Squibs and Discussion

THE SEMANTICS OF *-SHIP* SUFFIXATION

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In this squib we explore the semantic conditions for English *-ship* suffixation. We propose that (a) the English suffix *-ship* is sensitive to the distinction between stage- and individual-level predicates, (b) this sensitivity is a lexical property of the suffix, and (c) the semantics of the base selects the specific meaning of *-ship*. Property (b) is the most interesting, for it shows that the difference between stage- and individual-level predicates is not purely pragmatic or semantic, but is indeed involved directly in the grammar of a language.

We will begin with the observation that, although *-ship* attaches to many common personal nouns (1a), it does not attach to all (1b). The natural question is, what separates the first group of nouns from the second?

(1) a. airmanship, friendship, kingship, penmanship, priestship, sponsorship
b. ??parentship, ??wifeship, ??nieceship, ??womanship

According to Carlson (1977), stage-level predicates apply to temporary stages and denote properties of stages. Hence, they typically express transient properties. By contrast, individual-level predicates apply to individuals without regard to time. Hence, they express stable or enduring properties of individuals.

The distinction between stage- and individual-level predicates plays an important role in syntax (Carstairs 1973, Kratzer 1989, Pesetsky 1992).[1] To illustrate, certain sentences containing a clause introduced by *if* or *when* are well formed only when both clauses involve a stage-level property. Thus, *my friends* in (2a) means something like 'those who are my friends at some given time'. Hence, it is a stage-level predicate and (2a) is well formed. In contrast, *my parents* in (2b) does not mean 'those who are my parents at some given time'. The relation between parents and child is timeless and permanent. One's parents are one's parents without respect to time. Hence, *my parents*

[1] Carstairs (1973:149) characterizes what Kratzer calls a ''stage-level'' requirement as an iterability requirement. For more explanation, see Carstairs 1973, Kratzer 1989.

is an individual-level predicate and (2b) is not well formed. The grammatical contrast in (3) is explained in the same way.

(2) a. I hate it when my friends are older than me.
b. *I hate it when my parents are older than me.

(3) a. John hates it if Mary has long hair.
b. *John hates it if Mary has a long nose.

Musan (1995) observes that the independence of individual-level predicates from time predicts them to be inappropriate with temporal adverbs. The prediction is confirmed by data like the following, where the predicates in (4a) are individual-level and those in (4b) are stage-level:

(4) a. *John's father is intelligent today.
*John's father was recently altruistic.
*John's father was honest at three o'clock this afternoon.
b. John's sponsor is available today.
John's sponsor was recently sick.
John's sponsor was available at three o'clock this afternoon.

Analogously to (4), (5) shows that the individual-/stage-level distinction also occurs among common personal nouns.

(5) a. John's longtime friend
b. John's longtime sponsor
c. ??John's longtime parents
d. ??John's longtime niece

For Gricean reasons, the permanent nature of the individual-level predicates *parents* and *niece* predicts that they are inappropriate with the adjective *longtime,* while *longtime* may modify stage-level predicates.

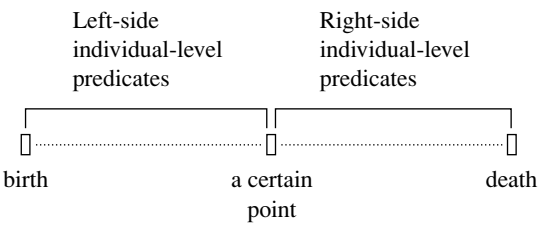
The distinction between stage- and individual-level predicates also plays a crucial role in English *-ship* suffixation. Consider again the examples in (1).

(1) a. airmanship, friendship, kingship, penmanship, priestship, sponsorship
b. ??parentship, ??wifeship, ??nieceship, ??womanship

The base nouns in (1a) are stage-level predicates. They denote properties that hold at a given time, properties of stages. In contrast, the base nouns in (1b) are individual-level predicates. They denote stable or enduring properties of an individual. For clarification, we need a finer distinction among individual-level predicates:[2] left-side individual-level predicates and right-side individual-level predicates.

[2] We are grateful to an anonymous *LI* reviewer.

(6)



As shown in (6), left-side individual-level predicates denote properties that individuals have at birth and retain until a certain point in time. *Girl* and *child* are left-side individual-level predicates. For example, Mary is a girl at the time of her birth and ceases to be a girl at a certain age. Right-side individual-level predicates denote properties that individuals acquire at a certain point in their lives and retain for the rest of their lives (see Musan 1995:23). For example, John is not a father at the time of his birth. He becomes a father when his first child is born and remains a father for the rest of his life.[3] *Parent, woman, man,* and *mother* are right-side individual-level predicates.

