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SUMMARY

The volume brings together papers related to the work of Anita Mittwoch, most of which were presented at the workshop ‘Syntax, Lexicon, and Event Structure’, which was held at the Hebrew University of Jerusalem in 2006, in honour of Anita Mittwoch. It contains 15 contributions distributed in three parts (I: Lexical Representation, II: Argument Structure and the Compositional Construction of Predicates, and III: Syntactic and Semantic Composition of Event Structure), preceded by a general preface by the series editors, biographical notes on the contributors, and an introductory chapter by the editors. The volume is completed by a single list of references and three indices of names, topics, and languages. The papers address a broad range of topics, such as the lexical semantics of verbs and their arguments, the structure of the lexicon, the division of labour between lexicon and syntax, the compositional semantics and syntactic structure of VPs, argument and event structure, as well as general issues related to the semantics and morphosyntax of events. Data from various languages are discussed, such as English, Hebrew, Hungarian, Greek, Japanese, Blackfoot, Dutch, as well as two different sign language employed in Israel.

In the **introduction** to the volume, **Malka Rappaport Hovav, Edit Doron, and Ivy Sichel** briefly recapitulate its main themes in relation to Mittwoch’s overall research on temporal and aspectual issues, in particular the lexical semantics of verbs and its interaction with arguments and modifiers. They state that whereas the papers in the volume address a wide range of topics, from the lexical semantics of verb roots to morphologically derived verbs and the morphosyntax of aspect, tense and modality, they all share the same research question, which is to determine the division of labour between lexical semantics, compositional semantics, and morphosyntax in the representation of events, as well as the nature of cross-linguistic variation in this area. After providing a short review of the main ingredients of event descriptions (such as lexical aspect, telicity, incrementality, argument structure, voice, viewpoint aspect, tense, mood, and habituality), they summarise the chapters in the volume and establish connections between them as well as their relation to Mittwoch’s research, further motivating the overall structure of the volume. The concluding section gives an overview of Anita Mittwoch’s contribution to linguistics, starting from her 1971 dissertation, which anticipated many of the relevant topics in the literature on events, such as the correlation between incremental themes and the possibility of object omission or parallels between incremental theme verbs, change-of-state verbs and motion verbs in combination with goal phrases. Particular papers by Mittwoch are discussed, which address topics that are directly picked up by some of the authors in this volume, such as optional intransitivity (Mittwoch 1971, 1982, 2005; Landman & Rothstein, this volume), the notion of homogeneity (Mittwoch 1998), the interaction of aspectual class and temporal *when*-clauses (Mittwoch 1988; Mittwoch, this volume), habituality (Mittwoch 2005; Boneh & Doron, this volume), the different effect of bare plural and mass arguments on accomplishments and achievements (Mittwoch 1991; Borer, this volume), and cognate object constructions (Mittwoch 1998, Horrocks & Stavrou, this volume).

PART I: LEXICAL REPRESENTATION

In ‘**Reflections on Manner/Result Complementarity**’, **Malka Rappaport Hovav** and **Beth Levin** develop their hypothesis from previous works that (non-stative) verbs either lexicalise manner or result, but not both, mainly discussing data from English. They propose canonical realisation rules for the association of a root’s ontological categorisation with an event schema (made up of combinations of the well-known predicates ACT, CAUSE, BECOME; see Rappaport Hovav & Levin 1998). They posit that each root has an ontological categorisation, chosen from a fixed set of types, including manner and result. Roots are proposed to be integrated into event schemas either as arguments or as modifiers of the event predicates involved. In particular, manner roots are argued to modify ACT, whereas result roots are arguments of BECOME. They furthermore posit a constraint on lexicalisation, according to which a root can only be associated with one primitive predicate in an event schema, either by modifying or adjoining to it. It follows that a root cannot

lexicalise both manner and result, given that it would then have to be the modifier of ACT and at the same time the argument of BECOME. They argue that the notion of result should not be equated with the notion of telicity (e.g. result states are not necessarily telic), but rather with the notion of scalar change. In contrast, manner verbs are argued to specify non-scalar change, i.e. change that cannot be characterised in terms of an ordered set of values of a single attribute, and to most often involve complex change in various dimensions. They suggest that the notion of scalar vs. non-scalar change and thus of result vs. manner, has a direct parallel in the motion domain, where we find complementarity between manner and path verb roots (cf. Talmy, 1985; this issue is also addressed in Horrocks & Stavrou, this volume).

