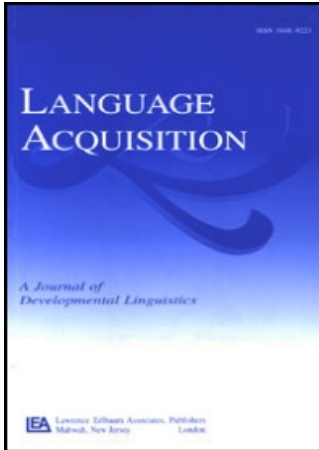


This article was downloaded by:[Bunger, Ann]
On: 11 January 2008
Access Details: [subscription number 789524782]
Publisher: Psychology Press
Informa Ltd Registered in England and Wales Registered Number: 1072954
Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Language Acquisition

Publication details, including instructions for authors and subscription information:
<http://www.informaworld.com/smpp/title~content=t775653668>

How We Learn to Talk About Events: Linguistic and Conceptual Constraints on Verb Learning

Ann Bunger^a

^a Department of Psychology and Institute for Research in Cognitive Science,
University of Pennsylvania,

Online Publication Date: 01 January 2008

To cite this Article: Bunger, Ann (2008) 'How We Learn to Talk About Events: Linguistic and Conceptual Constraints on Verb Learning', *Language Acquisition*, 15:1, 69 - 71

To link to this article: DOI: 10.1080/10489220701600481

URL: <http://dx.doi.org/10.1080/10489220701600481>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article maybe used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Language Acquisition, 15:69–71, 2008
 Copyright © Taylor & Francis Group, LLC
 ISSN: 1048-9223 print/1532-7817 online
 DOI: 10.1080/10489220701600481

 Psychology Press
 Taylor & Francis Group

How We Learn to Talk About Events: Linguistic and Conceptual Constraints on Verb Learning

Ann Bunger

*Department of Psychology and Institute for Research in Cognitive
 Science, University of Pennsylvania*

Ph.D. Received: Northwestern University, 2006

Major Advisor: Jeffrey Lidz

To learn the meaning of a word, a language learner must map a linguistic unit onto a representation of the world provided by her conceptual system. A classic puzzle in the study of language acquisition concerns what constraints determine the set of hypotheses that a learner generates for the meaning of a novel word and what kinds of information help her to narrow down that set. My dissertation investigated the range of meanings that learners are willing to encode in single verbs associated with causative events and how those options are guided by the mapping between conceptual and linguistic event representations. To accomplish this, I asked three specific questions: first, which combinations of the subparts of a causative event learners are willing to encode in a single verb; second, how specific they are about the event features being encoded; and third, how they deal with conflicts between hypothesized verb meanings and new information from the extralinguistic context. My results demonstrate that the meanings that adult and 2-year-old word learners postulate for novel verbs are influenced both by cues to meaning provided by verb syntax and by more general constraints on the way that verb meanings can be related to event representations.

From infancy, we represent causative events as being composed of a set of subevents associated in a hierarchical structure that reflects their partonomic relationships to one another (Leslie (1984), Zacks and Tversky (2001)). So, for example, a causative event in which a girl makes a ball bounce by hitting it with her hand would be represented as in (1), in which the first subpart [girl hits

ball] corresponds to the causing subevent and the second subpart [ball bounces] to the result.

- (1) a. [[girl hits ball] CAUSE [ball bounces]]

Our linguistic representations of events are intimately tied to our conceptual representations, and languages reflect this complex internal structure in the grammar of the causative construction (Carter (1976), Talmy (1985), Jackendoff (1990), Levin and Rappaport Hovav (1995)). Previous work has shown that 2-year-olds can make use of regularities in the mapping between verb meaning and verb syntax to figure out what kind of event a novel verb refers to (Landau and Gleitman (1985), Naigles (1990), Fisher, Hall, Rakowitz, and Gleitman (1994)). My goal in this dissertation was to examine the precise nature of the meanings that children assign to verbs when they learn them in this way: i.e., how flexible they are in the linguistic representations they associate with novel verbs and how those linguistic representations map onto the relevant event representations.

The project comprised a set of four experiments, all of which employed the preferential looking paradigm (Spelke (1979), Golinkoff, Hirsh-Pasek, Cauley, and Gordon (1987)). During the familiarization phase of each experiment, participants (2-year-old children and adults) were presented with videos of causative events, like a girl making a ball bounce, that were matched with novel verbs. During the test phase, participants were presented with two new events that differed from the familiarized causative in carefully controlled ways and were asked to decide which test event could also be labeled with the novel verb. The experiments differed in the syntactic frames in which the novel verb was presented during familiarization (transitive, unaccusative, unergative), as well as in the features of the familiarized causative event (means, result, causation) that were altered in test events.

The results of Experiments 1 and 2 show that 2-year-olds have access to the same complex representations for causative events that adults do and that both groups can use verb-specific subcategorization information to identify and label the subparts of these events. Specifically, both groups mapped novel verbs in unaccusative intransitive syntactic frames (“The ball pimed.”) onto the result of a causative event and novel verbs in unergative intransitive frames (“The girl pimed.”) onto the agent’s activity. For novel verbs presented in transitive frames (“The girl pimed the ball.”), 2-year-olds demonstrated a bias to interpret them as labels for a causative event, whereas adults tended to map them onto the agent’s activity. Experiments 3 and 4 reveal that as long as structural constraints on the mapping between verb syntax and semantics are satisfied, 2-year-olds can be flexible in the specificity of the semantic content they assign to their representation of a causative. That is, when they represent a novel verb as causative, they are willing to extend it to refer to other causative events that differ in the identity of either the means or the result subevents, but not to events

that differ in their basic event structure—i.e., to events that are not causative. Taken together, these results suggest that although adults and 2-year-olds face word-learning situations with different strategies that reflect differences in their experiences with the target language and the world, learning in both populations is highly constrained by core limits on verb meaning.

REFERENCES

- Carter, R. (1976) "Some Constraints on Possible Words," *Semantikos* 1, 27–66.
- Fisher, C., D. G. Hall, S. Rakowitz, and L. Gleitman (1994) "When it is Better to Receive than to Give: Syntactic and Conceptual Constraints on Vocabulary Growth," *Lingua* 92, 333–375.
- Golinkoff, R. M., K. Hirsh-Pasek, K. M. Cauley, and L. Gordon (1987) "The Eyes Have It: Lexical and Syntactic Comprehension in a New Paradigm," *Journal of Child Language* 14, 23–45.
- Jackendoff, R. S. (1990) *Semantic Structures*, MIT Press, Cambridge, Massachusetts.
- Landau, B. and L. R. Gleitman (1985) *Language and Experience: Evidence from the Blind Child*, Harvard University Press, Cambridge, Massachusetts.
- Leslie, A. M. (1984) "Infant Perception of a Manual Pick-up Event," *British Journal of Developmental Psychology* 2, 19–32.
- Levin, B., and M. Rappaport Hovav (1995) *Unaccusativity: At the Syntax-Lexical Semantics Interface*, MIT Press, Cambridge, Massachusetts.
- Naigles, L. (1990) "Children Use Syntax to Learn Verb Meanings," *Journal of Child Language* 17, 357–374.
- Spelke, E. S. (1979) "Perceiving Bimodally Specified Events in Infancy," *Developmental Psychology* 15, 626–636.
- Talmy, L. (1985) "Force Dynamics in Language and Thought," *Chicago Linguistic Society* 21.2, 293–337.
- Zacks, J. M., and B. Tversky (2001) "Event Structure in Perception and Cognition," *Psychological Bulletin* 127, 3–21.

Received 27 February 2007