"Eat" as an Unergative Verb: A brief note against the projection principle and Hale and Keyser on unergatives

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Introduction

The issue that I will address in this article is the lexical semantics of the verbs *eat*, *drink*, *read*, and *write*. Although they are generally regarded as transitive verbs, unlike other transitive verbs, they optionally appear without their internal arguments, e.g., *I eat sashimi* vs. *I eat*. This issue is problematic for Government and Binding Theory (Chomsky, 1981) and its descendants, which recognize the PROJECTION PRINCIPLE¹:

Representations at each syntactic level (i.e., LF, and D- and S-structure) are projected from the lexicon, in that they observe the subcategorization properties of lexical items (ibid: 29)

Additionally, Chomsky (ibid: 37) writes: "subcategorization entails θ -marking". If it is the case that *eat* is a transitive verb that subcategorizes for an NP with the θ -role Theme, then occurrences of intransitive *eat* violate two core principals of Government and Binding Theory, the Projection Principle and the THETA CRITERION. I will argue, based on cross-linguistic phenomena regarding cognate objects, resultative diagnostics, and aspectual properties that such verbs are, in fact, unergative verbs belonging to the "volitional acts" subdivision that includes *dance*, *run* and *sing* (Perlmutter, 1978).

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¹ In early Generative Grammar (Chomsky, 1962) a system of ordered rules was used to derive intransitives such as *eat* from their corresponding transitives (See Chomsky, 1986: 14).

1. Cognate Objects

Note that unlike most recognized unergatives, *eat* and its kin do not have cognate objects $(drink^2 \text{ and } smoke \text{ are exceptions})$. One can say *to dance a dance*, but we have no equivalent for *eat-class* unergatives. Cross-linguistically, however, one finds *eat-class* unergatives occurring regularly with cognate objects, e.g., Turkish:

1) Yazi yazmak.

writing write.

'To write'

2) Yemek yemek.

eating eat

'To eat'

3) Okuma okumak

reading read

'To read'

In all other cases, cognate objects are only found with recognized unergative verbs in Turkish:

5) Kosma kosmak

running run

'To run'

If, in fact, English *eat* and its kin are unergative, as I argue, this also raises problems for the claims of Hale and Keyser (1993), who argue that all unergative verbs are

² Intransitive *drink* has only the idiomatic meaning 'to *drink alcohol*'.

underlyingly transitive, derived by the incorporation of a cognate object into the head of VP. We would be left without a cognate object for *eat*, *write*, and *read*, thus leaving them impossible to derive by the head-head movement from internal argument to verb.

In recent work, Hale and Keyser (2003) have drawn a distinction between unergatives that take "true" cognate objects and those that take what they call HYPONYMOUS ARGUMENTS. The distinction is based on contrasts of the following type:

- 6) John danced the Tango and Bill danced it too.
- 7) *John slept the sleep of the just and Bill slept it too. (ibid: 71)

The *eat*-class unergatives conform to the hyponymous unergatives such as *dance* in this respect:

8) John ate pizza and Bill ate it too.

In their intransitive forms, pragmatic interpretation is analogous for both; *to dance*, means to move the body in a manner recognized as a dance, and *to eat*, means to consume something recognized as food. Naturally, interpretations of what constitutes a dance or food differ from culture to culture. Transitive versions of the unergatives *to dance* and *to eat* are also analogous. *To dance the watusi* and *to eat sashimi* have postverbal NPs that are just more specific instances of a dance and food, respectively.

While maintaining the analysis of underlying transitivity for hyponymous unergatives, Hale and Keyser (ibid: 92) have proposed a "classificatory" relation between the verbal head and its designated argument, which amounts to nothing more than old-fashioned semantic selection. This clearly is also the case with the *eat*-class unergatives, which select arguments in an analogous way.

2. Resultative Diagnostics.

Submission of the *eat-class* unergatives to two resultative diagnostics that discriminate transitives from unergatives discussed in Levin and Rappaport Hovav (1995) bolsters the case that *eat* and the other putative transitive verbs are, in fact, unergative verbs. The DIRECT OBJECT RESTRICTION (ibid: 33) requires all resultatives to be predicated of immediately post-verbal NPs in English. Despite the terminology, not all are Direct Objects:

Transitive Resultatives

- 9) The boxer punched his opponent senseless.
- 10) The gorilla broke the chair to pieces.

Unergatives require a "dummy reflexive" to syntactically save the construction:

Unergative Resultatives

- 11) They danced themselves unconscious.
- 12) They laughed themselves sober.

The *eat-class* unergative also requires such a reflexive:

Eat-Class Resultatives

- 13) He ate himself comatose.
- 14) She read herself blind.