In ‘**Verbs, Constructions, and Semantic Frames**’, **Adele E. Goldberg** is concerned with a related issue, namely whether there are constraints on what can serve as a semantic frame for a verbal sense. Following Fillmore (e.g. 1985), she postulates that meanings are relativised to frames, combinations of a word sense’s profile (what is asserted) and the background frame of a word (what is presupposed). She reviews two recent proposals for constraints on verbal meanings and argues that they are both too strong and should merely be seen as tendencies. To argue against Croft’s (1991) constraint, according to which verbs can only describe simple events or complex events in which two subevents are causally linked, she discusses cases where the event profiled by a verb is not causally related to an event that is part of the background frame (e.g. *return* presupposes a prior event of movement away from the location that the returner is returning to), or verbs that profile two subevents that are not causally related (e.g. *blanch* asserts the two events of immersing food in hot water and then in cold water). As counterexamples to Rappaport Hovav & Levin’s manner/result complementarity, she mentions verbs that allegedly lexicalise both manner and result, such as the motion verbs *scale*, *schuss* (in the skiing context), or *climb* (but see Levin & Rappaport Hovav, to appear, for a way to integrate the latter into their system), or verbs of cooking and verbs of creation, e.g. *scribble*, which is taken to specify a particular manner of writing but at the same time to lead to a result, namely that something written was created. Instead she proposes the weaker Conventional Frame constraint, according to which a verb’s meaning can involve two or more subevents, only if these are related by a semantic frame. In addition, she posits that argument structure constellations (‘constructions’), can also be associated with semantic frames, and that the meanings associated with verbs and with constructions can combine into one meaning. She states that unlike verbs, whose meaning capacities must comply with the Conventional Frame constraint, meanings associated with verbs in combination with constructions can evoke novel events (e.g. in the resultative construction *She sneezes the tube right out of her nose*). Goldberg’s careful discussion of particular counterexamples to the two constraints under discussion raises the important issue that particular notions underlying these constraints, such as cause, manner, or result, have to be defined precisely in order for the constraints to work, and it is possible that the definitions employed so far are not sufficient. However, it is not clear that all the alleged counterexamples are really problems and warrant rejecting the constraints altogether. Apart from the issue that presupposed but not asserted meaning (e.g. with *return*) could be argued to fall out of the range of lexicalisation constraints, the two distinct subevents in *blanch* might not be causally related, but they are in a much tighter relation than she wants us to believe, since they have to involve the same theme, they have to be temporally adjacent, and you cannot reverse their order. One of her counterexamples against manner/result complementarity, in turn, *scribble*, is actually not a counterexample under Rappaport Hovav & Levin’s definition of result as scalar change, since the change that comes about by a scribbling event is not necessarily scalar. In general, the authors have argued in several papers that verbs of creation are manner verbs which do not lexicalise a scale, and that the scale is provided by the incremental theme (see also Kennedy, to appear). Finally, the Conventional Frame constraint proposed instead might shift the problem to another unclear question, namely what are possible semantic frames?

In ‘**Contact and Other Results**’, **Nomi Erteschik-Shir** and **Tova Rapoport** take a syntactic approach to the issue of what is lexically specified by verbs. They extend their 2007 account of differences in the availability of particular argument structure alternations between two types of contact verbs (*hit* vs. *smear*), to include a third type (e.g. *splash*). Starting from the assumption that a single verb can project various structures, they derive the differences from differences in the make-up of lexical atoms in the otherwise uniform lexical representations of these verbs. According to Atom Theory (Erteschik-Shir & Rapoport 1997, and subsequent work), given a universal inventory of atoms, Manner (M), State (S), and Location (L), verbs can at most specify two atoms, manner (M) and two kinds of result (S or L). An atom can be merged with a verbal host to form a predicate, or it can modify an element it is adjoined to. The projection possibilities themselves are constrained only by the principle of Full Interpretation, according to which the interpretation of each atom has to take place within its local V projection, and projected structure requires the availability

of an uninterpreted atom. Each projected V-atom merges with a subject specifier, the interpretation of which follows from the nature of the predicate (e.g. the subject of a change predicate is interpreted as the theme; similar to Hale & Keyser 1993, and subsequent work). *Hit*-verbs, then, are analysed as involving two atoms, M specified for forceful means and L specified for point of contact. Such verbs can project a change-of-location structure, with M an adverbial modifier and L projecting as a (null) preposition (*The car hit the wall*). They can also project an agentive causative structure with an overt goal predicate, with M an adverbial modifier and L modifying the theme DP, which provides the location of the point of contact (*Jane hit the ball to the other side of the field*). *Smear*-verbs are argued to involve the two atoms M (smear manner) and L (surface contact). A complex cause structure is derived when the L atom modifies an overt P *on* (*We smeared mud on the wall*). This restricts *on* to surface contact, and the complement, *the wall*, specifies the location of this contact. They propose that a simple change structure (**Mud smeared on the wall*) is not acceptable because the M atom would remain uninterpreted, as it requires an agent (and thus a cause). A second causative structure (*We smeared the wall with mud*) is argued to be possible, because the L atom modifies the theme subject *the wall* of the central coincidence predicate *with* (the wall is thus the locus of the mud). Finally, *splash*-verbs are taken to specify the dispersal of a plurality of particles, which motivates the analysis of L as plural: These verbs are argued to involve only one atom, L_{pl}, specified for splash-shaped surface contact. The fact that single-component *splash*-verbs can project a change structure (*Mud splashed on the wall*) follows naturally, however the complex cause+change structure (*We splashed the wall with mud*) is more surprising. The authors claim that this structure is possible because of L's plurality: 'the upper projection is licensed because the increments of the change can be controlled by a causing event. The causer thus has the additional interpretation of controlling the sum of the individual events, the increments that make up the plural change' (p. 74).

