

Title:

Mind your Manner adverbials! (MiMa)

Summary:

Manner is ubiquitous in human life. When we do things, we often do them in a particular way. This way of doing things is reflected in our language. You can drive *slowly*, think *aloud*, handle things *with* care, and act *as if you're a fool*.

MiMa addresses the question of how 'manner' is encoded in the structure of human language. Specifically, it examines the grammar of *Manner Adverbials* (MA). *MiMa's* first line of research consists in the strict decomposition of MAs into smaller linguistic components. Theoretically, this quest for *inner structure* aims to show that MAs, even though superficially different, have a *uniform* underlying structure, viz., an *adpositional structure*. *MiMa's* second line of research focuses on the *distributional behavior* (word order) of MAs. Theoretically, it aims to show that MA's *inner structure* is a key determinant of MA's *outer behavior* in the clause.

By focusing on a single adverbial class, *MiMa* reaches *empirical scope* along two lines. *Constructionally*: *MiMa* investigates manner-adverbial *constructions* that have hitherto been largely ignored. *Comparative-linguistically*: *MiMa* undertakes a comparative study at three levels: *macro* (languages from different language-families), *meso* (languages from a subfamily: Germanic), and *micro* (Dutch dialects). This layered comparative-linguistic methodology —novel in the study of adverbials— leads to the discovery of coarse- and fine-grained cross-linguistic differences in the *grammar of manner*. Theoretically, *MiMa* aims to show that these dimensions of diversity are reducible to the system of *functional categories* in human language. Overall, *MiMa* advances our understanding of what is (in)variant in human language.

Key words: comparative syntax, manner adverbial, syntactic decomposition, word order, generative grammar

Project description:

I. Manner in human life. Manner is ubiquitous in human life. When we do things, we often do them in a particular way. You wake up *happily*, brush your teeth *thoroughly*, read the newspaper *quickly*, and drive to work *carefully* before starting to teach your class *enthusiastically*. Besides these manners of acting from a person's daily life, manners are also found in institutional settings: a teacher can teach her class *frontally* or *in a blended manner*, a nurse can inject medication *subcutaneously* or *intravenously*, and a concert pianist can play a note *pianissimo* or *fortissimo*. Manners matter also in social contexts. They are often defined —implicitly or explicitly, as in codified standards (etiquette)— as norms of behavior. A system of rules and conventions tells you how to behave in social life: "Chew *with your mouth closed!*" (table manners); *Caution: Drive slowly!* (traffic manners); "Please dress *California casual!*" (party manners). Last but not least, manner is a central component of learning processes, as reflected in corrective utterances such as *No, Johnny, not that way, but this way!*, and evaluative ones such as *Well done, Johnny!*

II. Manner in human language. Given the pervasiveness of manner in human life, it is not surprising that this basic property is expressed in language. In language use, we do not only talk about events and their participants ('John brushed his teeth'), or about the *where* ('in the bathroom'), the *when* ('yesterday'), and the *why* ('because of his visit to the dentist') of events, but crucially also about the *how* of events, as in *John brushed his teeth thoroughly*. These phrases expressing the 'where/when/why/how' are called *adverbials* or *modifiers* (Ernst-2002), and those belonging to the *how*-subclass are called *manner adverbials*.

As typological studies have shown, MAs are attested in a broad range of genetically unrelated languages (Hengeveld-1992, Loeb-Diehl-2005, Hallonsten-Halling-2018). Some illustrations are given in (1).

(1)

Chinese; Sino-Tibetan	Turkish; Turkic	Chamorro; Austronesian, Philippine
Ni keyi <i>manman de zou</i> you can slow DE walk 'You can walk slowly.'	<i>Yavaş-ça</i> konuştu slow-ÇA talk 'He talked slowly.'	Ha pacha i feggon <i>gi kubatde-na</i> he touched the stove LOC fear-his 'He touched the stove timorously.'

Given their wide-spread occurrence across the languages of the world, it could hence be assumed that MAs are important building blocks of human language. If so, the obvious question to ask is: How is ‘manner’ encoded in the structural build of human language? More succinctly:

Q_{overall}: *What is the grammar of MAs?*

III. Why (just) MAs? MiMa intentionally focuses on the grammar of a single adverbial sub-class: Manner Adverbials. An important reason for singling out MAs is their close connection to the verb(al environment). This is clear from (i) word order patterns involving more than one adverbial (*John brushed his teeth <thoroughly> yesterday <*thoroughly>*), and (ii) the obligatory presence of MAs in certain contexts (*John behaved *(properly)*). Their so-called *VP-adverbial* status makes them ideal candidates for examining morphosyntactic interactions (e.g., word order) with the verb and its arguments in a syntactically demarcated and controllable workspace.

