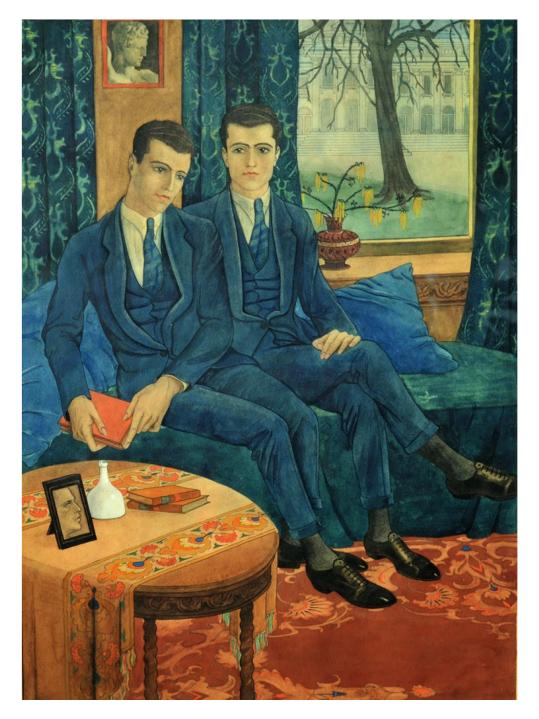
Beyond Progressive Aspect

On situational PPs, boundary effectuation and the Dutch preposition aan



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SUMMARY

The cover of this thesis features a set of twins. At first sight, they may look the same, behave similarly in many relevant ways, and are thus difficult to tell apart. Still, of course, they're not the same person.

Something similar applies to the subject of thesis: Dutch prepositional phrases headed by the preposition *aan* 'on, at, to', which generally denote locations, but are also regularly used in a 'non-locational' sense. These types of phrases are highly similar—just like the twins—yet this thesis aims to tease them apart. Specifically, this thesis concerns the second, 'non-locational' group, which is termed 'situational', because on closer inspection, they do denote not *locations* but *situations*. For instance, in (1)-(3) the underlined constituents headed by *aan* (and their underlined translations) refer to the situations of 'looking for, 'boiling' and 'using speed'.

- (1) Ik ben <u>aan het zoeken</u> in de buurt naar een grotere woning, maar het is moeilijk!
 'I'm <u>looking</u> for a bigger place to live in the neighborhood, but it's hard!'
- (2) Controleer de smaak zodra de soep weer <u>aan de kook</u> is.
 'Check the taste as soon as the soup is <u>boiling</u> again.'
- (3) De man—die <u>aan de speed</u> was—kreeg van de rechter een flinke bolwassing.
 'The man—who was <u>using speed</u>—was firmly reprimanded by the judge.'

Using the abbreviation 'PP' for 'prepositional phrase', cases like (1)-(3) can be called 'situational *aan*-PPs'. An important first observation is that the situational *aan*-PPs have a fixed structure: the preposition *aan*, followed by a definite article, and finally either an infinitive (V_{INF}), a verb stem (V_{STM}) or a noun (N) as the complement of *aan*. This thesis thus examines three possible patterns: [*aan het* V_{INF}], [*aan de* V_{STM}] and [*aan* DET N]. Those patterns then combine with a restricted set of verbs, including *zijn* 'to be', *gaan* 'to go' and *krijgen* 'to obtain'.

The first pattern, paired with the verb *zijn*—i.e. [*zijn aan het* V_{INF}]—has been characterized in previous work as a 'progressive construction'. This raises two questions: what exactly is progressive aspect, and how do the different verbs and complements that occur in the situational *aan*-PPs differ conceptually from that analysis? To answer these questions, first an attempt is made at teasing apart the constituent concepts making up 'progressivity'. There turn out to be four core components: temporal decomposability, dynamicity, boundary effectuation by the subject, and non-gnomicity.

Next, the possible verbs (e.g. *zijn*, *gaan*, *krijgen*) and complements (i.e. $V_{INF,}$, V_{STM} and N) are analyzed in terms of these four components. For the complements, the four components turn out to be sufficient to distinguish them semantically. All three of them may exhibit the 'full cluster' of the four components, but [*aan het* V_{INF}] does not require the effectuation of boundaries, [*aan de* V_{STM}] does not exclude gnomic interpretations, and [*aan* DET N] imposes neither of these restrictions in a strict sense. What the three complements do share, by definition, are the components of temporal decomposability and dynamicity. These two components can therefore be seen as the situational *aan*-PPs' conceptual core.

Regarding the verbs, at least eight features are necessary, including decomposability and boundary effectuation, but also (among others) causativity, continuativity and modality. These properties are contributed by the verbs, which are thus to a greater or lesser degree compatible with the conceptual structure of each of the complements.

The main outcome of this thesis is a more integrated and rather precise account of the *aan*-PPs exemplified by (1)-(3), making it possible to gain a broader understanding of the well-known progressive construction [*zijn aan het* V_{INF}]. That broader understanding also sheds some light on the way that the expression of aspect is organized in Dutch. This thesis adds to the impression that this organization may be more systematic than generally assumed.

SAMENVATTING

Op de voorzijde van deze scriptie staat een tweeling afgebeeld. Ze zien er op het eerste gezicht hetzelfde uit, gedragen zich in veel relevante opzichten waarschijnlijk ook vergelijkbaar, en zijn dus moeilijk uit elkaar te halen. Toch zijn ze niet dezelfde persoon.

Zoiets geldt ook voor het onderwerp van deze scriptie: voorzetselconstituenten met aan het hoofd het voorzetsel *aan*, die in de regel een locatie aanduiden, maar vaak ook 'non-locationeel' worden ingezet. Die constituenten lijken op elkaar—net als de tweeling—maar worden in deze scriptie uit elkaar gehaald. Specifiek gaat deze scriptie over de tweede, 'non-locationele' groep, die hier 'situationeel' wordt genoemd. Op de keper beschouwd verwijzen deze *aan*-constituenten namelijk niet naar *locaties*, maar naar *situaties*. In (1)-(3) verwijzen de onderstreepte *aan*-zinsdelen bijvoorbeeld naar de situaties 'zoeken', 'koken' en 'speed gebruiken'.

- (1) Ik ben <u>aan het zoeken</u> in de buurt naar een grotere woning, maar het is moeilijk!
- (2) Controleer de smaak zodra de soep weer <u>aan de kook</u> is.
- (3) De man—die <u>aan de speed</u> was—kreeg van de rechter een flinke bolwassing.

Met gebruikmaking van de gebruikelijke Engelse afkorting voor 'voorzetselconstituent', 'PP' (voor 'Prepositional Phrase'), kunnen we gevallen zoals (1)-(3) 'situationele *aan*-PPs' noemen. Een belangrijke eerste observatie is dat de situationele *aan*-PPs in (1)-(3) een vaste vorm hebben: het voorzetsel *aan*, dan een bepaald lidwoord (*de* of *het*), en tot slot ofwel een infinitief (V_{INF}), een werkwoordstam (V_{STM}), of een zelfstandig naamwoord (N) als toevoeging bij *aan*.

Deze scriptie onderzoekt dus drie mogelijke patronen: [*aan het* V_{INF}], [*aan de* V_{STM}] en [*aan* DET N]. Die patronen gaan vervolgens samen met een beperkte set aan werkwoorden, waaronder *zijn*, *gaan* en *krijgen*.

Het eerste patroon gepaard met het werkwoord *zijn*—dus [*zijn aan het* V_{INF}]—is in eerder werk wel getypeerd als een 'progressiefconstructie'. Dat roept twee vragen op: wat is progressief aspect precies, en hoe verschillen andere de werkwoorden en toevoegingen die we in de situationele PPs tegenkomen conceptueel gezien van die analyse? Om die vragen te beantwoorden, worden eerst de cruciale componenten van 'progressiviteit' uit elkaar getrokken op basis van eerder theoretisch onderzoek. Dat blijken er vier te zijn: temporele geleding, dynamiciteit, de bewerkstelliging van tijdsgrenzen door het subject, en een niet-gnomisch karakter.

Vervolgens worden de werkwoorden (bv. *zijn, gaan, raken*) en toevoegingen (V_{INF} , V_{STM} en N) in termen van onder meer deze vier componenten geanalyseerd. Voor de toevoegingen blijken deze componenten te volstaan om ze semantisch van elkaar te onderscheiden. Alle drie kunnen ze aan deze vier componenten voldoen, maar [*aan het* V_{INF}] vereist niet altijd de bewerkstelliging van tijdsgrenzen, [*aan de* V_{STM}] sluit gnomische interpretaties niet uit, en [*aan* DET N] legt geen van beide componenten strikt op. Wel zijn ze per definitie temporeel geleed en dynamisch; deze twee componenten kunnen daarom worden gezien als de semantische kern van de situationele *aan*-PPs.

Wat de werkwoorden betreft zijn ten minste acht eigenschappen nodig, waaronder geleding en tijdsgrens-bewerkstelliging, maar ook onder meer causativiteit, continuativiteit en modaliteit. Deze eigenschappen worden bijgedragen door de werkwoorden, die dus in meer of mindere mate compatibel zijn met de conceptuele structuur van elk van de toevoegingen.

De belangrijkste uitkomst van deze scriptie is een meer geïntegreerd en behoorlijk precies beeld van *aan*-PPs zoals die in (1)-(3). Dat maakt het mogelijk om de bekende progressiefconstructie [*zijn aan het* V_{INF}] in een breder verband te begrijpen. Dat bredere verband werpt ook een licht op hoe de uitdrukking van aspect in het Nederlands is georganiseerd. Deze scriptie draagt bij aan de indruk dat die mogelijk toch systematischer is dan meestal wordt aangenomen.

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LIST OF ABBREVIATIONS

AAN	Dutch preposition <i>aan</i> 'on, at, to'				
DET	determiner				
DIM	diminutive				
EXS	Dutch existential pronoun/adverb er				
F	feminine				
IMP	imperative				
INF	infinitive				
РСР	past participle				
PL	plural				
PP	prepositional phrase				
PRT	particle				
PST	past tense				
REFL	reflexive				
SG	singular				
STM	verb stem				
I	first person				
2	second person				
3	third person				

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Chapter 1 Introduction

1.1 Non-locational PPs

The Dutch preposition *aan* 'on, at, to' is a versatile creature. In its basic locational use, it indicates a static spatial relationship of contact or contiguity between two entities (Cuyckens 1991; Beliën 2002; Zwarts 2010). For instance, in (1), *aan* locates the *geschilderde vrouwen* 'painted ladies' on the wall observed by the speaker, and in (2), the people referred to by the first person plural subject *we* 'we' are located at the beach by *aan*. Moreover, *aan* is used in the so-called '*aan*-Dative' (Colleman 2010; Van Belle & Van Langendonck 1996), in which it indicates a path ending in contact with the complement of *aan* (Colleman 2010:288). This is illustrated in (3), in which the path is specified by the main verb *geven* 'to give'; *geven*'s direct object *de telefoon* 'the phone' travels down that path resulting in contact with *aan*'s complement: *mijn man* 'my husband'.¹

- (1) <u>Aan de muur</u> hingen een paar geschilderde vrouwen van de hand van AAN the wall hung.3PL a couple painted women from the hand of kunstenaars die zich bijzonder op het naakt schenen te hebben toegelegd. artists that REFL special on the nude seemed.3PL to have.INF apply.PCP
 'On the wall hung a couple of painted ladies made by artists who seemed to have applied themselves specifically to painting nudes.' (WR-P-P-B-0000000046)
- (2) Vorige week hebben we de hele dag <u>aan het strand</u> gezeten. previous week have.IPL we the whole day AAN the beach sit.PCP
 'Last week, we spent the entire day at the beach.' (WR-P-E-A-0006254795)
- (3) Ik kreeg een black-out en moest de telefoon <u>aan mijn man</u> geven.
 I got.ISG a black.out and had.to.ISG the phone AAN my man give.INF
 'I had a black out and had to hand my husband the phone.' (WR-P-P-G-0000043628)

Examples (1)-(3) illustrate the way *aan* is used prototypically. But not all of *aan*'s uses are locational or dative. This thesis is about prepositional phrases (PPs) headed by *aan* that—in the

^{1.} Unless indicated otherwise, the examples in this thesis are from the SoNaR corpus of contemporary written Dutch (Oostdijk et al. 2013). The ID of each corpus item is included between brackets below each example. Elements of interest are underlined.

words of Booij (2010:153)—"receive a non-locational interpretation". In other words: cases where the *aan*-PP does not serve to locate an entity, as it does in (1)-(2), nor functions as a dative, as it does in (3). For expository purposes, I will follow Booij (2010) and call the objects of study 'non-locational *aan*-PPs' for now.² Examples are given in (4)-(6). In each case, the non-locational *aan*-PP consists of *aan* and a determiner (*het* 'the' or *de* 'the'), but the element following the determiner varies: it is an infinitive in (4), a verb stem in (5) and a noun in (6).³ The *aan*-PPs are generally combined with a main verb, such as the basic copula *zijn* 'to be' or the ingressive verb *gaan* 'to go'; they are illustrated with the former here. For ease of reference, the non-locational *aan*-PPs illustrated by (4)-(6) will be notated in this thesis as [*aan het* V_{INF}], [*aan de* V_{STM}] and [*aan* DET N].⁴

(4) $[aan het V_{INF}]$

De passagiers voor Ghana <u>zijn aan het inchecken</u>. Maar er zijn alweer the passengers for Ghana be.3PL AAN the check.in.INF but EXS be.3PL yet.again bagageproblemen. luggage.problems

'The passengers for France are checking in. But there are issues with the luggage yet again.' (WR-P-E-G-0000001550)

(5) $[aan de V_{STM}]$

Controleer de smaak zodra de soep weer <u>aan de kook is</u>. check.IMP the taste as.soon.as the soup again aan the boil.STM be.3SG 'Test the flavor as soon as the soup is boiling again.' (WR-P-P-H-0000042186)

(6) [aan DET N]

De archeologen <u>zijn</u> nog <u>aan het werk</u> tot eind augustus. the archeologists be.3PL still aan the work until end August 'The archeologists will still be working until late August.' (WR-P-P-G-0000418993)

^{2. &#}x27;Non-locational' may be considered a shortened version of 'non-locational and non-dative' for now. The next chapter will establish what exactly sets the *aan*-PPs in (4)-(6) apart from those in (1)-(3) in order to come up with a non-negative term.

^{3.} Boogaart (1999:167ff.) calls the combination of [*aan het* V_{INF}] with *zijn* as in (4) a 'locative' construction in order to reflect their locative origin (i.e. presumed diachronic development from locational *aan*-PPs such as (1)-(2)) and as a way of distinguishing them terminologically from the English progressive (i.e. [*be* V-*ing*]), the comparison of which with the Dutch 'locatives' is one of his main aims. Although it may seem contradictory to employ the term 'non-locational' here for set of patterns a subset of which has previously been termed 'locative', the terms are in fact complementary: 'locative' puts focus on [*aan het* V_{INF}]'s diachronic and formal dimensions, whereas 'non-locational' stresses its synchronic and semantic properties.

^{4.} The notation [aan DET N] is from Lemmens (2015:8), the other two were formulated here by analogy with it.

The *aan*-PPs in (4)-(6) have both formal and semantic properties in common: they all combine with a more restricted set of verbs than PPs like those in (1)-(3) (e.g. *zijn* 'to be' and *gaan* 'to go' mentioned above, but not *hangen* 'to hang' or *geven* 'to give' from (1) and (3)), and they all refer in some way to the situation denoted by the complement of *aan* ('checking in' from the infinitive *inchecken* 'to check in' in (4), 'boiling' from the verb stem *kook* 'boil' in (5) and 'working' from the noun *werk* 'work' in (6)) instead of a location (such as 'the wall' in (1) and 'the beach' in (2)) or recipient/benificiary (such as 'my husband' in (3)).

Despite these clear similarities, non-locational *aan*-PPs have not yet been approached from an integrated perspective, i.e. one that focuses on the potential interrelations between these patterns. As a result, the distribution of research attention over the patterns in (4)-(6) has been rather unbalanced:⁵ a large number of studies has been published on [*aan het* V_{INF}], or actually much more specifically on its combination with one particular main verb—namely *zijn* 'to be', which has been widely analyzed as a "special progressive construction" (Broekhuis et al. 2015:151).⁶ While this analysis as such is certainly valid, an a priori focus on progressive aspect carries the major risk that deviations from [*zijn aan het* V_{INF}] that do not fit the progressive account—such as combinations with *gaan* 'to go' instead of *zijn* 'to be', or a nominal complement instead of an infinitive—are set aside or even ignored (cf. Lemmens' (2012) criticism on Booij (2010)). A telling quote in this respect is Lemmens' (2015:8) remark that [*zijn aan* DET N] "meestal niet als een echte progressiefconstructie [wordt] beschouwd" ('is usually not considered a real progressive construction'): this remark implies in my view that [*aan* DET N] not being considered a 'progressive construction' may in fact explain its lack of research attention—and I think this may well be a correct diagnosis.

^{5.} A similar imbalance exists in work taking the locational or dative senses of *aan* as a starting point (e.g. Beliën 2002; Colleman 2010): while such work goes to great lengths to capture a wide variety of attested locational or dative uses of the preposition (or—in the case of Colleman 2010—even both), [*aan het* V_{INF}] is left out of consideration—presumably because of the idea that it constitutes a 'special progressive construction', even though only a subtype of [*aan het* V_{INF}] can be analyzed as such.

^{6.} Studies or reference works that examine or touch upon the progressive aspectual semantics of [*zijn aan het* V_{INF}] include: Anthonissen (2011); Anthonissen et al. (2019); van Beek et al. (2013); Beekhuizen (2010:101-138); Behrens et al. (2013); Bertinetto et al. (2000); Bogaards (2017, 2019*a*, 2020*a*); Boogaart (1991, 1995, 1996, 1999:167-204, 2004, 2016); Booij (2002, 2003, 2004, 2008, 2010:146-168); Breed et al. (2017); Brisau (1969); Broekhuis (2013*a*); Broekhuis et al. (2015:151-156); Bybee et al. (1994:132); Comrie (1976:99); Coppen (2009); De Jonghe & De Geest (1985:119); De Schutter & Van Hauwermeiren (1983:190); Donaldson (1987:55*ff*; 1997:193-194); Ebert (1989, 1996, 2000); Felser (2000); van Gelderen (1993:183-184); Geleyn & Colleman (2014); van Gestel (1985); de Groot (1995, 2000); Haeseryn (1977); Haeseryn et al. (1997:1048-1054); van den Hauwe (1992); van der Horst (2005, 2008:1751-1752); IJbema (2001:98-99); Kirsner (1981); Krause (1997, 2002); Lemmens (2003, 2005, 2012, 2015); Leys (1985); Luif (1998:36); Mortier (2008); Overdiep (1939); Paardekooper (1971:94-96); Shetter & van der Cruysse-van Antwerpen (2002); Smedts & Van Belle 2003:156/273; Smits (1987); Stoop (2011); van den Toorn (1975); Van Pottelberge (2002, 2004:17-178, 2007); Vismans (1982*a*,*b*). A more integrated view—like the one proposed in this thesis—will be taken in Boogaart & Bogaards (*in prep*.).

1.2 Aims and outline

The aim of this thesis is therefore to approach the patterns illustrated in (4)-(6) by departing not from progressive meaning (which accounts for only a subtype of a subtype of non-locational *aan*-PPs) but from the observation that these particular *aan*-PPs share a certain form and meaning that sets them apart from locational and dative *aan*-PPs. This constitutes a bottom-up and form-driven approach, requiring a robust empirical foundation that will be laid by working with a attested language through corpus data—specifically, data drawn from the SoNaR corpus of contemporary written Dutch (Oostdijk et al. 2013), which will be analyzed mainly in qualitative terms. In order to build upon previous work on [*zijn aan het* V_{INF}], which has mainly been concerned with its aspectual value, the focus of this thesis will be primarily on the (aspectual) semantics of these patterns, but where relevant their syntax will also be examined.

This thesis is organized as follows. Chapter 2 will provide a more in depth discussion of the properties that appear to be shared by [*aan het* V_{INF}], [*aan de* V_{STM}] and [*aan* DET N] but not by other *aan*-PPs. The goal of Chapter 2 is to establish a positive working definition (i.e. one that does not appeal to what these *aan*-PPs are *not*, unlike 'non-locational') that can then be used to formulate the specific research questions of this thesis.

Next, Chapter 3 gives an overview of 'progressive aspectuality', which has been the main focus of previous work on non-locational *aan*-PPs (specifically [*zijn aan het* V_{INF}], cf. (4)). This chapter will tease apart and examine the various semantic components taken as defining properties of progressivity in previous work, and come up with a set of postulated components of progressive meaning based on that examination.

With the theoretical and analytical groundwork in place, Chapter 4 first applies the postulated core meaning of progressivity from the previous chapter to [*zijn aan het* V_{INF}], which has been widely analyzed as a 'progressive construction' in previous work. The goal is to establish precisely what the 'progressivity' of this construction entails, so that it can be related clearly to the other non-locational *aan*-PPs. Next, this chapter will examine the other main verbs that the non-locational *PPs* combine with (e.g. *zijn* 'to be' and *gaan* 'to go'), and subsequently the other complements they take (i.e. verb stems and nouns), aiming to precisely determine the semantic contribution of each of these elements. These examinations will produce an exhaustive overview of the semantic features associated to non-locational *aan*-PPs in general, and to the verbs and complements they take in particular.

Finally, Chapter 5 will be devoted to the conclusions of this thesis, a critical discussion of the methods and findings, and avenues for future research.

Chapter 2 Situational PPs

2.1 From non-locational to situational PPs

In the previous chapter, the patterns under study in this thesis were characterized as 'nonlocational PPs' (following Booij 2010) headed by the preposition *aan* 'on, at, to' in Dutch. The aim of this chapter is to explore these specific patterns and establish a shared basis that can be used to characterize them in a way that does not appeal to what they are *not*, but to what defines them internally—i.e. to get from a negative to a positive working definition, which will then be used as the basis for the research questions of this thesis. The following paragraphs explore the *aan*-PPs by type of complement: infinitive, verb stem, then noun. Within the latter category, an additional distinction will be explored between *aan*-PPs that select a restricted set of verbs on the one hand (which are relevant to this study), and verbs that select a prepositional object (PO) headed by *aan* on the other (which, as I will argue, are not). This comparison between *aan*-PPs and *aan*-POs will also bring to light particular lexical and syntactic properties of the PPs under study. Based on this overview, I will show that the non-locational *aan*-PPs under study share an aspecto-temporal conceptual basis (instead of a spatio-temporal one). The term 'situational' will be proposed to capture this semantics.

2.1.1 Infinitival complement. The best-known example of a non-locational *aan*-PP—and the one that has gotten the most research attention—is undoubtedly [*aan het* V_{INF}], i.e. a PP headed by *aan* with a complement consisting of the definite neuter singular article *het* 'the' and a variable infinitive (cf. footnote 5 for references). This type of *aan*-PP is typically combined with the basic copula *zijn* 'to be' to encode progressive aspect (i.e. that the situation denoted by the infinitive is continuous and non-stative; cf. Comrie 1976:32-40), as illustrated in (7). It has therefore been approached as a 'progressive construction' in a great deal of previous research—mainly as the '*aan het*-progressive', 'prepositional progressive', or 'PREP-progressive' (where PREP stands for preposition, to distinguish it from the 'posture progressive', i.e. 'POS-progressive', cf. Lemmens 2005, 2015). In (7), [*zijn aan het* V_{INF}] expresses that the situation denoted by the infinitive (*soep*).

maken 'to make soup') is non-stative and ongoing, and that the subject of zijn (*ik* 'I') is continuously involved in it.⁷

(7) Alles onder controle. De kindjes zijn thuis en ik <u>ben</u> hier soep everything under control the children. DIM be.3PL at. home and I be.ISG here soup <u>aan het maken</u>. AAN the make.INF

'Everything under control. The kids are at home and I am making soup over here.'

(WR-P-E-G-000008225)

Although the emphasis on progressive aspect may give the impression that [*aan het* V_{INF}] is itself a progressive construction, this is not in fact the case (Lemmens 2012): it can be combined with several other verbs, which express different types of aspect and assign different thematic roles. These verbs will be discussed at length in Chapter 3, but for now, two examples are given in (8) and (9). In (8), [*aan het* V_{INF}] is combined with *gaan* 'to go', which assigns the same thematic roles as *zijn* but encodes not progressive but ingressive aspect (i.e. indicating the beginning of a situation; cf. Comrie 1976:19-20). In (9), it combines with the ingressive verb *krijgen* 'to obtain', which differs thematically from *zijn* and *gaan* in that encodes its grammatical subject as the causer of the situation denoted by the infinitive. When combined with [*aan het* V_{INF}], *krijgen* has therefore been classified as a 'causative verb' (e.g. Booij 2010; Van Pottelberge 2004).⁸

- (8) Vanaf het midden van de jaren '90 ging de rente <u>aan het dalen</u>.
 from the middle of the years '90 went.3sG the interest aan the fall.INF
 'From the mid-90s on, the interest rates started falling.' (WR-P-P-H-0000082206)
- (9) Titeuf heeft niet echt iets intellectueels te bieden. Maar hij krijgt Titeuf have.3SG not really something intellectual to offer.INF but he obtain.3SG gezinnenwel <u>aan het praten</u> over onderwerpen waarover gepraat moet worden. families PRT aan the talk.INF about topics about.which talk.PCP must.3SG become.INF 'Titeuf doesn't really have anything to offer intellectually. But he does get families talking about topics that need to be talked about.' (WR-P-P-B-0000000187)

^{7.} This definition is based on the semantic characterization of non-locational *aan*-PPs by Booij & Audring (2018:223): " $<[aan de [V_i]_N]_{PF_i} \leftrightarrow [Involved in the (habitual) action SEM_i]_i>". As a definition of (progressive) aspect, this characterization is somewhat bare-bones (and the 'habitual' component, of course, does not belong to progressive aspect at all), but it is useful here for purposes of exposition—particularly for distinguishing progressive and ingressive aspect. These definitions will be expanded and refined in chapter 3.$

^{8.} Note that the thematic role that *zijn* and *gaan* assign to the subject (i.e. the one who is involved or starting to get involved in the situation denoted by the infinitive, in (5): *de rente* 'the interest rates') is assigned by *krijgen* to its direct object (in (6): *gezinnen* 'families').

In (8), [gaan aan het V_{INF}] encodes the start of the involvement of the subject (de rente 'the interest rates') in the situation denoted by the infinitive (dalen 'to fall'). And in (9), [krijgen aan het V_{INF}] does the same, except that it concerns a starting involvement of the direct object (gezinnen 'families') in the situation denoted by the infinitive (praten 'to talk'), while the subject (hij 'he') is coded as the situation's causer.

2.1.2 Verb stem complement. Despite the strong focus in the literature on non-locational *aan*-PPs with an infinitival complement, the complement of *aan* in such PPs can also be something other than an infinitive. These structures have received little attention, however. For one, it can be a verb stem (Booij & Audring 2018:220-223; Broekhuis et al. 2015:153). This pattern—which will be notated here as [*aan de* V_{STM}]—resembles [*aan het* V_{INF}] in both structure and meaning. Structurally, the complement in both patterns consists of a form of the verb (infinitive or stem) preceded by a determiner (which is the common article *de* 'the' for a verb stem instead of the neuter article *het* 'the' selected by infinitives). With respect to their meaning, the *aan*-PPs both denote a situation specified directly by the verb form (be it an infinitive or stem). The use of a verb stem is most common with certain verbs, such as *koken* 'to boil' and *wandelen* 'to walk', which are illustrated in (10) and (11) paired with *zijn* 'to be' and *gaan* 'to go'.

(10) Roer stevig tot de saus <u>aan de kook is</u> en laat hemnog even stir.IMPfirm until the sauce AAN the boil.STM be.3SG and let.IMP him still a.while zachtjes koken. quietly boil.INF

'Stir vigorously until the sauce is boiling and leave boiling gently for a little while.' (WR-P-P-G-0000057671)

(11) Mijn vader is zo mogelijk nog eigenwijzer dan ik (van wie zou ik my father be.3sG if possible even headstrong.CMP than I from who would.IsG I dat toch hebben?). Hij was ook vast met zijn infuus <u>aan de wandel</u> that PRT have.INF he was.3sG also meanwhile with his drip AAN the stroll.STM <u>gegaan</u> om even te plassen. go.PCP for a.while to pee.INF

'My dad is possibly even more headstrong than me (I wonder who I get it from?). He had also started taking a stroll in the meantime with his infusion pump in order to go to the bathroom.' (WR-P-E-A-0006121504)

Although [*aan de* V_{STM}] is more common with certain verbs than with others, Booij & Audring (2018:220-223) show that the pattern has a limited degree of productivity, i.e. it is possible to

extend it to new tokens but not to any token (cf. Barðdal 2006, 2008 for the concept of gradual productivity)—contrary to [*aan het* V_{INF}], which according to them is "unrestrictedly productive" (Booij & Audring 2018:223). In some cases, the infinitive in [*aan het* V_{INF}] can be replaced by its derived verb stem, or vice versa, producing a minimal pair of [*aan het* V_{INF}] and [*aan de* V_{STM}] with no readily discernible meaning difference. To illustrate, the infinitive from (9) was replaced with the corresponding stem in (9') below, and vice versa for the verb stems from (10)-(11) in (10')-(11'), all of which produce perfectly acceptable sentences. The same cannot be said, however, for the infinitive in (8): replacing *dalen* 'to fall' with its derived verb stem *daal* 'fall' produces an unacceptable sentence in (8')—or at least a strongly marked one, which is certainly less acceptable than (9')-(11').

(8') *Vanaf het midden van de jaren '90 ging de rente aan de daal. $(V_{INF} \rightarrow V_{STM})$ (9') Hij krijgt gezinnen wel aan de praat over onderwerpen waarover gepraat moet worden.
 $(V_{INF} \rightarrow V_{STM})$ $(V_{INF} \rightarrow V_{STM})$ (10') Roer stevig tot de saus aan het koken is en laat hem nog even zachtjes koken.
 $(V_{STM} \rightarrow V_{INF})$ $(V_{STM} \rightarrow V_{INF})$ (11') Hij was ook vast met zijn infuus aan het wandelen gegaan. $(V_{STM} \rightarrow V_{INF})$

The (relative) unacceptability of (8') illustrates the idea that [*aan de* V_{STM}] is characterized by more limited productivity than [*aan het* V_{INF}]. But as of yet it is unclear what types of restrictions on the former pattern can account for this disparity, or—more generally—what the differences between the two patterns are in the first place. Broekhuis et al. (2015:153) claim that the patterns have "more or less the same meaning" but do tentatively suggest that the pattern with an infinitive and the one with a stem may prefer different main verbs (viz. *zijn* 'to be' and *raken* 'to get', respectively), while admitting that this suggestion is based on too little data (viz. one Google search with the minimal pair *aan het kletsen/aan de klets* 'chatting'). In sum, what we know at present is that [*aan het* V_{INF}] and [*aan de* V_{STM}] are highly similar but not exactly the same; this thesis will, among other things, look into the subtle differences between these patterns.

2.1.3 Nominal complement. This is not yet the whole story. There is a third and final group of non-locational *aan*-PPs, in which *aan*'s complement is a noun (Boogaart 1999:169; Booij & Audring 2018:220-223; van der Horst 2005:139; Lemmens 2015:8; Van Pottelberge 2004:25-26).⁹ Like [*aan het* V_{INF}] and [*aan de* V_{STM}], the complement includes a determiner, but in this

^{9.} The syntactic characterizations of the three different *aan*-complements given here (i.e. infinitive, verb stem and noun) pertain only to the part-of-speech-type most commonly associated with the complements themselves, not

case it is variable, agreeing with the gender of the noun in question (i.e. *de* for a common noun, *het* for a neuter one). As van der Horst (2005:139) points out, the nouns that non-locational *aan*-PPs combine with appear to form a highly heterogeneous group. For the time being, though, this group will be abstracted over with one notation: [*aan* DET N], following Lemmens (2015:8), who claims that the pattern "is limited to a few common nouns". As will be shown in §4.3.2, this claim is too strong—in fact, multiple subgroups can be distinguished—but Lemmens' notation [*aan* DET N] does form a good starting point for exploring this final group of non-locational *aan*-PPs. The pattern is illustrated in (12)-(14) with the nouns *werk* 'work', *bier* 'beer' and *drugs* 'drugs', paired in each case with *zijn* 'to be'.

(12) Diederik was aan het werk toen ik een rookpluim zag, vertelt een Diederik was.3SG AAN the work when I a smoke.plume saw.1sg tell.3SG a buurtbewoonster. local.resident.F

'Diederik was working when I saw a plume of smoke, says a local resident.' (WR-P-P-G-0000423883)

- (13) <u>Ben</u> nu <u>aan het bier</u> in Paard van Troje, maar wijntje klinkt ook goed. be.ISG nowAAN the beer in Horse of Troy but wine.DIM sound.3SG also good 'I'm having a beer right now at [the bar] Paard van Troje, but a glass of wine also sounds pretty good.' (WR-P-E-L-0000000230)
- (14) Ze <u>is aan de drugs</u> en wordt gedwongen zichzelf te prostitueren.
 she be.3SG AAN the drugs and become.3SG force.PCP REFL to prostitute.INF
 'She is using drugs and gets forced to prostitute herself.' (WR-P-P-G-0000230602)

Similarly to [*aan het* V_{INF}] and [*aan de* V_{STM}], the [*aan* DET N]-patterns illustrated in (9)-(11) indicate involvement in the situation denoted by the complement, in this case the noun. To start with the most straightforward example: *aan het werk* 'working' in (9) simply indicates involvement in *werk* 'work'. However, since, contrary to the other non-locational *aan*-PPs, [*aan* DET N]'s complement is not a verb—which always has a 'situation' as its object of reference—

necessarily to the internal organization of the non-locational *aan*-PP, i.e. to the question whether *aan*'s complement is verbal (in the case of an infinitive or stem) or nominal (in the case of a noun). In fact, there is strong disagreement about this regarding [*aan het* V_{INF}]: grosso modo the two positions are (i) that V_{INF} in this pattern is a nominalized infinitive (Booij 2010; Haeseryn et al. 1997); and (ii) that [*aan het* V_{INF}] is a form of the verb in which *aan het* constitutes some kind of inflection (Broekhuis et al. 2015; Smits 1987). There are arguments for and against both analyses, which Broekhuis et al. (2015:151-156) discuss at some length.

but a noun—which may refer to all kinds of things¹⁰—the situation may also be denoted in a more indirect way: as Booij and Audring (2018:220) put it, [*aan* DET N] "denote[s] an event or a habitual action in which the object denoted by the noun plays a central role".

The fact that the situations denoted by [*aan* DET N] may constitute not only events but also habits is illustrated most clearly by (10) and (11): in (10), *aan het bier* 'having a beer' denotes one specific event at a particular time in which, indeed, *bier* 'beer' plays a central role; and in *aan de drugs* 'using drugs' in (11), a similarly central role is played by *drugs* 'drugs', except not just once, but as a chain of such specific events which are construed together to constitute a habit (or more specifically, since that habit is evaluated negatively: an addiction). The distinction between events and habits will be discussed in more detail further on; what is relevant for now is that the indirect way in which the situation denoted by [*aan* DET N] is specified by the noun is systematic and, as such, a part of the pattern's semantic structure. This not only sets [*aan* DET N] apart from [*aan het* V_{INF}] and [*aan de* V_{STM}], which specify the situation directly through the complementive verb's situational reference, but on a more general level also points at a shared conceptual basis between the three non-locational *aan*-PPs: they all denote a *situation* that is somehow specified by the complement.

2.1.4 *Prepositional objects.* Before moving on to a stipulative definition of non-locational PPs, it is necessary to consider one type of *aan*-PP with a nominal complement that—although they are neither locational nor dative—do not belong to the group of PPs under study in this thesis. This concerns PPs headed by *aan* that function as a prepositional object ('voorzetselvoorwerp', cf. Haeseryn et al. 1997:1168-1178; Pijpops 2019), also called a 'PP-complement' (Broekhuis et al. 2015:284-328). The latter term is somewhat confusing here, since the non-locational *aan*-PPs under study have also been analyzed as a kind of complement to the main verb they select (Broekhuis et al. 2015:152). Nevertheless, there are at least four clear differences: one lexical (the verb-preposition pair is lexically specified for prepositional objects), three syntactic (prepositional objects have no fixed determiner, exhibit less restricted word order, and allow R-pronominalization).

^{10.} In lexical-semantic terms, verbs require situational reference, whereas nouns permit both object-reference and situational reference (Bierwisch 2011:336-338), or as Lyons (1977) calls it: reference to first-order and second-order entities. Note that 'situation(al)' is used here in the sense of 'eventuality' (Bach 1986), i.e. as an abstraction over all types of states of affairs, defined by Bierwisch (2011:338) as "entities that instantiate propositions and are subject to temporal identification" (e.g. events, states and so on). The term 'situational reference' was chosen here instead of 'eventuality-reference' to reflect the link between the verb or noun's situational reference and that of the entire *aan*-PP, for which the term 'situational' will be used as a counterpart to 'locational' (cf.§2.1.4). In general, though, the terms 'situation' and 'eventuality' (as well as 'state of affairs') will be regarded as synonyms in this thesis.

A prepositional object (PO) is a PP that serves as an internal argument to a predicate; the combination of the verb and the preposition heading the PO is fixed, i.e. lexically determined by the verb (Broekhuis et al. 2015:284). A large number of POs is headed by *aan* in Dutch (cf. the list in Haeseryn et al. 1997:1170-1171). Two examples are given in (15)-(16 *denken aan* 'to think about' and): *beginnen aan* 'to start with'.¹¹

(15) Wie <u>denkt</u> aan de grootste Debussy-vertolkers onder de dirigenten, zegt in who think.3SG AAN the biggest Debussy.interpreters under the conductors say.3SG in ieder geval Boulez. every case Boulez

'One who would think about the greatest interpreters of Debussy among conductors would certainly come up with Boulez.' (WR-P-P-H-0000148403)

(16) De genodigden wachten namelijk met eten op hem, omdat hij het offer moet the invitees wait.3PL namely witheat.INF on him because he the sacrifice must.3SG zegenen voor ze <u>aan de maaltijd beginnen</u>. bless.INF before they AAN the meal start.3PL

'The guests wait for him before eating, because he must bless the sacrifice before they begin their meal.' (WR-P-P-B-0000000418)

In (15), the complement of *aan* in *denken aan* (i.e. *de grootste Debussy-vertolkers onder de dirigenten* 'the greatest interpreters of Debussy among conductors') corresponds to the theme of the predicate (i.e. what is being thought of). But in (16), *beginnen aan* signals the start of the subject (*ze* 'they') in the situation signified by the complement of *aan* (*de maaltijd* 'the meal'). When it comes to meaning, therefore, (15) clearly functions differently to the *aan*-PPs in (12)-(14), while (16) actually resembles them rather closely. In fact, *beginnen* 'to start' could be replaced with the verbs from the restricted set selected by [*aan het* V_{INF}], [*aan de* V_{STM}] and [*aan* DET N]. This is illustrated with ingressive *gaan* 'to go' and progressive *zijn* 'to be' in (16').

II. Van Pottelberge (2004:24) distinguishes beginnen aan 'to start with' from [aan het V_{INF}] on the basis of his observation that "die Ausfüllung der Präpositionalphrase mit aan grundsätzlich frei ist" ('the use of a prepositional phrase with aan is optional in principle'), which "in aan-het-Konstruktionen nicht möglich [sind]" ('is not possible for [aan het V_{INF}]'). While this may be true for beginnen 'to start' (e.g. in (16), ... voor ze beginnen '... before they start' is fine), such optionality is not a general property of POs, as witnessed by the unacceptability of denken 'to think' without aan aan-PP in (15): *Wie denkt, zegt in ieder geval Boulez (Intended: 'One who thinks, would certainly come up with Boulez'). In my view, the lexical and syntactic differences laid out in this section are therefore a better way to differentiate POs like beginnen aan 'to start with' from situational aan-PPs.