In 'The Lexical Encoding of Idioms', Martin Everaert defines an idiom as a 'conventionalized linguistic expression which can be decomposed into potentially meaningful components and exhibit co-occurrence restrictions that cannot be explained in terms of rule-governed morphosyntactic or semantic restrictions' (p. 81). He argues that in both lexicalist and non-lexicalist theories, idioms have to be listed as particular units, in Distributive Morphology, for instance, in the encyclopaedia, and in lexicalist theories in the narrow lexicon, a list of lexemes and irregularities that cannot be captured by more general rules. The actual question that Everaert is concerned with, then, is the nature of a lexicon in the I-language sense and whether idioms, whose conventional nature makes them an object of E-language, could be part of this lexicon. He extends Chomsky's (1986) theory of lexical representation by proposing that lexical items can be specified not just for C(ategorial)- and S(emantic)-selection, but also for L(exical)-selection, which imposes co-occurrence restrictions between lexical heads. In particular, it is proposed that a head can L-select a specific item, and this incorporates an idea by Weinreich (1969), according to which the lexical building stones of idioms are specified in the lexicon for contextually constrained subsenses. For example, to account for the meaning of the idiom *kick the bucket*, Everaert proposes among the literal subsense(s) of *kick* another subsense, say meaning (4) (abbreviated in the following as *kick₄*), which in combination with a particular subsense of *bucket*, say meaning (8) (*bucket₈*) and with a definite determiner, means 'die', as L-selectionally specified for *kick₄*. Similarly, the lexical semantics for *bucket* specifies several subsenses, including *bucket₈*, which is L-selectionally specified as meaningless in the context of *kick₄*. However, all subsenses of *kick* or *bucket* share the same C- and S-selectional feature specifications, which captures the generally acknowledged fact that in idioms, the morphosyntactic properties of their constituting parts are the same as under the non-idiomatic readings (e.g. irregular past tense or plural morphology, the lexical aspect of the verb), or that idioms allow for modification or replacement of parts.

PART II: ARGUMENT STRUCTURE AND THE COMPOSITIONAL CONSTRUCTION OF PREDICATES

In 'The Emergence of Argument Structure in Two New Sign Languages', Irit Meir investigates the argument structure mechanisms of two sign languages that started developing in the mid to late 1930s, namely Israeli Sign Language (ISL) and Al-Sayyid Bedouin Sign Language (ABSL). She compares three different age groups for each language in the way (context-free) single actions depicted in video clips are signed to another person, who in turn had to identify the action in a picture-verification task. Meir observes that the older generations pursue communicative avoidance strategies, for example by employing one-argument clauses, which obliterate the need to mark argument structure (e.g. WOMAN SIT; GIRL FEED for an event involving a girl feeding a woman), or the (less common) so-called 'body as subject' strategy, in

which the subject (even if it is not first person) is identified with the signer. Both strategies are assumed to be costly: the inflation of verb forms makes the discourse quite loaded and redundant, whereas the second strategy confounds grammatical person with syntactic role. Grammatical strategies to encode argument structure are argued to gradually develop in younger generations, with ISL showing preference for verb agreement, which is fully developed in the third group, and ABSL for word order (SOV order is predominant by the third generation), without developing verb agreement. Verb agreement in sign languages takes place when the arguments' R-loci, i.e. the points of space which their referents are associated to, are incorporated into the verb form by pointing or eye gaze. Meir also identifies intermediate steps to mark verb agreement in first- and second-generation ISL signers. For example, some signers localise referents in space, without integrating these R-loci into the verb form, other signers use 'auxiliary' signs that move between the R-loci without this movement being part of the verb form, or they mark agreement only with the object, but not with the subject. Meir concludes that the findings from ISL show that, unlike in spoken pidgins and creoles, word order as a grammatical means to mark argument structure does not necessarily appear before verb agreement. She hypothesises that this might be due to the different modality, in the sense that verb agreement in spoken languages often develops only after the grammaticalisation of free personal pronouns, whereas in sign languages it merely involves the grammaticalisation of space. An alternative hypothesis, however, could be that in spoken languages, where words have to be linearised in a two-dimensional space, word order might be more 'natural' or suitable than verb agreement, whereas sign languages make use of a three-dimensional space, with verb agreement and word order being equally 'natural' options for the encoding of argument structure.

