

What Triggers the Difference between Externally and Internally Caused Eventualities? : A Probe into the Conceptual Structure of Sound Emission Verbs

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1. Introduction

1.1 The Aim of This Study

- The Distinction between “Externally” and “Internally” Caused Verbs Proposed by Levin and Rappaport Hovav (1995)
 - (1) a. The window broke./The burglar broke the window.
b. The door opened./Bill opened the door.
c. The glass melted./Floyd melted the glass.
 - (2) a. The audience laughed./*The comedian laughed the audience.
b. Mary shuddered./*The monster shuddered Mary.
c. The children played./*Mother played the children.
 - (3) The girl cried./*That boy cried the girl.
 - (4) The keys were jingling in his pocket./He was jingling the keys in his pocket.
- The Aim of This Study: to show that with respect to this set of verbs, the distinction between the two types of caused eventualities can be accounted for in terms of ‘action chain’ and ‘construal’ in Langacker’s theory.
- The Questions Addressed in This Study:
 - (5) (a) What kind of situation do the terms ‘internally-caused’ or ‘externally-caused’ refer to in the cognitive domain of sound emission?
(b) What factors bring about such a contrast as that observed between (3) and (4)?

1.2 On the Classification of Sound Emission Verbs

- Levin, Song and Atkins’ Classification (1997) as to the Mode of Production, according to Sounds Produced Internally or Externally to the Sound Emitter:

Internally produced sound(s) (IPS) vs. Externally produced sound(s) (EPS)

- (6) Examples of IPS: *cry, chatter, groan, growl, gurgle, howl, roar, whistle, etc.*
- (7) Examples of EPS: *bang, clatter, click, crack, creak, jingle, rattle, rustle, thud, etc.*

● Verbs of IPS which permit an EPS use:

- (8) a. ... *whistling* with draughts , both its windows had been boarded up
(BNC: FRJ)
- b. The whole ground *groaned* as Mike hit the post. (BNC: CA0)

■ Grammatical Distinctions Corresponding to Verbs of IPS vs. Verbs of EPS

Table 1. Attested Complement-taking Properties of Sound Emission Verbs¹

Properties	Verbs of IPS	Verbs of EPS
Occurring with Cognate Objects (e.g. <i>laugh a hearty laugh</i>)	✓	
Occurring with Reaction Objects (e.g. <i>groan one's lament</i>)	✓	
Occurring with Message Objects (e.g. <i>whistle warnings</i>)	✓	
Occurring with Direct Speech Complements (e.g. " <i>Oh, no, Doctor, please,</i> " <i>Lily cried.</i>)	✓	
Causative Sound Use (e.g. <i>He was jingling the keys in his pocket.</i>)		✓
Motion Use (e.g. <i>A cart rattled past.</i>)		✓
Causative Motion Use (e.g. <i>She plopped the book down.</i>)		✓

1.3 The Scope of Data for Analysis

■ Verbs and Their Use Chosen in This Study

- (9) i. Verbs listed in Levin (1993: 234-5) as verbs of sound emission
- ii. Verbs found in BNC (British National Corpus) and also in the entries of four dictionaries, OALD, LDCE, CCED, and CIDE²
- iii. The basic use denoting someone or something emits a sound
- iv. The intransitive use employed in the structural frame [NP V] with a sound emitter as subject; or the transitive use employed in the structural frame [NP V NP] with a sound emitter as object

● **The number of verbs chosen as the target of this study is 110 (54IPS, 56EPS).**

■ Representative Instances from Each of the Structural Frames

- (10) a. [NP V]

*The girl cried in pain. / The baby gurgled when she saw her father.
A door was banging loudly somewhere, etc.*

- b. [NP V NP]

*She banged the door angrily. / A light breeze rustled the treetops.
They clinked glasses and drank to each other's health, etc.*

1.4 Assumptions on the General Schemas for the Emission Event, IPS Events, EPS Events

■ Three Entities Comprising a Cognitive Domain for Emission Events:

- (i) **Energy Source** (an agent or an external force); (ii) **Emitter**; (iii) **Emittee**

¹ This table is drawn on the basis of Table 4 in Levin, Song and Atkins (1997: 40), which summarizes the different types of transitive uses found in the corpus for the sixteen verbs of sound.

