- 4. Theoretical Notes on the Sentence in English and Atsugewi
- 4.1 Efficiency and Groundedness of Information

We now undertake to compare an English sentence and an Atsugewi sentence as to the efficiency or redundancy and the 'foregroundedness' or 'backgroundedness' with which their informational content is typically presented.

To bring the comparison into greater relief, we consider sentences which specify a situation much more complex than an s_T , in fact which contain the specifications for no fewer than seven objects with distinct semantic functions in the situation: specifications not only for the FIGURE and GROUND, as already discussed, but also for the INSTRUMENT and AGENT, to be discussed below, as well as for the 'BENEFACTEE', the 'CO-DOER', and the 'AGITANT'. In Atsugewi, as it happens, these seven objects and their functions -- whether or not they are concurrently specified by external expressions -- must be specified within the sentential-verb. In the latter, we note just to provide a little detail, the FIGURE-, GROUND-, and INSTRUMENT-functioning objects are specified as to their semantically more-contentful characteristics, whereas the otherwise-functioning objects are specified at most as to their 'personal' characteristics or, in some cases, merely as to their presence in the situation.

Now, if it is necessary for a speaker to specify the seven objects, with their functions, in some detail -- such as can be accomplished by external expressions-- the English sentence, lacking a sentential-verb,

proves the more efficient instrument than the Atsugewi sentence. The latter, in addition to doing what English does with external expressions, must redundantly re-specify the objects and their functions in its sentential-verb. For example, an English sentence would simply contain seven external NPs and function-indicators (either positional or prepositional) as in (52):

(52)the boy, together with his friend, the girl had CO-DOER AGITANT AGENT shove the ashes into the lake with their feet FIGURE GROUND INSTRUMENT for her father, BENEFACTEE

while the informationally-equivalent Atsugewi sentence must contain not only the equivalents of the English NPs and function-indications, as represented in (53):

(53) girl-AGITANT, boy, his friend-togetherwith, ashes, lake-to, their feet-with, her father-for,

but also a sentential-verb which redundantly re-specifies the objects (as to certain of their characteristics) and their functions, as represented in rendered translation in (54):

(54) she-footly-dirted-aliquid-for [someone]-togetherwith [someone]-had-him.

On the other hand, if it is sufficient for a speaker merely to specify the presence in a situation of certain functional relations involving objects, together with certain minimal characteristics of those objects, an Atsugewi sentence containing solely a sentential-verb proves the more efficient instrument than the English sentence. The latter, in order to specify the presence of the functional relations at all, has no recourse but to contain entire external NPs, thereby over-specifying the characteristics of the objects.

In this second circumstance, the object specifications in the Atsugewi sentential-verb differ from those in the external NPs of English along the additional dimension of groundedness. We will claim that for the most part information about a component of a situation is foregrounded, or called attention to, when specified by an overt external vadic expression and is backgrounded, or not called attention to, when specified by an incorporated bathic expression. For example, information about the MANNER component is foregrounded in the adverbial by plane in the sentence

(55) he went to New York by plane,

whereas it is backgrounded in the verb fly (< GO-BY-PLANE) in the sentence

(56) he flew to New York.

Thus, in the circumstance where an Atsugewi sentence contains only a sentential-verb and the most closely equivalent English sentence must contain external NPs, information about objects is nicely backgrounded

in the former but necessarily foregrounded in the latter; if having the option to background is considered an advantage, Atsugewi clearly has the advantage over English. For an example, if the Atsugewi sentential-verb derived in (38), here shown in rendered translation:

(57) (it)-freebody-dirted-aliquid,

is compared with the English sentence which is most closely equivalent to it in information-content (and is at the same time colloquial):

(58) the dirt fell into the water,

it can be seen that information about the FIGURE and GROUND is backgrounded in the former in the root and suffix whereas it is foregrounded in the latter in the subject NP and the prepositional-object NP. The English sentence which is most closely equivalent to the Atsugewi sentential-verb in backgroundedness:

(59) it fell in

is, however, inferior to it in information-content, for the sententialverb additionally specifies that the 'it' is a dirty one and the entrance is a liquid one.

4.2 A Principle of Multiple Specification

We now adduce a certain principle relating to multiple specification:

(60) expressions which concurrently specify a particular component of a situation are each independently accountable to that component for their appropriateness and not to each other;

in other words, their appropriateness depends on language-situation relations, not on intra-language relations.

