A Semantic Approach to Verbal Prefixation:
With Special Reference to Prefix Over-
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In this joint research, we are concerned with the words which have the form of "over- + V". The prefix has two senses: one is a spatial/temporal sense, and the other is an "excessive" sense. Specifically, we focus on the latter case. The excessive over- is notable for some grammatical phenomena. For example, it is not attached to stative verbs (e.g. *overresemble/*overcontain) and achievement verbs (e.g. *overdie/*overbreak). It makes a transitive verb from an intransitive stem verb. As discussed in Yumoto (1997), the prefixation affects the selectional properties of stem verbs.

(1) a. John overate (*apples).
   b. He overslept the fixed time. (cf. *sleep the time)
   c. They overbuild (the city/*houses). (cf. *build the city)

The example in (1a) shows that overeat cannot take as its direct object a noun phrase interpreted as Theme. Historically it took a reflexive pronoun but this use is obsolete in present-day English. In (1b), oversleep is transitive though the stem verb sleep is intransitive. In (1c), overbuild can only take as its direct object a noun phrase interpreted as Place, while build cannot take such a noun phrase as its direct object. The objects of these sentences serve as a norm of excessiveness. But this is not the case with the examples in (2).

(2) a. He overbought fertilizer.
   b. John overheated the room.

Judging from the above, it is important to elucidate what the norm is like because it is an essential element of the evaluation and the prefix over- expresses a concept which plays semantically an important role in it.

When we say something is excessive, we judge its value in light of the relevant norm of comparison. Consider the examples in (3).

(3) a. The ship was overloaded with people.
   b. They overbuild the city.

Sentence (3a) describes a quantity of the loaded things, i.e. the number of people, which exceeded the capacity of the ship. Similarly with (3b). In these cases, we see the ship and the city as containers. The image of a container evokes the amount of space to hold things, that is, the capacity. We speak of an excessive state when a quantity of things goes beyond the capacity or upper limit of a container for that quantity. The upper limit of the container serves as the norm of the judgement. In this
way, over-designates a relationship between the top of the things stacked in the container and the upper limit of the container, i.e., the norm, as in Figure 1.

This spatial relation is metaphorically extended to a scalar relation as in Figure 2. The scale designates the degree to which the act expressed by the stem verb has been achieved. The norm on the scale is an upper limit of a desirable range. We call the scale an absolute scale. Overeat and overheat are among the verbs that involve this type of scale. We have a certain range of degree with respect to eating or heating, etc. A norm implied in this scale is the upper limit of such a range. When we do something more than necessary, we regard that action as excessive. The scale is unidirectional in that the quantity only increases, and never decreases on the scale.

The scale is metaphorically extended further as in Figure 3. We call the scale a relative scale. In this scale a norm is a state in which we regard something as normal, standard, or reasonable. We regard what is expressed by the stem verb as excessive, when it is not in such a state. See the examples in (4).

(4) a. I think you are overestimating his ability.
   b. He overvalues his daughter.

It is important to note that the scale is bidirectional unlike the absolute scale, that is, the quantity can decrease on the scale. This idea is valid for the use of prefix under-. Words of the relative scale type have the "under- + V" counterpart, whereas words of the absolute scale type do not.

(5) a. overbuild/*underbuild, overeat/*undereat, overload/*underload
    oversmoke/*undersmoke
   
   b. overbuy/underbuy, overvalue/undervalue, overpay/underpay,
      overestimate/underestimate

In this research, we proposed the semantic relation of prefixes to verbs examining how the norm of the judgement of excessiveness is determined.

SELECTED REFERENCE