The choice for a *mono-adverbial* study is motivated by MiMa’s aim to reach empirical depth and coverage at two levels: (i) the *constructional* level: What are the formal manifestations of MAs in a specific language?, (ii) the *comparative-linguistic* level: In what ways are languages similar (uniformity) or different (diversity) in their manner-adverbial grammar? A solid answer to **Q_{overall}** requires a solid empirical basis.

IV. Inner structure and outer behavior. MiMa’s *main aim* is to answer **Q_{overall}** by means of an in-depth investigation of two core linguistic dimensions, which interact with each other:

- The *inner structure* of MAs: What is the structural composition of manner-adverbial constructions, i.e., how are they organized internally on the basis of which smaller components?
- The *outer behavior* of MA’s: What kind of grammatical behavior (word order) do manner-adverbial constructions display in interaction with their linguistic environment?

An illustration of the two dimensions is given in (2)-(3) for English. (2) shows that MAs can have different formal appearances, some having a clearly composite structure (*in a funny way*), others a more “hidden” structure (*a+loud*), and still others being superficially “bare” (*fast*). Examples (2)-(3) show that inner structure (*form*) interacts with outer behavior: all MAs can appear postverbally (2), but only *carefully* is permitted preverbally.

(2) She will read the words **in a funny way/this way/aloud/carefully/fast**.

(3) She will ***in a funny way/*this way/*aloud/^{OK}carefully/*fast** read the words.

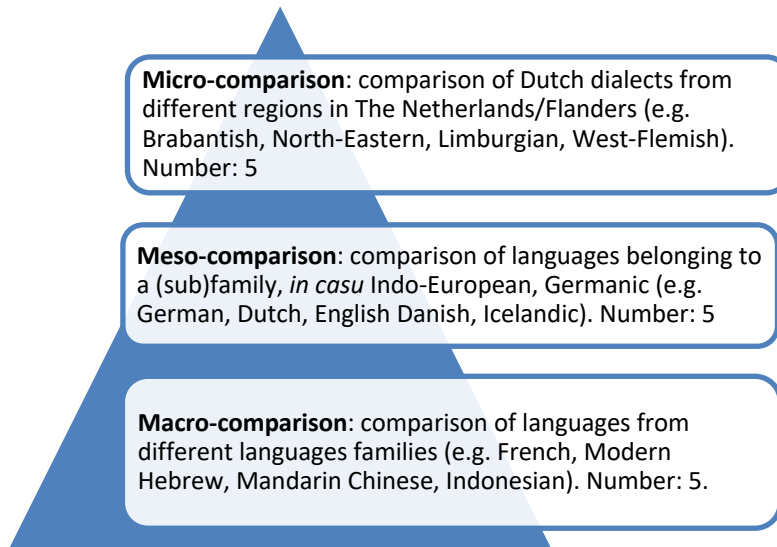
MiMa’s quest for the inner structure and outer behavior of MAs will be guided by two overall **hypotheses**:

- **HYP1_{inner}**: Manner-adverbial constructions are manifestations of **one and the same** abstract, underlying syntactic configuration, namely the *adpositional phrase* (PP). The structural template of this PP is made available by Universal Grammar (UG), the (theory of the) genetic component of the language faculty that underlies the acquisition of the grammar of a particular language (Chomsky-1965, 1986). Language-particular manifestations of MAs are realizations of this underlying structural template.
- **HYP2_{outer}**: MA’s *inner structure* is a key determinant of its *outer behavior* (e.g. word order) in the clause.

MiMa’s **Work Packages** 1 (PhD1) and 2 (PhD2) will examine the inner structure of MAs. WP1 aims to lay bare (decompose) *non-clausal*, and WP2 *clausal* MAs. The outer behavior of MAs (WP3) will be a joint investigation of PhD1&2 and PI. Here research results from WP1 and WP2 come together and interact. See VII for a description of each WP.