As a transitive, the *eat-class* is unacceptable. Only an unaffected object such as *plate* saves it, analogous to the role of the "dummy reflexive":

15) She ate the plate empty.

The simple fact is that the subcategorized theme of *eat* can never appear in a resultative, thus creating a paradox for the view that it is a transitive verb:

16) *She ate the spaghetti empty/gone.

Resultative nominalizations are also a diagnostic for discriminating transitive from unergative verbs. Examples 17 - 21 again show *eat-class* verbs conforming to unergatives:

Transitive Nominalizations

- 17) The watering of tulips flat is a criminal offense in Holland. (Carrier and Randall, 1992: 201).
- 18) The punching of an opponent senseless is greeted with glee by pro boxing fans.

Unergative Nominalizations

19) *The dancing of oneself unconscious is highly admired by denizens of Manhattan's discos.

Eat-Class Nominalizations

- 20) *The drinking of oneself stupefied is a popular pastime among linguists.
- 21) *The eating of oneself sick is common among children.

3. Aspectual Properties

In this section I will show that *eat* has the identical aspectual properties as Hale and Keyser's hyponymous unergatives. Parsons (1990: 37) provides the following aspectual paradigm based on Kenny (1963):

22) If x is V-ing then x has not V-ed

Verbs whose progressive does not entail its perfect are EVENTS. Verbs conforming to the following test, where progressive entails perfect, are PROCESSES, also referred to as Activities:

23) If x is V-ing then x has V-ed

A canonical unergative such as *run* is a Process; that is, *If John is running then John has run* (to a certain extent). When unergatives are analyzed as VPs with internal hyponymous arguments, they conform to the test for EVENTHOOD, that is, *If John is running the marathon, then John has not run the marathon*, i.e., that particular marathon running has not been completed. By these diagnostics, intransitive *eat* is also a Process; that is, *If John is eating then John has eaten* (to a certain extent). Transitive *eat* becomes an Event in the same manner as unergatives. *If John is eating a steak then John has not eaten a steak*; that is, that particular steak eating has not been completed. This type of conversion from Process to Event is known in the literature as a CATEGORY SWITCH (Parsons, 1990) and indeed, *eat*-class unergatives, including *drink*, *smoke*, *read* and *write* behave identically in their aspectual properties to the hyponymous unergatives, e.g., *dance*, *run*, and *walk*.

5. Conclusion

In this short article I have presented several arguments for why *eat* and its kin should be considered unergative verbs. Chomsky (1986: 9) has noted the contrast between *a dancing bear* ('a bear that dances'), a canonical unergative, and **an eating man* ('a man that eats'). This contrast points to a significant distinction between *eat* and the recognized unergatives.

The obvious difference between the hyponymous unergatives and the *eat*-class unergatives is that the *eat*-class verbs all take internal arguments that are concrete, e.g., *smoke a cigar*, *read a book*, and *drink a beer*. In contrast, recognized unergatives take more abstract arguments, either cognate objects or hyponymous arguments, e.g., *dance a tango*, *run a marathon*, and *sing a ballad*. I suggest that the *eat*-class unergatives, like true transitives, take objects that are AFFECTED in some relevant sense, and therefore, like transitive verbs, need to specify an internal argument in participial adjective constructions, e.g., *a flesh-eating man* (cf. transitive: *a bunker-destroying missile*/**a destroying missile*).

References

Carrier, J. and J. H. Randall (1992). "The Argument Structure and the Syntactic Structure of Resultatives." *Linguistic Inquiry* 23: 173-234.

Chomsky, Noam (1981). Lectures on Government and Binding: The Pisa Lectures. Mouton de Gruyter.

Chomsky, Noam (1986). *Knowledge of Language: Its Nature, Origin, and Use.* New York, Westport, CN, and London, Praeger.

Hale, Kenneth and Samuel J. Keyser (1993). "On Argument Structure and the Lexical Expression of Syntactic Relations." Hale and Keyser (eds) (1993) *The View from Building 20*. MIT Press, Cambridge, MA

Hale, Kenneth and Samuel J. Keyser (2003). *Prolegomenon to a Theory of Argument Structure*. MIT Press, Cambridge, MA.

Kenny, Anthony (1963). Action, Emotion and Will. Humanities Press, New York.

Levin, Beth and Malka Rappaport Hovav. (1995). *Unaccusativity: At the Syntax-Lexical Semantics Interface*. Cambridge, MA, MIT Press.

Parsons, Terrence (1990). Events in the Semantics of English: A Study in Subatomic Semantics. MIT Press, Cambridge, MA.

Perlmutter, David (1978). "Impersonal Passives and the Unaccusative Hypothesis." *Berkley Linguistic Society* 4, Berkley, CA.