In '**Animacy in Blackfoot: Implications for Event Structure and Clause Structure**', **Elizabeth Ritter** and **Sara Thomas Rosen** investigate a particular type of verbal morphology, so-called finals, in the Algonquian language Blackfoot. Different finals result in four verb stem classes: intransitive (in)animate (II & IA, where the subject is (in)animate), and transitive (in)animate (TI & TA, with the object being (in)animate). They propose that, rather than marking an aspectual or a lexical argument structure distinction ((a)telicity or (in)transitivity), these finals are overt exponents of *v*, since they have both syntactic and semantic properties generally attributed to *v*. In particular, all and only transitive finals are shown to license a DP object, including unselected objects, such as benefactives, or so-called cross-clausal agreement. Semantically, TI, TA and IA finals are argued to impose an animacy restriction on the external argument and thus to theta-assign this argument, whereas II finals do not, and the respective verbs are unaccusative. They conclude that these properties make Blackfoot finals a mixed category with functional (object licensing, Case-checking) as well as lexical properties (theta-marking). Ritter & Rosen refute the alternative hypothesis that finals mark (a)telicity by showing that verbs that can appear with both transitive and intransitive finals, e.g. *eat*, behave alike with respect to standard telicity tests, no matter whether they appear with a transitive or an intransitive final. Furthermore, they argue that IA finals can appear with two thematic arguments and thus cannot signal 'internal' argument structure, either, in the sense that TI and TA finals would signal transitivity, but IA finals would not. It should be noted, however, that the authors (implicitly) understand argument structure in a strictly lexical sense, and operations on the argument structure as essentially lexical in nature. For instance, their examples for IA finals with two thematic objects, as lexically specified for the particular verb, involve bare nominals (of the type *she ate fish*, where *fish* is treated as an NP rather than a DP), which have been analysed as predicate modifiers rather than arguments of the verb (semantic incorporation), and this should also syntactically result in an intransitive structure (e.g. Chung & Ladusaw 2004), though this nominal can still be seen as a thematic argument of the verb (see also Farkas & de Swart 2003).

In '**Lexicon versus Syntax: Evidence from Morphological Causatives**', **Julia Horvath** and **Tal Siloni** make a further important contribution to the prominent discussion about the division of labour between lexicon and syntax by comparing morphologically derived causatives (as opposed to periphrastic ones) in Japanese and Hungarian. Based on evidence from Binding, negation, VP-ellipsis, and the interpretation of agent-oriented adverbs, data discussed in previous literature reveal that Japanese morphological causatives formed by the productive causative morpheme *-(s)ase* are biclausal. Horvath and Siloni show, based on the same diagnostics, that morphological causatives in Hungarian that are derived by means of the productive suffix *-(t)at/- (t)et*, are monoclausal. They argue that previous, uniformly syntactic analyses do not capture the facts because they either make the wrong prediction that productive morphological causatives are necessarily biclausal (e.g. Harley 2008), or because they have to implement additional stipulations to account for the fact that the input can also be transitive and unergative verbs (e.g. Pylkkänen, 2008). Instead, Horvath and Siloni

propose that languages like Japanese derive morphological causatives in the syntax, whereas languages like Hungarian derive them in the lexicon. They define a lexical causativisation rule that adds an agent argument to the Θ -grid of the input verb, and, if necessary, reevaluates the causative component of the Agent of the input predicate, [+c], to [-c] (in the sense of Reinhart's, 2002, Theta System). From this account it follows that the former are biclausal, whereas the latter are monoclausal. To further support this account, they discuss Japanese data involving the causativisation of coordinate structures, which is not possible in Hungarian, and given that coordinate structures are necessarily built in the syntax, such causativisation in Japanese also has to take place in the syntax. Furthermore raising verbs can be causativised in Japanese but not in Hungarian, again a fact that follows from treating the Japanese construction as derived in the syntax but the Hungarian one as formed in the lexicon.