- (16') a. Hij moet het offer zegenen voor ze <u>aan</u> de maaltijd <u>beginnen</u>.
 - b. Hij moet het offer zegenen voor ze <u>aan</u> de maaltijd gaan.
 - c. Hij moet het offer zegenen voor ze <u>aan</u> de maaltijd <u>zijn</u>.

'He must bless the sacrifice before they begin their meal.' (a-b) 'He must bless the sacrifice before they have their meal.' (c)

The semantic overlap between (16) and (12)-(14) does not mean that the *aan*-PP in (16'a) is of the same type as the ones in (16'b-c), or vice versa, that *beginnen* in (16'a) belongs to the same set of verbs selected by non-locational *aan*-PPs as *gaan* and *zijn* in (16'b-c). As mentioned before, there are at least four differences between (15)-(16)/(16'a) on the one hand and (12)-(14)/(16'b-c) on the other.

One difference is lexical: verbs that take an *aan*-PO, such as *denken* and *beginnen*, as a rule select a standard preposition (or small set of prepositions, e.g. *denken aan/om* 'to think about/of', *beginnen aan/met* 'to start with') to head their PO. From the perspective of the verb, the preposition is thus a fixed part of the syntactic frame, i.e. they constitute a verbal collocation. For this reason, Broekhuis et al. (2015:284) call them "PO-verbs". Cognitively speaking, then, the idea is that there are separate lexical entries for PO-collocations such as *denken aan* aan *beginnen aan*. The role of an *aan*-PO—which is often purely functional (Broekhuis et al. 2015:284)—is therefore determined by the PO-verb and as such differs per collocation.

These roles seem to be reversed for the non-locational *aan*-PPs in (12)-(14)/(16'b-c): the contribution of the *aan*-PP is more stable (cf. §2.2) and as such the PP restricts the selection of main verbs (e.g. *zijn* and *gaan*, but not *denken*), not the other way round. In other words: *zijn* and *gaan* are not PO-verbs; *zijn aan* and *gaan aan* constitute neither collocations nor separate lexical entries. Instead there appears to be a particular group of *aan*-PPs—including [*aan* DET N]—that is specified for the types of verbs it may select.

The remaining three differences are syntactic. First, the determiner slot in the *aan*-PPs in (14)-(16)/(16'b-c) is fixed: the definite article (*de* or *het* 'the') may not be replaced by, for example, an indefinite article (*een* 'a') or a demonstrative pronoun (*deze/dit* 'this' or *die/dat* 'that'). This is not an issue for POs, which do not impose general restrictions on the complement of the preposition. This is illustrated by (16").

- (16") a. Hij moet het offer zegenen voor ze <u>aan</u> <<u>de</u>> <<u>een</u>> <<u>deze</u>> <<u>die</u>> maaltijd <u>beginnen</u>.
 - b. Hij moet het offer zegenen voor ze <u>aan</u> <<u>de</u>> <<u>*een</u>> <<u>*deze</u>> <<u>*die</u>> maaltijd <u>gaan</u>.
 - c. Hij moet het offer zegenen voor ze <u>aan</u> <<u>de</u>> / <*<u>een</u>> / <*<u>deze</u>> / <*<u>die</u>> maaltijd <u>zijn</u>.

Second, POs have less restricted word order than non-locational *aan*-PPs in subordinate clauses: within the subordinate verb cluster (i.e. the phenomenon that in Dutch all verbs must be at the end of a subordinate clause, cf. Broekhuis & Corver 2015:1112-1117; Bogaards 2019*b*:71-73) POs may precede or follow the verb, whereas the PPs under study here may only be in post-verb position. (16^{'''}) illustrates this.

- (16") a. Hij moet het offer zegenen voor ze <<u>beginnen</u>> <u>aan de maaltijd</u> <<u>beginnen</u>>.
 - b. Hij moet het offer zegenen voor ze <*gaan> aan de maaltijd <gaan>.
 - c. Hij moet het offer zegenen voor ze <*<u>zijn</u>> <u>aan de maaltijd</u> <<u>zijn</u>>.

Third and last, POs allow R-pronominalization (cf. Beliën 2008:21-23; Broekhuis 2013*b*:291*ff*.), i.e. pronominal reference to the complement of the preposition by attaching an R-word (e.g. the existential pronoun *er, hier* 'here', *daar* 'there') to the preposition to form an R-pronoun (e.g. *eraan* 'to it', *hieraan* 'to this', *daaraan* 'to that')— in the Dutch linguistic tradition also called a 'pronominal adverb' ('voornaamwoordelijk bijwoord', cf. Haeseryn et al. 1997:491-494,1176; Van Canegem-Ardijns & Van Belle 2004). The R-pronominalized version of (16'a) is shown below in (16^ma), with added glosses and a translation to clarify how the R-pronouns operate. The non-locational *aan*-PPs under study here do not seem to be as willing to R-pronominalize: if (16^mb-c) are taken as R-pronominalized counterparts to (16'b-c), this produces unacceptable or at least strongly marked sentences.

(16"") a. Hij moet het offer zegenen voor ze <<u>eraan</u>> <<u>hieraan</u>> <<u>daaraan</u>> He must the sacrifice bless.3sG before they EXS.AAN here.AAN there.AAN start <u>beginnen</u>.

'He must bless the offer before they start with it/with this/with that.'

- b. Hij moet het offer zegenen voor ze <*<u>eraan</u>> <*<u>hieraan</u>> <*<u>daaraan</u>> <u>gaan</u>.
- c. Hij moet het offer zegenen voor ze <*<u>eraan</u>> <*<u>hieraan</u>> <*<u>daaraan</u>> <u>zijn</u>.

The semantic, lexical and syntactic differences discussed here clearly set non-locational *aan*-PPs apart from *aan*-POs, especially since they not only apply to [*aan* DET N] (as shown above) but also to [*aan het* V_{INF}] and [*aan de* V_{STM}], as demonstrated in (17) and (18) below for the three syntactic differences discussed previously, with the infinitive *dineren* 'to have dinner' and the verb stem *wandel* 'stroll'.

(17) $[aan het V_{INF}]$

a.	[Fixed determine Hij moet het he must.38Gthe	offer					<* <u>dat</u> > that
	<u>dineren</u> have.dinner.1NF						
b.	[Restricted word Hij moet het he must.3SG the	offer			<* <u>gaan</u> >	<* <u>zijn</u> >	<u>aan het</u> AAN the
	<u>dineren</u> have.dinner.1NF						
c.	[No R-pronomin Hij moet het he must.3sGthe	offer	U				
	<* <u>eraan</u> > <* <u>hiera</u> Exs.aan here.aa						

'He must bless the sacrifice before they start/are having dinner.'

(18) $[aan de V_{STM}]$

a. [Fixed determiner]

Hij moet het offer zegenen voor ze <u>aan</u> <<u>de></u> <<u>*deze></u> <<u>*die></u> <u>wandel</u> he must.3SG the sacrifice bless.INF before they AAN the this that stroll.STM

<<u>gaan</u>>/ <<u>zijn</u>>. go.3PL be.3PL

b. [Restricted word order]

Hij moet het offer zegenen voor ze <<u>*gaan</u>> <<u>*zijn</u>> <u>aan de</u> he must.3sG the sacrifice bless.INF before they AAN the

<u>wandel</u> <<u>gaan</u>> <<u>zijn</u>>. stroll.stm g0.3PL be.3PL c. [No R-pronominalization] Hij moet het offer zegenen voor ze <<u>aan de wandel</u>> <<u>*eraan</u>> he must.3sgthe sacrifice bless.INF before they AAN the stroll.STM EXS.AAN <<u>*hieraan</u>> <<u>*daaraan</u>> <<u>gaan</u>> <<u>zijn</u>>. here.AAN there.AAN g0.3PL be.3PL

'He must bless the sacrifice before they start/are strolling.'

It is worth noting here that locational *aan*-PPs are somewhere in between non-locational *aan*-PPs and *aan*-POs with regard to the syntactic behavior illustrated in (17)-(18), whereas dative *aan*-PPs behave similarly to *aan*-POs. First, neither locational nor dative *aan*-PPs have a fixed determiner (suggesting that this is a specific property of non-locational *aan*-PPs). Second, locational but not dative PPs exhibit the restricted word order shown above to a degree—that is: post-verbal position is markedly less acceptable (or: more marked) than pre-verbal position. Last, both allow R-pronominalization, provided that the other, more general restrictions on it are met (e.g. the semantic restriction [–HUMAN]; cf. Broekhuis 2013*b*:297-332). For completeness' sake, these claims are demonstrated in (19)-(20) for locational and dative *aan*-PPs, using two constructed examples with subordinate word order.

(19) Locational *aan*-PP

- a. [No fixed determiner]
 Omdat we nu <u>aan</u> <<u>de></u> / <<u>een></u>/ <<u>deze></u> / <<u>die></u> <u>eettafel</u> <u>zitten</u>.
 because we now AAN the a this that dining.table sit.INF
 'Because we are sitting at the/a/this/that dining table right now.'
- b. [Degree of restricted word order]
 Omdat we nu <??zitten> <u>aan de eettafel</u> <<u>zitten</u>>.
 because we now AAN the dining.table sit.INF
 'Because we are sitting at the dining table right now.'
- c. [R-pronominalization] Omdat we <<u>er</u>>/ <<u>hier</u>> / <<u>daar</u>> nu <u>aan zitten</u>. because we EXS here there now AAN sit.INF 'Because we are sitting at it/here/there right now.'

- (20) Dative *aan*-PP
 - a. [No fixed determiner]

<u>geeft</u>. give.3sG

'Because she's giving all of her money to the/a/this/that charity.'

- b. [No restricted word order] Omdat ze al haar geld <<u>geeft</u>> <u>aan het goede doel</u> <<u>geeft</u>>. because she all her money AAN the good cause give.3SG 'Because she's giving all of her money to the charity.'
- c. [R-pronominalization] Omdat ze <<u>er</u>>/ <<u>hier</u>> / <<u>daar</u>> al haar geld <u>aan geeft</u>. because she EXS here there all her money AAN give.3SG 'Because she's giving all of her money to it/this/that.'

In sum, at least four types of *aan*-PPs can be distinguished, which exhibit subtly varying syntactic behavior: (i) locational *aan*-PPs; (ii) dative *aan*-PPs; (iii) non-locational *aan*-PPs; and (iv) *aan*-POs. In addition, the fourth type distinguishes itself from the first three lexically in that the preposition is a fixed part of the syntactic frame of the PO-verb with which it collocates. Finally, the semantic contribution of locational, dative and non-locational *aan*-PPs is more stable than that of *aan*-POs, which are generally more functional in nature and depend on the verb for their interpretation.¹²

2.2 Aspecto-temporality vs. Spatio-temporality

Now that the type of non-locational *aan*-PPs under study has been clearly demarcated (from both locational/dative *aan*-PPs and *aan*-POs), a shared conceptual basis can be established. Specifically, the observations in the previous paragraphs make it possible to make a first attempt at characterizing this type of *aan*-PP not in terms of its deviation from a prototype (i.e. as non-locational), but in terms of the defining features of the type itself, which was the goal formulated at the outset of this chapter. One crucial defining feature, I would argue based on the discussion above, is the fact that non-locational *aan*-PPs denote *situations* instead of *locations*. In other words,

^{12.} This is exactly why the PO-verb *beginnen aan* 'to start with' in (15) semantically resembles the non-locational *aan*-PPs in (16'): its ingressive (and thus aspectual) semantics just so happens to align with the situational meaning of [*zijn/gaan aan* DET N]. However, the difference is that non-locational *aan*-PPs have this aspectual meaning component as a structural part of their semantics (cf. next paragraph), whereas this is not the case for *aan*-POs.

they primarily indicate a position along a temporal axis (i.e. being involved in a certain situation) instead of a position along one or more spatial axes (i.e. being situated in a certain location).

What exactly I mean by 'temporality' needs to be specified here, since locational PPs generally have a temporal component as well in the sense that 'being in a certain location' may be and usually is temporally bounded as well as related to a reference point in time. In a nutshell, I would argue that non-locational PPs primarily profile internal-temporal (i.e. aspectual) structure, whereas locational PPs primarily profile spatial structure.¹³ At the same time, both non-locational and locational PPs may interact with external (i.e. deictic) temporality (cf. Comrie 1976; Boogaart 2004) through the main verbs with which the PPs are combined, particularly tense marking on those verbs.¹⁴ To make these claims more concrete, (21)-(22) present simplified versions of the constructed examples of the (non-)locational *aan*-PPs from (17) and (19). The (a)-versions are in present and (b)-versions in past tense in order to illustrate the interaction with external temporality (i.e. deictic positioning in relation to a temporal reference point).

(21) Non-locational *aan*-PP

- a. We <u>zijn aan het dineren</u>.
 we be.IPL AAN the have.dinner.INF
 'We are having dinner.'
- b. We <u>waren aan het dineren</u>.
 we were.IPL AAN the have.dinner.INF
 'We were having dinner.'
- (22) Locational *aan*-PP
 - a. We <u>zitten aan de eettafel</u>.
 we sit.IPL AAN the dining.table
 'We are sitting at the dining table.'
 - b. We <u>zaten aan de eettafel</u>. we sat.IPL AAN the dining.table

'We were sitting at the dining table.'

^{13.} Spatial structure implies internal-temporal structure in that 'being somewhere' can be taken as a stage-level predicate (in the sense of Carlson 1977), but here the aspectual structure is derived from and as such secondary to the spatial interpretation.

^{14.} Obviously, the situation type of the main verb taking a locational PP also influences the internal-temporal interpretation of that PP. The same goes for non-locational PPs, except that the set of verbs they combine with is much more restricted, both in terms of types and aspectual value (which is phasal, specifically either progressive or ingressive—cf. chapter 3).

The *aan*-PPs in (21) primarily profile the continuousness and non-stativity (i.e. internal temporality) of the situation *dineren* 'having dinner', whereas those in (22) primarily profile a location along spatial axes: *aan de eettafel* 'at the dining table'. The latter secondarily exhibit internal temporality in that 'being in a location' (here: 'being at the dining table') is generally temporally bounded (cf. footnote 11) and this internal-temporal potential is further specified by the posture verb *zitten* 'to sit', which is itself stative (Lemmens 2002; cf. footnote 12). Moreover, both (21) and (22) interact with external temporality by way of tense marking: the situation in (21a) and location in (22a) are encoded to overlap with the moment of speaking, whereas those in (21b) and (22b) are positioned in relation to a reference point that precedes the moment of speaking.

In this sense, both locational and non-locational *aan*-PPs have a temporal component. But: the former is *spatio*-temporal and the latter *aspecto*-temporal. This analysis implies a specific conceptual relation between locational and non-locational *aan*-PPs in the sense that the semantic configuration of locativity is not so much *replaced* with that of temporality, but instead *shifts* from 'spatially specified location projected onto temporal axis' to 'aspectually specified situation projected onto temporal axis', while in both cases the deictic temporal position on that axis is determined not by the PP itself but by tense marking on the paired verb.

In sum, I have argued here that there is an aspecto-temporal basis underlying [*aan het* V_{INF}], [*aan de* V_{STM}] and [*aan* DET N], which also separates them conceptually from locational *aan*-PPs. Or put more concisely, the three patterns of interest here refer primarily not to locations but to situations. Therefore, the research object of this thesis will be termed 'situational *aan*-PPs'.¹⁵ Where locational *aan*-PPs have spatio-temporal meaning, situational *aan*-PPs thus have aspecto-temporal meaning: a "from space to time"-relation in the sense of Haspelmath (1997).

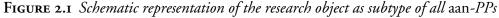
2.3 Levels of analysis and research questions

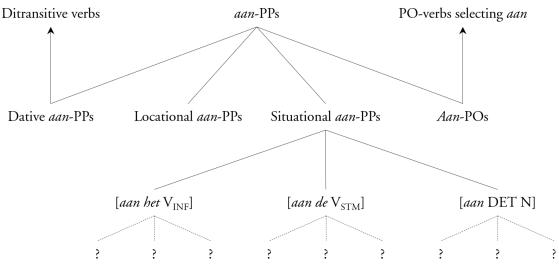
The goal of this thesis is to investigate the synchronic semantics and syntax of situational *aan*-PPs in Dutch. This general goal generates a more specific set of research questions, which will be laid out in this section. As a way of navigating the types of structures and levels of analysis that will be examined in this thesis, and in order to link the specific research questions explicitly

^{15.} My use of the term 'situational' should not be confused with that of Lemmens (2015), who uses the term to analyze the aspectual profile of the Dutch posture progressive (i.e. [*zitten/staan/liggen/hangen te* V_{INF}]) in opposition to [*zijn aan het* V_{INF}], the latter of which he calls 'processual'. As I will argue in chapter 3, in my view the former is better termed 'uni-actional' (as opposed to 'telic pluractionality' and 'processuality'). I will therefore reserve the term 'situational' for the type of PP under study (i.e. in opposition to 'locational'), and will not use it in the sense of Lemmens, except to position the concepts used here to those of Lemmens (cf.§3.3/fn.110-111).

Situational PPs

to those types and levels, Figure 2.1 presents the four types of *aan*-PPs discussed in the previous sections (i.e. dative PPs, locational PPs, situational PPs and POs) as subtypes of all *aan*-PPs. In addition to being represented as *aan*-PP subtypes, dative *aan*-PPs and *aan*-POs are also linked to the specific verbs that select them, namely ditransitive verbs and PO-verbs, respectively. While it is known that situational *aan*-PPs (especially [*aan het* V_{INF}]) are also associated with a restricted set of verbs (Haeseryn et al. 1997:1048-1054; Van Pottelberge 2004:28-37), the relation between those verbs and all situational subtypes has not yet been examined systematically. For that reason, no link between the situational PPs and type of verb was included yet in Figure 2.1.





Representing the object of study schematically as in Figure 2.1 makes it clear that there are at least three distinct levels of analysis: starting from the top, there is (I) the level of all four types of *aan*-PP, then (II) the situational subtypes which were distinguished based on the conventional part-of-speech-type of the complement (infinitive, stem or noun), and (III) potential further subcategorizations based on the semantics and/or syntax of these subtypes, which may or may not be appropriate for the analysis of these patterns. There is no a priori reason to adopt or reject such subcategorizations apart from anecdotal observations in the literature, which currently generate contradictory predictions—most notably van der Horst's (2005:139) remark that [*aan* DET N] appears to form a highly heterogeneous group, suggesting that it may be appropriate to subcategorize, versus Lemmens' (2015:8) claim that [*aan* DET N] is highly restricted, which would suggest that it does not break down any further. To reflect this uncertainty, potential further subcategorizations were connected to the situational types with dotted lines and question marks.

The research questions that are at the center of this thesis operate at levels II and III of Figure 2.1, i.e. between and within the situational *aan*-PPs identified in this chapter. Each of these two levels generates either one or two research questions. Level II produces two questions: first, the strong focus in previous work on [*zijn aan het* V_{INF}] and its progressive aspectual semantics raises the question what progressive aspect is in an abstract sense, as well as how it applies to situational *aan*-PPs in general and [*zijn aan het* V_{INF}] in particular. This leads into the second question at this level, which is how exactly the three types of situational *aan*-PPs differ in terms of their semantics and/or syntax. The third and final question, generated by level III, ties into the observation made above that it is as of yet unclear whether situational subcategorizations are appropriate. All in all, this produces the following three research questions:

- LEVEL II I. What is progressive aspect and how does it apply to situational *aan*-PPs? (Chapter 3)
 - 2. Which similarities and differences are there between the three types of situational *aan*-PP? (Chapter 4)
- LEVEL III 3. Are further subcategorizations appropriate within situational *aan*-PPs? (Chapter 4)

As noted above, each of the following chapters is centered around one or two research questions, starting with the 'progressive perspective' taken in previous research (Chapter 3), then increasing specificity by examining differences between and within situational *aan*-PPs (Chapter 4).

Taken together, these research questions will provide a more integrated, bottom-up and formdriven account of situational *aan*-PPs in Dutch, both of those that have been studied extensively (i.e. [*aan het* V_{INF}]) and of those that have received little attention (i.e. [*aan de* V_{STM}] and [*aan* DET N]). This will add a crucial dimension that has generally been lacking in previous research: [*aan het* V_{INF}] has mostly been studied as a progressive construction and as such connected to other aspectual constructions like [*zitten te* V_{INF}] (e.g. Boogaart 1999; Lemmens 2015), but not so much as a type of PP headed by *aan* with synchronic resemblances to other *aan*-PPs. Due to this limited perspective, it was never possible to solve specific puzzles such as whether there is any difference between *aan het werken/werk* 'working' (i.e. [*aan het* V_{INF}] and [*aan* DET N]) or *aan het kletsen/de klets* 'chatting' (i.e. [*aan het* V_{INF}] and [*aan* DET N]) or Broekhuis et al. 2015:153). This thesis will, among other things, provide empirical and theoretical grounds for dealing with these issues.

Chapter 3 Components of progressive meaning

The research object of this thesis was characterized in the previous chapter as 'situational *aan*-PPs': PPs headed by the preposition *aan* that share an aspecto-temporal conceptual basis and as such refer to situations. Previous work on *aan*-PPs has been a great deal more specific, however, in terms of both form and meaning, looking almost exclusively at the subtype-of-a-subtype [*zijn aan het* V_{INF}] and its function of expressing 'progressive aspect' in Dutch (e.g. Boogaart 1999; Booij 2010; Lemmens 2015). This chapter takes a critical look at the concept of progressive aspect: how it relates to situation and viewpoint aspect, as well as to related notions such as agentivity, volition and control, how it has been applied to [*aan het* V_{INF}] and whether it applies to the other two types of situational *aan*-PP: [*aan de* V_{STM}] and [*aan* DET N].

When attempting to define any conceptual domain, it is crucial to make a distinction between semantic-cognitive notions as such on the one hand, and the formal categories observable in language that in some way express those notions on the other (Mair 2012).¹⁶ That is to say: although it may not be possible (yet) to establish on the basis of external evidence whether conceptual domains such as progressivity are universal, constitute cognitive primitives, or exist 'before' or 'outside of' linguistic expression, it is nevertheless important to make clear whether one's descriptive or theoretical claims deal with hypothesized *pre*linguistic/*extra*linguistic concepts or observed linguistic forms. Of course, there is a happy methodological medium to be struck: the *cross*linguistic, i.e. to work towards a grasp of the conceptual domain based on recurring behavior of relevant forms across languages, which should contribute to figuring out which semantic components constitute the core of the category and which are more peripheral. This section builds on the current state of the field when it comes to understanding 'progressivity as such' based on crosslinguistic analyses, with the aim of applying this understanding to the

^{16.} This is not to say that the ontological status of 'the notion as such' is clear, i.e. whether it exists separately from its manifestation in human languages; this is a language-philosophical question that to my mind has not been answered satisfactorily. Another way of looking at this is epistemological: is our knowledge of conceptual categories such as the progressive predicated upon our encounters with them in language, or is it possible to (get to) know them based on more general human perceptual experience, or even intuitively? In my view, Mair (2012) is running ahead of these questions when he claims that progressivity as a semantic notion "is universal and transportable across languages" (*ibid*:803). At the same time, his distinction between *aspect* and *aspectuality* (see below) is important and useful to the aims of this section.

aan-PP subtype that has widely been analyzed as 'a Dutch progressive', as well as to the other types of situational *aan*-PP, which may or may not align with this progressive semantics.

With regard to the general distinction laid out above, Mair (2012:805-807) differentiates between *progressive aspectuality*, which refers to the semantic notion, and *progressive aspect*, referring to formal categories encoding progressivity in languages.¹⁷ I will adopt this distinction here, which is useful insofar as the discussion of progressivity distinct from [*zijn aan het* V_{INF}] is concerned. Thus, the following sections (§3.1-3.4) will explore progressive aspectuality, while the subsequent chapter will go into aspect as manifested first in [*zijn aan het* V_{INF}], then in [*aan het* V_{INF}], [*aan de* V_{STM}] and [*aan* DET N] in Dutch—progressive and beyond.

3.1 Continuousness, non-stativity and decomposability

A classic characterization of progressive aspectuality comes from Bernard Comrie, who defines it as "the combination of continuousness with non-stativity" (1976:12). For Comrie, progressivity is a subtype of 'continuous aspectuality', which also includes 'non-progressive' (i.e. not necessarily non-stative) meaning, and which in turn—together with 'habitual' (i.e. noncontinuous¹⁸) meaning—forms a subtype to 'imperfectivity' (*ibid*:25). Comrie's definition thus ties into different types of aspectual notions.

From the perspective of a 'two-component model of aspectuality' (Smith 1997; Boogaart 2004; Xiao & McEnery 2004)—which divides up the conceptual domain of aspectuality into two separate, yet interacting types: situation and viewpoint aspectuality¹⁹—'continuousness' and 'non-stativity' are situation-aspectual notions, while 'imperfectivity' corresponds to viewpoint aspect. As a subtype of imperfectivity, progressivity is thus a type of viewpoint aspectuality, but it also has a situational semantics that imposes restrictions on the types of situations taking progressivity, and that may operate on situations that do not meet one or more of its restrictions (i.e. *aspect shift* or *coercion*, cf. Moens & Steedman 1988; de Swart 1998, 2000; Michaelis 2004).

^{17.} This use of the terminological pair *aspect* and *aspectuality* differs from another conventional usage (cf. Boogaart 2004), where *aspectuality* functions as a cover term for the two types of aspect that are usually distinguished: situation aspect and viewpoint aspect, and where *aspect* is used synonymously with the latter type. I will not employ the term *aspectuality* in this way here, instead using *aspect* as the intralinguistic cover term and specifying in every case whether 'situation aspect(uality)' or 'viewpoint aspect(uality)' is meant.

^{18.} As I see it, habituality is not most straightforwardly distinguished from (non-)progressivity by way of (non-)continuousness, but rather in terms of pluractionality combined with situation-externality and gnomic construal (Bertinetto & Lenci 2012). I will elaborate on this view in §3.3.

^{19.} Situation and viewpoint aspectuality are known by various different names in the literature: to name just a few, the former also goes by *lexical, ontological* and *taxonomic aspect*, as well as *Aktionsart, actionality, action, aspect*₂ and *eventuality type*; the latter has also been called *grammatical aspect, aspect*₁ and simply *aspect* (cf.fn.17). Cf. Boogaart (2004) for discussion of the (dis)advantages of many of these terms; I will not problematize them here.

The two-way distinction and interaction presupposed by the two-component model, which is crucially founded on the idea that aspectual interpretation is compositional (Verkuyl 1972, 1993), is commonplace in current aspectual theory (cf. e.g. Bache 1982; Depraetere 1995; Bertinetto & Delfitto 2000; Boogaart 2004; Borik & Reinhart 2004) and will thus be adopted in this thesis. In the following, the situational and viewpoint components of Comrie's (1976) definition will be explored and connected to other treatments of progressivity. This also requires definitions of situation and viewpoint aspectuality, which in each case will first be laid out as conceptual points of departure.

3.1.1 Situational components. Starting with situation aspectuality: this concerns the internaltemporal characteristics of situations. In language (i.e. with regard to situation *aspect*), these are generally a property of verbs or verb phrases (i.e. the predicate). Situations may be stative or dynamic, for instance, and extend in time or rather be punctual. Various situation types may be distinguished depending on which situation-aspectual features are employed and which combinations are assumed to be interpretable; the relevance or validity of such feature sets and taxonomies may vary by language or even by (set of) construction(s). Most studies take Vendler's (1957, 1967) three parameters (which go back to Aristotle—cf. Verkuyl 1989) as a starting point: DYNAMICITY (dynamic/stative), TELICITY (telic/atelic) and DURATIVITY (durative/punctual), which in Smith's (1997) situational taxonomy produces five distinct situation types.²⁰ This taxonomy is shown in Table 3.1, including some examples.²¹

Situation type	Features			Everales	
Situation type	Dynamic	Telic	Durative	Examples	
State	_	_	+	to know the answer, to love classical music, to be hungry	
Астіvіту	+	-	+	to laugh, to eat, to play the piano, to stroll in the park	
Accomplishment	+	+	+	to build a house, to write a thesis, to walk to school	
Achievement	+	+	-	to win a game, to reach the top, to discover, to find	
Semelfactive	+	-	_	to tap, to knock, to sneeze, to blink, to flash	

TABLE 3.1 Five situation types according to Smith (1997), with examples (after Smith 1997:3)

^{20.} Feature attribution is binary, i.e. situation types are distinguished by saying that they either do (+) or do not (-) exhibit a given feature. The convention is then to represent features between square brackets: the parameters are represented as [±DVNAMIC], [±TELIC] and [±DURATIVE], and situation types are said to be, for example, [+DVNAMIC] or [-DVNAMIC].

^{21.} Cf. Smith (1997:19*ff*.) for a more detailed treatment of these situation types and features. Because they are so commonplace, I will not elaborate on them here, except where specifically relevant for defining progressivity.

The two components of Comrie's definition—continuousness and non-stativity—are closely related to the situational features of [±DURATIVE][±DYNAMIC], respectively. Continuousness implies sustained action, and sustainment requires extension in time, i.e. non-punctuality. This explains why progressivity is generally infelicitous with Achievements (e.g. ³⁷She is reaching the top), which are punctual by definition (Binnick 1991:282).²² Non-stativity, then, corresponds to dynamicity, which is what separates progressive from non-progressive continuousness; dynamicity can therefore be considered the central property of progressive aspectuality. ²³ Importantly, dynamic action is generally associated with related notions such as agentivity, volition and control, the relation of which to the type of taxonomy in Table 3.1 has been dealt with in various ways in previous work. This issue will be taken up in the next section (§3.2). But before that, the relation of progressivity to viewpoint aspectuality requires some elaboration.

3.1.2 *Viewpoint components.* Viewpoint aspectuality involves the ways that situations (in the sense of situation aspectuality) may be presented with regard to their internal temporality. The term 'viewpoint', which again stems from Smith (1997), implies a visual metaphor: ²⁴ a situation—with a certain set of situation-aspectual features—may be viewed in different ways. The most basic or general viewpoint-aspectual opposition distinguished in the literature is that between *perfectivity* and *imperfectivity* (see e.g. Boogaart 2004; Comrie 1976; Dahl 1985, 2013; Langacker 2008; Sasse 1991, 2002; Smith 1997; Xiao & McEnery 2004).²⁵ In a ubiquitous extension of the visual metaphor outlined above, *(im)perfectivity* can be understood as taking a holistic, global view (*perfective*) versus an unbounded, partial view (*imperfective*) on a given situation. In other words, perfective aspectuality presents an 'external' conceptualization of a situation: it is viewed as a bounded whole, without gaining insight into its constituent parts, whereas imperfective aspectuality on the other hand presents an 'internal' conceptualization: the situation is unbounded and viewed only partially, without gaining an overview of all constituent parts at the same time.²⁶ The opposition is thus structured by two related, but not entirely

^{22.} Semelfactives are also punctual, but lack the telicity of achievements, which licenses iterative interpretations (reinterpreted as activities) that felicitously combine with progressivity—e.g. *She is knocking at the door*.

^{23.} Situation types that typically take a progressive viewpoint are thus durative and dynamic, i.e. activities and accomplishments. Anthonissen et al. (2019:1131) summarize this idea with the statement that "the progressive is an event selector".

^{24.} As do *presented* and *regard* (as well as *insight* further on), incidentally.

^{25. (}Im)perfectivity is sometimes equated with (un)boundedness, but I would argue that 'being bounded' is only one of two components constituting this opposition, the other being *decomposability* (discussed below).

^{26.} Perfectivity is sometimes conflated with telicity (cf. Depraetere 1995 for discussion), i.e. the situation-aspectual property of having an inherent endpoint (e.g. when the thesis is finished in the accomplishment *to write a thesis*). The key difference is that presenting a situation as a bounded whole does not require an inherent end goal

equivalent notions: *boundedness*, i.e. whether all boundaries (*perfective*) or fewer than all boundaries (*imperfective*) are in view; and *decomposability*, i.e. whether the situation is broken down into parts (*imperfective*) or not (*perfective*).^{27,28}

As mentioned previously, Comrie (1976) classifies progressive aspectuality as a subtype of imperfectivity. However, defining progressivity in terms of situation-like notions such as 'continuousness' and 'non-stativity' does not immediately clarify why or how it would provide an imperfective perspective, or put more generally: if viewpoint aspectuality is specifically defined in terms of (im)perfectivity, why we are dealing with a type of viewpoint at all when it comes to progressivity (rather than some kind of derived situation aspectuality). This is where other definitions of progressivity come in, which more explicitly qualify its imperfectivity—doing so in various ways: most notably by connecting its semantics to a 'time frame' or 'event frame' (i.a. Bertinetto et al. 2000; Chung & Timberlake 1985; Mair 2012; Timberlake 2007), by stressing its phasal character (i.a. Coseriu 1976; ter Meulen 1985; Dik 1997; Michaelis 1998; Xiao & McEnery 2004), or by analyzing its meaning in terms of two types of scope: maximum and immediate scope (i.a. Langacker 1987, 1991, 2001; De Wit et al. 2013; Anthonissen et al. 2019).

The first type of analysis defines progressive meaning as "the idea that an event is progressing dynamically over a time frame opened up by an utterance" (Mair 2012:803). Besides Comrie's continuousness ("progressing") and non-stativity ("dynamically"), this definition includes the idea that a situation viewed progressively plays out during a contextually determined time frame. A shortcoming of such an analysis is that the nature of the time frame is not specified in terms of (im)perfectivity. After all, there is no theoretical reason that "an utterance" could not open up a global, holistic and bounded "time frame", producing a perfective viewpoint.

This issue is remedied by the second type of definition, which qualifies this time frame specifically as a *phase* and as such classifies progressivity as a type of *phasal* aspectuality (which is

⁽although the two are highly compatible), while having an inherent end goal does not necessarily imply being completed (e.g. *to write a thesis* may be presented imperfectively: *I am writing a thesis*).

^{27.} The main aspectual parameters distinguished by Haeseryn et al.'s (1997:1664ff.) account of aspect in Dutch run parallel to these notions: "*temporele begrenzing*" (*boundedness*) and "*temporele geleding*" (*decomposability*).

^{28.} Different analyses of viewpoint aspectuality may attach greater or lesser importance to these notions in understanding the conceptual opposition. Smith (1997), for example, appears to take boundedness as the main component, as she defines perfectivity/imperfectivity based on inclusion of all and no boundaries respectively (proposing a third, 'neutral' category for viewpoints that profile at least one but not all boundaries, such as ingressivity—a view that will not be adopted here). Xiao & McEnery (2004), on the other hand, stress both boundedness and decomposability for understanding (im)perfectivity. To my mind, the two notions are intertwined but both required to understand progressivity: unboundedness is clearly a crucial component of progressive aspectuality but not sufficient to distinguish it from other imperfective viewpoints such as habituality, which is unbounded but not decomposable. At the same time, unboundedness is the corollary of decomposability in the sense that decomposing a situation makes it impossible to profile all of its boundaries. In that respect, there is a conceptual hierarchy between unboundedness and decomposability: imperfectivity necessarily implies the former but not the latter.

likewise a subtype of imperfectivity, for reasons laid out below). According to this view, phasal aspectuality "bear[s] on the developmental phase of the [situation], in terms of beginning – continuation – end of the [situation]" (Dik 1997:225).²⁹ In other words, situations can be decomposed into at least three phases of development: one that includes the initial boundary (ingressive aspectuality), one including the terminal boundary (egressive aspectuality), and finally one that lies in between the initial and terminal phases and thus includes no boundaries, i.e. the medial phase. It is precisely this type of phase that is profiled by progressive aspectuality according to this kind of definition.³⁰

By its very nature, phasality (i.e. decomposability) entails imperfectivity, as decomposition into phases obstructs a holistic and bounded situational 'overview'.³¹ Phasal aspectuality profiles only one of a situation's several constituent parts, which generally makes for a partial and thus imperfective construal. According to phasal analyses of aspectuality, therefore, not only progressivity but also continuativity and ingressivity are imperfective, since they are likewise decomposable and thus profile fewer than all temporal boundaries (cf. Xiao & McEnery 2004; Bogaards 2020*b*).³²

The third and final way of defining progressive aspectuality to be discussed here further fleshes out the relation of the medial phase to the 'residual' structure of the situation on which progressivity operates, i.e. those parts of the situation that fall outside of the medial phase, most notably the initial and terminal temporal boundaries. They do so in terms of two types of "aspectual scope": maximum and immediate (Langacker 2001; Anthonissen et al. 2019:1131*ff*.). In terms of the phasal analyses discussed above, progressive aspectuality has the medial phase within its immediate scope: this is the temporal unit that is rendered salient, the entity that claims are made about. Or using the terms from the first type of definition discussed here, the 'time

^{29.} Dik (1997) uses the abbreviation *SoA (State of Affairs)* here for what I have been calling a situation; these terms are synonymous. Moreover, as can be seen in the above quote, he calls the second phase "continuation", but I would rather call it 'medial' as progressivity implies continuousness but not continuation/continuativity (cf. Bybee et al. 1994:127; Mair 2012:812). Dik (1997:225) seems to be aware of this as he does distinguish between progressivity (e.g. *John was crying*) and continuativity (e.g. *John continued crying*).

^{30.}It can be pointed out here that progressivity shares its 'medial phasality' with the non-progressive (yet continuous) viewpoint, but not with habituality, which is not a phasal notion.

^{31.} In this sense, phasality and decomposability are two sides of the same coin—or may even come down to the same concept (although phasality can be specified, e.g. progressivity entails *medial* phasality).

^{32.} The relation between decomposability and imperfectivity is not deterministic, however, as progressivity may combine with other types of viewpoints (constructing a complex viewpoint in the sense of Xiao & McEnery 2004), and potentially producing a perfective viewpoint (e.g. the perfect progressive aspect in English: *I have been writing a thesis*). Note that the idea of 'complex viewpoints' from Xiao & McEnery (2004) runs contrary to Mair's (2012) problematization of Comrie's (1976) classification of progressivity as an imperfective subtype, which according to Mair "suggests incompatibility in principle between the progressive and the perfective" (2012:815). I strongly disagree with Mair's view: Comrie's classification simply reflects the fact that progressivity in most cases correlates with imperfectivity—and correlation need not imply incompatibility elsewhere.

frame opened up by the utterance' is within the immediate scope. But according to 'scope' definitions of progressivity, it also "still feature[s] backgrounded boundaries", "which are located within the expression's maximal scope" (Anthonissen et al. 2019:1131). That is, to understand a progressive construal, the boundaries and phases that are not selected are not rendered entirely invisible or inaccessible; instead, they function as a contextual backdrop to the phase that *is* selected. Behrens et al. (2013:98)—citing Comrie (1976) and Dowty (1979)—call this "defocusing boundaries". And Arche (2014:827) seems to get at a similar conclusion by saying that progressive aspectuality "does not have an antitelic power" (i.e. if a predicate taking the progressive viewpoint has an inherent endpoint, it is not deleted). Still, there is a clear hierarchy in salience between phases, which aligns with the idea that the decomposability and medial phasality characterizing progressivity are essentially unbounded and thus imperfective.

3.1.3 Core components. To sum up, progressive meaning pairs continuousness with dynamicity, underscoring these notions in dynamic-durative situations presented with the progressive viewpoint, or alternatively coercing situations into exhibiting them. Furthermore, progressivity decomposes a given situation into phases of development (making it unbounded), rendering the medial phase salient (immediate scope) and backgrounding the rest, including the initial and terminal boundaries (maximal scope). Progressivity thus differs from non-continuous imperfective viewpoints such as habituality in its *decomposability*, and from non-progressive continuous viewpoints in its *dynamicity*. These can therefore be considered its core components.³³ As noted previously, the core component of dynamicity is correlated with related but distinct properties, such as agentivity, volition and control. The next section goes into the role that these concepts have to play in a definition of progressive aspectuality.