Left-side and right-side predicates are individual-level predicates and cannot appear with *-ship*. Hence, we propose the following semantic condition:

(7) $X]_N$ -ship$]_N$
Condition: X is a stage-level predicate.

The semantics of the base select the specific meaning of *-ship*. First, if the base is a relational noun, the resulting noun denotes the relation. Since *friend* is relational, a friend is always the friend of someone else (8a). But *penman* is not relational. A penman is not the penman of someone else (8b).[4]

(8) a. $[\![\text{friend}]\!] = \lambda x \exists y[\text{friend}(x,y)]$
b. $[\![\text{penman}]\!] = \lambda x[\text{penman}(x)]$

Accordingly, *friendship* means 'the relation that holds between friends' (we may also use the predicate adjective *friends* to denote the relation). But *penmanship* does not mean 'the relation that holds

[3] The ill-formedness of **wifeship* seems to be a challenge for our analysis. In some cases the property of being someone's wife seems transient. However, in most cultures the property of being someone's wife is enduring and permanent, making it a right-side individual-level predicate.

[4] Barker and Dowty (1993) and Barker (1995) propose a test for the relational status of a noun: if a noun can take a genitive *of*-phrase, and the *of*-phrase can also be paraphrased by a prenominal possessive, the noun has an appropriate relational sense.

(i) a. John is a friend of mine.
b. *John is a penman of mine.

(ii) a. John is my friend.
b. *John is my penman.

between penmen' because it is impossible for two people to be penmen with one another.

This does not mean that a noun like *penman* cannot serve as the base for *-ship* suffixation, only that when it does, the resulting noun has a meaning different from the one it has when the base is a relational noun. If the base is a noun with the suffix *-man* or *-woman, -ship* means 'skill or art'. So, *-ship* in *penmanship, airmanship,* and *horsewomanship* means 'skill or art'. It follows, incidentally, that a noun with the suffix *-man* or *-woman* whose meaning does not entail a specific skill will not combine with *-ship*.

(9) *milkmanship, *postmanship, *tradesmanship

For example, *postmanship* is semantically odd because no specific skill is needed to be a postman. The noun *airman* has several senses. To be an airman in the sense of 'a civilian or military pilot, aviator, or aviation technician' requires particular skills, hence *airmanship* 'skill in piloting or navigating airplanes'. However, the most frequent meaning of 'airman' is probably 'an enlisted person of the lowest rank in the air force'. Since this sense does not entail any specific skill, *airmanship* cannot mean *'the skill or art of being an enlisted person of the lowest rank in the air force'.

If the base denotes a rank in a hierarchy, *-ship* means 'office or position' or 'period of office'.[5] For instance, consider *priest* and *lady*.

(10) a. pope – cardinal – archbishop – bishop – monsignor – priest
b. queen – duchess – . . . – lady

Priestship and *ladyship* denote the office or rank of priest and lady, respectively.[6] As with *airman,* if we interpret *lady* in a more common sense, one that does not entail office or position, *ladyship* is semantically odd.[7]

Is there a way to unite these three senses of *-ship*? As shown by Aronoff (1980), when a morphological operation appears to have many different senses, they can often be reduced to a single fairly general sense, the meanings of individual words being determined by a combination of the meaning of the base and the context. Although space

[5] We are grateful to an anonymous *LI* reviewer for pointing this out.

[6] *Popeship* is a marginal word for some speakers. That is because *papacy* blocks *popeship*.

[7] As an anonymous *LI* reviewer points out, *ladyship* is problematic because there are some ''ladies,'' namely, the children of certain English peers, to whom the epithet applies at the moment of birth; for them, it is really an individual-level property. *Ladyship* occurs now only in the fossilized expressions *her/your ladyship* and is lexicalized as part of an idiom. It would appear that *-ship* suffixation in an earlier stage of English was not so restricted as it is now. The same applies to *lordship*. Contrast *overlordship,* which has a wider privilege of occurrence. It is not restricted to *his overlordship,* but that is acceptable because no one is an overlord from the moment of birth.

limitations prevent us from offering a detailed solution here, the outline is clear: the meaning of a *-ship* word selects the stage-level property that is most salient in the meaning of the base. In particular, if the base is relational, the output denotes that relation; if the base denotes someone who has a skill, the output denotes that skill; if the base denotes someone who occupies a position in a hierarchy, the output denotes that position or period of office.