One possible relation between concurrent nominal expressions: that the vadic NP always specifies a particular instance of a generic category specified by the bathic N, may at first seem to hold, but can on closer inspection be seen not to. Thus, in the previously-used example

(61) he drove home to his cottage in the suburbs,

the external NP, his cottage in the suburbs -- or any NP which might appropriately stand in its place -- may seem to specify a particular instance of a generic category specified by the bathic noun HOME (here incorporated in the adverbial satellite home). That no such membership-relation from vadic NP to bathic N holds can be seen in a sentence like

(62) he walked home to his hotel room,

it being clear that a hotel room is not always an instance of a home (for that matter it can be seen that no membership-relation holds in the reverse direction either, since a home is not always an instance of a hotel room). Since the satellite and NP of the sentence in (62) are appropriate only if the GROUND object is in fact both a home and a hotel room, it is clear from this example that, as per the principle in (60), the only relevant relation is between the expressions and the situational (actual) object in reference: that the appropriateness of the former is solely dependent on the correctness with which they each, independently, specify the latter.

Similarly for the Atsugewi example derived in (44), here shown in rendered translation:

(63) soot (it)-freebody-dirted-aliquid creek-to,

the GROUND object must be both a liquid and a creek for the presence of -aliquid and areek each to be appropriate. If in fact the GROUND object is a frozen creek, the suffix -aliquid would be inappropriate and the sentence in (63), as a whole, would be unacceptable as a specifier of the situation as a whole. The fact that a creek is not always a liquid, as when it is frozen, again points out the absence of any member-relation from a vadic NP to a concurrent bathic N.

Another possible relation between concurrent nominal expressions: that a particular vadic NP inherently requires pairing with a particular bathic N in a form of grammatical agreement, must also be ruled out. Thus, in Atsugewi, the choice of a particular external FIGURE-specifying NP does not automatically determine the sentential-verb's FM root (which incorporates a bathic FIGURE-specifying N). We can illustrate this fact with the homologous case in Navaho. Here, an external

FIGURAL NP meaning 'the rug' can correctly appear with the classificatory verb which specifies the FIGURE as 'a flexible planar object' if the FIGURAL object is a rug spread out. But the same NP can also correctly appear with the verb which specifies the FIGURE as 'a linear object' if the FIGURAL object is a rug rolled up.*

*In those cases in a language where, e.g., a particular vadic NP does inherently require pairing with a particular vadic verb, this is not interpreted as a matter of multiple specification to be represented in the underlying structure. Rather, this is in fact interpreted as a matter of grammatical agreement to be handled in the course of derivation, e.g., by moving a copy of the NP or component of the NP -- not an independent bathic N -- into adjunction with the underlying verb, this adjunction to key in the appropriate vadic verb.

It may be non-rigorously noted here that in the English verb phrase the verb and a pronoun are in agreement with the *situational* gender, but with the *grammatical* person, of the subject nominal. Thus, in (i):

- the reflexive pronoun is masculine or feminine in agreement with the actual gender of the situational entity specified by the subject nominal, whereas the auxiliary and pronoun are third personal in agreement with the overt (grammatical) person of the subject nominal, despite the fact that this latter can only be specifying the first-personal 'ENTITY SPEAKING'. Because of the requirement for agreement with grammatical person, the sentence in (ii) is unacceptable:
- (ii) *my father's only child am cutting myself (although contrast this requirement against the older English 'our Father, which αrt in heaven,...').

It can be further deduced from the principle in (60) that if a sentence seems odd because it contains several elements which apparently clash in their specifications of a single situational object,

the problem does not lie in any broken intra-sentential co-occurrence relations among the elements but rather in that there exists no familiar object with all the characteristics concurrently specified for it -- and that if one did exist, the sentence would no longer seem odd. For example, if the verb *bend* may be taken to have incorporated in it a bathic noun which specifies the FIGURE [actually, the 'FIGUROID' -- see section 8] as a 'rigid object', then, we claim, the sentence

(64) the handkerchief bent in two

seems odd not because of any broken co-occurrence relation between handkerchief and (the bathic noun incorporated in) bend but because usually no object has simultaneously the characteristics of 'a handkerchief' and 'a rigid object'. If a handkerchief is first dipped in liquid nitrogen, however, there results an object which indeed has both characteristics and, if predicated of this object, the sentence in (64) no longer seems odd.