3.2 Control, agentivity and volition

Dynamicity is primarily a property of actions performed rather than states holding, and as such is associated with notions that generally cluster with performed dynamic action, viz. that it is carried out by an *agentive* subject that executes it *volitionally* and exerts *control* over it. These three notions—agentivity, volition and control—are sometimes used informally and seemingly interchangeably in relation to progressive aspectuality. This is understandable in view of the fact that "the paradigm instance" (Lyons 1977:483) of dynamic action indeed exhibits this tripartite

^{33.} This aligns with the idea that continuousness or durativity is more of "a contextual meaning or an 'overtone', rather than a basic meaning [of progressive aspectuality]" (Binnick 1991:284; cf. also Palmer 1965).

semantic cluster, but at the same time the notions are not conceptually equivalent and appear to be hierarchically organized (i.e. agentivity may entail control and/or volition, but control and volition do not seem to entail each other). The aim of this section is to tease apart the situationaspectual parameter of dynamicity from these semi-aspectual notions and to develop a theoretical model that will allow for this disentanglement to be operationalized.

Some examples of the informal, seemingly interchangeable use of these concepts will help in setting the scene. Mair (2012), for instance, contrasts continuous, non-progressive meaning in the sense of Comrie (1976) with progressivity by stating that—in contrast to the latter—for the former "there is no volitional agent involved" (Mair 2012:806) and also "there is [...] usually no conscious control" (*ibid*:808), whereas dynamic action "is normally under conscious control of some agent" (ibid:808). Similarly, Boogaart (1999) connects progressive meaning to "presenting activities, carried out by a volitional agent" (Boogaart 1999:176), while also observing that progressivity "[does not] always need an agentive subject" (*ibid*:181), demonstrating this observation with examples from Dutch "that do not involve any kind of agentivity or volitionality" (ibid:184) such as Het was aan het regenen 'It was raining', and concluding that notions like agentivity "are important, albeit surely not the only relevant notions" (*ibid*:184). Lastly, in the same vein, Van Valin (2005) notes an association (but also a distinction) between dynamic situations on the one hand, and controlling subjects of, (non-)agentive participants in and (in)volitional verbs referring to such situations on the other (Van Valin 2005:36). What Boogaart's, Mair's and Van Valin's accounts have in common is that volitional and/or controlling agents play a role in characterizing progressive and/or dynamic predication, but without making explicit how they are related—neither mutually nor with regard to agentivity.

By and large, attempts to formalize these notions and reconcile them with dynamicity and progressivity have focused on the concepts of agentivity and control, superimposing them onto matrices like Table 3.1 as binary parameters [±AGENTIVE] (Lyons 1977; Boogaart 1999; Huddleston & Pullum 2002; Declerck 2006; Cherici 2019) and [±CONTROL] (de Groot 1983, 1985:74-75; Dik 1981, 1997:105-116; Vet 1980:68; Vester 1983:36; Broekhuis et al. 2015:52-53) that crosscut the Vendlerian-Smithian taxonomy. As far as I know, this has not been attempted for the concept of volition. In the following I will discuss situational taxonomies 'enriched' with control (§3.2.1) and agentivity (§3.2.2), proposing to merge them (§3.2.3) and concluding with a brief note on the place of volition within such a merged taxonomy (§3.2.4).

3.2.1 Taxonomies featuring [±CONTROL]. The binary parameter [±CONTROL] stems from the theoretical framework of Functional Grammar (Dik 1981), where it is assumed to constitute one of four main binary parameters relevant to the semantic structure of basic predicates in general. The concept of control has been defined in this context as "whether the referent of the subject is able to bring about or terminate the event" (Broekhuis et al. 2015:52). Since the initial boundary and phase of a situation precede the medial phase profiled by progressive meaning, the ability to effect termination seems to be most relevant here. Additional tests for control are felicity of using a verb in directives and commissives (Dik 1997:113) and acceptability of adverbs that require a controlling subject (e.g. *deliberately* and *carefully*—cf. Van Valin 2005:36).

Using these tests, it is possible to superimpose the parameter [±CONTROL] onto Smith's (1997) situational taxonomy. This is shown in Table 3.2, again with several examples. The 'default' terms for the situation types from Table 3.1 are listed first, then their (un)controlled counterparts. Note that except for states, the 'basic' situation types (i.e. activities, accomplishments and achievements) refer to the controlled versions, which makes the conceptual range of these terms considerably more narrow in this taxonomy.³⁴

^{34.} Dik (1997) does not account for Semelfactives, but [±CONTROL] straightforwardly applies to them; I call the two resulting types (Un)controlled Semelfactives. Another distinction Dik does not make is that between [-CONTROL] accomplishments and achievements: both are termed *change* (which is thus itself [±DURATIVE]). In my view, Dik is not very clear in his reasoning here, simply announcing that "[w]e shall not use special terms for [±durative] [situations]" and "[w]hen these features are relevant they will be mentioned separately" (1997:114). There is something to be said for this type of underspecification, since the question whether non-controlled change extends temporally often depends on the construal of the situation (e.g. by means of progressivity) rather than the situation itself. However, as Broekhuis et al. (2015:53) point out, this type of underspecification is a broader phenomenon in the case of [±CONTROL]: some situations are underspecified for control anyway (i.e. they are themselves [±CONTROL]), and this is not limited to a specific situation type. This raises the question why underspecification has formal repercussions on one component of the taxonomy, but not another. Strikingly, by the way, the interpretation of this particular type of underspecification is dependent specifically on the animacy of the subject (Broekhuis et al. 2015:53). For example, John rolled from the hill is an accomplishment (telicity being derived from the path), whereas The stone rolled from the hill constitutes a durative change. The key role of the subject is striking here because situation aspectuality is usually considered to apply to predicates expressly understood as the main verb and its direct arguments (viz. the direct object but not the subject).

Situation type		Fe	eatures	Framplas	
Situation type	Dynamic	Telic	Durative	Control	Examples
State	_	_			to know the answer, to love classical music, to be tall
Activity	+	_	+	+	to laugh, to eat, to play the piano, to stroll, to push a cart
Accomplishment	+	+	+	+ to build a house, to writ to walk to scho	
Achievement	+	+	_	+	to win a game, to reach the top, to depart
Controlled Semelfactive	+	-	-	+	to tap, to knock, to hit, to shoot
Position	_	-	+	+	to keep calm, to sit, to be patient
Dynamism	+	-	+	-	to dream, to shiver, to blow in the wind, to rain
Change	+	+	±	-	to discover, to find, to get an idea, to twist one's ankle, to explode
Uncontrolled Semelfactive	+	-	-	-	to sneeze, to blink, to flash

 TABLE 3.2
 Situational taxonomy including [±CONTROL] (after Dik 1997; Broekhuis et al. 2015)

If one of progressivity's core components is indeed dynamicity, and dynamicity is prototypically (but not necessarily) associated with control, this generates the prediction that Activities, Accomplishments and Controlled Semelfactives (which are both [+DYNAMIC] and—for the latter: derivedly through iteration—[+DURATIVE]) are the prototypical candidates for the progressive viewpoint, ³⁵ while Positions, Dynamisms, Changes (construed duratively, cf.fn.34), and Uncontrolled Semelfactives are more peripheral yet still conceivable candidates (since they exhibit only one of these features). In fact, the more concise prediction is that only States and Achievements are particularly unsuitable. It appears that these predictions are largely accurate, as States are generally considered to be incompatible with the progressive viewpoint and Achievements require a drastic type shift (adding a 'preparatory phase'—cf. Moens & Steedman 1988), while Dynamisms, Changes and Positions (albeit in different terminology, viz. Processes and stage-level States—cf. next subsection and §4.1) seem to be crosslinguistically less likely but certainly not impossible (e.g. Binnick 1991; Boogaart 1999, 2004; Smith 1997; Xiao & McEnery 2004). As such, the parameter of [±CONTROL] appears to have considerable explanatory power for a semantic account of progressive aspectuality.

^{35.} Strictly speaking, this prediction would also include Achievements, but as Binnick (1991:282) points out, this combination is blocked by the combination of punctuality and telicity, which prohibits iteration. Or reasoned in reverse: the specific combination of atelicity and punctuality characterizing Semelfactives licenses iterated durativity and thus progressivity. This is unavailable for Achievements, which therefore require type-shifting.

3.2.2 *Taxonomies featuring [±AGENTIVE].* Alternative attempts at teasing apart dynamicity and related notions have focused on agentivity. Similarly to [±CONTROL] in the previous section, they apply [±AGENTIVE] to the Vendlerian-Smithian taxonomy of situation aspectuality as a binary parameter. It should be pointed out at the outset that such applications do not really position themselves vis-à-vis taxonomies superimposing a binary parameter [±CONTROL], and often even seem to include control in their definition of agentivity.

A clear example is Lyons (1977), who proposes [±AGENTIVE] as a key situational parameter, arguing that "[a] dynamic situation [...], most important of all [...] may or may not be under the control of an agent" (Lyons 1977:483)—that is, the agentive subject is related conceptually to the dynamic situation in terms of control. Lyons' definition of agentivity, then, involves yet other notions (although, remarkably, not control): "[w]e may think of the paradigm instance [of agentivity]", he writes, as "one in which an animate entity, X, intentionally and responsibly uses its own force, or energy, to bring about an event" (*ibid*:483). The three features that Lyons puts on the scene here—animacy, intention and responsibility—are again closely related to and likely intertwined with the features under discussion presently: animacy of the subject is sometimes a condition for control (cf.fn.34), and intuitively speaking there is a certain reciprocity between intention (meaning to do something) and volition (wanting to do something)—not to mention responsibility, which I will not go into here so as not to make matters more complex.

In this respect, Lyons' treatment of these notions in terms of "paradigm" and "non-paradigm instances" is enlightening: he theorizes that features such as animacy, intention and responsibility are separable in the latter case (which basically constitute statistically infrequent situations) but notes that "languages are designed, as it were, to handle the paradigm instances" (*ibid*:483). According to a '(non-)paradigmatic' view, the relation between dynamicity and these notions is thus indeed one of association and correlation, which then raises the question which of these notions are the core components and which are more peripheral (cf.§3.1.3). I will not attempt to answer this question here (although it could be examined quantitatively); instead, I will assume that control, agentivity and volition constitute the core associated features, as they turn up most frequently in the literature on progressivity and dynamicity—and because, not unimportantly, two of them have been applied formally to situational taxonomies.

Speaking of taxonomies, the binary parameter [±AGENTIVE] has also been superimposed on Vendlerian-Smithian taxonomies of situation aspectuality. The original application and matching terminology come from Lyons (1977), who notably only applies them to [+DYNAMIC] situations, i.e. not to states (and, like Dik 1997, does not account for Semelfactives). Table 3.3

shows the taxonomy featuring the parameter [±AGENTIVE].³⁶ This taxonomy was later adopted, either in part or fully, by i.a. Boogaart (1999), Huddleston & Pullum (2002), Declerck (2006:66-70) and Cherici (2019). Especially Processes—which are [+DYNAMIC][-TELIC] [-AGENTIVE] and particularly associated with gradual change verbs (Bertinetto & Squatini 1995)—have become a fairly commonplace addition to the domain of dynamic situations.

Situation type		Fe	eatures		Examples	
Situation type	Dynamic	Telic	Durative	Agentive	Lamples	
State	+		-	to know the answer, to love classical music, to be hungry		
Астіvіту	+	-	+	+	to laugh, to eat, to play the piano, to stroll, to push a cart	
Accomplishment	+	+	+	+	to build a house, to write a thesis, to walk to school	
Achievement	+ +		Ι	+	to win a game, to reach the top, to depart	
Agentive Semelfactive	+	-	_	+	to tap, to knock, to hit, to shoot	
Process	+	-	+	_	to change, to grow, to increase, to deteriorate	
Instant	+	+	_	_	to discover, to find, to get an idea, to twist one's ankle, to explode	
Non-agentive Semelfactive	+	-	_	-	to sneeze, to blink, to flash	

 TABLE 3.3
 Situational taxonomy including [±AGENTIVE] (after Lyons 1977 and Declerck 2006)

What is especially striking about the taxonomy in Table 3.3 is how similar it is to the one crosscut by [±CONTROL] in Table 3.2: besides the 'basic' situation types, which overlap completely, agentive and non-agentive Semelfactives appear to correspond neatly to their controlled and uncontrolled counterparts, and Instants match non-durative Changes. One minor difference is that no States are included that are [-AGENTIVE], due to Lyon's presupposition that states are incompatible with agentivity; this was not considered an issue in the work underlying Table 3.2, which included controlled States known as Positions. A final small difference is that the

^{36.} Lyons (1977) employs somewhat idiosyncratic terminology for some of the 'basic' situation types (i.e. those from Table 3.1), at least from the perspective of current research, namely 'Action' for 'Accomplishment' and 'Act' for 'Achievement'. I will use the latter, more conventional terms. Moreover, as noted above, Lyons does not account for Semelfactives, even though [±AGENTIVE] applies to them just as straightforwardly as [±CONTROL] (cf.fn.34); analogously to Table 3.2, the two types of Semelfactive will be called (*Non-)agentive Semelfactives* here. Finally, Lyons (1977) and Declerck (2006:68) call [+DYNAMIC][-AGENTIVE] situations 'Events', but this term does not align very well with the use of that term in the aspectual literature, namely as a cover term for either 'situations' in general or for all [+DYNAMIC] situations. I therefore propose a new term here for [-AGENTIVE] Achievements: 'Instant', which is transparent about being [-DURATIVE] and compatible with being [-AGENTIVE].

combination [+DYNAMIC], [-TELIC], [+DURATIVE] and [-AGENTIVE], i.e. durative Changes in Table 3.2, is absent from Lyons' (1977) taxonomy—for reasons that he does not explain.

There is also a major difference, however, namely the specific type of situational structure ensuing from the combination [+DYNAMIC][-TELIC][+DURATIVE][-AGENTIVE/-CONTROL], i.e. Dynamisms and Processes in Tables 3.2-3.3 respectively. Although they are characterized by the same set of binary features, they are nevertheless clearly different: Processes (e.g. *to grow*) exhibit gradual change, especially when viewed from a progressive perspective (e.g. *Our love is growing*), whereas Dynamisms (e.g. *to rain*) do not, or at least in Dik's (1997) classification devotes no special attention to this distinction. There is no theoretical reason for this contrast between Dik's and Lyons' taxonomies; it appears to be an arbitrary outcome of a difference in emphasis. In this regard (and also in regard to the minor differences, i.e. the absence of Positions and durative Changes), the taxonomies in Tables 3.2-3.3 are complementary.

Of course, such complementarity is only viable if the features [±AGENTIVE] and [±CONTROL] are in some way reducible to one another. In the case of dynamic situations, I would argue that Lyons' (1977) and Dik's (1997) conceptual characterizations of these notions—combined with the idea of "paradigmatic instances"—indeed provide grounds to 'merge' taxonomies.

3.2.3 Merging taxonomies: [±EFF.BOUND]. Vendlerian-Smithian situational taxonomies crosscut by the parameters [±CONTROL] and [±AGENTIVE] are both based on the twofold idea that certain situations are controlled by an agentive subject while others are not, and that this difference is relevant to a semantic account of dynamicity and progressivity. More specifically, the former of these approaches define [±CONTROL] in terms of whether the subject "is able to bring about or terminate the event" (Broekhuis et al. 2015:52), while the latter define [±AGENTIVE] in terms of whether the situation is "under the control of an agent", where the agent is "one [...] [who] bring[s] about an event" (Lyons 1977:483). In addition to both exploiting the notion of control (either as the overarching concept or as a central conceptual component connecting subject and event), the interpretation of that notion appears to be based in both cases on whether the subject has the ability to realize a temporal boundary—be it ingressive or egressive; initial or terminal. Interestingly, what the discussion of progressivity in §3.1 showed is that such boundaries fall outside of the immediate scope (in the sense of Langacker 2001) of progressive aspectuality. Therefore, it would seem that the parameters of [±CONTROL] and [±AGENTIVE], insofar as they correlate with progressivity, operate on the maximal scope of progressive aspectuality. In this way, the idea that these notions are associated with progressivity provides an additional theoretical motivation for an account of progressive semantics that includes immediate and maximal scope,

and vice versa, the potential for boundary effectuation within progressivity's maximal scope may also constitute a shared conceptual core between the parameters of [±CONTROL] and [±AGENTIVE] within the context of progressive aspectuality. What I am arguing, in other words, is that [±CONTROL] and [±AGENTIVE] are reducible to one another in the sense that, in this context, agentivity entails control over what is profiled within the maximal scope, i.e. the effectuation or realization of temporal boundaries: starting or stopping the situation at hand. Control over the begin or end of a situation also entails control over its sustained progression—that is, control over what is profiled within the immediate scope—but under this analysis this ability is secondary to, or derived from, the ability to effectuate boundaries.

If agentivity and control are understood as such, then it becomes clear that they shed light on different aspects of the same mechanism: [±AGENTIVE] applies to the subject itself and [±CONTROL] to the ability of that subject to realize temporal boundaries. Therefore, the latter can be considered a component of the former within the specific context of progressive aspectuality: from the progressive viewpoint, a subject's agentivity is defined as their ability to effectuate temporal boundaries. In terms of Lyons (1977), the paradigm instance of a 'progressive agent' may therefore differ from paradigm instances of agents in other contexts.³⁷ This also implies that control is a subordinate notion to agentivity, at least for the purposes of a situational taxonomy specifically relevant to an account of progressivity.³⁸ To differentiate the 'merged taxonomy' proposed below from previous proposals, however, I propose an alternative term to [±CONTROL] and [±AGENTIVE] here. That term is [±EFFECTUATE BOUNDARIES], or [±EFF.BOUND] for short, which can be understood as a specific manifestation of a general feature [±CONTROL/±AGENTIVE].

Using the feature [±EFF.BOUND] allows the taxonomies in Tables 3.2-3.3 to be merged, except for two situation types, which differ in a way that cannot be derived from the four features in such a merged taxonomy. This concerns Dynamisms from Table 3.2 and Processes from Table 3.3, which are both [+DYNAMIC], [-TELIC], [+DURATIVE] and [-EFF.BOUND], but differ in how the dynamicity is understood: Dynamisms (e.g. *to dream, to rain*) are incontractible but do not change, evolve or cumulate, whereas Processes do, exhibiting gradual change without an inherent endpoint (e.g. *to change, to increase*). As noted previously, this difference is not theoretically motivated, but it has been analyzed in theoretical terms in earlier work: Boogaart, wondering "what the common denominator is of agentive situations and non-agentive gradual changes" theorizes that the answer may be "change or dynamicity" (1999:183). And Declerck (2006), in

^{37.} Another feature of the control over boundary effectuation possessed by the paradigm instance of the progressive agent is that such control is generally associated with animate subjects, cf.fn.34.

^{38.} Croft formulates this idea more generally: "controlled activities are most A[gent]-like" (2012:254).

his partial extension of Lyons' (1977) taxonomy, adds [±EVOLVING] as situational feature, arguing that "[e]volving situations [...] are always [...] non-agentive [i.e. [-EFF.BOUND]] and consisting in a gradual change", by which he means that "each stage of an evolving situation is similar to the preceding stage, except that it usually represents a higher or lower value on a scale" (Declerck 2006:65).³⁹ Boogaart's and Declerck's proposals are complementary in the sense that Dynamisms and Processes overlap mutually and with Activities in being [+DYNAMIC], but differ in being [-EVOLVING] and [+EVOLVING], respectively.^{40,41}

Merging Dik's (1997) and Lyons' (1977) taxonomies combined with the 'locally applying' feature [±EVOLVING] from Declerck (2006) produces the taxonomy shown in Table 3.4.⁴²

^{39.} In my view it can be contested whether gradual change is necessarily [-EFF.BOUND], since Activities can also incite gradual change (e.g. *to enlarge*) as can Processes with animate subjects (e.g. *The minister is increasing taxes*— cf.fn.34). Boogaart (1999:183) takes the same standpoint, pointing out that "having an agentive subject and [...] presenting a gradual change [is] not mutually exclusive". The advantage of Declerck's application, however, is that [±EVOLVING] only applies to two situation types, making the taxonomy less complex; this also aligns with the fact that Activities are not generally differentiated by graduality in the literature (which is simultaneously a valid criticism—but one that I will not go into presently).

^{40.} This property could also be captured following Boogaart (1999), i.e. in terms of [±CHANGE], but I feel that Declerck's (2006) notion of 'evolving' better reflects the graduality that sets Dynamisms and Processes apart. It also has the added advantage of avoiding terminological confusion or overlap with 'Changes' as a situation type.

^{41.} It can also be argued that Changes are [+EVOLVING] by definition, since they involve an [-EFF.BOUND] development toward an inherent end goal. Analogously, in my view, Accomplishments can be argued to always be [+EVOLVING] (cf.fn.39 for a similar standpoint on Activities). Since [+EVOLVING] presupposes a situation to be both [+DYNAMIC] and [+DURATIVE], it does not apply (or would be [-EVOLVING]) for the remaining situation types, i.e. Positions, Semelfactives (both non-effectuateable and effectuateable), States and Instants. In any case, it is 'applied locally' in Table 3.4 for two reasons: (i) because it aligns with Declerck's (2006) application of the parameter, and (ii) because the concept captured by [±EVOLVING], i.e. 'gradual change', has been argued to be relevant specifically to the Dutch 'progressive construction' [*zijn aan het* V_{INF}] (e.g. by Boogaart 1999; Beekhuizen 2010).

^{42.} In order to avoid the terms '(non-)agentive' and '(un)controlled', the term '(non-)effectuateable' is introduced here as a way to distinguish between [±EFF.BOUND] Semelfactives. And in order to list [+EFF.BOUND] and [-EFF.BOUND] situations together, Positions and States changed places vis-à-vis the previous taxonomies. Finally, since Instants from Lyons (1977) correspond to non-durative Changes from Dik (1997), Changes were taken as durative by definition in this taxonomy. It should be noted here that Declerck (2006) groups Dynamisms and Instants together under 'Events' (cf.fn.36) because he does not combine [±EVOLVING] and [±AGENTIVE] (i.e. [±EFF.BOUND]) with [±TELIC].

		,	Feature	Evernales			
Situation type	Dynamic	Telic	DURATIVE EFF.BOUND		Evolving	Examples	
Position	_	_	+	+		to keep calm, to sit,	
10511101			т	Т		to be patient	
Activity	+	_	+	+		to laugh, to eat, to play the	
						piano, to push a cart	
Accomplishment	+	+	+	+		to build a house, to write a	
		•		•		thesis, to walk to school	
Achievement	+	+	_	+		to win a game, to reach	
		•		•		the top, to depart	
Effectuateable	+	_	_	+		to tap, to knock,	
Semelfactive				•		to hit, to shoot	
State	_	_	+	_		to know the answer, to love	
						music, to be tall	
Dynamism	NAMISM + - +		_	to dream, to shiver,			
						to blow in the wind, to rain	
Process	+		+	_	+	to change, to grow, to darken,	
					'	to increase, to deteriorate	
Change	+	+	+	_		to die, to mature,	
						to fall down a glacier	
Instant	+ +	+		_		to discover, to find, to get an	
						idea, to explode	
Non-effectuateable	+	_	_	_		to sneeze, to blink, to flash	
Semelfactive						· · J	

 TABLE 3.4
 Situational taxonomy with [±AGENTIVE] and [±CONTROL] merged into [±EFF.BOUND] and added [±EVOLVING] (after Smith 1997; Lyons 1977; Dik 1997; Declerck 2006)

In the previous section, it was concluded that the core components of progressive aspectuality are *dynamicity* and *decomposability*—specifically, *medial phasality* (i.e. with backgrounded boundaries). In this section, the relation of the subject to these notions was analyzed in terms of the ability to *effectuate boundaries* outside of the medial phase. The paradigmatic instance of the progressive subject is able to effectuate those boundaries, and the paradigmatic instance of progressive aspectuality is thus a situation that is dynamic and decomposable and features such a subject. In terms of the taxonomy in Table 3.4, the prototypical situations selecting the progressive viewpoint are therefore [+DYNAMIC] (corresponding to the core component of *dynamicity*), [+DURATIVE] *or* [–DURATIVE] and [–TELIC] (corresponding to the core component of *decomposability*: punctual situations cannot generally be decomposed unless they are also atelic, i.e. iterable), and lastly [+EFF.BOUND] (corresponding to the core component of *boundary effectuation*). This makes it possible to formulate a somewhat detailed prediction on the situations aligning most closely with progressive meaning and those that deviate most from it in terms of the number of situational features that they have in common. Table 3.5 takes stock of the number of overlapping features, postulating that crosslinguistically, the situation types on the

left (more features in common) should be more felicitous with 'the progressive' than those on the right (fewer features in common). From the perspective of progressive *aspect* as manifested in language, Table 3.5 also posits that any given progressive form has a wider semantic range if it accepts more types (as seen from the left).⁴³

All features in common	Two features in common	One feature in common
Астічіту	Position	State
Accomplishment	Achievement	Instant
Effectuateable Semelfactive	Dynamism	
	Process	
	Change	
	Non-effectuateable Semelfactive	

 TABLE 3.5
 Predicted crosslinguistic range of progressive aspectuality in terms of situational features

The prediction in Table 3.5 captures various insights from the literature about progressive aspect, such as the idea that Activities and Accomplishments are most common with the progressive viewpoint (e.g. Boogaart 1999; Beekhuizen 2010; Lemmens 2015), as well as the observation that States typically resist progressivity. It is beyond the scope of thesis to test these predictions crosslinguistically, but this overview does make clear what the core meaning of progressive aspectuality as hypothesized presently entails empirically; future testing may therefore (in)validate (parts of) the present treatment of progressivity, both in the abstract and as applied to situational *aan*-PPs in Dutch.

3.2.4 A note on volition. This section has focused on synthesizing control and agentivity because these notions have previously been formalized in situational taxonomies. But there are also grounds to maintain that volition belongs to—or is at least strongly associated with—the paradigmatic instance of the 'progressive agent'. Beekhuizen, for instance, in examining the types of subjects occurring with [*zijn aan het* V_{INF}], defines the subject-role of agent in terms of "the volitionality of the instigation and the continuation of the action" (2010:107).

^{43.} Note that the distribution in Table 3.5 assigns the same relative weight to each of the three core components. However, there is no reason that, say, [±DYNAMIC] could not be more important than [±DURATIVE] (cf.fn.33). In my view, the relative importance of the hypothesized core components for the semantic structure of progressive aspectuality is a particularly interesting avenue for further research. Further research should take into account that progressive forms may impose different types of restrictions on the basis of the core components hypothesized here: they may impose disjunctive restrictions, for instance, i.e. that a situation exhibits either feature A or feature B or both A and B (cf. Bogaards 2020); or conjunctive restrictions, i.e. that a situation must exhibit both A and B.

The abstraction over $[\pm CONTROL]$ and $[\pm AGENTIVE]$ as $[\pm EFF.BOUND]$ —and the hierarchical relation between control and agentivity that this was shown to imply—makes it possible to relate volition more clearly and explicitly to control and agentivity. As was argued previously, agentivity is a property of the progressive subject, whereas control is a property of the relation of that subject to the situation, i.e. that the subject is able to effectuate temporal boundaries. I would argue that volition similarly qualifies the relation between subject and situation, but that instead of *ability*, it refers to the *willingness* of the subject to effectuate boundaries—or in the case of progressivity: that they are willing to refrain from effectuating the terminal boundary, thereby sustaining the situation. Control thus constructs possible worlds: the potential boundaries that could be effectuated by the progressive agent, while volition determines or at least strongly predicts which of those worlds will shape: whether the progressive agent will deploy their ability to effectuate boundaries, instigating a situation or sustaining it (or not). Control and volition are thus both *modal* specifications of [±EFF.BOUND]—specifically *dynamic modality* (cf. Perkins 1983), qualifying the position of the subject vis-à-vis the potential effectuation of boundaries in terms of ability and willingness, respectively.⁴⁴

Furthermore, it appears that control is tied more strongly to [±EFF.BOUND] than volition, since control, but not volition, is a necessary condition for a progressive viewpoint on an [+EFF.BOUND] situation: the entailment that the agent has control cannot be denied, whereas the entailment that the agent is volitionally sustaining the situation can be denied (although this is marked, raising questions such as: then why did they start in the first place and why do they not stop?). This is demonstrated with the English progressive in (23), which is a constructed example.

(23) He was reading a book, but actually he <#<u>was not able to read</u>> <<u>did not want to read</u>>.

In sum, I have argued here that [+EFF.BOUND] presupposes an agentive subject with the ability to effectuate temporal boundaries (i.e. control); the paradigmatic instance of progressivity also presupposes willingness to refrain from effectuating those boundaries (i.e. volition), which itself entails control, but volition is not a prerequisite for this. The hierarchy observed between agentivity and control thus extends to volition: volition implies control, but control does not imply volition. Put differently, ability is not contingent upon willingness, but willingness is

^{44.} Some approaches to modality (e.g. Hengeveld 1989; Nuyts 2016) consider willingness to belong to a different modal subtype, namely 'boulomaic modality' (p.c. Ronny Boogaart). Under such analysis, control and volition constitute dynamic and boulomaic specifications of [±EFF.BOUND], where the dynamic dimension is obligatory and the boulomaic dimension typical.

meaningless without ability. As a core component of progressivity, therefore, [±EFF.BOUND] is an abstraction over agentivity and control, as well as typically—but not necessarily—volition.

3.3 Pluractionality, situation-externality and non-gnomicity

Marchand (1955:47)—as cited by Binnick (1991:490)—writes about English that "the basic function of the Progressive Form is to denote one single action observed in the dynamic process of happening." This would seem to be a straightforward way, then, to distinguish progressivity from habituality, which by definition consists of a multitude of situations.

However, Lemmens (2015) shows (on the basis of two different progressive constructions in Dutch, including [*zijn aan het* V_{INF}]) that progressivity is not limited to a single, continuous situation "in a well-described spatio-temporal frame" (2015:5). Instead, progressives—[*zijn aan het* V_{INF}] in Lemmens' study in particular—may also outline a set of sufficiently equivalent situations, tied together by the cumulative effect that they are understood to bring about and the way that this occurs; the situation that the progressive viewpoint profiles in this case thus actually consists of multiple situations if a situation is understood as one uninterrupted aspecto-temporal entity (cf. also Vismans 1982, 1983). Using terminology from Bertinetto & Lenci (2012:853) the latter may be called 'micro-situations', which together make up a 'macro-situation'.⁴⁵

Examples from Lemmens (2015:30), featuring the Dutch [*zijn aan het* V_{INF}]-construction, are given in (24) and (25). In (24), the macro-situation 'working on the movie' is made up of at least two (and likely more than two) micro-situations 'working' that are spread out across four years; and in (25), the macro-situation 'destroying my own life' similarly consists of multiple micro-situations that the speaker considers to be cumulative, and as such add up 'slowly but surely' toward that destruction. In the words of Wood (2007:181), "a sequence of repetitions viewed as a single event can suggest a common result".

- (24) ... een film waaraan hij reeds vier jaar diskreet <u>aan het werken was</u>.
 a movie where.on he already four year discrete AAN the work.INF was.3SG
 '...a movie that he had already been working on discretely for four years.'
- (25) ... hoe ik mijn eigen leven langzaam maar zeker <u>aan het kapotmaken was</u>.
 how I my own life slow but sure aan the destroy.INF was.3SG
 '...how I was slowly but surely destroying my own life.'

^{45.} Bertinetto & Lenci (2012) actually distinguish between 'macro-events' and 'micro-events' in the context of pluractionality, but the term used in this thesis at this level of abstraction is 'situation'. Additionally, Bertinetto & Lenci's 'micro-event' corresponds to the term 'occasion' from Cusic (1981:67).

Lemmens (2015) calls cases in which the progressive profiles a macro-situation consisting of several micro-situations, like (24) and (25), 'processual', which refers to the build-up toward the 'common result' (in the sense of Wood 2007); Lemmens contrasts these with cases in which only one situation is profiled, which he calls 'situational'. (26) is an example of the latter case (Lemmens 2015:29) illustrated with one of the so-called posture progressives: [*staan te* V_{INF}], consisting of the posture verb *staan* 'to stand' and an infinitive denoting the situation that takes the progressive viewpoint, in (26) *loeien* 'to moo'. As Lemmens points out, the adjuncts of location (*aan de overkant* 'on the other side') and manner (*hevig* 'intense') make it clear that the situation in (26) takes place within a single time-frame—i.e. it constitutes one micro-situation.

(26) Aan de overkant van de sloot [...] <u>stond</u> een koe hen hevig toe <u>te</u> on the other.side of the ditch stood.3SG a cow them intense toward to <u>loeien</u>. moo.INF

'At the other side of the ditch, a cow was mooing to them intensely.'

It should be clear that Lemmens' choice of terminology ('situational' and 'processual') conflicts heavily with the terms used here: the former with *situational* as a type of viewpoint aspect(uality) as well as the type of *aan*-PP under study; the latter with *Processes* as in situations that are [+DYNAMIC][-TELIC][+DURATIVE][-EFF.BOUND][+EVOLVING]. The difference between the progressive situations in (24)/(25) ('processual') and (26) ('situational') is therefore better characterized in terms of *pluractionality*, i.e. whether a situation consists of one action or several repeated actions; this also makes it possible to relate and further distinguish progressivity from habituality in a way that appeals to one and the same notion—which on the whole, in my view, makes it a more suitable analytical concept for examining the phenomenon illustrated by (24)-(26) than Lemmens' 'situational' or 'processual' aspectual profile. On the one hand, this idea runs parallel to Ferreira's (2016) analysis of progressivity and habituality—which according to him "share the same temporal ingredients" (Ferreira 2016:368)—but on the other hand it runs contrary to his claim that they can be differentiated "in terms of verbal plurality", i.e. that "progressives are about singular events, and habituals are about plural events" (*ibid*:353). If progressives, like habituals, can profile macro-situations, while progressive aspectuality is also expressly defined as non-habitual (as was done in the previous section, following i.a. Comrie 1976), then clearly more is needed to distinguish them. The domain of pluractionality encompasses conceptual subdivisions that contribute to making this distinction.

'Verbal pluractionality' (a term originating with Newman 1980)—also called 'event plurality' has been characterized as the "verbal analog to nominal plurality" (Van Geenhoven 2004:142); definitions of the term 'pluractional' thus generally focus attention on "a single bounded event [...] repeated on several occasions" (Cusic 1981:67), "verbal action [...] characterized by one or another kind of multiplicity" (Gerhardt 1984:12), "the occurrence of multiple events" (Lasersohn 1995:241), "the same event repeat[ing] itself in a number of different situations" (Bertinetto & Lenci 2012:852) and "plurality of action or event" (Newman 2012:185). Leaving aside terminological differences (*action, event, occasion, occurrence, situation*), these definitions center around the plurality of the relevant aspecto-temporal entity at hand. As such, pluractionality stands in opposition to singular interpretations of situations, which are usually viewed as the 'default' case and consequently not generally assigned a special term. It is useful here to distinguish between pluractional and non-pluractional interpretations of progressives, which is why I will use the term 'uni-actional' for the latter type of interpretation (following Sherkina-Lieber & Armoškaite 2008).

Several semantic subdivisions can be made within the domain of pluractionality that are relevant to characterizing both progressive and habitual aspectuality. The first is, obviously, the distinction between uni-actional and pluractional situations. As mentioned previously, habituals are pluractional by definition, whereas progressives may be either—at least in Dutch, as was illustrated in (24)-(26), where (26) was an example of a uni-actional interpretation.

Within the domain of pluractional situations, then, the second relevant distinction that can be made is between situation-internality and situation-externality (Cusic 1981:67; Xrakovskij 1997; Šlunskij 2009:177).⁴⁶ That is to say: whether the plurality relates to the internal structure of a single situation (situation-internal), or to the aggregate structure of a macro-situation (situation-external), i.e. a situation that is comprised of several micro-situations (in the sense of Bertinetto & Lenci 2010, 2012). In that sense, situation-internal pluractionality is both pluractional (vis-à-vis plurality of repetition) and uni-actional (vis-à-vis the coherent construal of that repetition as a single, uninterrupted aspecto-temporal entity). Situation-internal pluractional interpretations are typical with iterated Semelfactives, especially constructed with the progressive viewpoint.⁴⁷ This is illustrated with Effectuateable and Non-effectuateable

^{46.} Actually, the original terms are 'event-internal' and 'event-external', but I am using the general term 'situation' at this level of abstraction (cf.fn.45).

^{47.} Note that situation-internal pluractionality is not so much a property of progressivity as a property of Semelfactives as such; Semelfactives need not be presented with the progressive viewpoint to receive a situation-internal pluractional (i.e. iterative) reading. Such a reading is always available, cf.e.g. *John knocked at the door for five minutes* and *The light flashed for five minutes*.

Semelfactives by the constructed examples below: in (27) and (28), the 'knocking' and 'flashing' are interpreted as situation-internally pluractional in that they profile a single situation (stretching across five minutes) that consists of a sufficiently consistent string of 'knocking' and 'flashing'. The difference with situation-external pluractional interpretations, such as the progressives in (24)-(25), is that each atomic subpart (i.e. every knock or flash) does not qualify as a 'situation' on its own.

(27)	John was knocking at the door for five minutes.	[Effectuateable Semelfactive]
(28)	The light was flashing for five minutes.	[Non-effectuateable Semelfactive]

Situation-external pluractionals profile a macro-situation that consists of micro-situations that do qualify as 'situations' in their own right. ⁴⁸ Both the pluractional interpretations of progressivity shown in (24)-(25) and habitual readings fall under this definition. The latter type of reading is illustrated by the constructed example in (29) below, in which the macro-situation 'playing soccer' is understood to consist of multiple micro-situations of 'playing soccer'. A Dutch example is (30), which features the specialized (albeit somewhat archaic) habitual construction [*plegen te* V_{INF}] (Boogaart & Bogaards *in prep.*).

- (29) She plays soccer every Wednesday.
- (30) Beckham nam zijn verantwoordelijkheid, zoals sterspelers <u>plegen</u> Beckham took.3SG his responsibility like star.players be.in.the.habit.of.3PL <u>te doen</u>. to do.INF
 'Beckham took his responsibility, as star players are wont to do.'

(WR-P-P-G-0000088196)

^{48.} This is not to say that the exact number (or length, distribution, nature, etc.) of the micro-situations making up that macro-situation is given: in fact, this is rather unclear in both the examples discussed here of pluractional progressivity (in (24)-(25), how many micro-situations of 'working' and 'destroying' are we dealing with?) and habituality (in (29), how many situations of 'playing soccer' have taken place, and in (30) which situations of 'taking responsibility' are meant?). Evidently, we can agree on specific scenarios that would or would not be appropriately described by these sentences: for example, buying a camera at one point in time, leaving it on a shelf only to use it four years later to film something for two seconds would not qualify as 'working on a movie for four years'—in that scenario, uttering (24) would arguably be deceitful—whereas spending two hours on the movie every day for four years would make (24) an fine description. But, as Comrie (1976:28) puts it, "between those two extremes, it is more difficult to determine precisely how often, and with what degree of regularity [...] this [would] make [for] an appropriate utterance". In the same line of thinking, Bertinetto & Lenci (2012:860) distinguish the features of 'reiteration specifiability' and 'determinability', arguing that habituals are non-specifiable and non-determinable.

The third and final relevant conceptual subdivision is that between gnomic and non-gnomic pluractionality; the term *gnomicity* or *gnomic imperfectivity* was coined by Bertinetto & Lenci (2012) and it refers to "expressing a generalization of some kind" (2012:860); more specifically, gnomic imperfectives "attribute a defining property to the intended referent(s)" (*ibid*:860). Thus habituals (e.g. (29)-(30)) are gnomic, since habits are essentially multiple equivalent situations construed as traits characteristic of the subject involved in them.⁴⁹ Conversely, situation-external pluractional progressives (e.g. (24)-(25)) are non-gnomic, as they profile multiple equivalent situations but do not generalize over them toward the conclusion of a typical trait.