Causatives are also addressed in '**On the Morphosyntax of (Anti)Causative Verbs**' by **Artemis Alexiadou**, who posits four classes of verbal meanings represented by a root or core component, namely agentive (e.g. *murder*), internally caused (e.g. *blossom*), externally caused (e.g. *destroy*), and cause unspecified ones (e.g. *break*) (building on Alexiadou, Anagnostopoulou & Schäfer, 2006). She claims that in principle all roots except for the agentive ones allow the so-called (anti)causative alternation, but languages fall into two groups whether they actually do so. The first group, represented by English, is argued to allow only cause unspecified roots to alternate, whereas in languages of the second type, e.g. Hindi and Greek, all but agentive roots are shown to alternate. Alexiadou proposes two anticausative/intransitive structures to be available in general, one without Voice and one which a non-agentive Voice which lacks an external argument. Morphologically marked anticausatives are argued to always appear in the latter structure. She brings forward extensive data from various languages (Greek, Hindi, Korean, Turkish, Japanese, Armenian) to support these two structures, which basically share the same pattern: with internally caused and cause unspecified verbs, the intransitive is basic and the anticausative is morphologically less complex, leading to the structure without Voice; with externally caused verbs, the transitive is basic and anticausativisation involves anticausative morphology (e.g. non-active morphology in Greek), leading to the structure with Voice. In the latter case, the morphology is often identical to passive morphology in the relevant languages, but the ungrammaticality of agentive *by*-phrases or modifiers shows that they are not passive. Alexiadou analyses the fact that the same morphology is used for anticausatives and for passives in these languages as a syncretism marking a valency reduction of some sort. It is furthermore argued that English only has the first structure, the one lacking Voice, but not the second structure, the one that is similar to a passive. This is proposed to follow from the fact that English lacks valency reduction morphology, and the English passive is analysed as structurally more complex (the passive morpheme sits in an additional aspectual projection, hence no valency reduction is involved) than the passive in languages that possess valency reduction morphology (which sits directly in Voice).

In '**Saturated Adjectives, Reified Properties**', **Idan Landau** addresses argument structure alternations not in the verbal but in the adjectival domain. He discusses evaluative adjectives, for which a basic adjectival construction (BasA, e.g. *John was very generous (to Mary)*) alternates with a derived adjectival construction (DerA, e.g. *That tribute was very generous (of John) (*to Mary)*). The external argument of BasA is shown to appear as an optional PP in DerA, whereas the internal goal argument of BasA cannot appear in DerA (or only as an adjunct *towards*-phrase). The interpretation of DerA is argued to necessarily be that of a stage level predicate, whereas BasA also allows an individual level interpretation. Landau proposes two possible structures for BasAs, namely one that involves an event argument (for the stage level interpretation, the output is an event predicate) and one that does not (individual level interpretation, the output is a proposition). He argues that DerAs are derived from BasAs by two operations, the lexical operation Saturation (SAT), which unselectively saturates all the individual arguments of BasA, and the syntactic operation Reification (R), which introduces a new external argument that is construed as a realisation or instantiation of the predicate. This analysis is argued to capture the fact that DerAs can only be derived from stage level BasAs, since R cannot relate a proposition to an individual but needs an event. He furthermore states that as a result of SAT, the arguments of BasA can only be expressed by (or doubled as) adjuncts (*of*- or *towards*-phrases); a proper goal argument (projected by a more deeply embedded goal phrase) is assumed not to be possible because its projection would depend on an external argument, introduced by the adjectivalising head *a*. He notes that such an external argument, however, would clash with the adjectivalising head a_R , necessary to introduce R, or this would lead to ungrammaticality when leaving the external argument unsaturated. Both operations are argued to be independently available, with SAT being involved in the derivation of verbal passives, passive event nominals, as well as alternations found with

subject and object experiencer adjectives, and R introducing the external argument in nominals (see, e.g., Williams, 1981, Grimshaw, 1990).

