THE RELEVANCE OF UNACCUSATIVITY TO POSSESSIVE DATIVES
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BACKGROUND: Borer and Grodzinsky (1986) observe that unaccusatives, but not unergatives, license Possessive Datives (PD) in Hebrew – henceforth, the 'unaccusativity generalization'. Subsequently, the PD has been used as an unaccusativity diagnostic. However, recent experimental and corpus research (Gafter 2014, Linzen 2014) has questioned the relevance of unaccusativity to the PD construction. Gafter (2014) suggests that PDs are sensitive to the prominence of the possessor compared to that of the possessee on scales of animacy and definiteness, not (necessarily) to unaccusativity. Linzen (2014) speculates that aspects of affectedness including context salience, animacy, and inalienability underlie the difference in the acceptability of PDs with unaccusatives versus unergatives. We first show that putative corpus counterexamples to the unaccusativity generalization should all be discarded in light of caveats limiting the use of the diagnostic (observed by Meltzer-Asscher and Siloni 2012 a.o.): Only lexical PDs and alienable subjects should be used since pronominal PDs have an ethical dative reading, and inalienable nominal subjects license dative possession independently of verb type. We then report a series of three acceptability rating experiments that provide support to the unaccusativity generalization.

METHODS: Materials in each experiment consisted of 10 pairs of unergative and unaccusative sentences (classified as such by the existence of transitive alternate having a Cause θ-role (Reinhart 2002)). To control for confounding factors, including animacy, definiteness, inalienability, and salience, sentences in each pair were presented with no context and had identical PDS and alienable nominal subjects, differing only in verb type. To rule out an ethical dative reading, all PDs were lexical (not pronominal). A plausibility judgment pretest was carried for each experiment to assure there is no significant difference in plausibility between the unaccusative and unergative scenarios. Experiment 1 tested the PD construction with unergative versus unaccusative verbs (as illustrated in (1)). Experiment 2 compared the PD construction with reflexive verbs (which have been argued to be unergative, Reinhart and Siloni 2004, 2005) and unaccusative verbs (reflexives were selected from a previously identified set (Siloni 2008)) (as illustrated in (2)). Experiment 3 examined PDs with unaccusative verbs compared to those with emission, alias theme unergative, verbs (in concert with Levin and Rapaport-Hovav's classification 1995) (as illustrated in (3)).

(1)   ha-pukimon   hitpate'ax/hit'ateʃ   le-yosef
        the- pukimon   developed/sneezed   to-yosef
        'Yosef's pukimon developed.' Intended meaning: 'Yosef's pukimon sneezed.'

(2)   ha-robot   hitmotet/hitxameʃ   le-naama
        the-robot   collapsed/armed itself   to-naama
        'Naama's robot collapsed.' Intended meaning: 'Naama's robot armed itself.'

(3)   ha-iton   nirtav/riʃreʃ   le-dafna
        the-newspaper   got wet/rustled   to-dafna
        'Daphne's newspaper got wet.' Intended meaning: 'Daphne's newspaper rustled.'

Sentences in each experiment were assigned to two lists in a Latin Square design. In addition to the ten experimental sentences, each list also contained ten filler sentences of varying acceptability. Order of presentation was randomized for each participant.

Participants were native Hebrew-speakers (Experiment 1: 50 participants, mean age: 24.94; Experiment 2: 60 participants, mean age: 24.29; Experiment 3: 57 participants, mean age: 31.51). Participants were presented with the list of sentences and were asked to rate how natural each sentence was on a scale of 1 (completely unnatural) to 7 (completely natural).

RESULTS: Data were analyzed using paired by-item and by-participant t-tests. The results revealed a significant effect for verb type in all 3 experiments, as summarized in Table 1:

Table 1. Experiment results by-item and by-participant:

Experiment	Unacc. Mean (SD)	Unerg. Mean (SD)	by-participant	by-item
1	4.46 (0.64)	3.29 (0.68)	$t(49) = 4.824, p < 0.001$	$t(9) = 3.714, p = 0.005$
2	4.44 (0.62)	2.1 (0.32)	$t(59) = 9.596, p < 0.001$	$t(9) = 4.36, p = 0.002$
3	5.55 (0.65)	4.69 (0.5)	$t(56) = 5.089, p < 0.001$	$t(7) = 3.1, p = 0.017$

DISCUSSION: The results reveal a significant effect for verb type, with the unaccusative PD constructions receiving a higher acceptability rating than all three unergative PD constructions. As there was no difference in animacy, definiteness, subject type (alienable or inalienable), and salience between the paired sentences in each experiment, yet a significant effect was observed, we conclude that verb type, unaccusative or unergative, affects the acceptability of the PD construction. Following Sorace and Keller (2005) and Sprouse (2007), we use acceptability judgement tasks as an indicator of grammaticality. We attribute the fact that the differences, although significant, were not very large numerically to extra-grammatical influences. Thus, the grammaticality of similar constructions with unergative verbs, specifically, the ethical, reflexive and inalienable dative constructions, may "boost" the perception of acceptability for the PD construction with unergative verbs. Taking into account the fact that the sentences were pretested for plausibility, and equal in all but verb type, we deduce grammaticality from the acceptability judgements. We assume that: (i) the PD must c-command its possessee or its copy (Borer and Grodzinsky 1986 a.o.); (ii) the PD is merged in a low Applicative Phrase (Preminger 2009). Thus, since the subject of unaccusatives (but not that of unergatives) is merged VP-internally in the complement position, a PD c-commands the former but not the latter. Time permitting, we will report two additional experiments reinforcing our claims. One shows that indeed Emission verbs are significantly more acceptable with inalienable nominal subjects than with alienable ones. The other shows that the above results are even sharper with *wh*-PDs. We ascribe this to the difference in focus structure between the declarative and interrogative constructions.

CONCLUSIONS (i) The (alienable) PD construction is possible with intransitives only if their subject is an internal argument. (ii) The acceptability judgment tasks we designed, which control possible confounding factors (animacy, definiteness, inalienability, salience, plausibility), can be used to diagnose or confirm the status of unergativity (or unaccusativity) for a coherent set of verbs.

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