The suffixation of *-ship* is reminiscent of a formation rule that derives individual correlates of properties from predicative expressions (Chierchia 1985:422).[8]

(11) If β is an *n*-place predicative expression, $\cap\beta$ is a singular expression.

$\cap$ is a nominalizer. Predicative expressions preceded by $\cap$ are nominalized predicative expressions, which are individual images of the properties and occur in argument positions. Consider (12).

(12) a. John and Bill are friends.
b. They made John pope.
c. John is not a good penman.

In (12) the nouns *friends, pope,* and *penman* are used to predicate something of an individual. If *-ship* attaches to these nouns, the derivatives *friendship, popeship,* and *penmanship* are individual correlates of the properties denoted by the predicate and are used as arguments.

(13) a. Friendship is rare.
b. Popeship is permanent.
c. John acquired penmanship.

Hence, *-ship* can be regarded as a nominalizer of a predicative expression.

(14) a. friend $\Rightarrow \lambda x \exists y[\text{friend}(x,y)]$
friendship $\Rightarrow \cap\lambda x \exists y[\text{friend}(x,y)]$
b. pope $\Rightarrow \lambda x[\text{pope}(x)]$
popeship $\Rightarrow \cap\lambda x[\text{pope}(x)]$
c. penman $\Rightarrow \lambda x[\text{penman}(x)]$
penmanship $\Rightarrow \cap\lambda x[\text{penman}(x)]$

One might conclude that the fact that *-ship* attaches to stage-level nouns and names stage-level properties is a fact about morphological processes that name abstract properties—that such processes must always do this, for some general semantic or pragmatic reasons. However, a look at the English suffix *-hood* shows otherwise. This suffix has meanings similar to the meanings of *-ship:* 'condition', 'state', 'order', 'rank'. A crucial question arises: is the base of *-hood* subject to the same semantic restriction as the base of *-ship?* First of all,

[8] We are grateful to Richard Larson for this suggestion.

consider word list (15), which is based on Webster's Third New International Dictionary. The italicized words have no counterpart with *-ship*.

(15)

-ship	*-hood*
apprenticeship	apprenticehood
bachelorship	bachelorhood
——	*childhood*
doctorship	doctorhood
fathership	fatherhood
——	*girlhood*
kingship	kinghood
ladyship	ladyhood
——	*manhood*
——	*motherhood*
neighborship	neighborhood[9]
——	*parenthood*
priestship	priesthood
queenship	queenhood
——	*sisterhood*
——	*wifehood*

The list reveals that, in spite of the resemblance in meaning, the semantic restriction that the base should be a stage-level predicate does not apply to *-hood:* its base can also be an individual-level predicate, as in *childhood, fatherhood, motherhood, parenthood, sisterhood,* and *wifehood*. Hence, the semantic restriction on the suffix is part of the lexical semantics of *-ship* and not a general fact about suffixes that form abstract nouns from common personal nouns. The user of English must learn this fact about *-ship;* it is not provided by general principles, linguistic or other.

The list in (15) provides further evidence for the claim that the semantic sensitivity to the stage-level versus individual-level distinction results from the lexical semantics of *-ship*. This evidence comes from pairs of words with the same stem, one with each suffix. Consider *fatherhood* and *fathership*. Although *father* can serve as a base for both *-hood* and *-ship, fatherhood* and *fathership* do not have the same meaning. *Fatherhood* means 'the state or condition of being a father'; *fathership* means 'the state or condition of being the oldest member of a community'. The difference in meaning results from the semantic sensitivity of *-ship*. Because of the semantic restriction on the base, *father* can be the base of *-ship* only when it has the stage-level property, that is, when it means 'the oldest member of the community'. In con-

[9] *-ship* and *-hood* lose their original meanings in *neighborship* and *neighborhood*. The primary meaning of these words is 'area surrounding some reference position'.

trast, *-hood* is not sensitive to the stage- and individual-level distinction. *Father* can therefore be the base of *-hood,* maintaining the original individual-level meaning of *father*. *-ship* can select only the marked subset that includes stage-level predicates, whereas *-hood* selects the superset that includes both stage- and individual-level predicates.

In this squib we have argued that the English morphological process of *-ship* suffixation is sensitive to the semantics of its base: the base of *-ship* must be a stage-level predicate. We have also shown that the specific meanings of *-ship* are determined by the semantics of the base and that the semantic restriction is a part of the lexical semantics of *-ship*. This last fact is the most important. Previous work has shown that the distinction between stage-level and individual-level predicates has linguistic consequences, but this does not mean that the distinction itself is linguistic. The fact that the distinction can be manipulated directly by individual affixes of English shows that it is indeed fundamentally part of language.

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