PART III: SYNTACTIC AND SEMANTIC COMPOSITION OF EVENT STRUCTURE

In ‘**Incremental Homogeneity and the Semantics of Aspectual *for*-Phrases**’, Fred Landman and Susan Rothstein make precise the notion of homogeneity that is required to pick out the predicates that can be modified by *for*-phrases. Homogeneity is commonly defined as a temporal notion, with respect to subintervals. States are homogeneous down to instants, activities are homogeneous only down to (sufficiently large) subintervals (Dowty 1979), whereas accomplishments and achievements are not homogeneous. Landman & Rothstein argue that homogeneity down to subintervals as the relevant criterion for the compatibility with *for*-adverbials does not account for the fact that activities allow for pauses and gaps. Instead, they propose to define homogeneity with respect to events, refining Landman’s (2008) notion of incremental homogeneity. Informally, incremental homogeneity is defined as the ‘incremental preservation of cross-temporal identity of an event, and of its event type, between the running time of the onset of that event and the running time of that event itself’ (p. 236). From this definition, they argue, it follows that *for*-adverbials are allowed with states (including derived states, such as progressives, habituals, modals), since they are lexically constrained as being homogeneous down to instants, which is a stronger notion than incremental homogeneity and thus subsumes it. They note that activities might allow for gaps segmentally but not incrementally and analyse them as lexically constrained to be incrementally homogeneous. Accomplishments and achievements, on the other hand, are argued not to meet the definition of incremental homogeneity, because their onsets are not events of the same type. Landman & Rothstein furthermore show that accomplishments and achievements in combination with bare plural and mass objects, but not in combination with determiner-noun phrase combinations, are acceptable with *for*-adverbials, and they propose that this is so because bare plural and mass nouns are kind-denoting. For example, *John ate apples* comes out as incrementally homogeneous, because it means that John is engaged in the apple-kind eating, which then is equivalent to eating some apple. The same account is proposed for bare plural subjects of achievements, e.g. *Guests arrived*, as well as for iterations, which, as Landman & Rothstein argue, pose an even bigger problem for the purely temporal notion of homogeneity, since here the gaps are even more evident. The former example is characterised as ‘punctual arrival events [which] are presented as if they are part of an incremental process of more and more instances of kind GUEST arriving [and] the spread is part of the cross-temporal identity conditions of that process’ (p. 249). In the same vein, they propose that the implicit object in intransitive uses of incremental verbs (e.g. *He ate*) is a kind description, which, again, results in incremental homogeneity (see also Mittwoch 2005 for a related idea).

In ‘**Event Measurement and Containment**’, Anita Mittwoch addresses the semantics of *for*- and *in*-adverbials, which serve as common diagnostics for the distinction between atelic and telic predicates. Whereas one might intuitively assume that *for*-adverbials measure atelic events while *in*-adverbials measure telic ones, Mittwoch convincingly shows that this is correct only in the part addressing *for*-adverbials. Following Krifka (1998), *for*-adverbials are analysed as extensive measure functions, with the presupposition that they apply only to homogeneous predicates. Such adverbials carry a scalar implicature, in the sense that *for an hour* implies *not for more than an hour*. Furthermore, they cannot apply to predicates that are already measured (in another domain or quantised in some other way): ‘normal measuring or counting presupposes the possibility of alternatives’ (p. 255). From this it follows that *in*-adverbials cannot be measure phrases, given that they apply to predicates that are already quantised. Following Krifka (1998) and Kearns (2003), Mittwoch argues that *in*-adverbials only indirectly measure the event, by measuring the interval that contains the event. Furthermore, they involve a reversal of the scalar implicatures found with *for*-adverbials, in the sense that *in an hour* implies *not in less than an hour*. Mittwoch addresses particular restrictions on *in*-adverbials that do not hold for *for*-adverbials, which are argued to follow from the assumption that *in*-adverbials are container measures and thus operate on a descending scale. For example, whereas *for*-adverbials are compatible with both upper and lower bounds (*for at least / at most an hour*), *in*-adverbials are ‘uninformative if they do not have a fixed upper bound, or one that can be roughly computed through the context’ (p. 259) (*#in at least an hour / #in more than / over an hour*, etc.), and related to this, *in*-adverbials involve relative shortness (*in as little as an hour* is more felicitous than *in as much as an hour* or *in hours*). The paper concludes with a comparison between *in*-adverbials and the *take* construction (in the sense of *need* or *require* as in *It took her an hour to complete the essay*), as an alternative way of indirectly measuring the length of telic eventualities. Mittwoch shows that this construction is not subject to the aforementioned

constraints that apply to *in*-adverbials and proposes that the *take*-construction is the unmarked means to (indirectly) measure telic events.

In ‘**Draw**’, **Christopher Piñón** argues that the verb *draw* behaves differently from regular verbs of creation, such as *build*, and he provides a semantic analysis of three readings he observes with this verb, which are shown to be morphologically distinguished in Hungarian. Under the first reading, for which Hungarian uses the non-prefixed verb *rajzol*, a kind of drawing is produced but no particular object is involved. This reading (under neutral intonation) is only compatible with non-specific indefinites, and Piñón analyses this as a proper verb of creation. Under the second reading, expressed by the Hungarian prefixed verb *le-rajzol* ‘on-draw’, the drawing of some object is produced, which involves the copying of an image. According to Piñón, this is the meaning of a verb of depiction, and it requires a definite or a specific indefinite object NP. Finally, the third *draw*, for which Hungarian employs the perfective prefix *meg* (*megrajzol*), expresses that a drawing is made of an object based on a certain description of that object, so that this reading does not involve copying. Thus, the article provides a more fine-grained lexical semantics of verbs that have previously been classified under one big label such as ‘verbs of creation’. An open question is whether it is necessary to postulate three distinct meanings for *draw*, rather than maintaining a single lexical entry and deriving the different readings from the composition of the verb with particular NPs (indefinite or definite) as well as particular aspectual information implicit in English but explicitly provided by the morphology in Hungarian. Given that the Hungarian particles *le* and *meg* occur with a number of different verbs it would be interesting to explore their semantics in detail and to investigate whether similar differences in the readings we observe with *draw* also appear with other verbs and then have a more systematic character. It also seems that the non-neutral uses of the Hungarian non-prefixed verbs are not necessarily lexically distinct from the prefixed versions, which is not expected if we dealt with three separate lexical items.