V. Comparative-linguistic methodology. MiMa aims to answer the two core questions in section IV by taking a comparative-linguistic approach that integrates three levels of comparison:

(4)



This *layered comparative* approach depicted in (4) is *novel* in the study of (manner-)adverbials. Comparison of dialects, whose grammars are largely the same —e.g., they all have **Object-Verb** order in embedded clauses, and they all have *prepositional* patterns (P+O) and *postpositional* patterns (O+P)— will enable MiMa to identify and analyze fine-grained manner-adverbial properties. Comparison of Germanic languages brings in additional factors such as contrasts in word order, both within the sentence (English: V+O; Dutch: O+V) and within PP (English: P+O; Dutch P+O and O+P), which may shed light on variation in manner-adverbial behavior in these historically related languages. Comparison at the macro-level will introduce still other factors, such as the free-morphemic or bound-morphemic status of adpositions. Besides providing the MiMa-team with a rich palette of fine-grained and coarse-grained manner-adverbial properties, the layered methodology in (4) will also allow the MiMa-team to take a cross-level perspective. For example, manner-adverbial-properties identified on the basis of Dutch dialects may be helpful in discovering similar properties in languages at the meso- or macro-level, and vice versa. In sum, the levels of comparison mutually influence each other.

The data-collection will consist of the following phases:

- Phase 1: Data collection on the basis of descriptive reference grammars, book chapters, journal articles, and typological or dialectal databases —e.g., DynaSAND (Barbiers *et al*-2006), DiDDD (Corver *et al*-2011)—, with the aim of getting an overview of the *types of manner constructions* in a language/dialect. A manner construction of type X attested in one specific language/dialect may be used as a *heuristic* means for finding out whether a similar manner construction exists in another language/dialect (see Phase 2).
- Phase 2: Questionnaire-based research of manner constructions in a specific language/dialect with the aim of (i) double-checking certain data attested in the grammatical resources used in Phase 1, and (ii) checking whether a manner construction of type X attested in one language/dialect has been “missed” in the linguistic description of another language/dialect, or is really non-existent in that language. For this questionnaire-based research, native speakers will be used. Informants for the micro-comparative research will be selected from the informant network of the Meertens institute, a database of over 7,000 informants. Informants for the macro/meso-comparative data will be found through (i) the linguistics network of the principle investigator and the (inter)national team of collaborators, and (ii) online resources from linguistics such as *Linguist list*.

VI. Comparative syntax. On the basis of the data collected by the layered methodology in (4), MiMa will address three *comparative-syntactic* sub-questions:

Q_{comparative}: To what extent are languages/dialects similar (*uniformity*) or different (*diversity*)

- **Q_{inner}**: ...in the inner structure and surface manifestation of MAs?
- **Q_{outer}**: ...in the outer behavior (word order) of MAs?
- **Q_{inner+outer}**: ...in the relation between inner structure and outer behavior of MAs?

In trying to find answers to the last two questions, MiMa will address the following two questions among others: Does distributional behavior of MAs correlate with the important distinction between head-initial (Verb-Object) languages *versus* Head-final (Object-Verb) languages? And does the form of MAs (e.g., morphologically “dressed” forms, as in English *quick-ly*, versus morphologically bare forms, as in German *schnell*) systematically correlate with word order behavior across languages?

MiMa’s comparative-syntactic study of the inner structure and outer behavior of MAs will be guided by two **hypotheses**, characteristic of the *generative-linguistic* approach to uniformity and diversity across languages (Borer-1983, Chomsky-1995):

- **HYP1_{uniformity}**: Cross-linguistically (including dialects), MAs have a common (i.e. universal) *structural* design, namely an adpositional design.
- **HYP2_{diversity}**: Cross-linguistic variation (including dialects) exclusively derive from properties associated with the functional categories (grammatical formatives) that are part of the adpositional domain.

VII. Urgency and relevance of the MiMa-project. MiMa will be the **first** formal-syntactic study in which (i) the inner structure and outer behavior of MAs, and (ii) their interaction, are studied in an integrated way across different languages and dialects. So far, most syntactic studies have singled out one aspect of adverbial syntax, or one particular type of adverbial construction. To give a few examples: (i) Larson-1985, Emonds-1987 and McCawley-1988 examine the inner structure of English bare-NP-adverbials; (ii) Emonds-1978 and Pollock-1989 discuss Adverb-Verb orderings in French and English; (iii) Alexiadou-1997, Cinque-1999 and Ernst-2002 examine syntactic sequencing of different semantic types of adverbs. By intentionally taking a mono-adverbial approach —*in casu* manner-adverbials— MiMa will be able to take an *integrative approach* toward the study of adverbials in which the intricacies of adverbial (morpho)syntax —inner structure, outer behavior, and their interaction— can be studied in depth and on the basis of a variety of languages and dialects. This way, MiMa will make a serious step in our understanding of the grammar of manner adverbials in human language. This, in turn, may serve as a stepping-stone for similar studies on other types of adverbials (e.g. temporal, locative). Theoretically, MiMa will advance our knowledge about the *uniformity* and *diversity* of MAs, both across constructions and across languages/dialects.