² These abbreviations stand for *Oxford Advanced Learners' Dictionary*, *Longman Dictionary of Contemporary English*, *Collins Cobuild English Dictionary*, *Cambridge International Dictionary of English*, respectively.

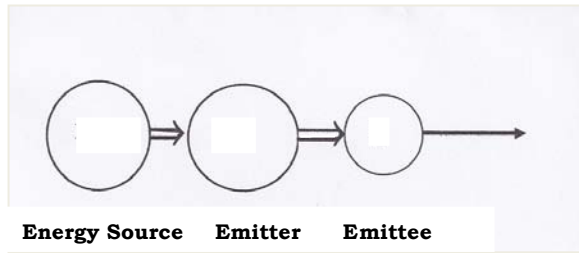


Figure 1. General Schema for Emission Events

- (11) a. The carhorn honked./What the carhorn did was honk.
 b. The bells jingled loudly./What the bells did was jingle loudly.
 c. The lamp shone brightly./What the lamp did was shine brightly.
 d. The well gushed oil./What the well did was gush oil.

- How do we represent the difference between the events described by IPS verbs and EPS verbs in terms of action chain?

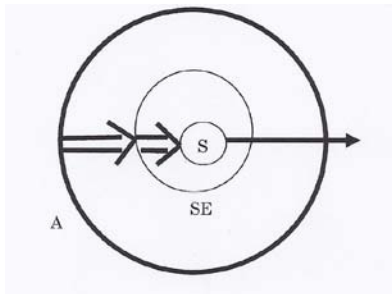


Figure 2. General Schema for Events Described by Verbs of IPS (where A=Agent, S=Sound and SE=Sound Emitter)

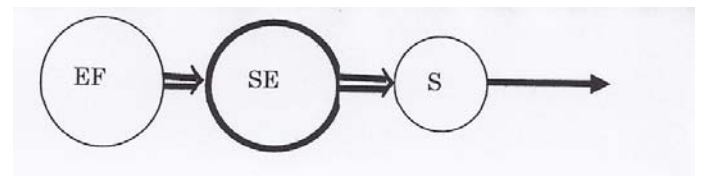


Figure 3. General Schema for Events Described by Verbs of EPS (where EF=External Force, SE=Sound Emitter and S=Sound)

- How do we account for the relationship between the verbs of EPS and their transitive use?

- (12) a. The door banged loudly. b. Leaves are rustling.
 c. The doorbell buzzed.
 (13) a. The wind banged the door loudly. b. A breeze is rustling leaves.
 c. Someone buzzed the doorbell.

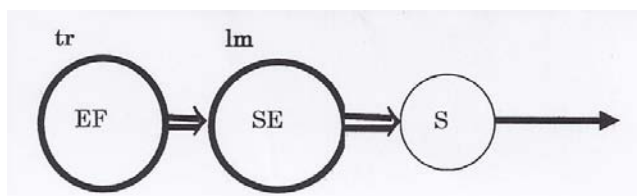


Figure 4. General Schema for Events Described by the Transitive Uses of Verbs of EPS

2. Arguments for the Conceptual Structure of Verbs of Internal Production

- Arguments for the Agent's Body as the Sound Emitter

- Zero-encoded Body and its 'Active Zone'

- (14) a. Jay sighed deeply *from within*.
 b. “Oh God,” I groaned/cried/moaned *from within*.
 c. He laughed/growled/wailed *from within*.
- (15) a. Wheels screeched *out of their night-locks* — (BNC: H8R)
 b. Benny hissed *out of the corner of her mouth*. (*Ibid.*: CCM)
- (16) a. She rasped *from her gashed throat*.
 b. The engine is knocking badly *from the front parts*.
 c. He whistled *from between his teeth*.
- (17) She washed/rinsed/shampooed/dressed/undressed/exercised ...
- (18) a. Let your hair shine *out from within* with TiGi Linea Treatment Shampoo.
 (BNC: CDH)
 b. This was the nature of the Lady 's eyes: ..., and they(=the Lady's eyes)
 glowed *from within*. (*Ibid.*: A3H)
 c. He exudes confidence *from within*.