In ‘**Morphological Aspect and the Function and Distribution of Cognate Objects Across Languages**’, **Geoffrey Horrocks** and **Melita Stavrou** investigate cognate object constructions (COCs) in Greek, Hebrew and English. They argue that Greek has transitivity COCs (TCOCs), which occur with verbs of all classes (unergative, unaccusative, (di)transitive), do not change the aspectual nature of the underlying verb, and in which the COs are fully referential arguments. They argue that Hebrew COCs similarly appear with all kinds of verbs and do not change the aspectual nature either. However, Hebrew COs are argued to be non-referential and not arguments but rather activity and event nouns, commonly adjectivally modified. Both the Greek and the Hebrew COCs are analysed as light verb constructions (of different kinds) (LVCs), following Mittwoch’s (1998) proposal for Hebrew. The status of the object as (non-)referential in a given language is diagnosed by its (in)ability to be questioned or topicalised, to undergo passivisation, and to appear with all kinds of determiners, as well as by the (non-)optionality of further modifiers (in form of adjectives or relative clauses) and the (im)possibility to be synonyms rather than strict cognates. In contrast, the core of English COCs, apart from TCOCs of the Greek type, are argued to only occur with unergatives and furthermore to have the potential to change the aspectual nature of the underlying verb (from non-terminative to terminative and thus to a telic VP). The COs are non-referential and non-argumental, and this construction is viewed as a telic alternative to the otherwise atelic VPs based on non-terminative unergative verbs. For example, they assume that *to grin* is a non-terminative activity verb, but that the COC *to grin a grin*, just like the LVC *to give a grin*, is preferentially interpreted as telic, since the nominalisation in the CO itself is preferentially interpreted as an event (rather than an activity). They propose that this change in aspectual character is mediated by a lexical rule, which is similar in nature to the lexical rule responsible for combining activity verbs or manner of motion verbs with secondary resultative predicates or goal phrase into a complex accomplishment predicate (e.g. *wipe the table clean*, *dance onto the stage*). In a cross-linguistic perspective it has been shown (e.g. Beck & Snyder 2001) that languages that have strong resultatives can also combine manner of motion verbs with goal PPs to derive an accomplishment. Horrocks & Stavrou propose that the ‘aspectual’ COCs of the English type pattern with these constructions, given that English has all three constructions to derive complex accomplishment predicates with activity verbs, whereas languages like Greek and Hebrew do not have any of them. They tie this ban on the syntactic creation of complex accomplishment predicates to the fact that languages like Greek and Hebrew express grammatical aspect on verb stems, with every verb form being specified for grammatical aspect, so that these pairs of verbs have to be listed separately in the lexicon. It is argued that as a result the lexical aspect of an event description, which grammatical aspect operates on to derive the overall aspectual interpretation, has to be fixed at the lexical level, once and for all, and that it cannot be changed in the syntax by adding resultatives or similar phrases. A potential problem for their overall cross-linguistic generalisation might be (most) Romance

languages, which do not have strong resultatives or the complex motion predicates mentioned above (cf. Beck & Snyder 2001), but which have grammatical aspect only in past tense forms. It is far from clear that these forms have to be stored as such in the lexicon (for all verbs) which would result in the lexical aspect having to be fixed once and for all before entering the syntactic derivation.

