for it to be ultimately specifiable by a surface structure) must be treated at the next-higher level of organization, where the whole of the balloon, as FIGUROID, moves out from or in upon itself, as GROUNDROID -- as suggested by the figure in (251b):

(251)

(a)



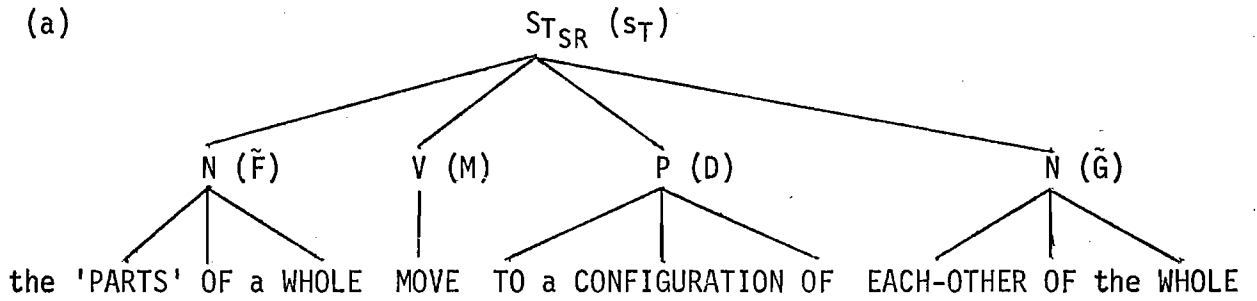
(b)



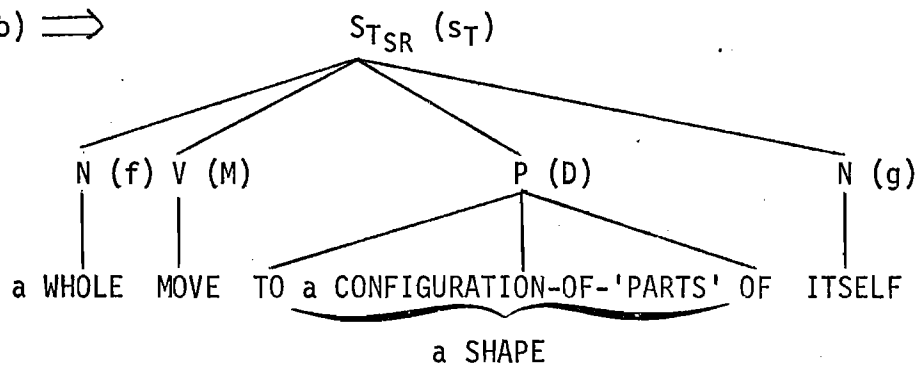
Thus, in (252) is represented the underlying structure which specifies an indiscrete SR situation at the more analytic level (here shown for clarity only with *MOVE* and *TO*) together with the derivation which translates the specification up to the next-higher level of organization:

(252)

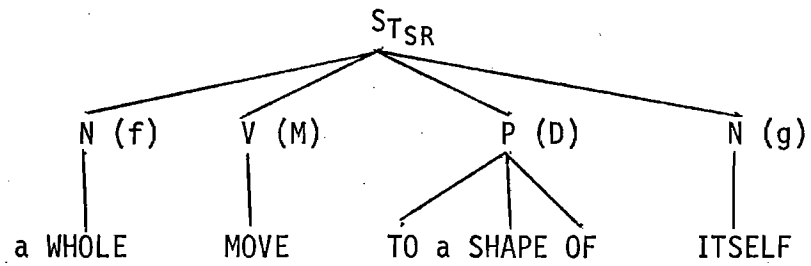
(a)



(b) ⇒



(c) ⇒





the first of these, we first represent the derived meaning of *fur1* in the most elaborated of the three styles of formulation previously used:

(254)

fur1 'for a flexible planar object (f) to move (M)  
into a unidimensionally coiled- or folded-together shape  
of (D) itself (g)'

Of this semantic formulation, the FIGUROID may be specified by a bathic noun to be represented as *FLEXPLANE*, and the SHAPE, by one to be represented as *UNICOIL*. In (255), we now present in schematic form a particular underlying indiscrete SR structure wherein the FIGUROID and the SHAPE components are multiply-specified, once by the preceding bathic nouns and once by the vadic nominals *the leaf* and *a tube*, respectively:

(255) a FLEXPLANE (f) MOVEd (M) TO a UNICOIL OF (D) ITSELF (g)  
the leaf TO a tube OF ITSELF

In this representation of the structure, the first line of forms are all earmarked for participation in the subderivation leading to the surface verb; the second line of forms are all earmarked for appearance at the surface as external, independent expressions. The appropriate movements, adjunctions, and insertions then proceed as indicated in (256):

(256)

⇒ the leaf FLEXPLANE-MOVEd-TO-UNICOIL-OF-ITSELF TO a tube OF ITSELF  
                                  furled (up)                                     into     [of][itself]

⇒ the leaf furled (up) into a tube [from the plant rust affecting it].