In sum: we should mind our manner adverbials! MiMa aims at a deeper understanding of these building blocks of human language by studying their inner structure (WP1&WP2) and outer behavior (WP3), cross-constructionally and cross-linguistically.

Description of WPs:

WP1 (PhD1): Decomposing non-clausal Manner Adverbials

WP1 investigates the morphosyntax of MAs that, from a constructional and superficial perspective, can be characterized as adpositional (5a), nominal (5b), and adjectival (5c).

- (5) You should open it ...
- a. **in a careful way.**
 - b. **this way.**
 - c. **carefully.**

Reviving ideas in Katz&Postal-1964 and Emonds-1976, WP1 explores the **hypothesis** that superficially different manner-adverbial constructions such as (5a-c) are actually manifestations of one and the same abstract, underlying syntactic representation —**uniformity**—, namely an *adpositional phrase* (in syntactic terms: PP).

Such a phrase typically exists of an adposition (e.g. *in*) and a noun phrase (e.g. *a careful way*), which has a noun (e.g. *way*) as its core element, which can be modified by an adjective (*careful*). Schematically:

(6) [_{adpositional phrase} P + [_{noun phrase} Adjective + Noun]]

WP1 **aims** to show that, in line with Borer-1983 and Chomsky-1995, **diversity** in adverbial form —both within a single language/dialect (see (5)) and across different languages/dialects (see below)— can be accounted for in terms of morpho-phonological and computational properties of functional categories (grammatical formatives), such as *with* (P), *way*, and *-ly*. Specifically, WP1 aims to show that the adpositional part (P) and the nominal part can have different formal manifestations. For example, P can be a *free* morpheme (*in a careful way*), a *bound morpheme* (*aloud*) or a *silent* morpheme (*P_{silent} this way*). A question that will obviously need addressing is the following:

Q: Which form (of P or the noun) is legitimate in which structural context?

Importantly, many imaginable adverbial patterns are non-existent. To give a few examples from English: (i) *in a careful way* in (5a) can't be replaced by *P_{silent} a careful way*; (ii) *this way* in (5b) can't have a plural form (**You can open it these ways*), although a plural form is possible when P is pronounced (*You can open it in several ways*); (iii) even though English permits adverbial forms such as *loudly* and *aloud*, the hypothetical form *aloudly* is impossible. The existence of *legitimate* adverbial constructions and *illegitimate* ones suggests that a *rule system* (i.e. a grammar) underlies the build of manner-adverbial expressions. WP1 **aims** to lay bare this rule system by developing in-depth analyses of the grammatical *nature* and *behavior* of the various sub-components (P, noun, adjective) of MAs.

WP1's investigation of *component 'P'* will address the question about the inner structure of *pre*-positional MAs (e.g. *with care*; P+noun) versus *post*-positional ones (e.g. Hindi: *asami se*, ease + ABLATIVE, 'with ease'). Interestingly, this contrast is also attested with manner-adverbial patterns featuring P and an adjective: English displays a *pre*-positional pattern (*aloud*), Nez Perce a *post*-positional pattern (*lamlamat-ki* quick-INSTR, 'quickly'). Notice that Dutch —related to English but not to Nez Perce— also displays the Adjective+P sequence, as in *hardop* (loud-up, 'aloud'). In the spirit of Van Riemsdijk-1978 and Koopman-2000, WP1 explores the **hypothesis** that *post*-positional patterns are derived from *pre*-positional ones by means of *displacement* within the adpositional phrase. Schematically: *hard + op* ~~hard~~. The parallel between the Dutch minimal pair *op de tafel* (on the table) and *erop* (it-on, 'on it'), on the one hand, and the minimal pair *op harde toon* (at loud voice) and *hardop* ('aloud') hints at a similar analysis of these patterns.