As I see it, habituality is therefore more than the sum of its parts (i.e. its meaning is not just 'pluractionality + situation-externality'), and the conceptual 'surplus' is gnomic imperfectivity as conceptualized above. This surplus is derived from a generalization, as Bertinetto & Lenci (2012) point out, and this generalization presupposes certain characteristics, including a degree of regularity, continuity and non-accidentality. As such, gnomic pluractionality (i.e. habituality) brings with it an asymmetry between macro-situation and micro-situations: the latter are situations that a subject is involved in, whereas the former is specifically a property of that subject, i.e. a State (cf. Bertinetto 1994). In situational terms, the micro-situations may be dynamic (e.g. to play soccer one Wednesday afternoon) whereas the habit is static by definition (e.g. to be in the habit of playing soccer every Wednesday afternoon). Non-gnomic pluractionality (e.g. situation-external pluractional readings of progressivity) is, on the contrary, symmetrical, and simply the sum of its parts: every micro-situation (e.g. working on the movie one afternoon) corresponds to the macro-situation (e.g. working on the movie for four years) and vice versa.

An interesting situational class for the progressive viewpoint in this respect are Processes, which—because they are [+EVOLVING]—exhibit gradual development and therefore do not break up as clearly into micro-situations as, say, Activities or Accomplishments with a progressive viewpoint and situation-external pluractional interpretation, even if progressive Processes generally extend beyond the kind of time-frame that Lemmens (2015) would call 'situational' (i.e. uni-actional). To illustrate the contrast, (31)-(32) provide constructed examples of a progressive Activity interpreted pluractionally, and an 'extended' progressive Process, respectively. The macro-situation of 'recording songs' in (31) is clearly atomic, being composed of micro-situations of 'recording', whereas the situation of 'decreasing' in (32) is more fluid. Notably, the

^{49.} Bertinetto & Lenci (2012) regard gnomic imperfectivity as a broader class, conceptualized as a continuum with [±PLURACTIONAL] and [±GNOMIC] as gradient conceptual parameters. Other types of expressions belonging to the gnomic class, according to them, include Individual Level predicates (e.g. *Elina is Finnish*) and generics (e.g. *Dogs have four legs*) (*ibid*:860), which do not presuppose situational plurality but do constitute generalizations.

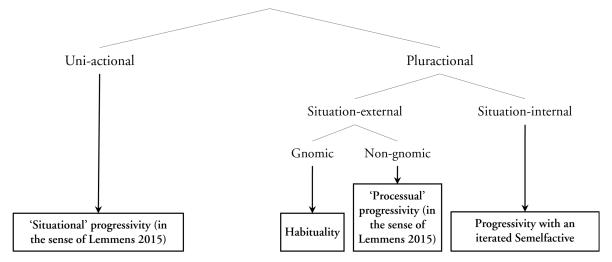
situational class of Instants—which share with Processes being [+DYNAMIC][-EFF.BOUND] rather resemble Processes when presented progressively, except that they are more atomic: (33) (from Beck 2012:57) illustrates that, at the level of the macro-situation, there is a kind of gradual development ('getting more and more expensive') but this development can be traced back to specific punctual micro-situations ('to increase in price once'). Beck (2012) calls cases like (33) 'pluractional comparisons' because the Process reading is derived from comparing members belonging to a set of Instants. Despite their apparent resemblance, cases like (32) are thus uniactional while cases like (33) are pluractional.

- (31) From July to September, he is recording songs for his new album. [*Pluractional Activity*]
 (32) From July to September, the temperature is decreasing. [*Uni-actional Process*]
- (33) Nutella was getting more and more expensive.

['Pluractional comparison': Instant construed as Process]

The distribution of progressive interpretations over the domain of pluractionality—as structured by the three conceptual subdivisions discussed here—is summarized schematically in Figure 3.1.

FIGURE 3.1 Types of imperfective interpretations in the pluractional domain (progressive and habitual)
Pluractionality



In conclusion, progressive aspectuality is not limited to (nor distinguishable from habituality via) uni-actionality, as Ferreira (2016) claims. Instead, habituals are by definition pluractional, situation-external and gnomic, while progressivity, in addition to uni-actionality, covers both

situation-internality and situation-externality and—most importantly—is non-gnomic.⁵⁰ Seeing as uni-actionality and situation-internal pluractionality are non-gnomic by definition (since generalizing requires several micro-situations), *non-gnomicity* can be considered a fourth and final core component of progressivity, in addition to the three components distinguished previously.

3.4 Summary: Four components of progressive meaning

This chapter has defined progressive aspectuality as a subtype of imperfectivity, and has identified and explored four core components of progressive semantics, understood as follows:

- **I. DYNAMICITY.** Progressive aspectuality presupposes that a given situation has a heterogeneous and non-contractible temporal structure;
- 2. DECOMPOSABILITY (MEDIAL PHASALITY). Progressive aspectuality decomposes a situation into at least three phases (initial-medial-terminal) and foregrounds the medial phase (immediate scope) while backgrounding the residual phases (maximal scope), i.e. defocusing boundaries;
- 3. **BOUNDARY EFFECTUATION.** Progressive aspectuality presupposes the ability of the subject (i.e. the 'progressive agent') to effectuate the boundaries within maximal scope;
- 4. **NON-GNOMICITY.** Progressive aspectuality may produce uni-actional or pluractional interpretations, the latter of which may be situation-internal or situation-external; situation-external pluractional interpretations of progressive aspectuality are by definition non-gnomic (i.e. do not entail a generalization over micro-situations in the direction of a defining property of the subject involved in those situations).

The first and third components distinguish progressivity from non-progressive continuous aspectuality (which are underspecified for dynamicity and do not presuppose the subject's ability to effectuate boundaries); the fourth component (implying all components) distinguishes progressivity from habituality (which is gnomic—ergo stative, non-decomposable, and not presupposing potential boundary effectuation). Following Lyons (1977), these four core components are theorized to be characteristic of the 'paradigmatic instance' of progressive aspectuality, but crosslinguistically, progressive aspects may assign a different weight to (combinations of) each of these components, resulting in potentially varying restrictions imposed by the progressive aspects that languages have. The maximal cluster of semantic components

^{50.} As a gnomic type of aspectuality, habituality is furthermore non-dynamic (the generalization is attributed as a property, i.e. a kind of State) and non-decomposable (habits do not by themselves presuppose decomposition into initial, medial and terminal phases); consequently, habituality does not imply potential boundary effectuation, which operates on a structure in which the boundaries are within maximal scope—which itself results from decomposition. On the other hand, gnomicity and decomposability do have in common that they imply unboundedness: in this sense, they constitute different ways of 'arriving at' an unbounded perspective.

does predict which situation types are most typical with a progressive viewpoint, i.e. Activities and Accomplishments, which aligns with what is known about progressivity in the literature. Regarding the relation of progressivity to imperfectivity: if (im)perfectivity is defined in terms of (un)boundedness—i.e. if *perfective* is understood primarily as 'all temporal boundaries in view' and *imperfective* as 'fewer than all temporal boundaries in view'—then the notions of 'imperfective' and 'unbounded' overlap in principle, except that imperfectivity (or: the imperfective domain) encompasses a larger set of notions, including at least 'decomposability', 'gnomicity' and 'boundary effectuation'. In other words, a given imperfective viewpoint may be a cluster of the properties 'unbounded', 'decomposable' and 'potential boundary effectuation' (i.e. progressive aspectuality) or the properties 'unbounded' and 'gnomic' (i.e. habitual aspectuality), whereas unboundedness is a more specific concept that is implicated by notions such as decomposability and gnomicity, but not made up by them.

This general view is schematized in Figure 3.2, which represents the implication of one notion by another through the upward vertical alignment of the boxes (e.g. boundary effectuation presupposes decomposability, which in turn presupposes unboundedness), and the types of imperfective aspectuality constituted by these notions by way of the arrows below them. Notions that are horizontally aligned (i.e. decomposability and gnomicity) are considered mutually exclusive. Note that the set of notions included in Figure 3.2 is not meant as an exhaustive list of conceptual parameters shaping the imperfective domain.

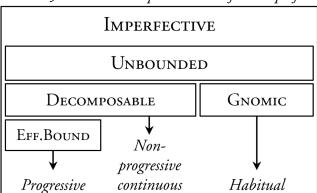


FIGURE 3.2 Schematic representation of the imperfective domain: Notions and types of aspectuality

The main aim of this section as a whole was to gain an *in abstracto* understanding of the core semantic components of progressivity, so that a critical and detailed analysis could be conducted of the (semi-)aspectual semantics of situational *aan*-PPs in Dutch. The next chapter will apply this understanding to situational *aan*-PPs: first [*zijn aan het* V_{INF}], then [*aan het* V_{INF}], [*aan de* V_{STM}] and [*aan* DET N].

Chapter 4 Beyond progressive aspect

I have argued in the previous chapter that progressive aspectuality consists of at least four semantic components: dynamicity, decomposability (specifically, medial phasality), boundary effectuation and non-gnomicity. It was hypothesized that—using a term from Lyons (1977)— 'paradigmatic instances' (i.e. prototypical manifestations in language) of progressive meaning exhibit all of these components, but that language-specific progressive forms may assign different weight to these components (which, as an empirical phenomenon, may also serve as way of (in)validating (parts of) the present hypothesis of progressive semantics).

This chapter relates the Dutch situational *aan*-PPs to this conception of progressive aspectuality: first to [*zijn aan het* V_{INF}], which has been widely analyzed as a progressive construction (§4.1), then to situational *aan*-PPs in general, focusing on the aspectual contribution of the main verbs (§4.2) and types of complement (§4.3).

4.1 [Zijn aan het V_{INF}] as a progressive construction

As has been pointed out in the previous chapters, [*zijn aan het* V_{INF}] is the most widely studied situational *aan*-PP in Dutch by a considerable margin, with many previous studies mainly emphasizing its progressive semantics (e.g. Anthonissen et al. 2019; Beekhuizen 2010:101-138; Behrens et al. 2013; Bertinetto et al. 2000; Boogaart 1991, 1999; Booij 2010:146-168; Ebert 2000; Lemmens 2005, 2015; Van Pottelberge 2004, 2007; Vismans 1982—cf.fn.6 in §1.1 for an attempt at a comprehensive overview). What progressivity entails precisely—conceptually and as manifested in [*zijn aan het* V_{INF}]—is not generally explored beyond definitions à la Comrie (1976) (i.e. 'continuousness' and 'dynamicity') and Langacker (2001) (i.e. 'scope' or 'boundary defocusing'), sometimes combined with informal applications of notions like a 'controlling' or 'volitional agent' (cf.§3.2). It is therefore useful to take a critical look at the 'progressivity' of [*zijn aan het* V_{INF}] in light of the components of progressive meaning postulated in §3.4, both with regard to the situation types (typically) occurring in the construction's infinitival slot, and in relation to potential coercion (aspectual type shift) brought about by the construction. The examination of [*aan het* V_{INF}]'s 'selection and shift' (§4.1.2) is preceded here by a brief discussion of previous work on the construction's selectional behavior (§4.1.1).

4.1.1 Previous work. A very basic example of $[zijn \ aan \ het V_{INF}]$ is shown in (34) (from Boogaart 1991:1). As Boogaart observes, the use of $[zijn \ aan \ het V_{INF}]$ in (34) indicates that the situation denoted by the infinitive (i.e. *een brief schrijven* 'to write a letter') "is presented as being in progress [...]; the letter is not claimed to have been finished" (1991:1).

(34) Jan was een brief aan het schrijven. Jan was.3SG a letter AAN the write.INF'Jan was writing a letter.'

Similarly, Lemmens (2015:6) describes the import of a sentence like (34) as "een aan de gang zijnde [...] situatie" ('an ongoing situation'), while Van Pottelberge (2007:123) calls it "event in progress" and Mortier (2008:6) "action in progress". Other studies (e.g. Beekhuizen 2010; Booij 2010; Bogaards 2019*a*) do not really attempt to define [*zijn aan het* V_{INF}]'s progressivity conceptually, instead illustrating the concept with the pattern itself.

Previous corpus research into the semantics of [*zijn aan het* V_{INF}] has examined the properties of the subject argument (Beekhuizen 2010) and infinitive (Beekhuizen 2010; Lemmens 2015), as well as adverbial adjuncts occurring with it (Lemmens 2015). Lemmens' examination of the ('processual') adverbs typically paired with [*zijn aan het* V_{INF}] has already been discussed in §3.3 in view of situation-external pluractional interpretations of the construction and will therefore not be discussed here.

With regard to the subject, Beekhuizen (2010:107-109) codes 753 attested instances of [*zijn aan het* V_{INF}] for what he calls 'agentivity' and 'empathy'. Beekhuizen connects the subject's agentivity to "volitionality of the instigation and the continuation of the action" (2010:107), coding three types of subjects: agents (e.g. *She is yelling*), themes (i.e. theme, e.g. *She is sleeping*) and experiencers (e.g. *She is thinking*). As noted previously (§3.2.4), volition is regarded here as secondary to control when it comes to potential boundary effectuation by the subject. Beekhuizen's classification can therefore be reframed in terms of [+EFF.BOUND] (agents) and [-EFF.BOUND] (themes and experiencers). Using these terms, out of the total 753 instances in Beekhuizen's corpus, 605 (80.3%) are [+EFF.BOUND], while 148 (19.7%) are [-EFF.BOUND] (cf. Beekhuizen 2010:108), suggesting that [*aan het* V_{INF}] exhibits the core component of boundary effectuation the majority of the time.⁵¹ The second notion Beekhuizen applies to the subject is

^{51.} As a point of reference: in Beekhuizen's data, out of the 1236 total attestations of the posture progressive (i.e. [*zitten/staan/liggen te* V_{INF}]), 667 (54%) are [+EFF.BOUND] (cf. Beekhuizen 2010:108). I would not claim that this makes [*aan het* V_{INF}] 'more progressive', but it does suggest a certain affinity between this component of progressive aspectuality on the one hand, and the progressive aspect observed in [*aan het* V_{INF}] on the other.

their 'empathy level', which he understands as types of subject differentiated by level of animacy (e.g. the speaker or hearer (animate) or, alternatively, animals or abstract entities (inanimate)). I will not go into this notion here because it is not a component of progressive meaning as conceptualized presently, although the [±EFF.BOUND] status of some verbs does seem to be conditioned by the subject's animacy (cf.fn.34).

Beekhuizen (2010) and Lemmens (2015) both examine the situation aspect (cf.§3.1.1) of the verbs occurring in [*zijn aan het* V_{INF}]'s infinitival slot: Beekhuizen employs the Vendlerian-Smithian taxonomy (i.e. Table 3.1 in §3.1.1), to which—drawing on Boogaart (1999)—he adds the class of 'gradual completion' (Beekhuizen 2010:110), i.e. the class called Processes in Table 3.4 (§3.2.3). Lemmens (2015) uses a more elementary Vendlerian taxonomy, distinguishing only States, Activities, Accomplishments and Achievements. The authors classify a set of attested sentences featuring [*aan het* V_{INF}] (the former 753, the latter 1040 items) according to a situational taxonomy (the former sexpartite, the latter quadripartite). Putting their classifications side by side in percentual terms produces the overview shown in Table 4.1.⁵²

Situational class	Beekhuizen (2010:112)	Lemmens (2015:24)
State	3.9%	0%
Activity	67.9%	49.2%
Process	9.2%	
Accomplishment	15.3%	18.9%
Achievement	3.7%	31.8%
Semelfactive	0.1%	

TABLE 4.1 Situation aspect of infinitives occurring in [zijn aan het V_{INF}] in previous corpus studies

The differences between Beekhuizen's and Lemmens' results are striking: other than a similar figure for Accomplishments, and the fact that Activities are most frequent (albeit with a 18.7% gap, or even 27.9% if Processes are included), the outcomes are rather conflicting. Beekhuizen's outcomes are most consistent with the account of progressive meaning given presently (§3.4), as [+DYNAMIC][+DURATIVE] situations (i.e. Activities and Accomplishments) make up the majority (83.2%). This is also the case for Lemmens (68.1%), except that almost a third of his annotations are [-DYNAMIC][-DURATIVE] (31.8%), i.e. have fewer than two components in common with the paradigmatic instance of progressivity. Moreover, Lemmens' figure for States (0%) suggests that [*zijn aan het* V_{INF}] excludes stative situations categorically, whereas in Beekhuizen's data, they are

^{52.} Although Lemmens is not very clear on this point, I have assumed that his classification as Activity subsumes Beekhuizen's 'gradual change' category—which is called 'Process' in Table 3.5, following earlier terminology because Activities and Processes only differ with regard to [±EFF.BOUND]. The same goes for Achievements and Semelfactives, which are traditionally taken together if the latter is not distinguished as a separate class.

rare (3.9%) but still more frequent than Achievements and Semelfactives combined (3.8%). It thus seems that the selectional behavior of [*zijn aan het* V_{INF}] in terms of situation aspect is an unresolved matter.

4.1.2 Selection and shift. As a way of building upon the work discussed in the previous paragraph, and thereby shed some more light on the analysis of [*zijn aan het* V_{INF}] as a progressive construction, this section will apply the taxonomy from Table 3.4 to the construction in qualitative terms, examining which situation types can occur in the infinitival slot, and what kinds of aspectual type shift can be observed. The discussion will follow the order 'more typical' to 'less typical' as postulated by Table 3.5 (§3.2.3), which is repeated more concisely in (35).

 (35) Most typical: Activities, Accomplishments and Effectuateable Semelfactives Less typical: Positions, Achievements, Dynamisms, Processes, Changes and Non-effectuateable Semelfactives Least typical: States and Instants

As pointed out above (and shown by Beekhuizen's and Lemmens' corpus analyses), most typical for progressivity in the abstract *and* to the Dutch construction [*zijn aan het* V_{INF}] are Activities and Accomplishments. In addition, (35) postulates that Effectuateable Semelfactives are typical cases, although this is not reflected quantitatively in Beekhuizen's and Lemmens' data. It is clear, though, that all three situation types are highly compatible with [*zijn aan het* V_{INF}], as demonstrated by the Activity *spelen* 'to play' in (36), the Accomplishment *een huis bouwen* 'to build a house' in (37), and the Effectuateable Semelfactive *slaan* 'to strike' in (38). As the examples illustrate, the situation structure of Activities and Accomplishments is unaffected by [*zijn aan het* V_{INF}]. It does force an iterative (i.e. Activity-like) reading with Effectuateable Semelfactives (e.g. (38) profiles at least two strikes), but this can hardly be considered a type shift, as the potential for iteration is a defining feature of Semelfactives in the first place (cf.fn.47). I will thus not consider cases like (38) type-shifts, because the iterative interpretation is also available (and often likely) without a phasal construction like [*zijn aan het* V_{INF}].⁵³

^{53.} An account in which iterated interpretations of Semelfactives embedded in [*zijn aan het* V_{INF}] constitute Effectuateable-Semelfactive-to-Activity (or Non-effectuateable-Semelfactive-to-Dynamism) type-shifts is, in principle, compatible with the account given here. A major disadvantage of such an account, however, is that it would 'downgrade' Semelfactives in terms of their status as 'typical candidates' for progressive aspectuality (as represented in (35)). Effectuateable Semelfactives would go down one step to 'less typical' candidates and Noneffectuateable Semelfactives down one step to the 'least typical' ones. This would not do justice to the observation that Semelfactives are highly compatible with progressive aspectuality due to their potential for iteration, which—as pointed out previously—is not a property of phasal or progressive constructions, but of the situation type itself. Put very concretely, putting Non-effectuateable Semelfactives on the same level of 'typicality' as States and Instants (which are highly incompatible with [*zijn aan het* V_{INF}], cf. below) is simply descriptively inadequate.

(37) We wonen momenteel nog in de Sint-Pietersstraat, maar zijn een huis aan we live.IPL at.the.moment still in the Sint-Pieter.street but be.IPL a house AAN het.bouwen in de Hangarstraat. [Accomplishment] the build.INF in the Hangar.street

'We are still living on Sint-Pieter street at the moment, but we are building a house on Hangar street.' (WR-P-P-G-0000683081)

(38) Die smeerlap was Bertie aan het slaan, Raymond. [...] Hij speelt altiid that bastard was.3SG Bert.DIM AAN the strike.INF Raymond He play.3sG always hijweg. Didier had hemmeegenomen. Hij was hem braaf. Ineens was well-behaved suddenlywas.3SG he gone Didier had him take.PCP he was.3SG hem <u>aan het slaan</u>. [*Effectuateable Semelfactive*] him AAN the strike.INF

'That bastard was striking little Bert, Raymond. He always plays nicely. Suddenly he was gone. Didier had taken him. He was striking him.' (WR-P-E-G-0000006259)

Next, situations that are [+DYNAMIC][+DURATIVE] (or [+DYNAMIC] but [-DURATIVE][-TELIC], i.e. potentially decomposable through iteration) and only diverge from the paradigmatic instance of progressivity in being [-EFF.BOUND], are similarly felicitous with [*zijn aan het* V_{INF}]. This concerns Dynamisms, Processes, Changes and Non-effectuateable Semelfactives, which are illustrated in (39)-(42) below. Non-effectuateable Semelfactives behave analogously to their effectuateable counterparts, forcing an iterative reading (e.g. similarly to (38)'s strikes, (42) profiles at least two sneezes). What is notable, then, about not only Non-effectuateable Semelfactives but also Dynamisms, Processes and Changes, is that [*zijn aan het* V_{INF}] does not alter their situational structure—they remain [-EFF.BOUND]: *regenen* 'to rain', *groeien* 'to grow', *worden* 'to become' and *sneeze* 'to sneeze' do not presuppose the subject's ability (let alone willingness) to initiate or terminate the situation, even when combined with [*zijn aan het* V_{INF}].

[Dynamism]

(39) Als ze zeggen dat het zomer is, maar je toch duidelijk ziet dat het if theysay.3sG that it Summer be.3sG but you PRT clear see.2sG that it

aan het regenen is. AAN the rain.INF be.3SG

'When they say it's Summer, yet you can clearly see it's raining.'

(WR-P-E-L-000000196)

(40) Je ziet dat mobiel internet momenteel zó snel <u>aan het groeien is</u> dat you see.2sG that mobile internet at.the.moment so quick AAN the grow.INFbe.3sG that de 'ouderwetse' radio nu echte concurrentie krijgt. [*Process*] the old.fashioned radio now real competition get.3sG
'You can see that mobile broadband is growing so quickly at the moment that 'old

fashioned' radio is getting some proper competition now.' (WR-P-E-C-0000010748)

(41) Anderen vrezen dat China stilaan daarentegen een nieuwe militaire on.the.other.hand that China gradually a others be.afraid.3PL new military grootmacht aan het worden is, die de Verenigde Staten naarde kroon superpower AAN the become.INF be.3SG that the United States to the crown zal willen steken. [Change] will.3SG want.to.INF stab.INF

'Others are afraid, on the other hand, that China is gradually becoming a new military superpower that will want to rival the United States.' (WR-P-P-H-0000054683)

(42) Ook was ze vanochtend weer aan het niezen. Ik hoop niet dat er also was.3SG she this.morning again AAN the sneeze.INF I hope.ISG not that EXS weer een verkoudheid aankomt. [Non-effectuateable Semelfactive] again a cold approach.3SG
 'She was also sneezing again this morning. I hope she isn't catching a cold again.'

(WR-P-E-A-0006450778)

It thus seems that dynamicity and/or durativity are more central to [*zijn aan het* V_{INF}] than boundary effectuation: if a situation is [+DYNAMIC][+DURATIVE] (or [+DYNAMIC][-DURATIVE] [-TELIC]), it need not be [+EFF.BOUND] to combine with [*zijn aan het* V_{INF}]. This has been pointed out previously specifically for gradual change (Boogaart 1999), but as (39) and (42) show, the situation does not have to be [+EVOLVING] either. Boogaart's question "what the common denominator is of agentive situations and non-agentive gradual changes that justifies the use of one and the same form" (1999:183) therefore requires a wider scope: when it comes to [-EFF.BOUND] situations, the combinatory range of [*zijn aan het* V_{INF}] covers both changing and non-changing (i.e. [±EVOLVING]) situations, which suggests that the common denominator Boogaart is looking for is not so much "change" as it is "dynamicity" (*ibid*.).

Since all situations combining with [*zijn aan het* V_{INF}] discussed up to now are not only [+DYNAMIC] but also [+DURATIVE] (or [-DURATIVE][-TELIC]), it is not yet clear whether the conspicuous absence of an [±EFF.BOUND] requirement illustrated in (39)-(42) should be attributed solely to dynamicity (as Boogaart seems to suggest) or also to durativity. The classes of Achievements and Instants are [+DYNAMIC][-DURATIVE], and differ only with regard to [±EFF.BOUND], being [+EFF.BOUND] and [-EFF.BOUND], respectively. Instants thus belong to the 'least typical' candidates for progressivity, having fewer than two components in common with the paradigmatic instance of progressive aspectuality as hypothesized presently.

If durativity is a relevant factor in loosening the [±EFF.BOUND] requirement, then Achievements but not Instants should be felicitous with [*zijn aan het* V_{INF}]. As it turns out, this prediction appears to be substantiated to a large degree: Achievements are considerably less marked and more systematically interpretable than Instants when inserted into the infinitival slot. That is, Achievements (which profile a punctual situation with a resultant state effectuated by the subject involved in it) undergo a systematic type shift to Accomplishments as [*zijn aan het* V_{INF}] additionally profiles the so-called 'preparatory phase' (Moens & Steedman 1988), i.e. the durative situation leading up to the 'culmination' (*ibid.*) profiled by the Achievement itself. Thus, in (43), for example, *vertrekken* 'to depart' is punctual by itself, profiling the punctual transition from still being somewhere to having departed; combined with [*zijn aan het* V_{INF}], however, the preparatory steps leading up to that transition (e.g. in (43) the whistle being blown, the train doors closing, the wheels getting in motion, and so on) are also part of the construal, producing an aspectual type shift to an Accomplishment.

(43) Vorig jaar raakten in Dinant al een treinbegeleider en een reiziger previous year got.3PL in Dinant already a train.conductor and a passenger zwaargewond toen ze onder een trein terechtkwamen die <u>aan het vertrekken</u> seriously.injured when they under a train ended.up.3PL that AAN the depart.INF <u>was</u>. [Achievement > Accomplishment] was.3SG

'Last year, a train conductor and a passenger already got seriously injured in Dinant when they ended up under a train that was departing.' (WS-U-E-A-0000386869)

A key factor in the availability of such a preparatory phase, it seems, is whether the situation is [±EFF.BOUND]. After all, taking preparatory steps building up to the effectuation of boundaries—

which for Achievements and Instants make up the entire situation as their initial and terminal boundaries coincide—presupposes that one has the ability to effectuate them. The very notion of preparation for a situation is thus predicated upon that situation being [+EFF.BOUND]. This idea is reflected by the strong markedness (or even unacceptability) of constructed examples like (44b) and (45b) featuring the Instants *vinden* 'to find' and *een briljant idee krijgen* 'to get a brilliant idea', which precisely presuppose that the Activities that could potentially culminate in them (viz. *zoeken* 'to search' and *heel hard nadenken* 'to think very hard' in (44a)-(45a)) take a subject that does not have the ability to effectuate the terminal boundary corresponding to the initial (and terminal) boundary of that culmination (i.e. the Instant itself, which is thus [-EFF.BOUND]).⁵⁴

(44) a. Drie jongens van tien <u>waren</u> in het park kastanjes <u>aan het zoeken</u>. [Activity] three boys of ten were.3PL in the park chestnuts aan the search.INF

'Three boys aged ten were looking for chestnuts in the park.'

(WR-P-E-G-000003602)

	b.	*Ze <u>waren</u> they were.3						[Instant]
		(Intended: "	They w	vere finding	g the c	hestnut	s.')	
(45)	a.	Okeej ik okay I						[Activity]

'Okay... I'm thinking very hard right now.' (WR-P-E-L-0000000173)
b. *Ik <u>ben</u> een briljant idee <u>aan het krijgen</u>. [Instant]
I be.ISG a brilliant idea AAN the get.INF
(Intended, 'I am getting a brilliant idea right now.')

(Intended: 'I am getting a brilliant idea right now.')

Two situation types remain: Positions and States, which are [-DYNAMIC] and --parallel to Achievements and Instants-distinguished by being [+EFF.BOUND] and [-EFF.BOUND]respectively. The question raised by the behavior of Achievements and Instants in (43)-(45) is whether dynamicity, like durativity, is a relevant factor in loosening the [+EFF.BOUND]requirement. If so, it is to be expected here that Positions are more felicitous with [*zijn aan het* V_{INF}] than States, which like Instants are the farthest removed from the paradigmatic instance of progressivity with fewer than two shared components. Indeed, Positions appear to combine with

^{54.} Note that the English translations of (44b) and (45b) are less marked, which suggests that the English progressive (i.e. [*be* V-*ing*]) has a wider range than [*zijn aan het* V_{INF}] when it comes to [±DURATIVE] and [±EFF.BOUND].

[*zijn aan het* V_{INF}] more straightforwardly than States—compare for instance the attested examples with the Positions *in de zon liggen* 'to lie in the sun' and *bloot zijn* 'to be naked' in (46ab) with the unacceptability of the States *het antwoord weten* 'to know the answer' and *van hedendaagse klassieke muziek houden* 'to love contemporary classical music' in the constructed examples in (47a-b).⁵⁵ Note that in (46), similarly to the type shift from Achievement to Accomplishment illustrated in (43), the Positions are interpreted with coerced dynamicity, i.e. they are type-shifted to Activities. Achievements and Positions thus function analogously in the sense that their respective 'deviant' [-DURATIVE] and [-DYNAMIC] properties are reinterpreted to align with the [+DURATIVE][+DYNAMIC] semantics ensuing from progressive decomposability and dynamicity.

- (46) a. Lekker in de zon <u>aan het liggen</u>, wat een hitte. [Position > Activity] delicious in the sun AAN the lie.INF what a heat
 'I'm lounging around in the sun, it's so hot.' (WR-P-E-L-000000029)
 - b. Gelukkig was het voor ons beiden "gênant" gezien we samen luckily was.3sG it for us both embarrassing considering we together
 <u>bloot aan het zijn waren</u>, maar echt leuk vond ik het niet. naked AAN the be.INF were.IPL but really fun found.ISG I it not [Position > Activity]
 'Luckily it was "embarrassing" for the bath of we considering that we were being realled

'Luckily it was "embarrassing" for the both of us considering that we were being naked together, but I didn't exactly enjoy it.' (WR-P-E-A-0005581171)

(47) a. Die vraag is makkelijk voor mij. *Ik <u>ben</u> het antwoord <u>aan het weten</u>. that question be.3SG easy for me I be.ISG the answer AAN the know.INF [*State*]

'That question is easy for me.' (Intended: 'I am knowing the answer.')

b. De laatste tijd luister ik veel naar Cage, Glass en Adams. *Ik <u>ben van</u> the latest time listen.ISG I a.lotto Cage Glass and Adams I be.ISG from hedendaagse klassieke muziek <u>aan het houden</u>. [*State*] contemporary classical music AAN the love.INF

'Lately I've been listening a lot to Cage, Glass and Adams.' (Intended: 'I am loving contemporary classical music.')

^{55.} Note that (46a) features pro-drop as well as verb-drop; I have assumed that the first person pronoun and the corresponding form of the verb *zijn* 'to be' (i.e. *ben* 'am') were dropped, as this—to my mind, at least—is the only possible interpretation of (46a). Furthermore, the combination of *lekker liggen* 'lit. deliciously lying' is highly unidiomatic in English and was therefore approximated with the verb *to lounge around* (which itself reflects the increased dynamicity of (46a) brought about by the aspectual type shift).

However, this is not to say that all Positions combine with [*zijn aan het* V_{INF}] without problems, nor that States can never be paired with it. In the constructed example (48), for instance, *geloven* 'to believe' is a Position (one has the ability to believe or disbelieve someone or something), yet strongly resists combining with [*zijn aan het* V_{INF}]. I would argue that this points in the direction of a gradient understanding of [±EFF.BOUND] for stative predicates: although the subject of a Position has the ability to effectuate the stative situation's boundary, such effectuation may be easier or more straightforward for some Positions (e.g. 'lying down' or 'standing up' for 'lying in the sun', and 'getting (un)dressed' for 'being naked' in (46a-b)) than for others (e.g. 'believing': it is not as directly clear how one would go about initiating or terminating a belief).

Conversely, as example (49) (from Boogaart 1999:175) shows, States are not entirely excluded from combining with [*zijn aan het* V_{INF}], although this does require a special interpretation in which—in the words of Boogaart—entails that "we interpret the subject referent [...] as someone who is rather busy being, or trying to look like" (1999:176) whatever the State denotes, e.g. in (49) "trying to look like [...] a good teacher" (*ibid.*).⁵⁶ As Boogaart points out, this marked interpretation also implies that the situation "is not conceptualized as a [S]tate at all, but rather as an [A]ctivity" (*ibid.*), i.e. a type shift not from Position but from State to Activity. This is striking because this did not appear possible for Instants (cf. (44)-(45)), the [–DURATIVE] and [+DYNAMIC] mirror image of States.

(48) Ik kies ervoor om je te geloven. *Dus ik <u>ben</u> je <u>aan het geloven</u>. I choose.ISG EXS.for for you to believe.INF so I be.ISG you AAN the believe.INF [Position]

'I'm choosing to believe you.' (Intended: 'So I am believing you.')

(49) 'Mary was een goeie lerares aan het zijn. [State > Activity]
Mary was.3SG a good teacher AAN the be.INF
'Mary was being a good teacher.'

This raises the question: why is reinterpreting an Instant from [-DURATIVE][-EFF.BOUND] to [+DURATIVE][-EFF.BOUND] problematic with [*zijn aan het* V_{INF}], whereas a State reinterpretation from [-DYNAMIC][-EFF.BOUND] to [+DYNAMIC][-EFF.BOUND] does seem possible? This can be explained with a further conceptual distinction employed by Boogaart (1999) between so-called *stage-level* and *individual-level predicates* (from Carlson 1977), which refers to whether a predicate

^{56.} This interpretation appears to be more compatible with the posture progressive, i.e. *Mary zit/staat een goeie lerares te zijn* 'Mary is being a good teacher'. But to my intuitions it is also possible with [*zijn aan het* V_{INF}]. This may be related to the observation that [+EFF.BOUND] is a stronger component of the posture progressive (cf.fn.60).

is construed to hold more temporarily (*stage-level*, e.g. *to be hungry*) or more permanently (*individual-level*, e.g. *to be tall*). Connecting this conceptual distinction to the present terminology, it is closely related but not equivalent to [±EFF.BOUND]: all [+EFF.BOUND] situations are, by definition, stage-level predicates, since the ability (let alone willingness) to effectuate boundaries presupposes a construal in which those boundaries exist, i.e. a temporary construal. If the focus is limited to the situation types under discussion here, Positions and Activities are always stage-level, whereas States may be either stage-level or individual-level.

This distinction is relevant because the specific State-to-Activity type shift illustrated by (49) is only possible with stage-level States (Boogaart 1999:174-178), or at least States that in some way allow a stage-level construal. Such a construal is essential for a dynamic interpretation of States (i.e. as an Activity) because the dynamicity is derived specifically from the "rather busy being, or trying to look like"-semantics observed by Boogaart (1999:176). I would propose to call this semantics 'performative': a State combined with [*zijn aan het* V_{INF}] can be conceptualized as [+DYNAMIC] because it is no longer understood as an *attributed* property but as a *performed* one. And *performance*—like *preparation* for Achievements—presupposes the ability to effectuate boundaries (i.e. to start or stop performing), while boundary effectuation, in turn, is contingent upon the existence of those boundaries (i.e. the State being stage-level). Under this analysis, State-to-Activity type shift is thus a twofold operation: potential boundaries are reinterpreted as effectuateable through the semantics of performance ([-EFF.BOUND] > [+EFF.BOUND]), while the act of performing itself entails dynamicity (i.e. [-DYNAMIC] > [+DYNAMIC]).⁵⁷

When combined with stage-level States and Positions, [*zijn aan het* V_{INF}] thus coerces dynamicity, just like it coerces durativity with Achievements (but generally fails to do so with Instants). And crucially, those coercions are brought about by systematic reinterpretations (performance and preparation) that are predicated upon the situation being [+EFF.BOUND].

In this sense, [±EFF.BOUND] (known as agentivity or control in previous research) is a sort of subsidiary or subordinate property to [±DYNAMIC] and [±DURATIVE] when it comes to progressivity as manifested in [*zijn aan het* V_{INF}]: [+EFF.BOUND] is only required insofar as it serves to coerce dynamicity (performance) or durativity (preparation). If a situation is already

^{57.} While being a stage-level predicate (viz. a stage-level State or a Position) is a necessary condition for being [+EFF.BOUND], it is not a sufficient condition. This accounts for the fact that not all stage-level States combine felicitously with [*zijn aan het* V_{INF}] (e.g. **Ik ben honger aan het hebben* 'I am being hungry'). Combined with the gradient conception of [±EFF.BOUND] for stative predicates proposed above, this also explains why some Positions combine with [*aan het* V_{INF}] more straightforwardly than others: apparently, deriving [+DYNAMIC] from [+EFF.BOUND] requires a certain 'level' of [+EFF.BOUND], which I would conceive of as the salience of the boundaries combined with whether it is clear how one generally goes about effectuating them.

[+DYNAMIC][+DURATIVE] (i.e. Activities, Accomplishments, Processes, Dynamisms and Changes) or [+DYNAMIC][-DURATIVE][-TELIC] (i.e. Effectuateable and Non-effectuateable Semelfactives), being [+EFF.BOUND] or [-EFF.BOUND] does not appear to play a role at all. Boogaart (1999:183) arrives at the same outcome in part, concluding that [*zijn aan het* V_{INF}] "can be used for (a) [+EFF.BOUND] [A]ctivities, and (b) gradual changes (that can be either [+EFF.BOUND] or [-EFF.BOUND])".⁵⁸ Based on the present analysis, this conclusion can be expanded since [*aan het* V_{INF}] was shown to also be compatible with [-EFF.BOUND] Activities, as well as [+EFF.BOUND] Accomplishments (including Achievements coerced to be Accomplishments) and [-EFF.BOUND] Changes, and, lastly, [-EFF.BOUND] situations that are [+DYNAMIC] but that are not gradual changes (i.e. Dynamisms).

From the perspective of the 'core components of progressive meaning' postulated in §3.4, [*zijn aan het* V_{INF}] thus cares most about presenting a situation as dynamic (and with that, nongnomic) and decomposing it in order to focus on the medial phase (which requires it to be durative). Notions of agentivity, volition and control (subsumed here under [±EFF.BOUND]), which are often mentioned in relation to progressivity (e.g. by Mair 2012), are thus not as central to the semantics of [*zijn aan het* V_{INF}] as the components of dynamicity and decomposability.

4.1.3 Summary: Dynamicity and durativity. In sum, $[zijn \ aan \ het V_{INF}]$ imposes a conjunctive, not a disjunctive, restriction (cf.fn.43) in that it operates on situations that must be both [+DYNAMIC] and [+DURATIVE] (although the latter can also be derived through iteration from the combination [-DURATIVE][-TELIC]). If one part of this twofold rule is not met (i.e. if the situation is a Position/State or Achievement/Instant),⁵⁹ [zijn aan het V_{INF}] coerces the situation into obeying the rule anyway—if possible; and that possibility is contingent upon systematic reinterpretation based on performance (Position/State) or preparation (Achievement/Instant), both of which presuppose the situation to be [+EFF.BOUND]. This is why Instants and individual-level States are generally incompatible with [zijn aan het V_{INF}], while Achievements, Positions and stage-level States are atypical yet systematically interpretable.

