

Syntax of *Aktionsart*: Internal-External Interaction and Cross-linguistic Variation
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This paper presents a lexical-decompositional analysis of the internal syntax of *Aktionsart* (situation aspect) by proposing an AktP projection between the VP-shell (Kratzerian VoiceP) and the semantic core (DM *v*P). Our main proposal—the external syntax of Akt-items is determined by the internal distribution of AktP combined with the larger clausal structure—not only explains the cross-linguistic variation, but also has implication for the mechanism of grammaticalization.

Observations Cross-linguistically we see a lot of complex verbs of the following type: e.g. English *set up*, *kill away*; German *ablehnen* “off-lean→decline”, *verbinden* “**PERF**-combine”; Hungarian *felolvas* “**up**-read→read aloud”, *becsuk* “**in**-close→shut, lock”; Russian *vytyanut’* “**out**-pull”, *razjest’* “**around**-eat→corrode”; Chinese *xiangchu* “think-**out**”, *yongkai* “use-**open**→begin to use”, etc. The common characteristics of these complex verbs include— **#1** They all form a complex predicate by combining the verb and a secondary element, be it an affix, a particle, or a status-unclear item (e.g. Chinese). **#2** Although they are perceived and listed as lexical items, the two component parts are clearly distinguishable, even when the overall readings are idiomatic. **#3** Many such units are syntactically separable despite the semantic idiomaticity (e.g. Hungarian); many others are syntactically inseparable despite the semantic compositionality (e.g. Russian). **#4** The secondary elements aspectually modify the verbal events, regardless of their original lexical readings; in some cases, aspectual reading only occurs when the given element appears in the complex construction (e.g. Chinese).

Our observations imply that: *a*) these complex verbs have further analyzable internal syntax, which interacts with external syntax in intricate ways; *b*) within this internal syntax there should be some *Aktionsart*-related structure; *c*) given the compositionality/idiomaticity coexistence (cf. Harley 2014), this internal structure probably lies between Voice (=Chomskyan *v*) and the verbalizer *v* (as in Distributed Morphology).

Proposal Based on the above observations, I propose that there is an AktP projection in the split-VP field, which is located between VoiceP and (verbalizing) *v*P. This projection harbors the various *Aktionsart*-items. Its head Akt can be either an overt Akt-marker or a phonologically null Akt-Operator, with the following featural make-ups:

Akt-head	Overt	Null
Featural make-up	{[+Φ], [±Σ], [<i>i</i> AKT]}	{[-Φ], [±Σ], [<i>u</i> AKT]}

Table 1: The featural make-up of Akt-head

Thus, Akt-markers are those Akt-items that are semantically bleached (no semantic feature) or have (nearly) irrelevant lexical meanings; in either way, Akt-markers are grammaticalized items specifically denoting *Aktionsart*, with their [*i*AKT] value fixed in the lexicon (of whatever guise). On the other hand, the Akt-Operator is an abstract item with an uninterpretable/unvalued formal feature [AKT], whose value is to be provided by a concrete (half-)lexical item in Spec-AktP via AGREE. The two positions for Akt-items have different bearing on their external distribution. To be specific, suppose that the main verb (*v*+Root) undergoes Head Movement in the split-VP, as is generally assumed in the lexical decomposition literature. When the Akt-item is a head, it forms a landing site of HM and joins to the verb in a fixed way; when it is a Spec, however, it is not involved in HM and keeps its relevant independence. An important prediction is that, *ceteris paribus*, only those Akt-items that are realized as specifiers can be separable and go through phrasal movement.¹ Note that when Akt-head is an overt Akt-marker, there is no

¹Akt-items in Spec are not always separable either, but as we will see, when they are not, there are always language-specific reasons involved, e.g. the disyllable-restriction in Chinese.

need for an extra Spec; however, this does not mean that overt Akt-markers are adjuncts, as they (being highly bleached) lack the relevant semantic feature to be interpreted as aspectual. Naturally, the Akt-items in Spec (i.e. when Akt-head is null) cannot be adjuncts either (*contra* Ramchand 2008) because of their movement possibility (cf. e.g. Kiss 2002 for Hungarian).

Cross-linguistic Variation Following the recent trend in Minimalism (cf. Chomsky 2011, Biberauer 2013), we assume that the linearization between verbs and Akt-items is largely a PF issue. So we mainly focus on the separability variation. **Hungarian** Akt-items are always separable, which suggests that they are merged as specifiers. This is true because Hungarian verbal particles are half-bleached (with [*i*AKT]). Besides, previous studies, though differing in details, have also suggested that they should be Spec of some preverbal functional projection (e.g. Kiss 2002). Thus, when the verb moves upward for external reasons (e.g. non-neutral context), the particle stays in AktP and emerges postverbally. **German** Akt-items can be separable or inseparable. The separable ones occupy Spec-AktP, while the inseparable ones occupy Akt-head and join to the verb via HM. This is reflected in their semantics as well—inseparable Akt-items are semantically bleached Akt-markers (e.g. *ver-*), while separable ones are half-lexical items (e.g. *ab-*). Since German is a V2 language, the Akt-head items move with the verb into higher projections, while the Akt-Spec items remain in AktP and appear at the end of the clause (presumably after other elements are moved out). **Chinese** Akt-items have similar featural patterns with the German ones, i.e. some are highly bleached Akt-markers while others are half-lexical items. However, in Chinese no clear separability is manifested in either case. Admittedly, one can hypothesize that Chinese verbs do not move out of VoiceP. However, we do see evidence of interaction between complex verbs and higher functional projections, e.g. viewpoint aspect (Asp) can be added to the complex verb as a whole but never only to the main verb. This, plus the diachronically justifiable preference of Modern Chinese for disyllabic lexical items, suggest that in Chinese the Akt-item and the verb are further recategorized (as in DM, via an additional verbalizer) into a single unit. We remain agnostic as to whether this recategorized unit combines with the Asp-marker via HM or post-syntactic operations. **Other languages:** The Akt-items in Russian are always inseparable, regardless of their semantic status (bleached or not). Those in English are always postverbal and interact with the arguments in flexible ways. While these and other cross-linguistic phenomena clearly need further research, we tentatively propose that in Russian there are also recategorization or phonological factors involved, and that in English, verbs generally move upward as in German, but the two languages differ concerning the behavior of arguments, which results in the different positions of verbal particles.

Further Implication The Spec/Head distinction of Akt-items corresponds to their semantic status, which is a matter of grammaticalization degree. In this respect, our analysis further reveals that grammaticalization involves (at least) a three-stage process, from *lexical morpheme* ([+Φ], [+Σ], [-F]) through *semi-functional morpheme* ([+Φ], [± Σ], [*i*F]; as Spec) to *functional morpheme* ([-Φ], [± Σ], [*u*F]; as Head). Thus, grammatical categories (together with their formal features) are yielded during the lexicalization of universal cognitive concepts, e.g. Akt could be the realization of some event-modifying concept (of which [AKT] is an instantiation). Nevertheless, whether or not to get a concept fixed in grammar and how to fix it are language-specific choices based on multiple factors. For instance, the type of Akt-items we have analyzed do not seem to exist in Romance languages, and in Hungarian and Chinese Akt-items only emerged at a later diachronic stage. The cross-linguistic variation in the instantiation of grammatical categories is no doubt a question worth further research (cf. Wiltschko 2014).

Selected References Kiss, K. (2002). *The Syntax of Hungarian*. Ramchand, G. (2008). *Verb Meaning and the Lexicon: A First Phase Syntax*. Harley, H. (2014). “Reply to commentaries”. In *Theoretical Linguistics* 40.