WP1's investigation of the *nominal component* (noun phrase) will start from the **hypothesis** that different *types* of nominal elements can represent this part of MA. Besides containing "regular" (i.e., contentful) nouns (e.g., *with care*, *in several ways*_{plural}), MAs can also contain semantically "light" nouns, as in *this way* in (5b), which must be singular (see above). WP1 will further explore the **hypothesis** that bound morphemes traditionally interpreted as adverbial markers attached to an adjective —e.g. English *careful-ly*, French *rapide-ment* 'quickly', Swedish *vacker-t*, beautiful-NEUTER, 'beautifully', and Arabic *jayyid-an*, perfect-ACCUSATIVE, 'perfectly' — are actually grammatical formatives that instantiate part of the noun phrase. Schematically: [_{noun phrase} *quick + -ly*] (see also Déchaine&Tremblay-1996, Baker-2003). Such an analysis of *quickly* implies that *quick* functions as an attributive modifier, just as *careful* does in (5a). WP1 **aims** to give cross-linguistic (including dialectal) substance to the idea that the surface pattern 'A + adverbial marker' is actually a noun phrase featuring an attributive modifier. This analysis will be extended to languages/dialects typically featuring morphologically bare MAs, such as Dutch *voorzichtig* ('carefully'). Interestingly, even in those languages/dialects, there are signs suggesting the presence of a noun phrase. The Dutch diminutive morpheme *-je*, typically present in nominal environments (*huis-je*, house-DIM), is also found on MAs, as in *voorzichtig-je-s* (careful-DIM-s, carefully'). This hints at the presence of a silent manner-noun (Kayne-2003).

If (6) underlies the manner constructions in (5), the question obviously arises why the adposition (P) is silent (unpronounced) in (5b,c). WP2 will address this issue and explore an analysis according to which light nouns and bound-morphemic "nominals" such as *-ly* occupy a different position within PP than do "regular" nouns such as *care*, possibly due to PP-internal movement (see above). WP1 **aims** to show that the different placement of the nominal part within the adpositional structure interacts with the silence versus overtness of P (Collins-2007).

WP2 (PhD2): Decomposing clausal Manner Adverbials

WP2 investigates the morphosyntax of MAs that, from a superficial perspective, can be characterized as *clausal*. Specifically, this project focuses on constructions such as (7a,b):

- (7) a. Jan liep [*zo als zijn vader altijd liep*]. (Dutch)
Jan walked so-as his father always walked
'Jan walked the way his father used to walk.'
b. Jan liep [*als of hij mank was*].
Jan walked as if he lame was
'Jan walked as if he was lame.'

(7a) exemplifies a *similitive* construction, (7b) a *simulative* construction (Haspelmath&Buchholz-1998). The former expresses a real similarity between Jan's way of walking and his father's way of walking, the latter a hypothetical similarity: 'as if he was lame'.

WP2 starts from the **hypothesis** that the clausal MAs in (7a-b), even though superficially different from non-clausal MAs such as those in (5), actually have the same underlying structure. In other words, **all** manner adverbials are structurally **uniform**. This means that a "clausal" MA is an adpositional phrase (PP) consisting of an adposition and a noun phrase, which in turn consists of a nominal element and a clause. Schematically:

- (8) [adpositional phrase P + [noun phrase Noun + Clause]]

WP2 will aim to identify and analyze (i) the adpositional component (P), (ii) the nominal component (Noun), and (iii) the inner structure of the clausal component. A puzzling property is, of course, the absence of an overt (i.e. pronounced) adposition in (8). By scrutinizing the grammatical nature and structural composition of clause-introducing elements such as *zo als* (7a) and *als of* (7b), WP2 will try to provide support for the structural configuration in (8).

Hypotheses that will be explored include the following: Firstly, could it be that *als*, traditionally analyzed as a subordinator, is a hidden nominal expression decomposable into two parts: the quantifier *al* 'all' and the bound morpheme *-s*? Related to this, could it be that the multifunctionality of *als* results from the type of silent (i.e. unpronounced) noun (Kayne-2003) that combines with *al-s*: (i) [*al-s* + *TIME_{silent}*] being temporal 'when', and (ii) [*al-s* + *WAY_{silent}*] being manner 'like/as'? Secondly, could it be that demonstrative *zo* 'so' in (7a), just like demonstrative *daar* 'there', is typically followed by a postposition? With locative *daar* 'there', the postposition can be overt (*daar achter* 'there behind') or silent (*daar* + *P_{silent}*, 'there') —see Collins-2007—, with manner *zo* the postposition remains silent: *zo* + P. Intriguingly, *zo* sometimes even pops up in locative environments, as in *daarzo* (there+so, '(over) there') and *daarzo achter* (there+so behind, 'behind that over there). Finally, certain Dutch dialects use *ge-lijk* (compare English *a-like*) instead of *zoals*. Could it be that the bound morpheme *ge-* is an affixal instance of P in (8) with *-lijk* being the realization of the noun? Note that the "adpositional interpretation" of *ge-* is suggested by expressions such as *ge-tweeën* (*ge*-two-PLURAL, 'by twos/with two people'), which has the paraphrase *met z'n tweeën* (with his two-PLURAL), featuring the free-morphemic adposition *met*.