What does this mean for the commonplace analysis of [*zijn aan het* V_{INF}] as a progressive construction? I would argue that [*zijn aan het* V_{INF}] covers the full range of progressive aspectuality as conceptualized in §3.4, but also stretches beyond that to the extent that it does

^{58.} Boogaart uses [±AGENTIVE] here, which I replaced with [±EFF.BOUND].

^{59.} Note that Smithian-Vendlerian taxonomies of situation aspect assume [-DYNAMIC][-DURATIVE] situations not to exist (cf. Tables 3.1-3.4 in §3.1) which makes impossible for one and the same situation to 'disobey' both parts of this rule—in other words: the true 'nightmare candidate' for progressive aspectuality in terms of situation type theoretically does not exist.

not 'care about' [+EFF.BOUND] in isolation, only as a way of realizing [+DYNAMIC][+DURATIVE].⁶⁰ This accounts for the fact that the construction is directly felicitous with Dynamisms, Processes, Changes and Non-effectuateable Semelfactives, which I would argue—strictly speaking—fall in the realm of non-progressive continuous meaning due to being [-EFF.BOUND]. So although [*zijn aan het* V_{INF}] is always characterized by dynamicity and medial phasality, not all of the meanings it expresses are 'progressive' in a narrow or paradigmatic sense.

4.2 Other main verbs

The idea that [*zijn aan het* V_{INF}] can indeed be seen as a progressive construction (albeit with a slightly wider aspectual range), as was argued in the previous section, does not preclude it from also being a 'situational *aan*-PP', as was put forward in Chapter 2, and from synchronically relating in that capacity to the other types of situational *aan*-PPs discussed in that chapter. Syntagmatically, [*zijn aan het* V_{INF}] differs from other such PPs regarding the complement of *aan* within the PP (i.e. '*het* V_{INF} ') and regarding the main verb outside of the PP (i.e. *zijn* 'to be'). Seeing as [*zijn aan het* V_{INF}]'s progressive meaning—specifically the [+DYNAMIC][+DURATIVE]-restriction resulting from that meaning—is a property of the construction as a whole (Booij 2010:146-147), I assume that the type of PP-internal complement (i.e. infinitive, stem or noun) and the PP-external verb that PP combines with (e.g. *zijn* 'to be', *gaan* 'to go', *krijgen* 'to obtain') both make semantic contributions to the aspectual interpretation of the main verbs, starting with previous work (§4.2.1) and then proposing an alternative (feature-based) approach (§4.2.2) before moving on the different types of *aan*-complement and their semantics and syntax (§4.3).

^{60.} Interestingly, the other Dutch progressive—the posture progressive (i.e. [*zitten/staan/liggen te* V_{INF}])—*does* appear to care about [+EFF.BOUND] for its own sake, at least in the case of *zitten* 'to sit' and *staan* 'to stand'. Evidence for this claim is their incompatibility with Processes (cf. (i)) and Changes (cf. (ii)), as well as the fact that they coerce [+EFF.BOUND] for Dynamisms with *zitten* and *staan* (cf. (iii)), whereas [*zijn aan het* V_{INF}] does not do this.

 ⁽i) De koers van de dollar <*zit te> <*staat te> <*ligt te> <is aan het> stijgen.
 the rate of the dollar sit.3SG to stand.3SG to lie.3SG to be.3SG AAN the rise.INF
 'The price of the dollar is increasing.'

 ⁽ii) Omdat China een politieke grootmacht <*zit te> <*staat te> <*ligt te> <aan het> worden <is>.
 because China an political superpower sit.3sG to stand.3sg to lie.3sG to AAN the become.INF be.3sG 'Because China is becoming a political superpower.'

⁽iii)Jordy <zit> <staat> weer eens te slapen tijdens z'n werk. Jordy sit.3SG stand.3SG again once to sleep.INF during his work 'Jordy is sleeping on the job once again.'

4.2.1 *Previous work.* The verbs with which [*aan het* V_{INF}] combines, besides *zijn* 'to be', have previously been collected and categorized by Haeseryn et al. (1997:1048-1054), Van Pottelberge (2004:27-51) and Booij (2010:146-168). The other situational *aan*-PPs—[*aan de* V_{STM}] and [*aan* DET N]—also combine with these verbs; in fact, I argued this to be one of their defining characteristics (cf.§1.1), setting them apart from locational *aan*-PPs, which combine with a much wider variety of verbs.

This closed set of verbs—which Van Pottelberge (2004:27) dubs "das System der *aan-het*-Verben" ('the system of *aan-het*-verbs')⁶¹—is divided up by the authors mentioned above into several groups on semantic and/or syntactic grounds, such as their aspectual character (e.g. progressive or ingressive) or valency (e.g. reflexive or transitive). A major difference among these classifications is whether the semantic and syntactic differences are treated as separate or interlocked criteria: Van Pottelberge (2004) makes two classifications: one syntactic, the other semantic, whereas Haeseryn et al. (1997) and Booij (2010) each put forward one classification in which the verbs' syntax and semantics are intertwined. The categorizations designed by Haeseryn et al. (1997), Van Pottelberge (2004) and Booij (2010) are summarized in (50)-(52).⁶²

(50) Haeseryn et al. (1997): 17 verbs

a.	Ongoing:	zijn 'to be', blijken 'to turn out', lijken/schijnen 'to seem
b.	Not stopping: ⁶³	blijven 'to stay'
c.	Starting:	gaan 'to go', (ge)raken 'to get', slaan 'to hit'
d.	Transitive, causative,	brengen 'to bring', maken 'to make', krijgen 'to obtain',
	starting:	zetten 'to put'
e.	Transitive, resultative:	hebben 'to have', houden 'to keep'
f.	Transitive, durative:	horen 'to hear', zien 'to see', vinden 'to find'

^{61.} An obvious criticism here is that [*aan het* V_{INF}] is not the only *aan*-PP that takes these verbs; [*aan de* V_{STM}] and [*aan* DET N] combine with them in a highly similar way.

^{62.} Haeseryn et al. (1997) do not name their categories, using the set of verbs that make up their categories as titles. They do characterize the verbs, though, both syntactically and semantically, which I used for the category names shown in (50).

^{63.} Haeseryn et al. (1997:1050) characterize the combination with *blijven* 'to stay' by saying that it "het niet ophouden van de door de infinitief genoemde werking uit[drukt]" ('expresses that the situation denoted by the infinitive does not stop'). In my view, this is too general; *blijven* also crucially implies that the situation already held for an extended period of time before continuing into the time frame profiled by *blijven*. However, since I am presenting the categorizations here in their own terms (cf.fn.62), I called this characterization 'not stopping'. I likewise disagree with the characterization 'resultative' in (50e), which is better termed 'continuation'.

- (51) Van Pottelberge (2004): 23 verbs
 - a. Syntactic categories
 - i. Copulative: zijn 'to be', blijken 'to turn out', lijken/schijnen 'to seem', blijven 'to stay'
 - ii. Intransitive: gaan 'to go', komen 'to come', (ge)raken 'to get', slaan 'to hit'
 - iii. Reflexive: *zich zetten* 'to put oneself'
 - iv. Transitive: *brengen* 'to bring', *maken* 'to make', *krijgen* 'to obtain', *zetten* 'to put', *hebben* 'to have', *houden* 'to keep', *horen* 'to hear', *zien* 'to see', *vinden* 'to find'
 - v. Modal: kunnen 'can', moeten 'must', mogen 'may', willen 'want'
 - b. Semantic categories
 - i. Start: gaan 'to go', komen 'to come', (ge)raken 'to get', slaan 'to hit', zich zetten 'to put oneself
 - ii. State: zijn 'to be', blijven 'to stay', horen 'to hear', zien 'to see', vinden 'to find'
 iii. Cause: brengen 'to bring', krijgen 'to obtain', maken 'to make', zetten 'to put', hebben 'to have', houden 'to keep'
 - iv. Modal: blijken 'to turn out', lijken/schijnen 'to seem', kunnen 'can', moeten 'must', mogen 'may', willen 'want'

(52) Booij (2010): 16 verbs

Verbs of appearance:	blijken 'to turn out', lijken/schijnen 'to seem'
AcI-verbs: ⁶⁴	horen 'to hear, zien 'to see', vinden 'to find'
Verbs taking secondary predicates:	hebben 'to have', houden 'to keep'
Inchoative and continuative verbs:	gaan 'to go', (ge)raken 'to get', slaan 'to hit'
	blijven 'to stay'
Causative verbs:	brengen 'to bring', maken 'to make'
	krijgen 'to obtain', zetten 'to put'
	Verbs of appearance: AcI-verbs: ⁶⁴ Verbs taking secondary predicates: Inchoative and continuative verbs: Causative verbs:

In terms of sheer descriptive adequacy, Van Pottelberge's classification accommodates the highest number of verbs combing with [*aan het* V_{INF}]: six and seven more than Haeseryn et al. (1997) and Booij (2010), respectively, which is due to the fact that Van Pottelberge adds an additional intransitive 'start' verb (*komen* 'to come'), recognizes that [*aan het* V_{INF}] combines not only with modal copulas but also modal auxilaries (*kunnen* 'can', *moeten* 'must', *mogen* 'may' and *willen* 'want') and includes the reflexive use of *zetten* 'to put' (i.e. *zich zetten* 'to put oneself') as a separate verb.⁶⁵ Booij's classification has the smallest descriptive range, covering one verb fewer than

^{64.} AcI stands for 'accusativus cum infinitivo' and refers to the traditional grammatical analysis of sentences such as *Ik zag haar fietsen* 'I saw her cycling', in which the object (*haar* 'her') of the finite AcI-verb (*zag* 'saw') functions as the subject of the infinitive (*fietsen* 'to cycle'—which in the English counterpart is a gerund 'cycling'), and where the formal object and infinitive (*haar fietsen*) are analyzed together as a special type of *beknopte bijzin* 'reduced clause' (cf.e.g. Haeseryn et al. 1997:967-968). Besides 'classic' AcI-cases, there are also cases with *aan het*, e.g. *Ik zag haar aan het fietsen* 'I saw her cycling', which Haeseryn et al. (1997), Van Pottelberge (2004) and Booij (2010) all classify as '*aan-het*-verbs' (cf. (50f), (51a.iv/b.ii) and (52b)).

^{65.} Van Pottelberge actually distinguishes a sixth syntactic category, namely without a finite verb (2004:37), which corresponds to the (fifth) semantic category 'appositive' (*ibid*:50-51), e.g. *Dus ik weer aan het hameren om vóór 22.00 die douche eruit te hebben* 'So I got back to hammering to remove that shower before 22.00' (*ibid*:51).

Haeseryn et al. as he does not account for *zijn* 'to be' as part of the classification, which is because he considers the verbs in (52) to be variations on the 'progressive' [*zijn aan het* V_{INF}]. This leads Booij to conclude that "Dutch has a constructional idiom [*aan het* V_{INF}] with the meaning of progressive aspect" (Booij 2010:155), i.e. that all combinations with the verbs in (52) are somehow 'progressive'—a claim that Lemmens (2012) criticizes.⁶⁶

Van Pottelberge's (2004) categorization is most successful in teasing apart syntactic and semantic factors and applying those factors in a clear and systematic way. This classification will therefore serve as the basis for the present semantic characterization of the verbs combing with [*aan het* V_{INF}]. Although Van Pottelberge's system has considerable descriptive and analytic power, I would argue that it can be improved upon with respect to the semantic dimension (which is the dimension of interest here), namely in at least two ways: (i) some of the semantic criteria are not mutually exclusive (viz. 'cause'/'modal' and 'start'/'state', where the former two always imply one of the latter two); and (ii) the criteria formalized in the categories in (51) are not sufficient to distinguish all relevant individual category members. Van Pottelberge does offer additional conceptual criteria to characterize individual verbs (e.g. "snell, energisch" ('quick and energetic') to distinguish *slaan* and *gaan*—cf. Van Pottelberge 2004:42), but the way that the categorization as a whole is designed prohibits him from applying those criteria across the entire system of verbs.

4.2.2 A feature-based approach. In order to remedy these issues and build upon Van Pottelberge's (2004) system of categorizing these verbs, I will take a feature-based approach here similar to the one used in §3.1 to distinguish different types of situation aspectuality in relation to progressive aspectuality. The advantage of this is not only that the verbs can be analyzed in terms of clusters of concepts (addressing the two problems mentioned above, as the clusters can be as large as required), but also that the features characterizing these verbs can be connected to the features that characterize the situation type of the verbs in the infinitival or verb stem slot, as

Because the focus here is specifically on the semantic features of the *verbs*, I will disregard cases without a verb for now, although those will be useful for analyzing the conceptual structure of the 'situational *aan*-PP' as such.

^{66.} Booij (2010:155) does concede that the "inchoative meaning" of "constructional idioms such as [...] [slaan aan het V_{INF}]" should be accounted for by assuming that "slaan has an inchoative meaning in combination with the [aan het V_{INF}]-construction". Combined with Booij's earlier claim, however, this would mean that slaan's inchoativity (which I prefer to call ingressivity—cf. Bogaards 2020b) is superimposed upon the progressivity of [aan het V_{INF}], producing a different kind of aspectual interpretation. I would argue that this is an unnecessarily roundabout way of characterizing the aspectual semantics of these combinations, which I think is the result of overgeneralizing the progressivity of [zijn aan het V_{INF}], probably due to its frequency (in both usage and research). A more straightforward analysis, as I will argue in this chapter, is that [aan het V_{INF}] (and, more generally, all situational aan-PPs) have an aspecto-temporal conceptual basis that is specified aspectually by the verb it takes (i.e. progressive in the case of zijn, but not progressive in the case of slaan) and by the PP-internal complement (cf.§4.3).

well as the features that play a role for progressive aspectuality in general and for [*zijn aan het* V_{INF}] in particular (e.g. [±EFF.BOUND]). In fact, as I will argue, among other features, various specifications of [±EFF.BOUND] can be used to distinguish the verbs in (51). The following subsections will go into the features that I consider to be necessary for such a classification.

4.2.2.1 [+PHASAL], [+INITIAL] and [+MEDIAL]. An important first observation for a feature-based classification is that *all* verbs in (51), when combined with [*aan het* V_{INF}], decompose a situation into phases (i.e. share with progressive [*zijn aan het* V_{INF}] the feature of decomposability). All verbs can thus be said to be [+PHASAL]. They differ, subsequently, in whether the medial phase (e.g. *zijn* 'to be', *houden* 'to keep', *blijken* 'to turn out) or initial phase (e.g. *gaan* 'to go', *krijgen* 'to obtain', *moeten* 'must') is profiled. This distinction cannot be captured by means of one binary parameter, since initial and medial focus do not constitute an exhaustive/diametrical opposition. The two notions do rule each other out. The entire [+PHASAL] set of verbs therefore breaks up into one subset that is [+INITIAL] (ergo [-MEDIAL]) and another subset that is [+MEDIAL] (ergo [-INITIAL]). Table 4.2 shows which verbs fall into which subset. The final column on the right also indicates how many verbs belong to each of the two categories produced by these features.

Verbs	[+PH.		
verbs	[±INITIAL]	[±MEDIAL]	n
gaan 'to go', komen 'to come', (ge)raken 'to get', slaan 'to hit', zich zetten 'to put oneself', brengen 'to bring', krijgen 'to obtain', maken 'to make', zetten 'to put', kunnen 'can', moeten 'must', mogen 'may', willen 'want'	+	_	13
<i>zijn</i> 'to be', <i>blijken</i> 'to turn out', <i>hebben</i> 'to have', <i>houden</i> 'to keep', <i>lijken/schijnen</i> 'to seem', <i>blijven</i> 'to stay', <i>horen</i> 'to hear', <i>zien</i> 'to see', <i>vinden</i> 'to find'	_	+	10

TABLE 4.2 Classification of verb set according to phasal parameters

To illustrate the [±INITIAL] and [±MEDIAL] status of these verbs, two examples are given below of each category: [+INITIAL] in (53), [+MEDIAL] in (54).

(53) a. Voor je <u>aan het koken gaat</u>, moet je de slechte van de goede before you AAN the cook.INF go.2SG must.2SG you the bad from the good mosselen scheiden. [+INITIAL] mussels separate.INF

'Before you start cooking, you have to separate the bad mussels from the good ones.' (WR-P-P-G-0000433588) b. Ik ben over 6 weken uitgerekend van de 3e, de oudste is nu ruim I be.ISG over 6 weeks calculate.PCP of the 3rd the eldest be.3SG nowwell.over 2,5, en nu zal ik tochecht wel <u>aan het uitleggen moeten</u> en ze heeft 2.5 and nowwill.ISGI PRT really PRT AAN the explain.INF must.INF and she have.3SG nog steedszoiets van kindjes spelen en zitten niet in buiken. [+INITIAL] so.far still something of kids play.3PL and sit.3PL not in bellies. 'The due date of my third is in six weeks, the eldest is now over 2.5, so now I will have

to start explaining things to her, and she's still like 'kids play, they're not in bellies'.' (WR-P-E-A-0004781194)

 (54) a. Een geïnspireerde leraar Nederlands <u>hield</u> hem <u>aan het lezen</u>, zelfs in de an inspired teacher Dutch kept.3sG him AAN the read.INF even in the hotelschool. [+MEDIAL] hotel.school

'An inspired Dutch teacher kept him reading, even during hotel management school.' (WR-P-P-G-0000259421)

b. Directeur T. Dorresteyn maakte bekend dat Blijdorp de komende jaren <u>aan</u> director T. Dorresteyn made.3sG known that Blijdorp the coming years AAN
 <u>het verbouwen blijft</u>.
 [+MEDIAL]
 the renovate.INF stay.3sG

'Managing director T. Dorresteyn announced that [the zoo] Blijdorp will keep on renovating in the coming years.' (WR-P-P-G-0000036999)

In (53), *aan het koken gaat* 'starts cooking' and *aan het uitleggen moeten* 'have to start explaining' both profile the initial boundary of the situation denoted by the infinitive (i.e. 'cooking' and 'explaining'). And in (54) *hield aan het lezen* 'kept reading' and *aan het verbouwen blijft* 'keeps renovating' profile the medial phase, just like the progressive [*zijn aan het* V_{INF}]. Initial versus medial phasality is thus the first set of parameters along which the verbs in (51) can be divided.

4.2.2.2 [\pm CAUSATIVE]. The next semantic parameter characterizing the set of verbs is causativity, that is, whether the subject of the verb is the causer of the situation denoted by the infinitive, or more specifically: whether they caused someone or something else to be involved in that situation (i.e. the causee). The causee is encoded as the direct object of the causative verb, which is why the semantic notion of causativity corresponds by definition to a transitive syntactic structure (but the reverse is not true—cf. *zien* 'to see', *horen* 'to hear' and *vinden* 'to find' under (51a.iv)). The parameter [\pm CAUSATIVE] is crosscut by [\pm INITIAL][\pm MEDIAL], although the combination

[+CAUSATIVE][+INITIAL] is more frequent than [+CAUSATIVE][+MEDIAL] (4 against 2). Table 4.3 adds causativity to the phasal classification from before.

Verbs	[+рн	ASAL]	[
verbs	[±INITIAL]	[±MEDIAL]	• [±CAUSATIVE]	n
gaan 'to go', komen 'to come', (ge)raken 'to get',				
slaan 'to hit', zich zetten 'to put oneself, kunnen			_	9
'can', moeten 'must', mogen 'may', willen 'want'	+	_		
brengen 'to bring', krijgen 'to obtain',				4
maken 'to make', zetten 'to put'			+	4
zijn 'to be', blijken 'to turn out', lijken/schijnen				
'to seem', blijven 'to stay', horen 'to hear', zien			_	8
'to see', vinden 'to find'	_	+		
hebben 'to have', houden 'to keep'			+	2

 TABLE 4.3
 Verb classification with added causative parameter

Examples (55) and (56) illustrate [+CAUSATIVE] in combination with [+INITIAL] and [+MEDIAL], respectively. (Note that (54a) is also [+CAUSATIVE], contrary to (53) and (54b)).

(55)									aan het lachen. AAN the laugh.INF [+INITIAL][+CAUSATIVE]
	'The tense expression on his face					e her la	ugh.'	(V	VR-P-P-B-0000000201)

 (56) Ik wil dat hij huilt. <u>Hou</u> hem <u>aan het huilen</u> en doe een bloedtest I want.ISG that he cry.3SG keep.IMP him AAN the cry.INF and do.IMP a blood.test op hem. [+MEDIAL][+CAUSATIVE] on him

'I want him to cry. Keep him crying and perform a blood test on him.'

(WR-P-E-G-0000011528)

In (55), the causer is 'his' facial expression, and the causee is 'her'—i.e. the person who starts laughing; in (56), the causer is the addressee, as the causative verb is an imperative, and the causee is the young patient getting their blood tested.

4.2.2.3 [±CONTINUATIVE]. A further relevant parameter is continuativity, i.e. whether the verb profiles a point in time before which the situation denoted by the infinitive is indicated to hold, and after which the situation is indicated to continue holding. Continuativity operates on medial phasality, adding a 'continuative point' to it that is not profiled by non-continuative *zijn* 'to be'

and *hebben* 'to have'. Hence, [+INITIAL] and [+CONTINUATIVE] are incompatible. Table 4.4 adds [±CONTINUATIVE] as a binary parameter, indicating incompatibility by leaving cells empty.

Verbs	[+PH	ASAL]		[±CAUS.]	
verbs	[±INITIAL]	[±MEDIAL]	[±CONT.]	[±CAUS.]	n
gaan 'to go', komen 'to come', (ge)raken 'to get',					
slaan 'to hit', zich zetten 'to put oneself', kunnen				-	9
'can', <i>moeten</i> 'must', <i>mogen</i> 'may', <i>willen</i> 'want'	+	-			
brengen 'to bring', krijgen 'to obtain', maken 'to					4
make', <i>zetten</i> 'to put'				+	4
zijn 'to be', blijken 'to turn out', lijken/schijnen					
'to seem', horen 'to hear', zien 'to see', vinden 'to				-	7
find'			_		
hebben 'to have'	_	+		+	1
<i>blijven</i> 'to stay']			_	1
houden 'to keep'			+	+	1

 TABLE 4.4
 Verb classification with added continuative parameter

In the previous examples, (54a-b) and (56) were continuative: in (54a-b), the *lezen* 'reading' and *verbouwen* 'renovating' were ongoing situations, which are kept going from the continuative point profiled by *houden* 'to keep' and *blijven* 'to stay'—in (54a) by a causer (*een geïnspireerde leraar Nederlands* 'an inspired Dutch teacher'), in (54b) by a non-causative subject (*Blijdorp*). The same goes for (56), which is [+CAUSATIVE][+CONTINUATIVE] and thus functions analogously to (54a). The full clusters of parameters for these examples are given below in (54'a-b) and (56').

(54') a. Een geïnspireerde leraar Nederlands <u>hield</u> hem <u>aan het lezen</u>, zelfs in de hotelschool. [+MEDIAL][+CAUSATIVE][+CONT.]

'An inspired Dutch teacher kept him reading, even in hotel management school.'

- b. Directeur T. Dorresteyn maakte bekend dat Blijdorp de komende jaren <u>aan het</u> <u>verbouwen blijft</u>. [+MEDIAL][-CAUSATIVE][+CONT.]
 'Managing director T. Dorresteyn announced that [the zoo] Blijdorp will keep on renovating in the coming years.'
- (56') <u>Hou hem aan het huilen</u> en doe een bloedtest op hem. [+MEDIAL][+CAUSATIVE][+CONT.]'Keep him crying and perform a blood test on him.'

4.2.2.4 [±MODAL] and [±EPISTEMIC]. The previous parameters all played a role in some way in all three previous verbal classifications in (50)-(52). However, the next parameter—modality—is only really distinguished by Van Pottelberge (2004), with Haeseryn et al. (1997) not integrating

modal meanings at all, and Booij (2010) only implementing them indirectly (as 'verbs of appearance'). Modality crosscuts part of the taxonomy, though, as it is compatible with phasality but not with causativity and continuativity (that is, the modal verbs do not encode these notions).

Modality, in this context, concerns the attitude of the speaker vis-à-vis the situation denoted by the infinitive. Syntactically speaking, two categories of modals combine with [*aan het* V_{INF}]: modal copulas (e.g. *blijken* 'to turn out) and modal auxiliaries (e.g. *moeten* 'must'). As Van Pottelberge (2004) points out, this syntactic distinction corresponds to the main phasal distinction structuring the verb set: the copulas are [+MEDIAL]—i.e. indicate the speaker's position toward a situation holding—whereas the auxiliaries are [+INITIAL]—i.e. indicate their position toward a situation starting.

But the modal meanings themselves are also distinct between these categories. The [+MEDIAL][+MODAL] verbs (*blijken* 'to turn out' and *lijken/schijnen* 'to appear') always encode epistemic modality, i.e. they qualify the speaker's attitude in terms of their knowledge of the situation: how certain they are of it, for instance, or how they acquired this knowledge.⁶⁷ By contrast, the [+INITIAL][+MODAL] verbs are by definition non-epistemic,⁶⁸ qualifying speaker attitude in terms of obligation and necessity (deontic: *moeten* 'must' and *mogen* 'may'), or ability and willingness (dynamic: *kunnen* 'can' and *willen* 'want'). This is illustrated by the respective epistemic and non-epistemic examples in (58) and (59), which are from Van Pottelberge (2004:29/36). Sentence (53b) (§4.2.2.1) also gives an example of a modal, non-epistemic verb.

In (58), *bleken aan het broeden* 'turned out to be brooding' indicates that the speaker has arrived at their knowledge of the 'brooding' situation only upon closer inspection; in (59), *wil aan het bouwen* 'wants to start building' encodes the willingness of the subject ('the utility company from Zeeland') to commence the situation of 'building'.

(58) De vrouwtjes <u>bleken aan het broeden</u> en vertoonden zich dus niet. the females turned.out.3PL AAN the brood.INF and showed.3PL REFL thus not [+MEDIAL][+MODAL][+EPISTEMIC]

'The females turned out to be brooding, so they didn't show themselves.'

^{67.} This may also be called 'evidential' (p.c. Ronny Boogaart). I am assuming here that evidentiality is a subtype of epistemic modality, and that cases like *blijken*, *lijken* and *schijnen* may thus be analyzed as 'epistemic' (as opposed to the non-epistemic verbs).

^{68.} See Narrog (2016) for a discussion of non-epistemic modal categories. Note that *willen* 'want' is sometimes categorized under dynamic modality, other times under boulomaic modality (which is also non-epistemic)—cf. also fn.44.

(59) Nu de Raad van State geen bezwaar heeft, wil het Zeeuwse now the Council of State no objection have.3sG want.3sG the from.Zeeland nutsbedrijf zo snel mogelijk <u>aan het bouwen</u>. [+MEDIAL][+MODAL][-EPISTEMIC] utility.company so quick possible AAN the build.INF
'Now that the Council of State has no objection, the utility company from [the Dutch province of] Zeeland wants to start building as soon as possible.'

It thus seems that, within this classification, epistemic modality coincides with medial phasality and non-epistemic modality with initial phasality.⁶⁹ Table 4.4 adds the parameter [±MODAL] to

(i) De vrouwtjes <u>moeten aan het broeden</u>. 'The females have to start brooding.'

[Deontic (i.e. non-epistemic) reading of *moeten* without additional verb]

- (ii) a. De vrouwtjes moeten aan het broeden zijn.
 'The females must be brooding.'
 [Epistemic reading of moeten 'must' as auxiliary to [+MEDIAL][-MODAL][-CAUS.][-CONT.] zijn 'to be']
 - b. De boer moet de vrouwtjes aan het broeden hebben.
 'The farmer must be having the females brooding.' [Epistemic reading of moeten 'must' as auxiliary to [+MEDIAL][-MODAL][+CAUS.][-CONT.] hebben 'to have']
- (iii)a. De vrouwtjes moeten aan het broeden gegaan/geraakt/geslagen/gebracht/gezet zijn.
 'The females must have started brooding/been made to start brooding.'
 [Epistemic reading of moeten 'must' as auxiliary to perfect tense [+INITIAL] gaan 'to go', raken 'to get', slaan 'to hit', brengen 'to bring', zetten 'to put']

b. De vrouwtjes <u>moeten aan het broeden gaan/raken/slaan/gebracht worden/gezet worden</u>. 'The females have to start brooding/be made to start brooding.'

[Non-epistemic reading of *moeten* 'must' as auxiliary to present tense [+INITIAL] gaan, raken, slaan, brengen, zetten]

c. De vrouwtjes <u>moeten aan het broeden gebleven/gehouden zijn</u>. 'The females must have stayed/been kept brooding.'

[Epistemic reading of moeten 'must' as auxiliary to perfect tense [+CONT.] blijven 'to stay', houden 'to keep']

- d. De vrouwtjes moeten aan het broeden blijven/gehouden worden.
 'The females have to keep/be kept brooding.'
 [Non-epistemic reading of moeten 'must' as auxiliary to present tense [+CONT.] blijven, houden]
- e. De boer <u>moet</u> de vrouwtjes <u>aan het broeden gehoord/gezien/gevonden hebben</u>. 'The farmer must have heard/seen/found the females brooding.'

[Epistemic reading of *moeten* 'must' as auxiliary to perfect tense verbs of perception *horen* 'to hear', *zien* 'to see', *vinden* 'to find']

f. De boer moet de vrouwtjes aan het broeden horen/zien/vinden.

'The farmer has to hear/see/find the females brooding.'

[Non-epistemic reading of moeten 'must' as auxiliary to present tense verbs of perception horen, zien, vinden]

^{69.} An interesting addition to the observation that epistemic modality and medial phasality coincide in this verb classification (cf. (i) below), is that epistemic interpretations of deontic and dynamic modals (i.e. *moeten* 'must' and *kunnen* 'can'—cf. Boogaart 2007; Boogaart & Trnavac 2011) *are* possible when they serve as auxiliaries to [+MEDIAL][-MODAL][-CONTINUATIVE] verbs from the classification (i.e. *zijn* 'to be' and *hebben* 'to have', cf. (ii)) or, alternatively, to [-MODAL] verbs in perfect tense (cf. (iii)). Note that [+MEDIAL][-MODAL][-CONTINUATIVE] also covers *horen* 'to hear', *zien* 'to see' and *vinden* 'to find', which however do not license epistemic readings except when in perfect tense (cf. (iii)). This suggests that an additional parameter is needed distinguishing them from *zijn*, with which they currently share a category. I therefore propose the parameter [±PERCEPTION] in §4.2.2.5. The sentences under (i)-(iii) are constructed examples based on (58); cf. (58) for glosses.

the previous classification that featured phasality, causativity and continuativity. Since the (non-)epistemic nature of that modality is also a factor differentiating the modal verbs in their own, modal terms, [±EPISTEMIC] was also added to Table 4.5 as a subordinate parameter to [±MODAL]—i.e. it can only be assigned if the verb is [+MODAL]; otherwise, it is incompatible by definition (as indicated by, again, empty cells).

Verbs	[+PH	ASAL]	[±MODAL]		[±cont.]	[±CAUS.]	
Verbs	[±init.]	[±MED.]		[±EPIST.]	[±CON1.]	[±CAUS.]	n
gaan 'to go', komen 'to come'							
<i>(ge)raken</i> 'to get', <i>slaan</i> 'to hit'						+	5
zich zetten 'to put oneself',			-				
brengen 'to bring', krijgen 'to obtain',	+	-					4
maken 'to make', zetten 'to put'						-	4
kunnen 'can', moeten 'must'							4
mogen 'may', willen 'want'			+	_			4
<i>zijn</i> 'to be', <i>horen</i> 'to hear'							4
zien 'to see', vinden 'to find'					-	_	4
<i>hebben</i> 'to have'			-			+	1
<i>blijven</i> 'to to stay'	-	+				-	1
<i>houden</i> 'to keep'					+	+	1
<i>blijken</i> 'to turn out',							2
lijken/schijnen 'to seem'			+	+			3

 TABLE 4.5
 Verb classification with added modal and epistemic parameters

Since modality precludes causativity and continuativity in this classification, the parameter [±MODAL] was placed after [+PHASAL]—before [±CAUSATIVE] and [±CONTINUATIVE].

4.2.2.5 [±PERCEPTION]. As it stands now, the feature-based classification (Table 4.5) puts the 'progressive' verb *zijn* 'to be' in the same category as *horen* 'to hear', *zien* 'to see' and *vinden* 'to find'. This categorization mirrors that of Van Pottelberge (2004), in which these four verbs belong to the semantic category of 'state', together with *blijven* 'to stay' (cf. (51b.ii)). I would argue, however, that *horen*, *zien* and *vinden* share a crucial semantic component not found in *zijn*, namely that they include information on the way that their subject *perceives* the situation denoted by the infinitive: *zien* corresponds to visual perception, *horen* to aural perception and *vinden* does not specify, although it is usually both visual and aural. These verbs are thus [+PERCEPTION], which also corresponds to a difference in syntactic behavior in that these verbs (contrary to *zijn* and *blijven*) take a direct object that functions as the subject of the perceived situation.⁷⁰ This is why Booij (2010) classifies them as "AcI-verbs" (cf.n.64), but I would argue

^{70.} This also implies that that subject of the perception verb is not involved in the situation themselves, which may also go some way in explaining why *zijn* 'to be' (as well as *hebben* 'to have') but not *horen* 'to hear', *zien* 'to see'

that the other object-taking (i.e. [+CAUSATIVE]) verbs are similarly 'AcI'-like, as they likewise take a direct object coded as the situation's subject, except that [+CAUSATIVE] verbs code their own subject as the causer (cf. (55)-(56)), not the 'perceiver'. For that reason, I think that the semantic parameter of [±PERCEPTION] is a better way of distinguishing these verbs than the syntacticosemantic notion of 'AcI'—vis-à-vis both non-causative *zijn* and *blijven*, and the causative verbs.⁷¹

Table 4.6 therefore adds the parameter [±PERCEPTION], which was placed between phasality and modality because [+PERCEPTION] verbs are not associated with any parameters beyond phasality: like [+MODAL] verbs, [+PERCEPTION] verbs are never [+CAUSATIVE] or [+CONTINUATIVE], which can be connected to the 'perceiver' status of the perception verb's subject: 'perceivers' are external to the situation to the extent that 'causer' and 'continuer' roles are ruled out. The perception verbs are also never [+MODAL], which may be due to the fact that [+PERCEPTION] resembles epistemic (evidential, cf.fn.67) modality in that it qualifies how knowledge was acquired of the situation at hand, except that this knowledge is attributed not (necessarily) to the speaker, but to the perception verb's subject. Last, [±PERCEPTION] operates on medial phasality: *zien, horen* and *vinden* do not themselves indicate that the subject perceived the start of the situation denoted by the infinitive (i.e. they are not associated with [+INITIAL]).

	-	ASAL]	1 1	[±MODAL]		r 1	r 1	
Verbs	[±INIT.]	[±MED.]	[±PERCEP.]	[]	[±EPIST.]	[±CONT.]	[±CAUS.]	n
gaan 'to go', komen 'to come',								
(ge)raken 'to get', slaan 'to hit',							-	5
<i>zich zetten</i> 'to put oneself'								
brengen 'to bring', krijgen 'to				_				
obtain', maken 'to make', zetten	т	-					+	4
'to put'								
kunnen 'can', moeten 'must',				+	_			4
mogen 'may', willen 'want'				т				Т
<i>zijn</i> 'to be'							-	1
<i>hebben</i> 'to stay'						_	+	1
<i>blijven</i> 'to have'				—			-	1
<i>houden</i> 'to keep'		+	_			+	+	1
<i>blijken</i> 'to turn out',	-	Ŧ						3
<i>lijken/schijnen</i> 'to seem'				+	+			5
horen 'to hear', zien 'to see',			+					3
<i>vinden</i> 'to find'			т					5

 TABLE 4.6
 Verb classification with added perception parameter

and *vinden* 'to find' license an epistemic reading in present tense when combined with a deontic/dynamic verb like *moeten* 'must' (cf.fn.69). In any case, a classification that reflects this difference between *zijn* on the one hand, and *horen, zien* and *vinden* on the other by assigning them to different categories is preferable to one that does not, in my opinion (cf.fn.71).

^{71.} It should be noted that Van Pottelberge also assigns perception verbs the property "wahrnemen, feststellen" ('perceive, determine') (2004:43), but does not put them in a separate category.

Example (60) illustrates [+PERCEPTION] with the verb *zien* 'to see'.

(60) Het succes van dansprogramma's op tv is niet toevallig. Niet alleen in the success of dance.shows on tv be.3SG not coincidental not only in Amerika wil iedereen nu graag beroemdheden <u>aan het dansen zien</u>. America want.to.3SG everyone noweagerly celebrities AAN the dance.INF see.3SG
'It is not a coincidence that dancing shows are such a big hit. It isn't just in the US that everyone really wants to see celebrities dancing right now.'

(WR-P-P-G-0000431254)

In (60), the object of *zien (beroemdheden* 'celebrities') is coded as the subject of the situation (*dansen* 'to dance'), and that situation is indicated to reach the subject of the perception verb (*iedereen* 'everyone') by way of a specific type of perception—in this case visual perception.

4.2.2.6 [±EFF.BOUND]. By assigning clusters of features to the verb set in (51), the current classification is sufficiently successful in differentiating [+MEDIAL] verbs, with largely only one verb corresponding to a single cluster of features and a maximum of three verbs grouped together—which in each case share a crucial semantic feature (i.e. epistemic modality and perception). The categories are larger for the [+INITIAL] verbs, however, and with the exception of the non-epistemic modal group, they lack such a defining semantic property.

Van Pottelberge (2004) addresses this issue in his classification (cf. (51b.i/iii) by introducing highly specific notions that set particular (sets of) verbs apart, such as the aforementioned 'quick and energetic', which in his analysis distinguishes *slaan* 'to hit' (which has this property) from *gaan* 'to go' (which does not). I will argue in this section that all of these 'extra' notions can be abstracted over with the parameter that I introduced in Chapter 3: [±EFF.BOUND], i.e. whether the subject of the verb, in combination with [*aan het* V_{INF}], has the ability to effectuate temporal boundaries. In the case of [+INITIAL] verbs, this concerns primarily the initial boundary itself, that is, whether the start of the situation that is profiled was effectuated by the subject involved in it or not (necessarily). But it also extends to the terminal boundary, which (due to [+INITIAL] verbs being [+PHASAL]) is defocused (i.e. in maximal scope) yet still available for interpretation in terms of [±EFF.BOUND]. The analysis will therefore be focused primarily on initial boundaries, and only secondarily on terminal ones.

To start with Van Pottelberge's distinction between *gaan* and *slaan*: in the current account (Table 4.6), these verbs share the feature cluster [+INITIAL][-MODAL][-CAUSATIVE] together with *komen* 'to come', *(ge)raken* 'to get' and *zich zetten* 'to put oneself', that is, according to the present

classification these five verbs are basically [+INITIAL] and nothing else. Van Pottelberge (2004:38-43) contrasts *slaan* with *gaan* and *komen* by noting that the latter two "auf besondere Merkmale wie Belebtheit, Intention des Subjekts und Schnelligkeit des Anfangs völlig neutral [sein]" ('are entirely neutral concerning special properties such as animacy, intention of the subject and pace of starting') (*ibid*:42). He argues that the third property ("Schnelligkeit") sets *slaan* apart from *gaan/komen*, as it explicitly marks a 'quick and energetic' pace of starting the situation.

Examples (61)-(63) illustrate the three verbs—gaan, komen, slaan—in their combination with [aan het V_{INF}]: in (61), ging 'lit. went' profiles the beginning of the situation denoted by the infinitive (schuiven 'sliding'), in (62) komt 'lit. comes' profiles the start of spelen 'playing' (or more specifically: 'playing more'), and in (63) slaat 'lit. hits' profiles the beginning of 'murdering, the 'quick and energetic' pace of which is reflected by the use of 'killing spree' in the translation.