● Zero-encoded Body as the Container of a Sound

- (19) a. She cried *out* in pain. b. She suddenly screamed *out* in pain.
 c. They yelled *out*. d. She sighed *out* in ecstasy.
 e. She laughed/chuckled *out* loud. (a-e from KDEC)
- (20) a. *The dishes clattered *out*. b. *The door banged *out* loudly.
 c. *The doorbell buzzed *out* loudly. d. *The car horn honked *out*.
- (21) a. She wasn't sure if she *groaned out* loud ... (BNC: JY3) (IPS Use)
 b. The cafe door *groaned* open ... (*Ibid.*: HWN) (EPS Use)
 c. *The cafe door *groaned out* open.

■ Arguments for Internal Causation

- (22) The tea kettle whistled./??The boiling water whistled the tea kettle.
 (Levin, Song, Atkins (1997: 43))
- (23) The keys were jingling in his pocket./He was jingling the keys in his pocket.
- (24) a.*John cried *with a bottle of whisky/a sad story*.
 b. The king cried *with a loud voice*. (BNC: C9R)
 c. She rasped *with her gashed throat*, “Oh, no.”
 d. He whistled *with his teeth/fingers*.

3. Arguments for the Conceptual Structure of Verbs of External Production

3.1 Arguments for the Presence of an External Force

● From the Interaction with *With*-phrases Expressing an ‘Accompaniment Cause’
 (Dirven 1995)

- (25) a. The windows began to rattle with the din from outside. (BNC: ADB)
 b. The thread that bound them snapped with one expert tug. (*Ibid.*: GUK)
 c. All the bones had cracked with the frost. (Adapted from BNC: HTM)

d. *He squealed his boots.

NB: No entries for the transitive uses of these verbs are attested in CCED, CIDE, OALD and LDCE, although regarding *chatter* and *creak*, the casual occurrences of their transitive uses are attested in OED (2nd Edition).

- (31) a. This door bangs and creaks easily.
b. This kind of building creaks and shakes easily.

☞ Sentences in (29) and (31) along with (28) suggest that what determines the middle construction is not the grammatical transitivity but the cognitive transitivity of the verb.

3.2 On the Relationship between EPS Verbs and Their Transitive Uses: Why the Construal?

■ Facts Indicating the Speaker's Construal of a Given Situation:

● It is not the case that there is a full-fledged transitive use corresponding to any verb of external sound production. In fact, according to my estimate, of all the English verbs of external sound production, approximately one third (20 out of 56) are not paired with corresponding transitive uses.

● Recall the case of the verb *creak*. This verb of external production has no corresponding full-fledged transitive use although some casual occurrences of its transitive use are attested.

● We see a dialectal difference between British and American speakers in the transitive use of the verb *squelch*, as seen in (32b), which sounds acceptable to some British speakers but unacceptable to American speakers:

- (32) a. Her shoes squelched at every step. (OALD)
b. She squelched her shoes at every step.

● Only the limited subset of noun phrases sanctioned as 'accompaniment cause' can be construed as trajector, as we have seen in the contrast between (26a-d) and (26e-f).

☞ All these facts indicate that the meaning of a verb of external sound production is not just determined by the conceptual content it evokes but is subject to the speaker's construal of a given situation.

4. Conclusions: Factors Triggering the Difference between Externally and Internally Caused Eventualities

■ From the above considerations, the factors suggested by the present study in triggering the difference between internally and externally caused eventualities are the following two:

- (i) The crucial factor triggering the difference involves whether the agent transmits

energy to its body as the sound emitter or an external force transmits energy to the sound emitter in the events of sound production. By virtue of this factor IPS events are differentiated from EPS events, as diagrammed in Figures 2 and 3. In the former case, since the agent and the sound emitter are undifferentiated, what the interaction between them brings forth is internal causation. On the other hand, in the latter case, since the external force and the sound emitter are completely distinct entities, what the asymmetrical interaction between them brings forth is external causation irrespective of whether the external force is linguistically profiled or not.