These and other fine-grained hypotheses about the grammatical nature of the "clause"-introducing part will need to be explored for a better understanding of the manner-adverbial expressions in (7). In line with the layered comparative approach (see V), WP2 will examine clause-introducing material not only at a micro-level but also at the meso- and macro-level. The relevance of a layered comparative perspective (see V) can be illustrated on the basis of a comparison between Dutch and German. Just like Dutch, German has the pattern *alsob* (*als+ob*, 'as if'). Contrary to Dutch, it has two additional variants: *als wenn* (as when) and *wie wenn* (how when). If there is a uniform structure for simulative constructions, the question as to how these variants instantiate this structure obviously arises. Furthermore, why does German permit three variants and Dutch only one? WP3 will address such questions about cross-linguistic diversity, starting from the hypothesis that variation is reducible to morpho-phonological and computational properties associated with grammatical formatives (e.g. *als*, *of/ob*, *wenn*, *wie*).

WP3 (PI, PhD1&2): Manner adverbials: Inner structure and outer behavior.

WP3 investigates the *outer behavior* (word order) of MAs. As was pointed out in the descriptions of WP1 and WP2, MiMa starts from the hypothesis that MAs, both non-clausal (WP1) and clausal ones (WP2), have a **uniform** structure, namely the structure of an adpositional phrase. From this one might draw the conclusion that their **outer behavior** should be uniform. As shown in (9), however, MAs display different distributional behavior, both *intralinguistically* (within a single language) and *interlinguistically* (between languages):

- (9) a. Each student will <^{OK}loudly/*aloud> pronounce the word <^{OK}loudly/^{OK}aloud>.
b. *Brazilian Portuguese*
Ela <^{OK}rapidamente/*rápido> terminou a tarefa <^{OK}rapidamente/*rápido>.
she <quickly> finished the homework <quickly>.
'She finished the homework quickly.'
c. *Welsh* (Tallerman-1988)
Mae o wedi <*yn gyflym/^{OK}cylym> cerdded <^{OK}yn gyflym/*cylym>.
Is he PERF <quickly> walk <quickly>
'He walked quickly.'

Rather than interpreting these data as evidence against a *uniform* underlying adpositional structure, WP3 *aims* to show that *intralinguistic* variation as regards the distribution of MAs relates to the *inner* properties of the adpositional phrase. *Inner form* being relevant to *outer distribution* is a familiar pattern in human language, as illustrated in (10) and (11):

- (10) a. Noone believed [_{clause} (that) Mary was ill].
b. [_{clause} *(That) Mary was ill] was believed by noone.

- (11) ...dat Jan het mes <onder het kussen/eronder> verstoep had <onder het kussen/?eronder>.
..that Jan the knife <under the pillow/there-under> hid had <under the pillow/there-under>

(10) shows that English finite *that*-clauses can occur both as direct objects (10a) and as subjects (10b). However, when *that* is absent —or better: when there is a silent conjunction— the finite clause is permitted only in object position (Stowell-1981). The Dutch example in (11) shows that *prepositional phrases* (*onder het kussen*) can occur both preverbally and postverbally. Postpositional phrases (*eronder*), however, must occur preverbally.

The *intralinguistic* and *interlinguistic* variation in the distributional behavior of MAs will be explored on the basis of three **research questions**, namely:

Q: To what extent do grammatical properties associated with...

- I. ...the *adposition* (P) play a role in MA's distributional behavior? E.g., (non)silence of P, Preposition stranding behavior, Pied piping behavior, case licensing.
- II. ...the *nominal* part (e.g. with *care*, *carefully*) play a role? E.g. could the "light" status of *-ly* trigger displacement, as do weak pronouns and clitics?
- III. ...the *verb* (V) play a role? It has been observed, for example, that VO-languages typically allow adverbials on either side of the verb, while OV-languages tend to restrict them to preverbal position (Ernst 2002, 2014; Haider 2004, Cinque-2004).

In sum: MiMa aims to give evidence in support of two core ideas regarding the grammar of MAs: (1) MAs have a uniform syntactic structure underlyingly; (2) their internal properties are a key determinant for their external behavior. Furthermore, MiMa aims to show that cross-constructional and cross-linguistic variation exclusively derives from properties of grammatical formatives.

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