(61) De lading van een vrachtwagen ging aan het schuiven en belandde op een the cargo of a truck went.3SG AAN the shift.INF and ended.up.3SG on a personenauto.
 passenger.car
 'The cargo of a truck started shifting and ended up on a car.'

(WR-P-P-G-0000671487)

- (62) De Uvoc-scholierenkern is gekrompen van 12 speelsters naar 9, waardoor the Uvoc-pupil.core be.3sG shrink.PCP from 12 players.F to 9 where.through iedereen meer <u>aan het spelen komt</u> en ze ook zienderogen vooruitgang boeken. everyone more AAN the play.INF come.3sG and they also visibly progress achieve.3PL 'The core of [the volleybal team] Uvoc pupils shrunk from 12 players to 9, so that everyone gets to play more and is also visibly making progress.' (WR-P-P-G-0000503106)
- (63) Maar eenmaal vrij <u>slaat hij aan het moorden</u> en tenslotte belandt hij onder but once free hit.3SG he AAN the murder.INF and eventually end.up.3SG he under de guillotine. the guillotine

'But once he is set free, he starts a killing spree and eventually ends up under the guillotine.' (WR-P-E-J-0000063764)

While I agree with Van Pottelberge that interpretations of [*aan het* V_{INF}] with *slaan* are often characterized by a more 'quick and energetic' pace than with *gaan* and *komen*, I would argue that this is not *itself* a defining feature but instead a typical, highly likely interpretation derived from a more abstract feature, namely that *slaan* is always [+EFF.BOUND]. In other words, *slaan* expressly encodes the ability of its subject to effectuate the initial boundary that is profiled, and secondarily the defocused terminal boundary. Applied to (63), this means that the subject *hij* 'he' has the ability to initiate the situation of *moorden* 'murdering'.

As Van Pottelberge points out, *gaan* is more general. However, I would qualify this generality not in terms of the absence of an explicit 'quick and energetic' dimension, but instead by assuming that *gaan* is underspecified for boundary effectuation, i.e. that it is [±EFF.BOUND]. The possibility of [-EFF.BOUND] interpretations with *gaan* is demonstrated by (61), in which the subject (*lading* 'cargo') does not have the ability to effectuate the initial boundary of *schuiven* 'shifting', nor its terminal boundary: it is not up to the cargo whether it starts or stops shifting.⁷² The [+EFF.BOUND] status of *slaan* entails incompatibility with this type of situation (Dynamism). The unacceptability of (61')—in which *ging* 'lit. went' was replaced with *sloeg* 'lit. hit'—shows that this expectation is borne out.

 (61') * De lading van een vrachtwagen <u>sloeg aan het schuiven</u>. [-EFF.BOUND] the cargo of a truck hit.3SG AAN the shift.INF
 (Intended: 'The cargo of a truck started shifting.')

The idea that *gaan* is [±EFF.BOUND] implies that it also allows [+EFF.BOUND] interpretations. This is indeed the case, as (63') demonstrates by replacing *slaat* with *gaat*. In my view, the lower degree of the 'quick and energetic' pace in (63') is thus a result of the fact that [+EFF.BOUND] is not expressly marked by *gaan*, which is [±EFF.BOUND]. Still, I think that 'killing spree' is an adequate translation nonetheless, even with *gaat* instead of *slaat*.

(63') Maar eenmaal vrij gaat hijaan het moorden. [+EFF.BOUND] but once free go.3SG he aan the murder.INF
'But once he is set free, he starts a killing spree.'

Does this mean that *komen* is also [±EFF.BOUND]? This is what Van Pottelberge's (2004) analysis would imply, in which *komen* is characterized as "ebenfalls algemein" ('likewise general') (*ibid*:42) vis-à-vis *gaan*. But replacing *slaat/gaat* in (63)/(63') with *komt* in (63") does not yield likewise [+EFF.BOUND] results: (63") is highly marked at best, implying (according to my intuitions) that the subject ended up killing people somewhat coincidentally or even accidentally. By contrast, [-EFF.BOUND] interpretations are no issue, as (61") shows.

^{72.} In terms of §3.2.3, *schuiven* 'to slide' is a Dynamism that may be interpreted as an Activity (i.e. [-EFF.BOUND] > [+EFF.BOUND]) with an animate subject (also cf.fn.34 in §3.2.1). But 'cargo' is, of course, quite inanimate.

- (61") De lading van een vrachtwagen <u>kwam aan het schuiven</u>. [-EFF.BOUND] the cargo of a truck come.3SG AAN the shift.INF
 'The cargo of a truck started shifting.'
- (63") 'Maareenmaal vrij komt hij aan het moorden. [+EFF.BOUND] ?> [-EFF.BOUND] but once free come.3SG he aan the murder.INF
 (Marked reading: 'But once he is set free, he ends up starting a killing spree.')

My conclusion is that *gaan* is indeed the most general [+INITIAL] verb, as Van Pottelberge claims, but that *komen* is actually more specific, and that this specificity can be accounted for by saying that *gaan* is [±EFF.BOUND] while *komen* is [-EFF.BOUND]. *Slaan* is [+EFF.BOUND], which I proposed as a more abstract way of formulating Van Pottelberge's notion of "Schnelligkeit".

That leaves two [+INITIAL][-CAUSATIVE] verbs, namely *(ge)raken* 'to get' and *zich zetten* 'to put oneself', which Van Pottelberge (2004:42) differentiates along the lines of animacy and intention: when combined with an animate subject, *(ge)raken* implies that the situation denoted by the infinitive was initiated non-intentionally, whereas *zich zetten* entails intention. In addition, of the two verbs only *(ge)raken* takes inanimate subjects, which never imply intention.

The two verbs are illustrated in (64)-(65) with animate subjects. In (64), *geraken* indicates that the situation of *praten* 'talking' in which the subjects *ze* 'they' get involved, was not initiated intentionally by those subjects, hence the translation 'end up talking' (even though *praten*, as an Activity, is normally [+EFF.BOUND]). In (65), *zette zich* 'set to' indicates that the subject *hij* 'he' started the situation of 'writing his memoirs' deliberately and with some effort.

(64) Ze houden zich schuil bijde wc-madam en geraken aan het praten over theykeep.3PL REFL hidden by the toilet-woman and get.3PL AAN the talk.INF about hun gezamenlijke hobby: muziek. [+EFF.BOUND] > [-EFF.BOUND] their joint hobby music
'They hide by the bathroom attendant and end up talking about their joint hobby: music.' (WR-P-E-C-0000010314)

 (65) Na zijn vertrek uit de Tweede Kamer in 1998 zette hij zich aan het after his departure out.of the Second Chamber in 1998 put.3sGhe REFL AAN the <u>schrijven</u> van een autobiografie. [+EFF.BOUND] write.inf of an autobiography

'After leaving the Dutch House of Representatives in 1998, he set to writing his memoirs.' (WR-P-P-H-0000147568) Like *gaan*, *slaan* and *komen*, I would argue that the animacy and intention by which Van Pottelberge differentiates (*ge*)*raken* and *zich zetten* are actually subsumed by [±EFF.BOUND]. The animacy requirement of *zich zetten* can be analyzed as being derived from [+EFF.BOUND] in that inanimate subjects generally cannot effectuate temporal boundaries. Hence, *slaan* also generally requires an animate subject—cf. (61') (which Van Pottelberge does not explicitly account for, although 'quick' and especially 'energetic' can be seen as properties of animates). The same goes for the 'intended' requirement, which like animacy was touched upon in §3.2 (especially §3.2.2) as a notion associated with [+EFF.BOUND]. In fact, I would argue that intention is a more important feature of *slaan* than *zich zetten*, as the latter implies a certain degree of effort or even reluctance: (65) emphasizes the discipline required for writing one's memoirs. This is even more apparent when replacing *slaan* with *zich zetten* in (63‴): this produces the somewhat humorous reading that the subject reluctantly went on a killing spree, which is, of course, not generally how killing sprees come about. Otherwise, *zich zetten* behaves the same as *slaan* with regard to [+EFF.BOUND], being incompatible with [-EFF.BOUND] situations, as demonstrated in (61‴).

(61"") *De lading van een vrachtwagen <u>zette zich aan het schuiven</u>. [-EFF.BOUND] the cargo of a truck put.3SG REFL AAN the shift.INF (Intended: 'The cargo of a truck started shifting (with some effort on the cargo's part).')

(63") 'Maareenmaal vrij zet hij zich aan het moorden. [+EFF.BOUND]
but once free put.3sGhe REFL aan the murder.INF
'But once he is set free, he (with some effort) starts a killing spree.'

The verb (ge)raken, on the other hand, mirrors komen in being [-EFF.BOUND], exhibiting this feature to a higher degree than komen as it can easily coerce [-EFF.BOUND] on verbs that are normally [+EFF.BOUND], such as the 'killing' from (63), as shown in (63"") (which in (63"), with komen, was rather marked). The idea that (ge)raken is [-EFF.BOUND] to a high degree in my view also accounts for the fact that notions like 'unintended' are straightforwardly derived from its [-EFF.BOUND] meaning (without needing those notions as separate features). As such, (ge)raken also easily combines with [-EFF.BOUND] situations, as shown in (61"") by replacing gaan from (61) with (ge)raken.

(61^{'''}) De lading van een vrachtwagen <u>raakte aan het schuiven</u>. [-EFF.BOUND] the cargo of a truck got.3SG AAN the shift.INF 'The cargo of a truck started shifting.' (63"") Maar eenmaal vrij raakt hij aan het moorden. [+EFF.BOUND] > [-EFF.BOUND]
but once free get.3SG he aan the murder.INF
'But once he is set free, he ends up starting a killing spree.'

What is crucial about (63"") is that the subject is not so much encoded to have started killing *unintentionally*, but more so that he *cannot help* killing people, i.e. that he lacks the ability to refrain from effectuating the 'killing spree' situation's initial boundary. An analysis of *(ge)raken* as [-EFF.BOUND] is therefore in my view not only more concise, but also more accurate.^{73,74}

The [+INITIAL][-CAUSATIVE] verb set can thus be broken down further by assigning the values [-EFF.BOUND] (*komen*, (*ge*)*raken*) [+EFF.BOUND] (*slaan*, *zich zetten*), and [±EFF.BOUND] (*gaan*) to each of the verbs. Table 4.7 incorporates these features for the initial-noncausative verbs.⁷⁵

 TABLE 4.7 Classification with boundary effectuation parameter added to initial-noncausative verbs

	J		<u> </u>						
Verbs	[+PH	ASAL]	[±PERCEP.]	[±MODAL]		[±CONT.]		[±EFF.	10
VCIDS	[±INIT.]	[±MED.]	[TPERCEP.]		[±EPIST.]		[±CAUS.]	BOUND]	n
komen 'to come',									2
<i>(ge)raken</i> 'to get'								_	2
slaan 'to hit', zich	+	-		_			-		2
zetten 'to put oneself'								т	2
gaan 'to go'								±	1

That leaves the [+INITIAL][-MODAL][+CAUSATIVE] verbs, i.e. *brengen* 'to bring', *krijgen* 'to obtain', *maken* 'to make' and *zetten* 'to put'. Van Pottelberge (2004) differentiates between *brengen*, *maken* and *zetten* on the one hand, and *krijgen* on the other, in terms of the notion "gelingen" ('managing to do something', 'pulling something off') (*ibid*:47), which characterizes *krijgen* but not the other three.

The Dutch verb *krijgen* has also been examined in more general terms (e.g. van Leeuwen 2006; Landsbergen 2006; Colleman 2015). Although such research does not take combinations of *krijgen* with [*aan het* V_{INF}] into account, the analysis of the semantics of *krijgen* does align with

^{73.} Strikingly, maximally [-EFF.BOUND] *(ge)raken* can coerce [-EFF.BOUND] on [+EFF.BOUND] situations (cf. the Activity *moorden* 'to kill' in (63"")), but maximally [+EFF.BOUND] *slaan* cannot, it seems, coerce [+EFF.BOUND] on [-EFF.BOUND] situations (cf. the Dynamism *schuiven* 'to slide' in (61')). The reason for this asymmetry, I think, is that it is easier to understand removing boundary effectuation ability than to understand assigning it.

^{74.} The [-EFF.BOUND] status of *raken* may also be reflected by its semantics in the '*raken*-passive' (p.c. Ronny Boogaart)—i.e. combined with a past (passive) participle, e.g. *Ze raakten ingesloten (door vijandelijke troepen)* 'they got surrounded (by enemy troops)' (cf. Haeseryn et al. 1997:1421) This runs parallel to the participle structure with *krijgen*, which has received more research attention (discussed below).

^{75.} It could be argued that the 'effort' or 'reluctance' exhibited by *zich zetten* in (63"') should have formal repercussions for the classification in Table 4.7. However, I think this is captured adequately by the idea that [+EFF.BOUND] is stronger for *slaan* than *zich zetten* (just like [-EFF.BOUND] was argued to be stronger for *(ge)raken* than *komen*). Moreover, the current classification groups a maximum of two verbs together, which also share a crucial semantic component.

Van Pottelberge's notion of "gelingen": Landsbergen (2006), for instance, calls the subject of a main sense of *krijgen* 'pseudo-agentive', which is to say that the subject lacks full control over realization of the situation at hand. Landsbergen (following van der Horst 2002) terms this pseudo-agentive sense "the new *krijgen*", which he illustrates with (64) below (*ibid*:159). Important for the present discussion is that the semantics "the new *krijgen*", combined with a past participle, strongly resemble that of *krijgen* combined with [*aan het* V_{INF}], illustrated in (65).

- (64) Ik <u>krijg</u> dit artikel niet <u>geschreven</u>.
 I obtain.ISG this article not write.PCP
 'I can't get this article written.'
- (65) Ik denk dat je op die manier mannen echt niet <u>aan het opvoeden krijgt</u>.
 I think that you on that manner men really not AAN the raise.INF obtain.2SG
 'I think you really won't get men to start raising kids that way.'

(WR-P-P-G-0000104544)

In (64), the subject is pseudo-agentive because they lack full control over realizing the situation in which the article is 'written'. Similarly, in (65) such ability is lacking for initiating the situation where men are 'raising kids'. I would argue, therefore, that (65)'s pseudo-agentivity (like that of (64)) can be abstracted over in terms of [-EFF.BOUND]: a pseudo-agentive subject lacks the ability (or at least has only partial or somehow inadequate ability) to effectuate temporal boundaries. Although (64) and (65) both feature negation, this is not a necessary condition for the [-EFF.BOUND] interpretation: if *niet* 'not' is removed from (64)-(65), the sentence gets an interpretation where obtaining the situation took a long time and/or great effort (cf. 64'-65').

(64') Ik heb het artikel geschreven gekregen. [-EFF.BOUND]
I have.ISG the article write.PCP obtain.pcp
'I got the article written (in the end/with great effort).'

(65') Ik heb mijn man <u>aan het opvoeden gekregen</u>. [-EFF.BOUND]
I have.ISG my man AAN the raise.INF obtain.PCP
'I got my husband to start raising the kids (in the end/with great effort).'

In my analysis, the 'in the end'/'with great effort' interpretations (corresponding to Van Pottelberge's notion "gelingen" and Landsbergen's "pseudo-agentivity") are again derived from [-EFF.BOUND]. I would argue, though, that *krijgen* is characterized by a lesser degree of

[-EFF.BOUND] than *(ge)raken* due to its [+CAUSATIVE] status, which implies a certain degree of boundary effectuation ability (unless it is combined with negation, as it often is—cf. (65)).

The first line along which the initial-causative set varies is thus that *krijgen* is thus [-EFF.BOUND] while the rest (i.e. *brengen*, *maken* and *zetten*) is not [-EFF.BOUND]. The next notion that Van Pottelberge (2004:47) introduces is that of "Auftrag" ('order', 'command'), which *zetten* exhibits and *maken* does not, while *brengen* is neutral (and *krijgen* precludes it due to "gelingen").⁷⁶ This means that with *zetten*, the relation between causer and causee is coded as one where the former directly orders the latter to start the situation at hand, whereas *maken* indicates explicitly that there is no 'ordering' relationship between causer and causee. This difference between *zetten* and *maken* is illustrated in (66)-(67): in (66), the mother 'orders' her daughter to start dancing,⁷⁷ while in (67), the 'masked creep' cannot have 'ordered' their victims to be startled, since being startled is generally an uncontrolled and non-volitional reaction (i.e. a Position, Dynamism or Non-effectuateable Semelfactive, depending on how it is construed).

(66) Daarna is het de beurt aan Elena, die met een knipoog ook Melissa, haar there.after be.3sG it the turn to Elena that with a wink also Melissa her tweejarige dochtertje <u>aan het dansen zet</u>. two.year.old daughter.DIM AAN the dance.INF put.3sG

'Then it's Elena's turn, who—with a wink—also makes Melissa, her two year old daughter, start dancing.'

(WR-P-P-H-0000101969)

(67) Dit is de zevende in een rij films waarin een gemaskerde griezel de boel this is the seventh in a row movies where.in a masked creep the bunch <u>aan het schrikken maakt</u>. AAN the be.startled.INF make.3SG

'This is the seventh in a series of movies in which a masked creep gives everyone a fright.' (WR-P-P-G-0000030880)

To make sense of the difference between *zetten* and *maken* in terms of [±EFF.BOUND], it is therefore necessary to clarify *whose* ability to effectuate boundaries is meant: the causer's or causee's. *Zetten*, at first sight, presupposes [+EFF.BOUND] of both causer and causee, as 'giving an

^{76.} In Van Pottelberge's analysis, this relationship only applies to cases where both the causer and causee are animate, since the very notion of 'ordering' presupposes an animate subject that can give orders and an animate object that can follow them. With an inanimate causer/causee, there is no difference between the three remaining verbs.

^{77.} Terming *zetten* '+Auftrag' leads to the—in my opinion—not entirely fitting wording that in (66) the mother 'orders' her daughter to start dancing. Abstracting over 'Auftrag' in terms of [±EFF.BOUND] solves this problem, as mother (causer) and daughter (causee) can simply be said to both have boundary effectuation ability.

order' implies that the one giving the order (causer) has the ability to effectuate a situation in which the one following the order (causee) has to ability to effectuate the initial boundary dictated by the order. In other words, *zetten* requires a situation in which both causer and causee be [±EFF.BOUND]. *Maken*, conversely, presupposes that the causee *does not* have the ability to effectuate the initial boundary of the situation, although the boundary is still realized (which the causee thus does not exert control over). At the same time, *maken*'s subject is still the causer of the situation, and unlike *krijgen*, *maken* does not imply any particular time span or effort resulting from the causer's lack of boundary effectuation ability. Thus, *maken* encodes a situation in which the causer is [+EFF.BOUND] while the causee is [-EFF.BOUND]. This account of *zetten* and *maken* in terms of [±EFF.BOUND] explains why replacing *zet* with *maakt* in (66') is marked, while substituting *maakt* for *zet* in (67') is unacceptable (since *schrikken* 'to be startled' is [-EFF.BOUND] to such a degree that it cannot be coerced into [+EFF.BOUND]).

- (66') ^{*}Elena <u>maakt</u> haar tweejarige dochtertje <u>aan het dansen</u>.
 Elena make.3SG her two.year.old daughter.DIM AAN the dance.INF [+EFF.BOUND]_{CAUSER} / [+EFF.BOUND]_{CAUSEE} ?> [-EFF.BOUND]_{CAUSEE}
 (Marked reading: 'Elena makes it so that her two year old daughter cannot help dancing'.)
- (67') *Een gemaskerde griezel <u>zet</u> de boel <u>aan het schrikken</u>.
 a masked creep put.3SG the bunch AAN the be.startled.INF [+EFF.BOUND]_{CAUSER} / [-EFF.BOUND]_{CAUSEE} *> [+EFF.BOUND]_{CAUSEE}
 (Intended: 'A masked creep makes everyone be startled'.)

The idea that *maken* and *zetten* select [+EFF.BOUND] causers needs to be specified, however, since (as Van Pottelberge points out) they also take inanimate subjects, which are generally [-EFF.BOUND]. *Deze anekdote* 'this anecdote' in (68a) and the analogously constructed example (68b) illustrate this; note that the respective [+EFF.BOUND] and [-EFF.BOUND] requirements for *zetten*'s and *maken*'s causees are upheld even with inanimate causers, as shown in (68'a-b).⁷⁸

^{78.} Note also that *maken* is less compatible with *studeren* 'to study' in (68'a) than with *dansen* 'to dance' in (66'), presumably because 'dancing' is less distinctly [+EFF.BOUND] than 'studying'.

- (68) a. Deze anekdote zette hem <u>aan het studeren</u> over de herkomst en de this anecdote put.3SG him aan the study.INF about the origin and the natuurlijke milieus van tuinplanten. [-EFF.BOUND]_{CAUSER} / [+EFF.BOUND]_{CAUSEE} natural environment of garden.plants
 'This anecdote led him to study the origin and natural environments of garden plants.' (WR-P-P-H-0000068317)
 - b. Deze anekdote maakte hem <u>aan het schrikken</u> over de herkomst en de this anecdote made.3SG him aan the be.startled.INF about the origin and the natuurlijke milieus van tuinplanten. [-EFF.BOUND]_{CAUSER} / [-EFF.BOUND]_{CAUSEE} natural environment of garden.plants

'This anecdote gave him a fright about the origin and natural environments of garden plants.'

- (68') a. *Deze anekdote <u>maakte</u> hem <u>aan het studeren</u> over tuinplanten. this anecdote made.3sG him aan the study.INF about garden.plants [-EFF.BOUND]_{CAUSER} / [+EFF.BOUND]_{CAUSEE} *> [-EFF.BOUND]_{CAUSEE}
 (Intended: 'This anecdote made it so that he could not help but to study garden plants.')
 - b. *Deze anekdote <u>zette</u> hem <u>aan het schrikken</u> over tuinplanten. this anecdote put.3sG him aan the be.startled.INF about garden.plants [-EFF.BOUND]_{CAUSER} / [-EFF.BOUND]_{CAUSEE} *> [+EFF.BOUND]_{CAUSEE}

(Intended: 'This anecdote made him be startled about garden plants.')

This means that *zetten* and *maken* are both $[\pm EFF.BOUND]_{CAUSER}$, but diverge in being $[\pm EFF.BOUND]_{CAUSEE}$ and $[-EFF.BOUND]_{CAUSEE}$ respectively. This specification of causer and causee can also be applied to *krijgen*, which like *maken* and *zetten* also combines with inanimate subjects. In that case, the 'in the end' or 'with trouble' interpretation is retained to the extent that the caused situation is understood as difficult to accomplish—due to the specific causer, or in general. This is illustrated by (69), in which the use of *krijgen* construes *lezen* 'to read' as a difficult situation to get the causees—*kinderen* 'children'—to be involved in. Still, as causees, the 'reading children' in (69) are [+EFF.BOUND]. But *krijgen* can also combine with a situation that assigns the causee an [-EFF.BOUND] role, like *lachen* 'to laugh' in (70). Besides being [-EFF.BOUND]_{CAUSER}, as the derived 'in the end'/ with trouble' readings show, *krijgen* is therefore [±EFF.BOUND]_{CAUSER}.

 (69) En da's precies de bedoeling van de Kinderboekenweek:kinderen<u>aan het lezen</u> and that's precisely the intention of the Child.book.week children AAN the read.INF
 <u>krijgen</u>. [-EFF.BOUND]_{CAUSER} / [+EFF.BOUND]_{CAUSEE}

'And that's exactly the aim of the Kinderboekenweek: getting children to read.' (WS-U-E-A-0000000580) (70) Kijk, heb ik je toch weer <u>aan het lachen gekregen</u>.
 look.IMP have.ISG I you PRT again aan the laugh.INF obtain.PCP [-EFF.BOUND]_{CAUSER} / [-EFF.BOUND]_{CAUSER}
 'Look, I got you to laugh again after all.'
 (WR-P-E-A-0004551694)

That leaves the final [+INITIAL][+CAUSATIVE] verb *brengen*, which according to Van Pottelberge (2004:47) is not characterized by "gelingen" and is neutral as to "Auftrag". Based on the relation of these notions to [±EFF.BOUND] as shown for the other three verbs above, this would mean that *brengen* is both [±EFF.BOUND]_{CAUSER} and [±EFF.BOUND]_{CAUSEE}, i.e. entirely underspecified for this notion just like *gaan* in the initial-noncausative set. This expectation is borne out, as shown by the acceptability of not only the [+EFF.BOUND]_{CAUSER/CAUSEE} and [-EFF.BOUND]_{CAUSER/CAUSEE} corpus examples under (71), but also their constructed minimal counterparts under (71').

(71) a. Ook in Vlaanderen, waar volkse accordeonisten [...] ooit de cafébezoekers also in Vlaanderen where working.class accordionists a once the café-goers
 <u>aan het dansen brachten</u>, is de heropleving van de accordeon een feit. AAN the dance.INF brought.3PL be.3SG the revival of the accordion a fact [+EFF.BOUND]_{CAUSER} / [+EFF.BOUND]_{CAUSEE}
 'In Vlaanderen too where working class accordionists at one time got the café-goers

'In Vlaanderen too, where working class accordionists at one time got the café-goers dancing, the revival of the accordion is a fact.'

(WR-P-P-G-0000185435)

b. Ik zou van jullie wel eens willen weten welke film jullie aan I would.ISG from you.PL PRT once want.to.INF know.INF which movie you.PL AAN <u>het huilen bracht</u> en waarom? [-EFF.BOUND]_{CAUSER} / [-EFF.BOUND]_{CAUSEE} the cry.INF brought.3SG and why

'I would like to know from you which movie made you cry and why?' (WR-P-E-A-0000341231)

(71') a. De accordeonmuziek <u>bracht</u> de cafébezoekers <u>aan het dansen</u>. the accordion.music brought.3SG the café-goers AAN the dance.INF [-EFF.BOUND]_{CAUSER} / [+EFF.BOUND]_{CAUSEE}

'The accordion music got the café-goers dancing.'

b. Welke persoon <u>bracht</u> jullie <u>aan het huilen</u> en waarom? which person brought.3SG you.PL aan the cry.INF and why [+EFF.BOUND]_{CAUSER} / [+EFF.BOUND]_{CAUSEE}

'Which person made you cry and why?'

To sum up, Table 4.8 characterizes the initial-causative verbs in terms of the previous parameters, with the added parameter [±EFF.BOUND] which is furthermore broken down into causer, i.e. subject (s), and causee, i.e. object (o). This makes it possible to tease apart semantically every individual verb in this set.

	I ABLE 4.0	Classifici	uion wiin	ooundary ejj	ecination pi	irameier aa	aea 10 11111	ui-cuusuiii	ve veros		
	Verbs	[+PHASAL]		[±PERCEP.]	[±MODAL]		[±cont.]	[±CAUS.]	[±EFF.BOUND]		10
	verbs	[±INIT.]	[±MED.]	[TPERCEP.]	[±EPIST.]		[±CON1.]	[±CAUS.]	S	0	n
	<i>krijgen</i> 'to obtain'								I	±	1
ſ	<i>maken</i> 'to make'								±	-	1
ſ	<i>zetten</i> 'to put'	+	_		_			+	±	+	1
	brengen 'to bring'								±	±	1

TABLE 4.8 Classification with boundary effectuation parameter added to initial-causative verbs

The classification of the initial-causative verb set can then be merged with that of the initialnoncausative set, clarifying which non-causative verbs are the (partial) counterparts of the causative verbs in terms of [±EFF.BOUND] and vice versa. This is shown in Table 4.9: *gaan* and *brengen* are full [±CAUSATIVE] counterparts, being the most general with respect to [±EFF.BOUND]; *zetten* and *slaan/zich zetten* are [±CAUSATIVE] counterparts regarding the [+EFF.BOUND] status of the one involved in the situation (i.e. causee/agent); *maken* and *komen/(ge)raken* are [±CAUSATIVE] counterparts regarding the [-EFF.BOUND] status of the one involved in the situation (causee/agent); and, finally, *krijgen* and *komen/(ge)raken* are [±CAUSATIVE] counterparts regarding the [-EFF.BOUND] status of one involved in the situation (*komen/(ge)raken*) and the causer (*krijgen*).⁷⁹

Verbs	[+PH	ASAL]	[±PERCEP.]	[±MODAL]		[±CAUS.]	[±cont.]	[±EFF.B	OUND]	
Verbs	[±INIT.]	[±MED.]	[±PERCEP.]	[±EPIST.]		[±CAUS.]	[±CON1.]	S	0	n
komen 'to come',										2
<i>(ge)raken</i> 'to get'								-	-	2
<i>slaan</i> 'to hit',										
<i>zich zetten</i> 'to put						_		+	÷	2
oneself										
gaan 'to go'	+	-		_				÷	£	1
krijgen 'to obtain'								-	±	1
maken 'to make'								±	-	1
<i>zetten</i> 'to put'						+		±	+	1
brengen 'to bring'								±	±	1

 TABLE 4.9
 Classification with boundary effectuation added to entire initial-nonmodal set

^{79.} In fact, *krijgen* is the only verb in the initial set that specifies anything about the boundary effectuation ability of the causer, which makes it a particularly interesting verb in this set. This ties in nicely with Landsbergen's (2006:161) remark that Dutch *krijgen* may be "one of the most curious words in our language" (quoting Grimm, who says the same about its German counterpart).

Although the application of [\pm EFF.BOUND] has been most directly useful here for the [+INITIAL][-MODAL] group—as it served to tease apart verbs that were sufficiently differentiated by the parameters [\pm CONTINUATIVE], [\pm CAUSATIVE] and [\pm PERCEPTION] in the [+MEDIAL][-MODAL] set, and [\pm EPISTEMIC] in the [+MODAL] group—, applying [\pm EFF.BOUND] throughout the rest of the classification as well is beneficial for a different reason: to relate all of the verbs to *zijn* 'to be', which as part of 'progressive' [*zijn aan het* V_{INF}] was analyzed as [+MEDIAL][+DYNAMIC][\pm EFF.BOUND].

The idea that [±EFF.BOUND] is a relevant parameter across the verb set as a whole, as I will argue, also suggests that it is not sufficient to analyze [zijn aan het V_{INF}] as a progressive construction (i.e. to infer its conceptual structure from the notion of 'progressivity'). Instead, understanding [zijn aan het VINF] requires an analysis that is informed by the broader languagespecific paradigm of situational *aan*-PPs (i.e. the verbs in this section and complements in the next). In other words, what I will argue is that [±EFF.BOUND]—as a notion conceptualized on the basis of earlier work on progressivity—in the case of [zijn aan het V_{INF}] is actually a notion tied not (only) to its progressivity but (primarily) to its place in the paradigm of situational *aan*-PPs, in which [±EFF.BOUND] is one of the constitutive concepts setting each of the members of that paradigm apart semantically. The remainder of this section will therefore briefly go over the rest of the verbs in the set: the modal-epistemic and modal-nonepistemic sets, as well as the medial-nonmodal group (structured by [±PERCEPTION], [±CAUSATIVE] and [±CONTINUATIVE]). First, the modal-epistemic group (i.e. blijken 'to turn out' and lijken/schijnen 'to seem') is compatible with both [+EFF.BOUND] and [-EFF.BOUND] situations (as well as animate and inanimate subjects), as shown by the examples in (72) (72b repeated from (58)-cf.§4.2.2.4). This set is thus [±EFF.BOUND].

(72) a. De sfeer Rusland en de Verenigde Staten lijkt tussen alvast aan the atmosphere between Russia and the United States seem.3SG at.any.rate AAN het ontdooien, na de ijzige periodedie volgde op de Russische inval after the icy period that followed.3sg on the Russian the thaw.INF invasion Georgië vorige zomer. [-EFF.BOUND] Georgia last Summer

'At any rate, the relations between Russia and the United States appear to be thawing after the frosty period following the Russian invasion of Georgia last Summer.'

(WS-U-E-A-0000165790)

b. De vrouwtjes <u>bleken aan het broeden</u> en vertoonden zich dus niet. the females turned.out.3PL AAN the brood.INF and showed.3PL REFL thus not [+EFF.BOUND]

'The females turned out to be brooding, so they didn't show themselves.'

By contrast, the modal-nonepistemic group (i.e. *kunnen* 'can', *moeten* 'must', *mogen* 'may', *willen*, 'want') does require the situation's initial boundary to be effectuateable by the subject. This makes sense, as the modal relation construed between subject and situation by the speaker is one of obligation/permission (deontic: *moeten*, *mogen*) or ability/willingness (dynamic/boulomaic: *kunnen*, *willen*)—notions that operate on an effectuateable initial boundary. After all, being 'obliged', 'permitted' or 'willing' to start something will have no effect if one is unable to effectively do so. Even *kunnen*, which precisely encodes 'ability', cannot, it seems, coerce [+EFF.BOUND] on distinctly [-EFF.BOUND] situations. This claim is substantiated by means of constructed sentences in (73), based on the attested example in (59) (cf.§4.2.2.4), supplemented by the constructed example (74).

(73) a. Het nutsbedrijf <<u>wil</u>> <<u>kan</u>> <<u>mag</u>> <<u>moet</u>> nu <u>aan het bouwen.</u> the utility.company want.3SG can.3SG may.3SG must.3SG nowAAN the build.INF [+EFF.BOUND]

'The utility company wants to/can/may/has to start building right now.'

(74) We <waren> <*<u>wilden</u>> <*<u>konden</u>> <*<u>mochten</u>> <*<u>moesten</u>> <u>aan het lachen</u> om we were.IPL wanted.IPL could.IPL may.PST.IPL must.PST.IPL AAN the laugh.INF for de 'beste slechtste film ooit' *The Room*. [-EFF.BOUND] *> [+EFF.BOUND] the best worst movie ever The Room
'We were laughing at the 'best worst movie ever' The Room.' (Unacceptable reading: 'We wanted to/could/were allowed to/had to laugh at the 'best worst movie ever' *The Room*.')

As (73a) shows, the modal-nonepistemic verbs are compatible with [+EFF.BOUND] situations. But they resist combining with *groeien* 'to grow' in (73b), which is [-EFF.BOUND] or at least rather

indistinctly [+EFF.BOUND]: the relation between one's actions and the effect of 'growing' is generally not very direct or clear, and therefore difficult to construe as effectuateable. (73b) can be interpreted through a highly marked reading that coerces [+EFF.BOUND], which in the case of *groeien* is difficult but not impossible. This is different for the highly [-EFF.BOUND] situation *lachen* 'to laugh'—generally an uncontrolled and involuntary bodily reaction—which rejects combing with the epistemic-modal verbs and [*aan het* V_{INF}] categorically, cf. (74). For comparison: non-epistemic *zijn* 'to be' combines with *lachen* without problems. The modal-non-epistemic verbs, when combined with [*aan het* V_{INF}], are thus expressly [+EFF.BOUND].⁸⁰

The [+PERCEPTION] set (*zien* 'to see', *horen* 'to hear' and *vinden* 'to find') takes two arguments, meaning that [±EFF.BOUND] splits into subject (s) and object (o) for this parameter (cf. Tables 4.8-4.9). As laid out in §4.2.2.5, the subject of the perception verb is the 'perceiver' (s), while the subject of the situation denoted by the infinitive corresponds to the object of the perception verb (o). The 'perceiver' is as coded as external to the situation: they are not a participant themselves, and hence do not exert influence over it. Perceivers (s) are thus [-EFF.BOUND]. As for the internal participant (o), it does not matter whether they have the ability to initiate a terminal boundary (i.e. to stop the situation), as demonstrated by example (75a), from Haeseryn et al. (1997:1053), and its variations in (75b-c), in which *we* 'we' is the perceiver and *hem* 'him' the participant in the situation (*rommelen* 'rummaging'). The [+PERCEPTION] set is thus [-EFF.BOUND]_{PERCEIVER} and [±EFF.BOUND]_{PARTICIPANT}.

(75) a. We <u>hoorden</u> hem <u>aan het rommelen</u> op zolder.
 we heard.IPL him aan the rummage.INF on attic
 [-EFF.BOUND]_{PERCEIVER} / [+EFF.BOUND]_{PARTICIPANT}
 'We heard him rummaging around in the attic.'

^{80.} This is actually more surprising than the explanation above ('deontic/dynamic/boulomaic modality operates on [+EFF.BOUND] situations') may make it seem, since without [*aan het* V_{INF}], these verbs take [-EFF.BOUND] situations no problem—cf. (i)-(ii). A relevant difference between (73b)-(74) and (i)-(ii) is that the latter do not profile the initial boundary of the situation; this may contribute to [±EFF.BOUND] not being a requirement there.

⁽i) Het nutsbedrijf wil/kan/mag/moet groeien. 'The utility company wants to/can/may/has to grow.'

⁽ii) We wilden/konden/mochten/moesten lachen om *The Room*. 'We wanted to/could/had permission to/had to laugh at *The Room*.'

This 'strict' notion of modality, where ability is a necessary condition for obligation, permission and willingness, thus seems to be a property of [*aan het* V_{INF}] (or, perhaps, situational *aan*-PPs in general) in their combination with these verbs. This provides an additional theoretical argument for the standpoint that [±EFF.BOUND] is a constitutive concept for the verb set in (51) as a whole, and—more fundamentally—for the idea that [±EFF.BOUND] itself should be defined in terms of control (ability) and not volition (willingness) (cf.§3.2.4). After all, this seems to be the main restriction imposed by the combination of [*aan het* V_{INF}] with these verbs.

- b. We <<u>zagen</u>> <<u>vonden</u>> hem <u>aan het rommelen</u> op zolder.
 we saw.IPL found.IPL him aan the rummage.INF on attic [-EFF.BOUND]_{PERCEIVER} / [+EFF.BOUND]_{PARTICIPANT}
 'We saw/found him rummaging around in the attic.'
- c. We <<u>hoorden</u>> <<u>zagen</u>> <<u>vonden</u>> hem <u>aan het <lachen> <huilen></u> op zolder. we heard.IPL saw.IPL found.IPL him aan the laugh.INF cry.INF on attic [-EFF.BOUND]_{PERCEIVER} / [-EFF.BOUND]_{PARTICIPANT}

'We heard/saw/found him laughing/crying in the attic.'

Then there is the [+MEDIAL][+CAUSATIVE] group, consisting of two verbs: one [-CONTINUATIVE] (*hebben* 'to have'), the other [+CONTINUATIVE] (*houden* 'to keep'). As causative verbs, they encode a causer (s) and causee (o). Neither verb has a [±EFF.BOUND]_{CAUSEE} restriction, as demonstrated by the constructed examples under (76). But while *houden* is also unrestricted for [±EFF.BOUND]_{CAUSER}, *hebben* does appear to require its subject to be [+EFF.BOUND], as evidenced by the—according to my intuitions—limited acceptability and highly marked readings produced by using *hebben* in (76b/d).⁸¹ It thus seems that *houden* is [±EFF.BOUND]_{CAUSER}, while *hebben* is more restricted—namely [+EFF.BOUND]_{CAUSER} and [±EFF.BOUND]_{CAUSEE}.

- (76) a. De dj <heeft> <houdt> het publiek aan het dansen. the DJ have.3sG keep.3sG the audience AAN the dance.INF [+EFF.BOUND]_{CAUSER} / [+EFF.BOUND]_{CAUSER}
 'The DJ has/keeps the crowd dancing.'
 - b. De muziek <^{??}heeft> <houdt> het publiek aan het dansen. the music have.3sG keep.3sG the audience AAN the dance.INF *hebben*: [-EFF.BOUND]_{CAUSER} ??> [+EFF.BOUND]_{CAUSER} / [+EFF.BOUND]_{CAUSEE} *houden*: [-EFF.BOUND]_{CAUSER} / [+EFF.BOUND]_{CAUSEE}
 'The music keeps the crowd dancing.' (Highly marked reading: 'The music has the crowd dancing'.)
 - c. De komiek <heeft> <houdt> het publiek aan het lachen. the comedian have.3sG keep.3sG the audience AAN the laugh.INF [+EFF.BOUND]_{CAUSER} / [-EFF.BOUND]_{CAUSEE}

'The comedian has/keeps the audience laughing.'