In ‘**Locales**’, **Hagit Borer** addresses post-verbal subjects in Hebrew, also discussing parallel examples from Italian and Catalan. Besides the well-known restrictions on the availability of post-verbal subjects (they cannot be external arguments or strong NPs), she makes the new observation that common post-verbal subject cases are rather limited and only occur with (a subset of the) achievement predicates. Furthermore, the events involved in these cases are interpreted as telic, despite their lacking a ‘quantity expression’ (they can only occur with weak nouns), which, by assumption, is otherwise necessary for a telic interpretation to arise (cf. Borer 2005). She proposes that post-verbal subject order is licensed in these cases by a covert *locale* provided by such predicates, which is a locative associated with the location of the event. The *locale* existentially binds the event argument, which in turn binds its argument forcing it to be weak, and this yields the post-verbal order. Borer proposes that a similar mechanism leads to the telic interpretation of achievements in the absence of a quantity expression in that the covert *locale* also licenses ASP_Q, which, by assumption, is necessary for a telic interpretation to arise (cf. Borer 2005). Her account correctly predicts that overt *locales*, such as *here*, *there* (or Catalan *hi*), have a similar effect as the covert ones, in that they can license a postverbal position of the subject with other event and clause types (states, activities, accomplishments; unergatives, transitives), which usually do not occur with this word order. Also in these cases the subject must be weak; the overt *locale* has to be weak as well and is necessarily adjacent to the verb, unstressed, and may not be coordinated.

In ‘**Modal and Temporal Aspects of Habituality**’, **Nora Boneh** and **Edit Doron** discuss two different strategies to express habituality in English, Hebrew, and Polish, namely a simple form (e.g. *Yael worked in the garden*) and a periphrastic form (e.g. *Yael used to work in the garden*). Both are argued to express a state since habituals, by assumption, are stative, but to differ in the sense that the periphrastic form expresses a retrospective view on the state, to the effect that it is felt as disjoint from the speech time S, whereas the simple form allows the state holding at S. They propose that the disjointness effect with the periphrastic form arises from a scalar implicature, due to the availability of stronger form to express that a habit continues until S, namely the present perfect in English and the simple present in Hebrew. They analyse the periphrastic form as a complex aspect, similarly to the perfect, with the reference time R preceding the perspective time P (in the sense of Kamp & Reyle 1993). A main point they make is that even though habituality strongly correlates with imperfectivity, especially in the Romance languages, habituality is independent of imperfectivity, which, by definition, involves the inclusion of R in the event time E, since perfective verb forms also allow for habitual readings (where E, the time of the habitual state, is included in R). Furthermore they argue that habituality has a modal character and that the modal operator in habituals is distinct from that in imperfectives, since it includes dispositionality. Building on Boneh & Doron (2008) they define a modal operator Hab, which involves an initiation event and iteration in possible worlds. Hab is argued to adjoin to the VP, and this modified VP is the input to aspectual operators. With the simple form Hab is taken to be the input to a perfective or imperfective operator, whereas with the periphrastic form they postulate a higher aspectual operator Φ_{Hab} , realised as, e.g., *used to*, which predicates actualisation and ‘distancing’ from P. A main contribution of this paper lies in the important observation that perfectives can also involve habituality and thus in the dissociation of habituality from imperfectivity. A shortcoming might be, however, that the paper starts out with the promise to analyse habituality in English, Hebrew, and Polish, but in the end discusses data mainly from English and Hebrew, and it is not clear whether Polish works the same way. In addition, some claims about Polish are rather vague and questionable (e.g. that Polish does not have grammatical aspect but only lexical aspect, or that states cannot be perfective).

EVALUATION

The papers in this volume address important and current issues in the semantics and morphosyntax of event predicates, employing different frameworks and covering a broad empirical basis. It will be of great service to scholars interested in the domain of events and could easily constitute the basis for a graduate course on this topic. The coherence of the volume is strengthened by the fact that similar topics are addressed from different points of view (e.g. lexicalisation constraints in a lexical, syntactic, or cognitive-cultural

perspective; causativisation as a lexical or syntactic operation; the semantic basis for diagnostics to distinguish between different classes of event predicates; the verb-framed vs. satellite-framed typology and its extension to other empirical domains), which is acknowledged by cross-references in a number of papers. Finally, it achieves its goal to honour and recognise the work of Anita Mittwoch, which, as the editors note, ‘has stood the test of time’, with Mittwoch’s deep understanding of linguistic phenomena in the domain of aspectuality and temporality leading to the profound impact she has had on the research in this area. The volume is carefully edited, but what could have been improved is the uniformity of the single list of references, for example, by instructing authors to check whether a manuscript has been published in the meantime, by specifying if a particular paper or book has been reprinted, or by adding missing page numbers and other missing information. Instead, several references are repeated as manuscripts or just because they were not cited exactly the same, or because they were more or less reprinted in identical form (e.g. Bennett & Partee 1972 & 1978, Harley 2005 & 2006 - which should be 2008 -, Pylkkänen 2002 & 2008, Ramchand 2006a, 2007 & 2008, Rappaport Hovav 2006 & 2008, Reinhart 2000 & 2002, von Stechow 2000 & 2001, Vendler 1957 & 1967).

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ABOUT THE REVIEWER

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