With different concurrent vadic forms in the underlying structure in (255), the sentence in (257) can result:

(257) the flag furled (up) into a tight roll [in the wind].

In a similar manner, *clench* -- which, as it happens, specifies not only the indiscrete SR situation of a normal fMDg verb but also a whole causative situation as matrix: a new verb type not treated here -- can be semantically represented as in (258) and can appear in sentences like that in (259):

(258)

clench 'for an open body-part (f) to  $f_{\text{move}}$  ( $\rho M$ )  
 [in upon itself] into a closed (or solid-throughout)  
 shape of (D) itself (g)  
 from ( $\delta$ ) its own muscular contractions acting on it ( $s_A$ )'

(259) his hand clenched into a fist [from an involuntary muscle spasm]

(The reason *clench* must be assumed to include the specification for an adactive event like that in (258) is that the verb cannot be used where the translatory event which it specifies is caused by some other kind of adactive event:

\*his hand clenched into a fist from the wind blowing on it.)

Likewise, *buckle*, which like *clench* specifies a whole causative situation and additionally specifies a component of manner in the contained indiscrete SR situation, can be semantically represented and exemplified as in (260) and (261):

(260)

buckle 'for a stiff planar solid (f) to  $f_{\text{move}}$  ( $\rho M$ ) with resistance (m)  
 into a (parallelly serial) ridge-containing shape  
 of (D) itself (g)  
 from ( $\delta$ ) pressure oriented along the solid's plane  
 acting on it ( $s_A$ )'

(261) the land mass buckled (up) into a mountain-range covered region  
 from the action of continental drift.

the pavement buckled from its own expansion in the heat.\*

Like English, Atsugewi has a number of FMDg roots. One of these, to be exemplified along with two others in section 17 or Part III, may be shown with its semantic representation at this point for the sake of concreteness:

(262)

-miq- 'for a house-like structure (f) to move (M)  
 out of its integral shape of (D) itself (g)'

[or: '... into a non-integral shape of (D) ...'].

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\* A fuller treatment of the self-referencing translatory situation would at this point go on to investigate the case where a set of objects changes (a generalization of MOVES) into a unitary object, and vice versa, a case which we here merely exemplify with a sentence-pair:

several ice floes melted together<sub>u</sub> into a single sheet of ice  
 the single sheet of ice broke apart<sub>u</sub> into several ice floes.

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Atsugewi's fMDg roots occur, often optionally, with a concurrent Dg suffix; a list of Atsugewi's DĜ and Dg suffixes is now presented in (263):

(263)

(a) forms specifying objects moving towards/fromwards each other (DĜ):

-i·w	'dually together <sub>w</sub> '
-a·s <sup>̣</sup> y	'multiply together <sub>w</sub> '
-tip -as <sup>̣</sup> w	'apart <sub>w</sub> '

(b) forms specifying objects moving into/out of adjacency with each other (DĜ̃):

-i·w	'dually T <sub>0</sub> together <sub>a</sub> '
-a·s <sup>̣</sup> y	'multiply T <sub>0</sub> together <sub>a</sub> /into an accumulation'
-tip -as <sup>̣</sup> w	'apart <sub>a</sub> '

(c) forms specifying an object moving towards/fromwards itself (Dg):

-a·s <sup>̣</sup> y	'inwards (upon itself)'
-tip -as <sup>̣</sup> w	'outwards (from itself)'

(d) forms specifying an object moving into/out of adjacency with itself (Dg):

-a·s <sup>̣</sup> y	'in <sub>a</sub> (upon itself)'
-tip -as <sup>̣</sup> w	'out <sub>a</sub> (from itself)'

(e) forms specifying a set of objects changing into a unitary object (DĜ̃), and vice versa (Dg):

-i·w	'dually together <sub>u</sub> '
-a·s <sup>̣</sup> y	'multiply together <sub>u</sub> '

-tip -asw	'apart <sub>u</sub> '
-nik -iy	'into two parts (in twain)'
-uww -ay	'into two unequal parts: one portion off from the rest'
-t -am	'into two unequal parts: one portion out from the rest'
-ikc -ik -ayw	'into fragments'