^{81.} Dutch *hebben* differs in this respect from English *to have*, which—as the 'highly marked' translations under (76b/d) show—is fine with an inanimate (i.e. [-EFF.BOUND]) subject.

d. De film <"heeft> <houdt> het publiek aan het lachen.

the movie have.3SG keep.3SG the audience AAN the laugh.INF

hebben:[-EFF.BOUND]_CAUSER?[+EFF.BOUND]_CAUSER/[-EFF.BOUND]_CAUSERhouden:[-EFF.BOUND]_CAUSER/[-EFF.BOUND]_CAUSER/

'The movie keeps the audience laughing.'

(Highly marked reading: 'The movie has the audience laughing'.)

Finally, the [-CAUSATIVE][+CONTINUATIVE] verb *blijven* 'to stay' mirrors its [-CONTINUATIVE] counterpart *zijn* 'to be' in being [±EFF.BOUND], as shown by the corpus examples in (77)-(78).

(77) Want hier draait het een schrijver natuurlijk om: hoe <u>blijf</u> ik <u>aan het schrijven</u>? because here turn.3SG it a writer of.course about howstay.ISG I AAN the write.INF [+EFF.BOUND]

'Because for a writer, of course, this is what it's all about: how do I keep writing?'

(78) Hoi Patries, ik ben benieuwd of ie nu iets wijzer wordt na dat whether you nowa.little wiser hi Patries I be.15G curious become.2SG after that bloedprikken. Vervelend als je zo aan het kwakkelen blijft. [-EFF.BOUND] unpleasant if you so aan the be.ailing.INF stay.2SG blood.test 'Hi Patries, I'd like to know whether the blood test reveals anything. It's so unpleasant to keep having health issues like that.'

As a final overview, Table 4.10 presents the full classification, including all parameters discussed up to now. To reiterate: empty cells indicate incompatibility of a parameter with an earlier parameter (i.e. those to the left). For the reader's convenience, the verbs are shown on both sides.

TABLE 4.10 Full classification of verbs combing with [aan het V_{INE}]

Verbs	[+PHASAL]		[±percep.]	[±MODAL]		[±cont.]	[±CAUS.]	[±EFF.I	BOUND]	Verbs
verbs	[±INIT.]	[±MED.]	[±PERCEP.]		[±EPIST.]	[±CONT.]	[±CAUS.]	S	0	verbs
komen 'to come',										<i>komen</i> 'to come',
<i>(ge)raken</i> 'to get'									_	<i>(ge)raken</i> 'to get'
<i>slaan</i> 'to hit',							-			<i>slaan</i> 'to hit',
<i>zich zetten</i> 'to put oneself'									+	<i>zich zetten</i> 'to put oneself'
gaan 'to go'				-				:	±	gaan 'to go'
<i>krijgen</i> 'to obtain'							+	_	±	<i>krijgen</i> 'to obtain'
<i>maken</i> 'to make'	+	_						±	-	<i>maken</i> 'to make'
<i>zetten</i> 'to put'								±	+	<i>zetten</i> 'to put'
brengen 'to bring'								±	±	brengen 'to bring'
kunnen 'can', moeten										kunnen 'can', moeten
'must', mogen 'may',				+	_				+	'must', <i>mogen</i> 'may',
<i>willen</i> 'want'										willen 'want'
<i>zijn</i> 'to be'							-	:	±	<i>zijn</i> 'to be'
<i>hebben</i> 'to have'						_	+	+	±	<i>hebben</i> 'to have'
<i>blijven</i> 'to stay'				_			-	:	±	<i>blijven</i> 'to stay'
<i>houden</i> 'to keep'			—			+	+	±	±	<i>houden</i> 'to keep'
<i>blijken</i> 'to turn out',	_	+								<i>blijken</i> 'to turn out',
lijken/schijnen 'to seem'				+	+				±	<i>lijken/schijnen</i> 'to seem'
<i>horen</i> 'to hear', <i>zien</i> 'to										horen 'to hear', zien 'to
see', vinden 'to find'			+					_	±	see', vinden 'to find'

4.2.2.7 [±DYNAMIC]. To round off, it is useful to discuss one final parameter, which like [±EFF.BOUND] is not necessary for teasing the verbs apart, but does contribute to relating all 'other' situational [*aan het* V_{INF}]-patterns to the 'progressive' [*zijn aan het* V_{INF}]: [±DYNAMIC].

In §4.1, [*zijn aan het* V_{INF}] was analyzed as a cluster of the features [+PHASAL][+MEDIAL] [+DYNAMIC][±EFF.BOUND] (the situational feature [+DURATIVE] being implied by [+PHASAL]). Table 4.10 (§4.2.2.6) analyzes all combinations of [*aan het* V_{INF}] and the verbs it selects in terms of all of these features, except for [±DYNAMIC]. So, the question is: do the other combinations also require or coerce the situation denoted by their infinitival complement to be [+DYNAMIC]? And, by extension, do they similarly exploit [+EFF.BOUND] and the semantics of 'performance' to bring about State-to-Activity or Position-to-Activity type shift? One attested examples discussed in §4.1 of the latter kind of type shift is shown in (79) (repeated from (46b)).

(79) Gelukkig was het voor ons beiden "gênant" gezien we samen luckily was.3sG it for us both embarrassing considering we together <u>bloot aan het zijn waren</u>, maar echt leuk vond ik het niet. naked AAN the be.INF were.IPL but really fun found.ISG I it not 'Luckily it was "embarrassing" for both of us considering that we were being naked together, but I didn't exactly enjoy it.'

It should be noted that (79), while attested, is quite unusual and receives a marked ('performance') reading. Replacing *zijn* with other verbs from the verb set (in the simplified version in (79'a)) either yields a more marked reading in which [+DYNAMIC] is more difficult to understand but still interpretable, cf. (79'b-c); or it produces a categorically unacceptable sentence, cf. (79'd-e).

- (79') a. [?]We waren samen bloot aan het zijn. we were.IPL together naked AAN the be.INF (Marked reading: 'We were being naked together.')
 - b. ^{??}We <<u>bleken</u>> <<u>leken/schenen</u>> <<u>bleven</u>> samen bloot aan het zijn. we turned.out.IPL seemed.IPL stayed.IPL together naked AAN the be.INF (Highly marked reading: 'We turned out to be/seemed to be/kept on being naked together.'
 - c. ^{??}We <<u>hoorden</u>> <<u>zagen</u>> <<u>vonden</u>> ze samen bloot aan het zijn. we heard.IPL saw.IPL found.IPL them together naked AAN the be.INF (Highly marked reading: 'We heard/saw/found them being naked together.')

- d. *We <kwamen> <raakten> <sloegen> <zetten ons> <gingen> <konden> <moesten> we came.IPL got.IPL hit.IPL put.IPL REFL went.IPL could.IPL must.PST.IPL <mochten> <wilden> samen bloot aan het zijn. may.PST.IPL wanted.IPL together naked AAN the be.INF (Unacceptable reading: 'We got/ended up/could/had to/had permission to/wanted to start being naked together'.)
- e. *We <kregen> <maakten> <zetten> <brachten> <hadden> <hielden> hen samen we obtained.IPL made.IPL put.IPL brought.IPL had.IPL kept.IPL them together bloot aan het zijn. naked AAN the be.INF

(Unacceptable reading: 'We got/had/kept them being naked together.')

I conclude that [*aan het* V_{INF}] has a [+DYNAMIC] requirement when combined with any of the verbs in the classification in Table 4.10. As (79') shows, though, it is much more difficult to coerce dynamicity in some cases than in others. What the verbs that produce unacceptable sentences in (79'd-e) have in common (and what makes them different from those in (79'a-c)) is that they are [+INITIAL] and/or [+CAUSATIVE]. It thus seems that both of these features are incompatible with the semantics of 'performance' that enable [+EFF.BOUND] to be exploited for the coercion of dynamicity in (79).

4.2.3 Summary: Clusters of semantic features. In this section, I have argued that the verbs with which [*aan het* V_{INF}] combines are best characterized as clusters of semantic features, rather than assigned to discrete groups (as in previous work, i.e. Haeseryn et al. 1997:1048-1054; Van Pottelberge 2004:27-51; Booij 2010:146-168). The features setting the verbs apart crosscut each other rather than being mutually exclusive, so that any division into categories is forced to abstract to the extent that the interrelations emerging from those crosscutting features are rendered invisible—even though those interrelations have explanatory value for the selectional behavior of the verbs. For example, some of the verbs from Van Pottelberge's (2004) 'modal' category (cf. (80) below) were shown in the previous section to be marked but interpretable when combined with a stative infinitive (cf. (79'b)) while others turned out to be categorically unacceptable (cf. (79'd)). This could be linked to the incompatibility of [+INITIAL] with the coercion of dynamicity, even though the modals analyzed as [+INITIAL] here do not belong to, for instance, the category "Abfang" ('start') in Van Pottelberge's (2004) classification.

As a way of summarizing the feature-based approach laid out in this section—and of comparing the present classification with the previous work that this approach builds upon—

(80) shows Van Pottelberge's (2004) classification (repeated from (51b)), while (81) presents the cluster of features characterizing each verb combing with [*aan het* V_{INF}]. Because all verbs under (81) share the two features [+PHASAL] and [+DYNAMIC] (while diverging in the additional features listed under (81a-n)), I propose here to call these verbs the 'phasal-dynamic verb set'.

(80) Van Pottelberge (2004): Semantic categories

- a. Start: gaan 'to go', komen 'to come', (ge)raken 'to get', slaan 'to hit', zich zetten 'to put oneself'
- b. State: zijn 'to be', blijven 'to stay', horen 'to hear', zien 'to see', vinden 'to find'
- c. Cause: brengen 'to bring', krijgen 'to obtain', maken 'to make', zetten 'to put', hebben 'to have', houden 'to keep'
- d. Modal: blijken 'to turn out', lijken/schijnen 'to seem', kunnen 'can', moeten 'must', mogen 'may', willen 'want'
- (81) Present classification: [+PHASAL][+DYNAMIC] verbs combining with [aan het V_{INF}]

	č
a. <i>komen, (ge)raken</i>	[+initial][-modal][-caus.][-eff.bound]
b. <i>slaan, zich zetten</i>	[+initial][-modal][-caus.][+eff.bound]
c. gaan	[+initial][-modal][-caus.][±eff.bound]
d. <i>krijgen</i>	$[+INITIAL][-MODAL][+CAUS.][-EFF.BOUND]_{S}[\pm EFF.BOUND]_{O}$
e. <i>maken</i>	$[+INITIAL][-MODAL][+CAUS.][\pm EFF.BOUND]_{S}[-EFF.BOUND]_{O}$
f. <i>zetten</i>	$[+INITIAL][-MODAL][+CAUS.][\pm EFF.BOUND]_{S}[+EFF.BOUND]_{O}$
g. <i>brengen</i>	$[+INITIAL][-MODAL][+CAUS.][\pm EFF.BOUND]_{S}[\pm EFF.BOUND]_{O}$
h. <i>kunnen, moeten</i> ,	[+initial][+modal][-epist.][+eff.bound]
mogen, willen	
i. <i>zijn</i>	[+medial][-modal][-cont.][-caus.][±eff.bound]
j. hebben	$[+MEDIAL][-MODAL][-CONT.][+CAUS.][+EFF.BOUND]_{S}[\pm EFF.BOUND]_{O}$
k. <i>blijven</i>	[+medial][-modal][+cont.][-caus.][±eff.bound]
1. houden	$[+MEDIAL][-MODAL][+CONT.][+CAUS.][\pm EFF.BOUND]_{S}[\pm EFF.BOUND]_{O}$
m. <i>blijken, lijken</i> ,	[+medial][+modal][+epist.][±eff.bound]
schijnen	
n. horen, zien, vinder	i [+medial][+percep.][-eff.bound] _s [±eff.bound] _o

The cluster representation in (81) has one additional advantage: it shows exactly how the 'progressive construction' [*zijn aan het* V_{INF}] relates semantically to the other combinations of verbs and [*aan het* V_{INF}]. Since all verbs are [+PHASAL] and [+DYNAMIC] when combined with [*aan het* V_{INF}], the clusters represented in (81a-n) provide a 'complete picture' about their semantic overlap and differences. In this way, (81) makes it clear that [*blijven aan het* V_{INF}] is most similar to the 'progressive construction' [*zijn aan het* V_{INF}], varying only in being [+CONTINUATIVE]; and that [*hebben aan het* V_{INF}] diverges not only in being [+CAUSATIVE], but also in having an express [+EFF.BOUND] requirement for the causer.

Finally, (81) shows that the feature [±EFF.BOUND]—which I proposed in Chapter 3 based on earlier work on control, agentivity and volition, and developed further in this section by applying

it to [*aan het* V_{INF}]—is a constitutive feature for the verb set combining with [*aan het* V_{INF}], which suggests that it is likely relevant to the analysis of situational *aan*-PPs in general.

4.3 Other complements

The phasal-dynamic verb set in (81)—or, more precisely, most of the verbs from that set combine not only with [*aan het* V_{INF}] but also with the other two situational *aan*-PPs under study: [*aan de* V_{STM}] and [*aan* DET N]. This section will examine how the aspecto-temporal conceptual basis underlying situational PPs in general (cf.§2.4) is specified by these particular *aan*-PPs in their structural role as complements to the phasal-dynamic verbs. The conceptual structure of the phasal-dynamic verbs in their combination with [*aan het* V_{INF}] (cf. (81)) will be taken as a point of departure, although it is not a given that their interpretation is entirely equivalent when they are combined with each of the situational *aan*-PPs. Specifically, while habitual (i.e. situation-external plus gnomic) interpretations are ruled out for [*zijn aan het* V_{INF}] (e.g. Boogaart 1999), they seem to be available for the verb stem and nominal groups. This difference between [*aan het* V_{INF}] on the one hand, and [*aan de* V_{STM}] and [*aan* DET N] on the other, will be worked out in §4.3.3. Before that, the semantics of [*aan* de V_{STM}] (§4.3.1) and [*aan* DET N] (§4.3.2) will be discussed individually.

4.3.1 The verb stem group: Boundary effectuation. Out of the two 'other complements', situational *aan*-PPs featuring the common determiner *de* 'the' and a verb stem—i.e. [*aan de* V_{STM}]—are most like [*aan het* V_{INF}], as both types of PP are made up of a form of the verb. Verbs—whether they be infinitives or stems—have situational reference (Lyons 1977; Bach 1986; Bierwisch 2011), that is, they refer to aspecto-temporal entities such as states, activities, processes and so on (cf.fn.10). Lyons (1977:442*ff*.) distinguishes between 'first-order' and 'second-order' entities, roughly identifying first-order entities as "more or less discrete physical objects" (*ibid*:442) and second-order entities as "perceptual and conceptual constructs" that "are observable and, unless they are instantaneous events, have a temporal duration" (*ibid*:444-445). Since situational *aan*-PPs—especially when combined with the phasal-dynamic verbs—themselves denote second-order entities, the second-order denotation of infinitives and verb stems aligns directly with that of the PP they are embedded in.

To illustrate, (82)-(83) present corpus examples of [*zijn aan het* V_{INF}] and [*zijn aan de* V_{STM}] with the same verb as the complement of *aan: wandelen* 'to stroll and *wandel* 'stroll', both

denoting the activity (i.e. second-order entity) of 'strolling'. As was pointed out in §2.1.2, there is no readily discernible meaning difference.

(82) Gisteren waren we aan het wandelen en komen we hem plots tegen. yesterday were.IPL we AAN the stroll.INF and come.IPL we him sudden upon 'We were taking a stroll yesterday and unexpectedly ran into him.'

(WR-P-E-A-0000098129)

(83) Mamma en papa denken dat ik met nonno <u>aan de wandel ben</u>, maar mommy and daddy think.3PL that I with grandpa AAN the stroll.STM be.ISG but die zit hier naast me. that sit.3SG here next.to me 'Mom and dad think that I am taking a stroll with grandpa, but he is sitting here next to me.' (WR-P-P-B-0000000106)

If there is no discernible difference between cases like (82) and (83), then how do [*aan het* V_{INF}] and [*aan de* V_{STM}] differ (if at all)? Previous accounts either do not address this question (Booij & Audring 2018) or tentatively conclude that they have "more or less the same meaning" (Broekhuis et al. 2015:153).

To examine this question empirically, a corpus query was conducted in the SoNaR-corpus of written Dutch (Oostdijk et al. 2013). Although the corpus is part-of-speech-tagged, verb stems are frequently tagged as nouns; in (83), for instance, *wandel* 'stroll', was tagged as a singular noun (N.soort.ev.*). For that reason, the query (formulated in CQL), shown in (84), seeks out both singular nouns and verb stems, which in Dutch share their form with the present singular conjugation of the verb (WW.pv.tgw.ev.*).

(84) ["aan"&pos="VZ.*"][pos="LID.bep.*"][pos="N.soort.ev.*"|pos="WW.pv.tgw.ev.*"]

The query in (84) yielded 626,219 tokens. Next, the subset of tokens tagged as verbs (908 tokens) were grouped by type and it was determined whether or not they were instances of [*aan de* V_{STM}]. To qualify as such, the item had to meet three criteria: (i) it had to go together with the verbs from the phasal-dynamic set (cf.§4.2); (ii) its meaning had to be aspecto-temporal, not spatio-temporal (cf.§2.2); and (iii) it had to behave syntactically like a situational *aan*-PP (i.e. fixed determiner, restricted word order and no R-pronominalization—cf.§2.1.4). An example of an item yielded by (84) that is not a situational *aan*-PP is shown in (85), which features the *aan*-PO (cf.§2.1.4) *ontlenen aan* 'to derive from' with the noun *geloof* 'belief'.

(85) Tegelijkertijd bezegelt dezehouding het einde van een traditie, die eeuwenlang at.the.same.time seal.3sG this attitude the end of a tradition that centuries.long
<u>aan het geloof</u> haar kracht <u>heeft ontleend</u>. [aan-PO]
AAN the belief her power have.3sG derive.PCP
'At the same time, this attitude seals the end of a tradition that for centuries derived its power from religious belief.' (WR-P-P-G-0000080774)

Items like (85) were removed from the verb-tag subset. Then the remaining types from that subset were merged with the corresponding types tagged (erroneously) as singular nouns, which made it possible to establish their total token frequency in the corpus (10,138 tokens). Table 4.11 shows all types of verbs occurring in [*aan de* V_{STM}] extracted from the corpus in this way.

Verb stem	n	%
<i>haal</i> 'tug'	7436	73.3%
<i>praat</i> 'talk'	1201	11.8%
<i>kook</i> 'boil'	1095	10.8%
<i>weet</i> 'know'	225	2.22%
wandel 'stroll'	110	1.09%
<i>zuip</i> 'guzzle'	18	0.18%
poets 'clean'	14	0.14%
<i>babbel</i> 'chat'	12	0.12%
schrijf 'write'	9	0.09%
<i>leg</i> 'lay (eggs)'	8	0.08%
opruim 'tidy up'	5	0.05%
<i>typ</i> 'type'	2	0.02%
hardloop 'jog'	1	0.01%
<i>vreet</i> 'gobble'	1	0.01%
<i>zit</i> 'sit'	1	0.01%
Ν	10,138	100%

TABLE 4.11 Types of stems found in situational aan-PPs: Absolute and relative token frequency

A first, general observation that can be made based on Table 4.11 is that [*aan de* V_{STM}] exhibits a rather low type frequency (15 types), both in proportion to the total token frequency and compared with [*aan het* V_{INF}]; Lemmens (2015:18) reports 447 types for the latter, and that is only for the combination with *zijn* 'to be'. Moreover, the four most frequent types make up almost all tokens (98.2%), with the three most frequent ones still making up an overwhelming majority (96%). The productivity of [*aan de* V_{STM}] thus seems to be restricted,⁸² and its overall

^{82.} One way in which productive (and especially newly formed) instances of [*aan de* V_{STM}] are restricted—according to my own (Netherlandic Dutch) native intuitions—is stylistically or in terms of register. One newly formed example given by Booij & Audring (2018:221) is *Hij zal vandaag aan de zwem zijn* 'He will be swimming today', and while I consider cases like *aan de zwem* 'swimming' grammatically acceptable, I generally find them to be

occurrence dominated by a handful of highly frequent combinations (viz. *aan de haal, aan de praat, aan de kook* and *aan de weet*).

This skewed distribution is especially relevant in light of the semantic characterization that Booij & Audring (2018) give of what they consider to be productive instances of [*aan de* V_{STM}]: "involved in the (habitual) action" denoted by the verb stem (Booij & Audring 2018:223). While this characterization is indeed a good way to capture the meaning of the 11 least frequent stems in Table 4.11, as I will argue, it does not in fact align with (all senses of) the four most frequent ones, as is demonstrated with corpus examples of the most frequent combinations in (86)-(89), in each case paired with *zijn* 'to be' from the phasal-dynamic verb set, except *weet* 'know' in (89), which only occurs with *komen* 'to come' (cf. (81a)).

- (86) En lezen dat een ander met je lief <u>aan de haal is</u>, is and read.INF that an other with your beloved AAN the tug.STM be.3SG be.3SG geen pretje. no fun.DIM
 'And reading that someone else has made off with your sweetheart, is no laughing matter.' (WR-P-P-G-0000362119)
- (87) Treinreis weer goed benut, jsp is <u>aan de praat</u> én ik begrijp train.journey again good utilize.PCP JSP be.3SG AAN the talk.STM and I understand.ISG waarom het niet werkte, sort of. why it not worked.3SG sort of

'I made the most of the train journey again, JSP is up and running *and* I understand why it wasn't working—sort of.' (WR-P-E-L-000000211)

- (88) Verwarm de room tot hij bijna <u>aan de kook is</u>. heat.up.IMP the cream until he almost AAN the boil.STM be.3SG
 'Heat up the cream until it is almost boiling.' (WR-P-P-G-0000155489)
- (89) De twee weeskinderen komen aan de weet dat ze van adel zijn the two orphan.children come.3PL AAN the know.STM that they of nobility be.3PL en verruilen het weeshuis voor het kasteel van hun voorouders. and exchange.3PL the orphanage for the castle of their ancestors 'The two orphans come to learn that they are of noble birth, and move from the orphanage

to the castle of their ancestors.' (WR-P-P-G-0000363332)

marked (specifically: dowdy or tacky). This is contrary to their [*aan het* V_{INF}] counterparts (e.g. *aan het zwemmen* 'swimming'), which to my intuitions are not marked in this way. The level of abstraction at which this study operates necessitates abstracting over such stylistic judgements, however, so that the restrictions will only be accounted for here in terms of conceptual parameters (namely [+EFF.BOUND], as argued below).

The highly frequent cases of [*aan de* V_{STM}] illustrated in (86)-(89) do not encode their subject to be involved in the (habitual) action denoted by the verb stem. Instead, they have specific meanings that appear to be tied to the combinations as a whole: *aan de haal* is not about the action of 'tugging',⁸³ but means that the subject has stolen (in (86): 'made off with') something or someone; *aan de praat* is not about 'talking',⁸⁴ but about functioning (in (87): 'being up and running'); and *aan de kook* and *aan de weet* in (88)-(89) concern the change of state from 'not boiling' to 'boiling' and 'not knowing' to 'knowing' (in (89): 'come to learn'), respectively, and thus do not constitute 'actions' either. It thus seems that *aan de haal/praat/kook/weet* are idiomatic combinations that are not instances of a productive schema [*aan de* V_{STM}], although they do correspond to it structurally (and are thus likely synchronically related to it, albeit on a lower level of abstraction and with idiosyncratic meanings tied to them).

An additional reason for assuming that these four most frequent patterns are not strictly instances of [*aan de* V_{STM}], is that the remaining 11 verb stems from Table 4.11 *do* fit with Booij & Audring's (2018) characterization of the productive pattern in terms of "involved in action". And the same goes for the attested examples that they provide, which are likewise low in frequency and thus probably newly formed based on the productive pattern. To get an overview of these attestations, (90a) presents the instances extracted from the corpus presently, and (90b) takes some additional examples from Booij & Audring (2018:221-222).

- (90) a. aan de wandel 'strolling', aan de zuip 'guzzling', aan de poets 'cleaning', aan de babbel 'chatting', aan de schrijf 'writing', aan de leg 'laying eggs', aan de opruim 'tidying up', aan de typ 'typing', aan de hardloop 'jogging', aan de vreet 'gobbling'
 - b. aan de smul 'feasting', aan de ratel 'rattling', aan de ren 'running', aan de zwem 'swimming', aan de lees 'reading', aan de leer 'learning'

As shown by the translations in (90), these instances of [*aan de* V_{STM}] in each case express that their subject (potentially encoded by a phasal-dynamic verb) is involved in the action denoted by the verb stem. Put in terms of the previous sections, what the productively formed examples of [*aan de* V_{STM}] in (90) appear to have in common, is that the one involved in the situation denoted by the stem has the ability to effectuate temporal boundaries, i.e. the verb stem slot requires a verb that is [+EFF.BOUND] (besides being [+DYNAMIC][+DURATIVE] or

^{83.} *Haal* in *aan de haal* could also be analyzed as a noun with the meaning 'a tug', in which case it would belong to the group of either metonymic-metaphorical (cf.§4.3.2.3/fn.99).

^{84.} *Aan de praat* actually has two meanings, one being the 'up and running' sense in (87), while the other is about 'talking' and thus—similarly to *aan de babbel* 'chatting' in (90)—*does* correspond to Booij & Audring's (2018) semantic characterization.

[+DYNAMIC][-DURATIVE][-TELIC]—cf. §4.1).⁸⁵ This claim generates the prediction that [*aan de* V_{STM}]—contrary to [*aan het* V_{INF}]—is incompatible with Dynamisms, Processes and Changes (or type-shifts them to Activities or Accomplishments). (91)-(93) demonstrate that this particular prediction is correct, showing examples (partially repeated from (39)-(41)—cf.§4.1) featuring [*aan het* V_{INF}] combined with these [-EFF.BOUND] situation types under (a), and (infelicitously) replacing them with the stems corresponding to the same infinitives under (b). Under my analysis, (91-93b) constitute failed [-EFF.BOUND]>[+EFF.BOUND] type-shifts, whereas (91-93a) do not need to type-shift because [*zijn aan het* V_{INF}] does not in principle require [+EFF.BOUND].

- (91) a. Je ziet toch duidelijk dat het <u>aan het regenen is</u>. [Dynamism] you see.2SG PRT clear that it AAN the rain.INF be.3SG
 'You can clearly see it's raining.'
 - b. *Je ziet toch duidelijk dat het <u>aan de regen is</u>. you see.2sg prt clear that it AAN the rain.stm be.3sg [Dynamism] *> [Activity]

(Intended: 'You can clearly see it's raining.')

(92) a. Mobiel internet <u>is</u> momenteel extreem snel <u>aan het groeien</u>. [Process] mobile internet be.3SG at.the.moment extreme quick AAN the grow.INF
 'Mobile broadband is growing extremely rapidly at the moment.'

b. *Mobiel internet <u>is</u> momenteel extreem snel <u>aan de groei</u>. mobile internet be.3SG at.the.moment extreme quick AAN the grow.STM [*Process*] *> [Activity]

(Intended: 'Mobile broadband is growing extremely rapidly at the moment.')

- (93) a. China <u>is</u> stilaan een militaire grootmacht <u>aan het worden</u>. [Change] China be.3sG gradually a military superpower AAN the become.INF
 'China is gradually becoming a military superpower.'
 - b. *China <u>is</u> stilaan een militaire grootmacht <u>aan de word</u>. China be.3SG gradually a military superpower AAN the become.STM [*Change*] *> [*Accomplishment*]

(Intended: 'China is gradually becoming a military superpower.')

I conclude that [*aan het* V_{INF}] and [*aan de* V_{STM}] share an aspecto-temporal conceptual basis, but differ in that the latter imposes stricter constraints than the former with regard to the situational

^{85.} It is not entirely clear whether Booij & Audring (2018) had a similar idea of a 'controlling' (or 'volitional') subject in mind when opting for the term 'action' (instead of, for instance, 'situation' or 'event'). In any case, my claim that [*aan de* V_{STM}] has an [+EFF.BOUND] constraint is very much compatible with their characterization of the pattern.

features of *aan*'s complement: while the former requires the situation denoted by the verb form to be [+DYNAMIC][+DURATIVE], the latter additionally requires it to be [+EFF.BOUND].⁸⁶ I analyze highly frequent combinations of *aan de* and an apparent verbal stem as fixed patterns, which is why they do not meet the restrictions imposed by the productive pattern, i.e. being [-DYNAMIC] and [-EFF.BOUND] (*aan de haal* 'stolen' and *aan de praat* 'up and running') or [-EFF.BOUND] (*aan de kook* 'boiling' and *aan de weet* 'gotten to know').

To characterize the phasal-dynamic verb set combining with [*aan de* V_{STM}] in terms of (81), [±EFF.BOUND] (or [+EFF.BOUND]_O) may be replaced by [+EFF.BOUND] (or [+EFF.BOUND]_O), while [-EFF.BOUND] (or [-EFF.BOUND]_O) verbs are predicted to either be incompatible with the pattern or coerce an [-EFF.BOUND] reading of an [+EFF.BOUND] verb stem (whereas for [*aan het* V_{INF}], the [-EFF.BOUND] meaning of the phasal-dynamic verb could also align with that of the infinitive).

(94)	Present classification:	[+PHASAL][+DYNAMIC] verbs combining with [<i>aan de</i> V_{STM}]
	a. <i>komen, (ge)raken</i>	[+INITIAL][-MODAL][-CAUS.][-EFF.BOUND]
	b. <i>slaan, zich zetten</i>	[+initial][-modal][-caus.][+eff.bound]
	c. <i>gaan</i>	[+initial][-modal][-caus.][+eff.bound]
	d. <i>krijgen</i>	$[+INITIAL][-MODAL][+CAUS.][-EFF.BOUND]_{S}[+EFF.BOUND]_{O}$
	e. <i>maken</i>	$[+INITIAL][-MODAL][+CAUS.][\pm EFF.BOUND]_{S}[-EFF.BOUND]_{O}$
	f. <i>zetten</i>	$[+INITIAL][-MODAL][+CAUS.][\pm EFF.BOUND]_{S}[+EFF.BOUND]_{O}$
	g. brengen	$[+INITIAL][-MODAL][+CAUS.][\pm EFF.BOUND]_{S}[+EFF.BOUND]_{O}$
	h. <i>kunnen, moeten</i> ,	[+initial][+modal][-epist.][+eff.bound]
	mogen, willen	
	i. <i>zijn</i>	[+medial][-modal][-cont.][-caus.][+eff.bound]
	j. <i>hebben</i>	$[+MEDIAL][-MODAL][-CONT.][+CAUS.][+EFF.BOUND]_{S}[+EFF.BOUND]_{O}$
	k. <i>blijven</i>	[+MEDIAL][-MODAL][+CONT.][-CAUS.][+EFF.BOUND]
	1. houden	$[+MEDIAL][-MODAL][+CONT.][+CAUS.][\pm EFF.BOUND]_{S}[+EFF.BOUND]_{O}$
	m. <i>blijken, lijken</i> ,	[+MEDIAL][+MODAL][+EPIST.][+EFF.BOUND]
	schijnen	
	n. horen, zien, vinden	$[+MEDIAL][+PERCEP.][-EFF.BOUND]_{S}[+EFF.BOUND]_{O}$

Interestingly, according to the hypothesized meaning of progressive aspectuality postulated in §3.4, [*zijn aan de* V_{STM}] as a productive pattern meets more of the 'core components of progressive meaning' than its infinitival counterpart. In this sense, [*zijn aan de* V_{STM}] is more of a 'progressive construction' than [*zijn aan het* V_{INF}], although it is used much less frequently.

^{86.} This conclusion also ties into the impression put forward by Broekhuis et al. (2015:153) that the [+INITIAL] phasal-dynamic verb *raken* 'to get' prefers the verb stem pattern over the infinitival one (and vice versa for the [+MEDIAL] verbs). That is, the [+EFF.BOUND] requirement could theoretically be a confounding variable conditioning a preference not only for boundary *effectuation* but for boundary *emphasis* (i.e. a preference for [+INITIAL] above [+MEDIAL] verbs, which background the initial boundary). This generates the hypothesis that [*aan de* V_{STM}] takes [+INITIAL] verbs significantly more frequently than [*aan het* V_{INF}]. It may be interesting to test this hypothesis in future research.

4.3.2 The nominal group: Types of extension. The final group—[aan DET N]—differs from [aan het V_{INF}] and [aan de V_{STM}] in that the complement is not a verb, but a noun, which may have situational reference (i.e. denoting second-order entities) but generally has object-reference (i.e. denoting first-order entities) (cf. Lyons 1977; Bierwisch 2011). To illustrate, (95)-(96) provide examples of [aan DET N] featuring nouns with situational (*werk* 'work') and object-reference (*bal* 'ball'), combined with the phasal-dynamic verb *zijn* 'to be'.

(95) Mevrouw Bertram, directeur van een bedrijf, zit achter haar bureau en <u>is</u> madam Bertram director of a company sit.3sG behind her desk and be.3sG <u>aan het werk</u>. AAN the work

'Mrs. Bertram, general manager of a company, is sitting behind her desk and working.' (WR-P-P-B-0000000176)

(96) Als het aan Günes ligt, mogen de Turkse supporters natuurlijk wel Günes lie.3sg may.3PL the Turkish fans of.course PRT if it to hartstochtelijk juichen als het nationale team aan de bal is vanavond in de cheer.3PL if the national team AAN the ball be.3SG tonight in the passionate wedstrijd tegen Engeland. against England game

'As far as Günes is concerned, the Turkish fans are of course allowed to cheer passionately when the national team is playing the ball tonight in the game against England.'

(WR-P-P-G-0000072784)

In the case of a noun with object-reference, some type of extension is necessary for understanding the object as a situation compatible with the aspecto-temporal meaning of the situational *aan*-PP. For instance, in (96), the noun *bal* 'ball' is interpreted not as the object 'ball' but as the situation of 'playing the ball'. If [*aan* DET N] is a productive pattern, then extensions like these must be a component of the pattern's semantics, otherwise newly formed instances would not be systematically interpretable. Furthermore, since nouns are not verbs, they are not themselves specified for situation-aspectual features such as [±DYNAMIC] or [±EFF.BOUND] (cf.§3.1-3.2). Insofar as these features are properties of instances of [*aan* DET N] combined with a phasal-dynamic verb, they must therefore be a property of the *aan*-PP, the phasal-dynamic verb, or most likely the combination of the two—not the noun itself. The types of extension that make it possible to interpret an object-denoting noun within a situational PP, are then the way that these situational properties are imposed on and/or derivable from the noun. The main aim of this section is therefore to identify and examine types of object-to-situation extension.

To get an empirically founded idea of the nouns that function as the complement of *aan* in situational PPs, a corpus query was performed in the SoNaR-corpus of written Dutch (Oostdijk et al. 2013), similarly to the one executed in the previous section. This query was, however, more general, extracting all sequences of the preposition *aan*, a definite article (i.e. *de* or *het* 'the') and any noun. The query is shown in (97).

(97) ["aan"&pos="VZ.*"] [pos="LID.bep.*"] [pos="N.*"]

The query in (97) produced 717,738 hits. Since (97) does not qualify the sequence of [*aan* DET N] semantically in any way, it also extracts all other types of *aan*-PP, so long as they only have a definite article between the preposition and the noun (viz. locational and dative *aan*-PPs, as well as *aan*-POs). To get an overview of the nouns appearing in situational [*aan* DET N], the hits were grouped by type and annotated for being possible cases of situational *aan*-PPs or not. To qualify as a situational *aan*-PP with a nominal complement, the item had to meet three criteria: (i) taking phasal-dynamic verbs (cf.§4.2); (ii) having an aspecto-temporal semantics (cf.§2.2); and (iii) behaving structurally like a situational *aan*-PP (i.e. fixed determiner, restricted word order and no R-pronominalization—cf.§2.1.4).

(98) gives an example of a corpus item removed by this procedure: *aan de muur* 'to the wall' is a locational *aan*-PP that has spatio-temporal meaning (i.e. being located around the wall), has a flexible determiner (e.g. *aan elke muur* 'to every wall'), no restricted word order in subordinate clauses (e.g. *de telefoon die was verankerd aan de muur* 'the phone that was secured to the wall') and R-pronominalizes (e.g. *de telefoon die eraan was verankerd* 'the phone that was secured to it').

(98) Vroeger, toen de bellende mens was veroordeeld tot de telefoon die <u>aan</u> previously when the calling human was.3SG condemn.PCPto the phone that AAN <u>de muur</u> was verankerd, bleef dit gewauwel binnenshuis. the wall was.3SG secure.PCP stayed.3SG this drivel indoors 'Previously, when people using the telephone were condemned to the device secured to the wall, this drivel remained indoors.'

(WR-P-P-G-0000150643)

Following this procedure, the 20 most frequent types of nouns appearing in [*aan* DET N] were identified. Table 4.12 presents these types, including their token frequency in absolute and relative terms.

Noun	п	%
<i>slag</i> 'hit'	15,590	21.3%
<i>werk</i> 'work'	11,818	16.1%
hand 'hand'	11,277	15.4%
orde 'order'	7011	9.6%
gang 'way'	5327	7.3%
<i>macht</i> 'power'	5034	6.9%
<i>beurt</i> 'turn'	3579	4.9%
woord 'word'	3114	4.3%
<i>leiding</i> 'leadership'	2662	3.6%
<i>top</i> 'top'	1653	2.3%
<i>bak</i> 'tub'	1526	2%
<i>lijn</i> 'line'	1411	1.9%
<i>telefoon</i> 'phone'	1195	1.6%
<i>stok</i> 'stick'	915	1.3%
<i>bal</i> 'ball'	303	0.4%
<i>drank</i> 'drink'	292	0.4%
drugs 'drugs'	283	0.4%
wijn 'wine'	144	0.2%
<i>bier</i> 'beer'	102	0.1%
<i>studie</i> 'study'	78	0.1%
Ν	73,314	100%

TABLE 4.12 Types of nouns found in situational aan-PPs: Absolute and relative token frequency

Table 4.12 corroborates Van der Horst's (2005) observation that situational [*aan* DET N] is a heterogeneous group, including highly concrete nouns (e.g. *telefoon* 'phone'), less tangible entities (e.g. *macht* 'power'), and wholly abstract notions (e.g. *gang* 'way'). Although—as I will argue in this section—several types of extension are needed to account for this heterogeneity, they do seem systematic, relying on metonymy and metaphor or a combination of the two. In the following, I will classify the nouns in Table 4.12 in terms of these extensions: metonymic (§4.3.2.2), metaphorical (§4.3.2.3) and metonymic-metaphorical extension (§4.3.2.5).

4.3.2.1 Metonymic extension. Booij & Audring (2018:220) remark that [*aan* DET N] refers to a situation "in which the object denoted by the noun plays a central role". Indeed, this appears to be a crucial—but not the only—way in which an object can be interpreted as a situation. Specifically, the 'central role' interpretation is *metonymic*: it denotes a situation by taking an object that is (presented as) a salient part of that situation. The nouns from Table 4.12 that rely on this metonymic shift are listed under (99): the meaning of the nouns themselves under (a), and the extended interpretation produced by embedding them in a situational *aan*-PP under (b).