This factor is consistent with two of the notions relevant to the phenomenon of transitivity that Rice (1985) puts forth: that is, the notion of maximal/minimal differentiation of participants and that of asymmetrical/symmetrical participants.

(ii) Another factor concerns construal, namely, whether the sound emitter or the external force is construed as trajector. That is, if the sound emitter is chosen as trajector, the whole event is coded as an intransitive clause while the external force remains 'off stage'; and if the external force is chosen as trajector, the whole event is coded as a transitive clause with the sound emitter as object. Several facts suggesting this construal are given in Section 3.2.

References

- Dirven, René (1995) "The Construal of Cause: The Case of Cause Prepositions," *Language and the Cognitive Construal of the World*, eds. by Taylor, John R. and Robert E. MacLaury, 95-118, Mouton de Gruyter, Berlin.
- Fagan, Sarah (1988) "The English Middle," *Linguistic Inquiry* 19: 2, 181-203.
- Hopper, Paul J. and Sandra Thompson (1980) "Transitivity in Grammar and Discourse," *Language* 56, 251-299.
- Hopper, Paul J. (1985) "Causes and Affects," *Papers from the 21st Regional Meeting of the Chicago Linguistic Society, Part 2: Papers from the Parassession on Causatives and Agentivity*, ed. by William H. Eilfort, Paul D. Kroeber and Karen L. Peterson, 67-88, Chicago Linguistic Society, Chicago, IL.
- Johnson, Mark (1987) *The Body in the Mind: The Bodily Basis of Meaning, Imagination and Reason*, University of Chicago Press, Chicago.
- Kemmer, Suzanne (1993) *The Middle Voice*, Typological Studies in Language 23, John Benjamins, Amsterdam.
- Keyser, Samuel J. and Thomas Roeper (1984) "On the Middle and Ergative Constructions in English," *Linguistic Inquiry* 15, 381-416.
- Lakoff, George (1987) *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*, University of Chicago Press, Chicago.
- Langacker, Ronald W. (1991) *Foundations of Cognitive Grammar*. Vol. II: *Descriptive*

Application, Stanford University Press, Stanford, CA.

Langacker, Ronald W. (1994) "Grammatical Traces of Some 'Invisible' Semantic Constructs," *Language Sciences* 15.4, 323-355.

Langacker, Ronald W. (1995) "Raising and Transparency," *Language* 71, 1-62.

Langacker, Ronald W. (2008) *Cognitive Grammar: A Basic Introduction*, Oxford University Press, Oxford.

Levin, Beth (1993) *English Verb Classes and Alternations*, University of Chicago Press, Chicago.

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

Levin, Beth, Grace Song and Beryl T. Sue Atkins (1997) "Making Sense of Corpus Data: A Case Study of Verbs of Sound," *International Journal of Corpus Linguistics* 2.1, 23-64.

Rice, Sally (1987) *Towards a Cognitive Model of Transitivity*, Ph. D. Dissertation, University of California, San Diego.

Schlesinger, Izchak M. (1989) "Instruments as Agents: On the Nature of Semantic Relations," *Journal of Linguistics* 25, 189-210.

Corpus and Dictionaries cited

British National Corpus (XML edition, 2007) Online Service [BNC]

Cambridge International Dictionary of English. Cambridge University Press, Cambridge. (1st edition, 1995) [CIDE]

Collins COBUILD English Dictionary. HarperCollins, London. (3rd edition, 1995) [CCED]

Kenkyusha Dictionary of English Collocations. Kenkyusha, Tokyo. (New edition, 1995) [KDEC]

Kenkyusha Dictionary of Theoretical Linguistics. (1st edition, 1992) Kenkyusha, Tokyo. [KDTL]

Longman Advanced American Dictionary. Longman, Harlow. (2nd edition, 2000) [LAAD]

Longman Dictionary of Contemporary English. Longman Group, Burnt Mill, Harlow, Essex. (3rd edition, 1995) [LDCE]

Oxford English Dictionary. Oxford University Press, Oxford. (2nd edition on CD-ROM) [OED]

Oxford Advanced Learner's Dictionary. Oxford University Press, Oxford. (5th edition, 1995) [OALD]