(99) [Metonymic extension]

- a. *orde* 'order', *macht* 'power', *beurt* 'turn', *woord* 'word', *lijn* '(phone) line' *telefoon* 'phone', *bal* 'ball', *drank* 'drink', *drugs* 'drugs', *wijn* 'wine', *bier* 'beer', *studie* 'study'
- b. aan de orde 'under discussion', aan de macht 'in power', aan de beurt 'to have one's turn', aan het woord 'talking', aan de lijn 'on the telephone', aan de telefoon 'on the telephone', aan de bal 'playing the ball', aan de drugs 'using drugs', aan de wijn 'drinking wine', aan het bier 'drinking beer', aan de studie 'studying'

What instances of [*aan* DET N] featuring the nouns under (99) have in common, is that they refer to a situation that the object denoted by the noun is a crucial component of. That component can be both highly concrete and quite abstract. For instance, *aan het bier* 'lit. at the beer' and *aan de lijn/telefoon* 'lit. at the phone' denote situations in which a concrete object plays a central role ('beer' > 'having a beer' and 'phone line'/'phone' > 'being on the phone'), while *aan de orde* 'lit. at the order', *aan de macht* 'lit. at the power', *aan de beurt* 'lit. at the turn' and *aan het woord* 'lit. at the word' denote situations in which a less tangible object functions as the central component ('order' > 'coming up for discussion according to the predetermined order', 'power' > 'being in power', 'turn' > 'having the turn' and 'word' > 'having the word', i.e. 'talking'). Four of these nouns—*bier, telefoon, beurt* and *woord*—are illustrated in (100)-(103) below.⁸⁷

- (100) <u>Ben</u> nu <u>aan het bier</u> in Paard van Troje, maar wijntje klinkt ook goed.
 be.ISG nOWAAN the beer in Horse of Troy but wine.DIM sound.3SG also good
 'I'm having a beer right now at [the bar] Paard van Troje, but a glass of wine also sounds pretty good.'
- (101) Mijn moeder gaat deftig praten als ze <u>aan de telefoon is</u>. Mijn vader niet. my mother go.3sG posh talk.INF if she AAN the phone be.3sG my father not 'My mom puts on a posh accent when she's on the phone. My dad doesn't.'
 (WR-P-P-G-0000057668)
- (102) Daarna is het vaak een uur of 3 à 4 wachten in de wachtkamer voordat there.after be.3sG it often an hour or 3 to 4 wait.INF in the waiting.room before je <u>aan de beurt bent</u>.
 you AAN the turn be.2sG

'After that you generally have to wait 3 to 4 hours in the waiting room before it's your turn.' (WR-P-E-A-0004303773)

^{87.} Example (100) has already been discussed in §2.1.3 as (13).

(103) Terwijl ik <u>aan het woord was</u>, zag ik sommigen knikken en anderen while I AAN the word was.ISG saw.ISG I some.people nod.3PL and other.people hun ogen sluiten bij de voorstelling die zij zich ervan maakten. their eyes close.3PL by the conception that they REFL of.it made.3PL
'While I was talking, I saw some people nodding and others closing their eyes while they were imagining it for themselves.'

(WR-P-P-B-000000175)

The metonymic 'part-whole' relationship between object and situation illustrated by (100)-(103) characterizes the entire set of nouns under (99). But are all types of nouns—those more abstract and those more concrete—productive with this pattern, i.e. extensible to new nouns resembling them, producing a similarly situational interpretation through metonymic extension? After all, for the metonymic shift to be a part of [*aan* DET N]'s semantics, it should apply to newly formed instances as well.

It appears that [*aan* DET N]'s metonymic shift is productive, but that its productivity is restricted to more concrete nouns, and within that group exhibits a preference for particular 'central roles' of the concrete object vis-à-vis the situation it extends to. The first claim (concrete over abstract) is based on the observation that more abstract nouns like *beurt* 'turn' and *woord* 'word' cannot be replaced by near-synonyms such as *zet* 'turn' and *opmerking* 'remark', as shown in (102')-(103').⁸⁸ Crucially, this points at a more general tendency: part-whole pairs with an abstract object cannot straightforwardly be interpreted as situations in [*aan* DET N], cf. the unacceptability of *idee* 'idea' and *woede* 'anger' (intended to stand metonymically for situations in the direction of 'thinking' and 'arguing', respectively) in the constructed sentences under (104).

- (102') *...voordat je <u>aan de zet bent</u>.
 before you AAN the turnbe.2SG
 (Intended: '...before it's your turn.')
- (103') *Terwijl ik <u>aan de opmerking was</u>... while I AAN the remark was.ISG
 (Intended: 'While I was talking/making a remark...')

^{88.} For *zet*, this may also be a case of competition with *aan zet zijn*, which is a standard combination with approximately the same meaning as *aan de beurt*, but which lacks a determiner (cf. van der Klis 2010 for this type of 'bare PP'). In any case, this still shows that the metonymic role played by *beurt* in this combination is not extensible to similar nouns.

- (104) a. Ik moet nu echt ergens mee komen, dus <u>ben</u> ik al de hele I must.ISG now really somewhere with come.INF so be.ISG I already the whole middag verwoed <u>aan</u> <<u>het nadenken</u>> <<u>het idee</u>>. afternoon fierce AAN the think.INF the idea
 'I really have to come up with something now, so I've been thinking hard all afternoon.' (Unacceptable with *het idee* 'the idea'.)
 - b. We <u>waren aan</u> <<u>het ruziemaken</u>> <<u>*</u><u>de woede</u>> over iets onbeduidends. we were.IPL AAN the argue.INF the anger about something insignificant 'We were arguing over a trivial matter.' (Unacceptable reading with *de woede* 'the anger'.)

Regarding the second claim: within the group of concrete nouns, instances of [*aan* DET N] on the basis of metonymic extension appears to be most felicitous if the role played by the object in the extended situation is one of *use*, that is: if the subject of the phasal-dynamic verb combining with [*aan* DET N] is coded to *be using* the object. 'Using the object' is then the basis for metonymic extension to the situation denoted by the *aan*-PP as a whole: from 'telephone' to 'using the telephone' in (101), for instance, and from 'beer' to 'using the beer' in (100). When it comes to newly formed instances, then, the metonymic relation seems to be even more specific, namely not just *use* but *consumption: drugs* 'drugs', *wijn* 'wine' and *bier* 'beer' in (99) can easily be replaced by other consumables such as *speed* (as a type of drug), *champagne* (as a type of wine) and *stamppot* 'vegetable mash' (as a type of food), cf. the corpus items in (105)-(107).

(105) De man – die <u>aan de speed was</u> – kreeg van de rechter een fikse bolwassing. the man that AAN the speed was.3SG got.3SG of the judge a firm reprimand 'The man—who was using speed—was firmly reprimanded by the judge.' (WR-P-P-G-0000507020)

(106) Ze regelen glazen en we gaan samen <u>aan de champagne</u>. they arrange.3PL glasses and we go.IPL together AAN the champagne 'They took care of the glasses and we start the champagne together.'

(WR-P-P-B-000000163)

(107) Wij gaan vanavond aan de stamppot, maar Japans blijft toch mijn favoriet! we go.IPL tonight AAN the vegetable.mash but Japanese stay.3SG PRT my favorite
'We will be having vegetable mash tonight, but Japanese is still my favorite!'

(WR-P-E-L-000000304)

Besides 'consumption', other types of metonymic 'use' exhibited by the concrete nouns in (99) appear to be much less productive. *Aan de lijn/telefoon* 'on the telephone' is a specific instance of

'use' in that it refers to 'using a device', and *aan de studie* 'studying' does not really correspond to 'use', but instead to the idea of 'working on something'. Crucially both 'non-consumption' types of metonymy—like the abstract ones—resist being replaced by similar nouns referring to devices or things that one could be working on. But unlike the abstract nouns, this does not produce categorically unacceptable sentences, but at most somewhat marked ones, cf. the constructed examples in (108)-(109), featuring the nouns *computer* 'computer' (device) and *scriptie* 'thesis' (work). Empirically, it should be added that cases like (108)-(109) are not attested in the SoNaR-corpus, which further speaks to their restricted nature, especially vis-à-vis the 'patterns of consumption' illustrated by (105)-(107).

- (108) De leerlingen < gaan > < zijn > aan de computer om te oefenen met spelling. the pupils go.3PL be.3PL AAN the computer for to practice with spelling
 'The pupils go/are on the computer to practice spelling.'
- (109) Om middernacht < ging> < was> ze nog aan de scriptie, die de volgende dag at midnight went.3SG was.3SG she PRT AAN the speech that the next day ingeleverd moest worden. hand.in.PCP must.3SG become.INF

'At midnight, she started/was still working on the thesis, which had to be handed in the next day.'

An important additional observation with regard to metonymic extension in [*aan* DET N] is that all concrete nouns in this pattern—consumption and otherwise—generally take a different default⁸⁹ [+MEDIAL] verb than *zijn* 'to be', namely *zitten* 'to sit'.⁹⁰ Attested items (110)-(112) illustrate this combination with the nouns from (105)-(109);⁹¹ (110a-c) illustrates 'consumption', (111) 'using a device' and (112) 'working'.

- (110) a. Hij <u>zit aan de speed</u> maar is niet gevaarlijk. he sit.3SG AAN the speed but is not dangerous
 'He is using speed, but he's not dangerous.' (WR-P-E-G-0000002366)
 - b. Het is nog maar middag en we <u>zitten</u> al <u>aan de champagne</u>.
 it is PRT but afternoon and we sit.IPL already AAN the champagne
 'It's only the afternoon and we're already drinking champagne.'

(WR-P-E-G-0000002167)

^{89. &#}x27;Default' is to say: [+MEDIAL][-PERCEP.][-MODAL][-CONT.][-CAUS.][±EFF.BOUND]—cf. Table 4.10 (§4.2.2.6). 90. Although *zijn* 'to be' is certainly not impossible, cf. for instance (100) and (105).

^{91.} Since there was only one token of [*aan* DET N] featuring *stamppot* 'vegetable mash' in the corpus, it was replaced by another specific type of dish in (110c): *sushi* 'sushi'.

- c. Wij <u>zitten</u> nu <u>aan de sushi</u>, kom je zo ook naar de pianobar? we sit.IPL now AAN the sushi come.2SG you soon also to the piano.bar 'We're having sushi right now, will you also be at the piano bar soon?' (WR-P-E-L-0000000327)
- (111) Met de winter op komst kan het al eens gebeuren dat je handen with the Winter on arrival can.3sG it already once happen.INF that your hands koud worden als je <u>aan de computer zit</u>. cold become.3PL if you AAN the computer sit.2sG
 'With Winter on its way, it may sometimes happen that your hands get cold when you're using the computer.' (WR-P-P-G-0000703038)
- (112) Ik <u>zit aan de scriptie</u> bij mijn ouders, het schiet nu eindelijk wel een keer op! I sit.ISG aan the thesis at my parents it hurry.3PL nowfinally PRT a time up 'I'm working on the thesis at my parents' place, finally making some headway!' (https://sjalotje.waarbenjij.nu/reisverslag/1616818/hopi-bon)

The combination of [*aan* DET N] with *zitten* instead of phasal-dynamic *zijn* is not as surprising as it might seem at first, considering that the posture verb *zitten* (and to a lesser extent *staan* 'to stand', *liggen* 'to lie' and *hangen* 'to hang') has frequent uses in Dutch in which it is strongly lexically bleached (cf. e.g. Leys 1985; Lemmens 2002, 2005; Bogaards 2019*b*,*c*). Most notably, *zitten* is one of the default verbs to encode location in Dutch—often regardless of whether the entity that it locates is actually in a sitting position (Lemmens 2002). Building on the idea that situational *aan*-PPs exemplify a "from space to time"-relation in the sense of Haspelmath (1997), it is a likely scenario that *zitten* would go on from encoding spatio-temporal relations to aspecto-temporal ones, especially when combined with a type of PP that exhibits such a shift by itself.

Does this mean that *zitten* belongs to the phasal-dynamic verb set, at least in regards to the verbs selected from this set by [*aan* DET N]? This is a difficult question to answer synchronically, as some combinations of *zitten* and [*aan* DET N] syntactically behalve mostly like situational *aan*-PPs (the 'consumption' group), whereas others behave more like locational *aan*-PPs or even *aan*-POs (the 'device' and 'work' groups, respectively), and still others do not combine with *zitten* at all (the abstract group, viz. *beurt* 'turn' and *woord* 'word'). These claims are demonstrated by (113)-(115), following the differences in syntactic behavior between situational *aan*-PPs, locational *aan*-PPs, and *aan*-POs laid out in \$2.1.4.⁹²

^{92.} The (adapted) examples under (113)-(115) are based on the attested items in (110)-(112).

- (113) Metonymy based on 'consumption': mostly resembling situational *aan*-PPs
 - a. [Fixed determiner] Het was nog maar middag toen we <u>aan</u> <<u>de</u>> <<u>*deze</u>> <<u>*die</u>> <u>champagne zaten</u>. it was PRT but afternoon when we AAN the this that champagne sat.IPL
 - b. [Degree of restricted word order]

Het was nog maar middag toen we <<u>2zaten</u>><u>aan</u> <u>de</u> <u>champagne</u>> <<u>zaten</u>>. it was PRT but afternoon when we AAN the champagne sat.IPL

c. [No R-pronominalization]

Het was nog maar middag toen we <<u>aan de champagne</u>> <*eraan> <*hieraan> it was PRT but afternoon when we AAN the champagne EXS.AAN here.AAN

<*daaraan> <u>zaten</u>. there.AAN sat.IPL

'It was only the afternoon when we were having champagne.'

- (114) Metonymy based on 'using a device': resembling locational *aan*-PPs?
 - a. [No fixed determiner]

Mijn handenwerden koud toen ik <u>aan</u> <<u>de</u>> <<u>de</u>> <<u>de</u>> <<u>die</u>> <u>computer</u> <u>zat</u>. my hands became.3PL cold when I AAN the this that computer sat.ISG</u>

'My hands got cold when I was using the/this/that computer.'

b. [Degree of restricted word order]

Mijn handenwerden koud toen ik $<\frac{22}{2at}>$ <u>aan de computer</u> $<\underline{zat}>$. my hands became.3PL cold when I AAN the computer sat.ISG

'My hands got cold when I was using the computer.'

c. [Difficult R-pronominalization]

Mijn handenwerden koud toen ik <<u>aan de computer</u>> <<u>eraan</u>><<u>hieraan</u>> my hands became.3PL cold when I AAN the computer EXS.AAN here.AAN

<²²<u>daaraan</u>> <u>zat</u>. there.AAN sat.ISG

'My hands got cold when I was using the computer.' (Marked reading: 'My hands got cold when I was using it/this/that.')

- (115) Metonymy based on 'working on something': resembling *aan*-POs?
 - a. [No fixed determiner] Het schoot eindelijk op toen ik <u>aan</u> <<u>de</u>> <<u>deze</u>> <<u>die</u>> <u>scriptie zat</u>. it hurried.3sG finally up when I AAN the this that thesis sat.ISG

'I finally made some headway when I was working on the/this/that thesis.'

b. [Degree of restricted word order]

Het schoot eindelijk op toen ik <^{??}zat> <u>aan de scriptie</u> <<u>zat</u>>. it hurried.3sG finally up when I AAN the thesis sat.ISG

'I finally made some headway when I was working on the thesis.'

c. [R-pronominalization]

Het schoot eindelijk op toen ik <<u>aan de scriptie</u>> <<u>eraan</u>> <<u>hieraan</u>> it hurried.3sG finally up when I AAN the thesis EXS.AAN here.AAN <<u>daaraan</u>> <u>zat</u>. there.AAN sat.ISG

'I finally made some headway when I was working on the thesis/it/this/that.'

The three types of 'concrete metonymy' discussed here (consumption, use and work) diverge along the syntactic lines shown in (113)-(115), albeit in highly subtle, almost gradual ways: consumption-based metonymy in (113) aligns entirely with [*aan* DET N] combined with verbs other than *zitten* (i.e. the phasal-dynamic verbs—cf. (16) and its primed variations in §2.1.4), as well as with [*aan het* V_{INF}] and [*aan de* V_{STEM}] (cf. (17)-(18)), except for the word order in subordinate clauses, which according to my intuitions is more acceptable in (113b) than (17-18b)—though still highly marked.

'Using a device' in (114) runs parallel to 'consumption' in (113) in that its word order is restricted only to a degree (cf. (114b)). But it is less restricted in that the determiner is not fixed and R-pronominalization marked, though not categorically unacceptable. On these counts, the 'device-based' metonymy in (114) resembles the syntactic behavior of locational *aan*-PPs in (19), which likewise have no fixed determiner, although they do seem more willing to Rpronominalize (cf. (19c)). It may be that *zitten*'s locative semantics construe *computer* as a location ('at the place where the computer is located') in addition to *zitten*'s combination with [*aan* DET N] which construes *computer* metonymically as a situation ('using the computer'). In this sense, cases like (111) and (114) may be ambiguous syntactically and semantically, suggesting that [*aan* DET N] is indeed a more 'heterogeneous group' (van der Horst 2005) than [*aan het* V_{INF}] and [*aan de* V_{STM}].

Finally, 'work-based' metonymy in (115) is the least restricted of the three: like 'consumption' and 'device' it restricts word order to a degree (cf. (115b)), and like 'device' has no fixed determiner (cf. (115a)), but diverges from the other two types of concrete metonymy in that it has no problems R-pronominalizing. It resembles in this sense not only locational *aan*-PPs, but also *aan*-POs, the only difference being that POs are less restrictive vis-à-vis word order. It may

be that *zitten aan*—in the meaning 'to work on'—is an emerging *aan*-PO,⁹³ again in addition to the synchronic resemblance of cases like (112)/(115) to situational [*aan* DET N].

In sum, when it comes to object-to-situation extension along the route of metonymy, the boundaries between [*aan* DET N] and the other *aan*-PPs discussed in Chapter 2 (i.e. locational *aan*-PPs and *aan*-POs) are not always clear-cut. This is especially the case with concrete nouns, which contrary to the abstract ones found in the corpus (i.e. *beurt* 'turn' and *woord* 'word') combine with verbs beyond the phasal-dynamic set—most notably *zitten* 'to sit'—that diachronically speaking may be becoming part of that set, but of which the synchronic status is not very clear. Some cases of concrete metonymy—especially those based on 'using a device' and 'working on something'—may therefore be ambiguous as to their status as a situational *aan*-PP on the one hand, or a locational *aan*-PP or *aan*-PO on the other. It makes sense that this kind of ambiguity was not found with infinitives and verb stems earlier on in this chapter, as the embedding of verbal forms (especially stems) in *aan*-PPs is reserved for specific, situational environments.⁹⁴

4.3.2.2 Metaphorical extension. Metonymy is not the only way in which objects are extended to stand for situations in [*aan* DET N]. A second type of extension that can be observed in Table 4.12 is by way of metaphor. Specifically, the noun then refers to a kind of location (e.g. *leiding* 'front position' and *top* 'top') that extends to a situation with which that location has a crucial property in common. That property (e.g. 'front position' > 'to be in charge' and 'top' > 'to excel in a certain field') is then construed as the central feature of the situation denoted by the *aan*-PP as a whole. In that sense, the Booij & Audring's (2018) characterization of [*aan* DET N] in terms of a 'central role' of the noun also applies to metaphorical extension. There are only two nouns in Table 4.12 corresponding to metaphorical extension (*leiding* and *top*), but they are not infrequent (4315 tokens in total). They are listed under (116).

- (116) [Metaphorical extension]
 - a. *leiding* 'front position', *top* 'top'
 - b. aan de leiding 'in charge', aan de top 'renowned'

These *aan*-PPs are illustrated in (117)-(118) with corpus items featuring the phasal-dynamic verbs *zijn* 'to be', *raken* 'to get' and *komen* 'to come'.

^{93.} Such an *aan*-PO should not be confused with the more established *aan*-PO zitten aan 'to touch'.

^{94.} In regards to the [*zijn aan het* V_{INF}]-progressive, competition with the 'posture progressive' [*zitten te* V_{INF}] may also be a reason why *zijn* 'to be' cannot be substituted with *zitten* 'to sit' in the former pattern.

- (117) Maar ik <u>ben aan de leiding</u> en ga nu niet oeverloos discussiëren. but I be.ISG AAN the front.position and go.ISG nownot endless discuss.INF
 'But I'm the one in charge and I'm not having an endless discussion right now.' (WR-P-E-A-0004339609)
- (118) Op je 32ste terug <u>aan de top raken</u> is zo goed als onmogelijk.
 on your 32nd back AAN the top get.INF be.3sG as good as impossible
 'Getting back to the top at age 32 is practically impossible.' (WR-P-P-G-0000249415)

The interesting thing about metaphorical extension is that situational cases like (117)-(118) synchronically occur alongside locational ones. That is, nouns like *leiding* 'front position' and *top* 'top' still refer to actual locations in certain contexts, for instance the leading position in a cycling race in (119), or the literal top of a mountain in (120). In such cases, the *aan*-PP may select other verbs than those from the phasal-dynamic set, such as *rijden* 'to ride' in (118) and *groeien* 'to grow'. Corpus items (119)-(120) thus illustrate non-metaphorical locational *aan*-PPs, which—following the "space as time"-route from Haspelmath (1997)—cases like (117)-(118) were presumably extended from.

- (119) Hij reed van start totfinish aan de leiding en had bijna een minuut he rode.3sg from start to finish aan the front.position and had.3sg almost a minute voorsprong op de Tsjech Sjtybar en onze landgenoot Kevin Pauwels. lead on the Czech Stjybar and our fellow.countryman Kevin Pauwels
 'He was riding in front position from start to finish and almost had a minute's lead on the Czech Sjtybar and our fellow countryman Kevin Pauwels.
- (120) <u>Aan de top</u> van de berg <u>groeien</u> steeds minder bomen. aan the top of the mountain grow.3plincreasingly fewer trees 'Fewer and fewer trees are growing at the top of the mountain.'

(WR-P-E-L-000000098)

Is [*aan* DET N] productive with metaphorical object-to-situation extension? The answer appears to be no, or at least that it is considerably less productive than metonymical extension. *Leiding* and *top* profile the extreme ends of a spatial domain (e.g. a pack of cyclists in (119) and a mountain in (120)), which is necessary to understand the situational *aan*-PPs in (117)-(118) metaphorically. But even under that restriction it is difficult to come up with other cases of situational [*aan* DET N] relying on metaphorical extension. My tentative conclusion is therefore that metaphorical cases like *aan de leiding* and *aan de top* are fixed patterns, not productive ones. They mirror the abstract metonymic cases *aan de orde, aan de macht, aan de beurt* and *aan het*

woord, which likewise share an object-to-situation extension that can be observed as such but not extended further to form new instances of [*aan* DET N]. Moreover, they resemble metonymic cases with a concrete noun like *aan de computer* 'on the computer' in that they are clearly related to locational *aan*-PPs, either by way of metaphorical extension from a physical location (e.g. from *aan de top van de berg* 'at the top of the mountain' to *aan de top van het bedrijfsleven* 'at the top of the business world') or because the PP is ambiguous as to its locational or situational status (e.g. *aan de computer* 'at the place where the computer is located' or 'using the computer'). These cases thus underscore the idea that the boundaries between the types of *aan*-PPs distinguished in Chapter 2 are not always clear-cut—particularly when it comes to [*aan* DET N].

4.3.2.3 Metonymic-metaphorical extension. Among the nouns in Table 4.12 there are two interesting cases where both metonymy and metaphor play a role. The first is *stok*, which literally translates to 'stick', and in the situational PP *aan de stok* denotes 'being in a conflict'. Stoett (1925:322) discusses it as an idiom with the meaning "ruzie, oneenigheid hebben of krijgen met iemand" ('have/get in a fight, conflict with somebody).⁹⁵ Aan de stok combines chiefly with *krijgen* 'to obtain' and *hebben* 'to have'; it is illustrated with these verbs in (121)-(122).

(121) In het bordeelin de Aarschotstraat kreeg de man het <u>aan de stok</u> met in the brothel in the Aarschot.street obtained.3sG the man it AAN the stick with twee prostituees die hij ervan beschuldigde zijn gsm en portefeuille gestolen two prostitutes that he EXS.of accused.3sG his cell.phone and wallet steal.PCP te hebben. to have.inf

'In the brothel on the Aarschotstraat, the man got into a fight with two prostitutes whom he accused of having stolen his cell phone and wallet.' (WR-P-P-G-0000233000)

(122) Tijdens de Roeselaarse Batjesvan 2004 <u>hadden</u> vier Pakistani die met twee during the from.Roeselare Batjesof 2004 had.3PL four Pakistani that with two kramen hetzelfde aanboden het met elkaar <u>aan de stok</u>.
stalls the.same offered.3PL it with each.other AAN the stick
'During the 2004 [annual market fair] Roeselaarse Batjes, four Pakistani—who were manning two stalls selling the same product—had a fight.' (WR-P-P-G-0000582459)

While *aan de stok*'s meaning is clearly fixed (and the type of extension it exemplifies thus in principle non-productive), it is interesting to note that the metonymic and metaphorical

^{95.} Interestingly, Stoett also remarks that "het voorz[etsel] *aan* hier de bet[ekenis] van *bezig zijn* [heeft]" ('the preposition *aan* has the meaning 'to be occupied with something' here') (1925:322), which basically corresponds to the idea of 'situational PPs' put forward in this thesis.

extensions discussed previously nonetheless apply to it—except both at the same time. First, the concrete object 'stick' is related to the situation of 'conflict' metonymically by way of a part-whole relation: a stick may play a 'central role' in such a situation in that threatening someone with a stick or actually using it to inflict physical violence is generally a sufficient condition for being in a conflict with that person. However, needless to say, not all conflicts involve sticks (i.e. the stick is not a necessary condition for conflict). This is where metaphorical extension comes in: the stick-conflict metonymy goes on to stand metaphorically for conflict situations in general based on the shared core property of 'inciting, sustaining or aggravating conflict'.

The second case is *bak*. In the PP *aan de bak*—according to the *Dikke Van Dale* dictionary of Dutch—this noun goes back historically to either the sense "houten balie waarin het warme voedsel voor de schepelingen van de kok werd gehaald" ('wooden counter in which the the hot meals would be transported from a ship's cook to the ship's crew') or "langwerpig vat, trog, kribbe waarin de runderen, paarden varkens enz. gevoerd worden" ('long tub, trough, manger in which cattle, horses, pigs etc. are fed')—or both.⁹⁶ What these senses of *bak* have in common is that they concern an object that a group of animate entities depend on for sustenance. Part-whole extension makes it so that the object *bak* goes on to stand metonymically for the situation of 'getting fed'. The next—metaphorical—step is that *aan de bak* extends to a more general scenario in which the subject has a vested interest in realizing the situation denoted by the *aan*-PP, but is (partly) dependent on another entity.⁹⁷ This aligns with the general definition that the *Dikke Van Dale* includes for *aan de bak komen*, namely "een kans krijgen om zijn kunnen te tonen" ('to get the opportunity to show one's abilities'), as well as the more specific sense "werk vinden" ('to find a job').⁹⁸ *Aan de bak*'s metonymic-metaphorical extension is illustrated in (123)-(124) with the verbs it mainly combines with, *komen* 'to come' and *(ge)raken* 'to get'.

(123) Wie in die tijd als zanger <u>aan de bak</u> wilde <u>komen</u> in een club, who in that time as singer AAN the tub wanted.to.3SG come.inf in a club must bijna onvermijdelijk langs de maffia passeren. must.pst.3SG almost inevitable via the mafia pass.INF
'Anyone who wanted to get a shot at being a singer in a club, almost inevitably had to go

through the mafia.' (WR-P-P-G-0000200544)

^{96.} Dikke Van Dale Online, accessed via <u>https://uleiden-vandale-nl.ezproxy.leidenuniv.nl:2443/zoeken/zoeken.do</u> on 21 August 2020, under lemma *bak'*, senses 14/17.

^{97.} In terms of §4.2, this metaphorical extension of *bak* corresponds to the feature [-EFF.BOUND]—which, in turn, aligns with the observation made below that the phasal-dynamic verbs *aan de bak* chiefly combines with are *komen* 'to come' and *(ge)raken* 'to get', which are specified for being [-EFF.BOUND] (cf. Table 4.10 in §4.2.2.6).

^{98.} Dikke Van Dale Online, accessed via <u>https://uleiden-vandale-nl.ezproxy.leidenuniv.nl:2443/zoeken/zoeken.do</u> on 21 August 2020, under lemma *bak'*, sense 17.

(124) In Los Angeles heb ik heel veel vrienden, getalenteerde acteurs en muzikanten, in Los Angeles have.ISG I very many friends talented actors and musicians die maar niet <u>aan de bak geraken</u>. that but not aan the tub get.3PL

'I have many friends in Los Angeles—talented actors and musicians—who are just not getting any work.' (WR-P-P-G-0000503113)

Summing up, the types of extension discussed in the previous sections—metonymic and metaphorical—are also a way to account (in tandem) for the semantics of *aan de stok* and *aan de bak*. This adds to the idea that both of these extensions may have been relevant diachronically in shaping the situational domain of *aan*-PPs, and are likely relevant synchronically in the way that this situational domain is structured (vis-à-vis speakers' linguistic knowledge). Like metaphorical extension, however, it appears that metonymic-metaphorical extension is not productive.⁹⁹

4.3.2.4 Opaque nouns. Out of the twenty nouns in Table 4.12, fifteen were accounted for in terms of either situational reference (one: *werk*), metonymic object-to-situation extension (twelve: *orde, macht, beurt, woord, lijn, telefoon, bal, drank, drugs, wijn, bier, studie*), metaphorical extension (two: *leiding* and *top*) and metonymic-metaphorical extension (two: *stok* and *bak*). That leaves three nouns that cannot be accounted for in terms of situational reference or some type of object-to-situation extension. They should therefore be analyzed as opaque, and the patterns they occur in as fixed. I will argue in this section—based on a qualitative discussion—that these three nouns can be accounted for in terms of three of the abstracted situational features discussed in §.3.1-§3.2: [±DYNAMIC], [±EFF.BOUND] and [±EVOLVING]. (125) lists the three 'opaque nouns'.

(125) [Opaque nouns]

- a. slag 'hit', gang 'way', hand 'hand'
- b. aan de slag 'busy', aan de gang 'going on/busy', aan de hand 'going on'

As the translations under (125b) indicate, the meaning of these *aan*-PPs is rather abstract (coming down to either 'busy', 'going on', or either of these). There is also no evident relation

^{99.} If *haal* in *aan de haal* 'stealing' (cf.§4.3.1/fn.83) is analyzed not as a verb stem but as a noun—i.e. not as the stem of *halen* 'to tug' but as *de haal* 'the tug'—then I would argue that it is another example of metonymic-metaphorical extension: the 'classic example' of stealing something (e.g. by a pickpocket or purse snatcher) involves a firm physical 'tug', which is thus metonymically related (part-whole) to the situation of 'stealing'. The tug-stealing metonymy then goes on to stand metaphorically for stealing in general. It would be interesting to examine diachronically whether these semantic extensions can indeed be observed in the historical emergence of *aan de stok* and *aan de haal*.

between the lexical semantics of the nouns and the meaning of the *aan*-PPs—except maybe for *gang* 'way', which contributes a sense of 'ongoingness' in other combinations including *gang van zaken* 'course of events, procedure', *op gang komen/brengen* 'get (someone/something) going' and *in volle gang* 'in full swing'. Moreover, *slag* 'hit' and *gang* (but not *hand* 'hand') seem related somehow to the phasal-dynamic verbs *slaan* 'to hit' and *gaan* 'to go', although there is no synchronic morphological process in Dutch that derives nouns like *slag* and *gang* from these verbs.

The abstract meaning of the PPs under (125b) is illustrated with corpus items in (126)-(128), combined with the phasal-dynamic verbs *gaan* 'to go' in (126) and *zijn* 'to be' in (127)-(128). In (125), *aan de slag*—through the main verb *gaan* 'to go'—takes a subject (*wetenschappers* 'scientists') that is coded to be busy doing something (here: *met de gegevens* 'with the data'). In (126), then, *aan de gang* denotes an ongoing situation specified by the subject (*een staatsbanket* 'a state banquet'). Finally, (127) features a state (*iets merkwaardigs* 'something strange', specified in the next clause as *net iets langer dan strikt noodzakelijk* 'slightly longer than strictly necessary') coded to be ongoing by *aan de hand*.

(125) Meer dan 200 wetenschappers <u>gaan aan de slag</u> met de gegevens die Kepler more than200 scientists g0.3PL AAN the hitwith the data that Kepler verzamelt. collect.3SG

'More than 200 scientists set to work on the data collected by Kepler.'

(WS-U-E-A-0000354127)

(126) Op dit moment is er een staatsbanket <u>aan de gang</u> op het paleis in Amsterdam. on this moment be.3SG EXS a state.banquet AAN the way on the palace in Amsterdam 'There is a state banquet going on right now at the Royal Palace of Amsterdam.'

(WS-U-E-A-0000007756)

vrijwel altijd iets (127) Met die borden <u>is</u> merkwaardigs <u>aan de hand</u>: de be.3G nearly always something strange with those signs AAN the hand the tekst is langer dan strikt noodzakelijk zou zijn. net iets text be.3sG just somethinglonger than strict necessary would.3sg be.INF 'With those signs there's basically always something strange going on: the text is just a bit longer than strictly necessary.' (WR-P-E-C-000000063)

The situational PPs *aan de slag, aan de gang* and *aan de hand* have the most general meaning of all the instances of [*aan* DET N] discussed here, as illustrated by the examples above. While they

all denote situations, that situation is not specified in terms of centering around an object that stands for a situation, as was the case with the nouns in the previous sections. This is because *slag, gang* and *hand* do not refer to objects at all, but instead—as I will argue here—contribute a set of situational properties. As such, they align with the situational reference of verbs (or in terms of Lyons 1977: denote second-order entities)—although their reference is more abstract, since the concrete type of situation they refer to is not specified. It can be agreed upon, however, which concrete situations could or could not be referred to with *slag, gang* or *hand*; a Process like *toenemen* 'to increase', for instance, could easily be said to be *aan de gang*, but not so much *aan de hand* and certainly not *aan de slag*. On the other hand, someone undertaking an Activity like *graven* 'to dig' could be said to be *aan de slag* or *aan de gang* with digging, but definitely not *aan de hand*.

Put very generally, therefore, I am arguing that as situational PPs, *aan de slag, aan de gang* and *aan de hand* represent abstractions over certain types of situations (out of all possible types of situations). The question is then which situational features (from §3.1-3.2) are relevant for capturing these abstractions. Being embedded in a phasal *aan*-PP, *slag, gang* and *hand* all refer to [+DURATIVE] situations. Beyond that, I will try to show here that two features play a principal part: [±DYNAMIC] and [+EFF.BOUND], that one feature plays a more minor role: [±EVOLVING], and that these semantic differences also correspond to a difference in syntax.¹⁰⁰

First, the feature [±DYNAMIC] sets apart *aan de hand* on the one hand, and *aan de gang* and *aan de slag* on the other, in that *hand* is the only noun that does not require the situation it abstracts over to be [+DYNAMIC]. That is to say: *hand* is [±DYNAMIC], *gang* and *slag* [+DYNAMIC]. To substantiate this claim, (128) presents a corpus item with *aan de hand* that necessitates understanding the situation referred to as a State, i.e. Yadira 'having a difficult problem'.¹⁰¹ Example (129), then, also features *aan de hand*, but refers to *dat er daar dingen gebeuren* 'that things happen there', i.e. [+DYNAMIC] situations (including *het roken van een jointje* 'smoking a joint': an Activity). Note that *aan de hand* construes the Activity 'pot smoking' as a Dynamism, since it does not take the agent of that situation as its subject, but instead the 'dummy subject' *er*, which is [-EFF.BOUND] in relation to the situation and thus does not supply not the typical [+EFF.BOUND] subject presupposed by the Activity of 'smoking pot'.

^{100.} Furthermore, this difference in syntax only plays a role for these three verbs, which is an additional reason to assume that the three 'opaque nouns' form a separate group.

IOI. Example (127) is likewise [-DYNAMIC].

- (128) Yadira, ik vind dat je een moeilijk probleem <u>aan de hand hebt</u>. [*State*] Yadira I find.ISG that you a difficult problem AAN the hand have.2SG
 'Yadira, I think that you're having a difficult problem.' (WR-P-E-A-0006511499)
- (129) Er <u>is</u> wel meer <u>aan de hand</u> dan het roken van een jointje, het feit EXS be.3SG PRT more AAN the hand than the smoke.INF of a joint.DIM the fact dat ze daar geen pottekijkers wensen toont aan dat daar dingen gebeuren that they there no pryers wish.3PL show.3SG to that there things happen.3PL die het daglicht niet verdragen. [Activity] > [Dynamism] that the daylight not bear.3PL

'There is more going on than just smoking pot, though, the fact that they don't want any prying eyes over there proves that things happen there that can't bear the light of day.' (WR-P-E-A-0000726533)

Crucially—as demonstrated by (128') and (129')—gang and slag can refer to the [+DYNAMIC] situation in (129), but not to the [-DYNAMIC] one in (128).¹⁰²

- (128')a. *Ik vind dat je een moeilijk probleem aan de gang hebt. *[State] (Intended: 'I think you have a difficult problem going on.') b. *Ik vind dat je een moeilijk probleem aan de slag hebt. *[State] (Intended: 'I think you have a difficult problem being busy.') (129')a. Er is wel meer <u>aan de gang</u> dan het roken van een jointje. EXS be.3SG PRT more AAN the way than the smoke.INF of а joint.DIM 'There is more going on than just smoking pot, though. [Activity] > [Dynamism]wel met meer aan de slag dan het roken b. Ze zijn van een jointje. They be.3PL PRT with more AAN the way than the smoke.INF of a joint.DIM
 - 'They are busy doing more than just smoking pot, though.' [Activity]

The fact that the abstractions made by *gang* and *slag* are specified for being [+DYNAMIC], sets them apart from *hand*, which is [±DYNAMIC]. The next feature—[±EFF.BOUND]—also mutually distinguishes *slag* and *gang*, besides further differentiating them from *hand*. This feature applies

^{102.} Note that the subject needs to be changed slightly for *slag* to work in (129'b); this is the syntactic difference that I mentioned earlier and will discuss below. This change would not make (128'b) felicitous, which is why it was not made there. For completeness' sake, this would make (128'b) read as follows: **Je bent aan de slag met een moeilijk probleem* (Intended: 'You're busy with a difficult problem'). Incidentally, this changed sentence would be acceptable if *probleem* 'problem' referred to something like a math problem, in which it would mean 'trying to solve it' (an Activity, which thus fits with the analysis proposed here). However, (128) and (128') are evidently not about a math problem, but about the more general problems that one may 'have' (i.e. that function as States).

as follows: the abstraction corresponding to *slag* is [+EFF.BOUND], the one corresponding to *hand* [-EFF.BOUND], while *gang*'s abstraction is underspecified for this feature, i.e. it is [±EFF.BOUND]. What this means is that the subject taken by *aan*-PPs featuring these opaque nouns (through a phasal-dynamic verb) is construed to either have the ability to effectuate the initial and terminal temporal boundaries presupposed by the situation (*slag*), to expressly not have that ability (*hand*), or either of these options (*gang*).

First, *slag*'s [+EFF.BOUND] requirement is illustrated with a corpus example in (130). In (130), the subject of the phasal-dynamic verb *gaan* 'go' (*de leerlingen* 'the pupils') is construed as a 'progressive agent': the pupils have the ability to initiate the general situation denoted by *slag*, i.e. 'being busy with the material', which is thus understood as an Activity.¹⁰³

(130) De leraar vertelt klassikaal een spannend verhaal en vervolgens gaan the teacher tell.3SG with.the.whole.class an exciting story and then go.3PL de leerlingen op hun eigen niveau aan de slag met de stof. [Activity] the pupils on their own level AAN the hit with the material
'The teacher tells the whole class an exciting story and the pupils subsequently get busy with the materials at their own level.' (WR-P-E-A-0004871513)

Next, (130') demonstrates that *gang* can function in the same way, denoting an [+EFF.BOUND] situation in (130'a). Conversely, *hand* rejects taking an [+EFF.BOUND] subject, cf. (130'b).¹⁰⁴

(130')a.	De leerlingen <u>gaan/zijn aan de gang</u> met de stof.	[Activity]
	'The pupils get/are busy with the materials.'	-
b.	*De leerlingen <u>gaan/zijn aan de hand</u> met de stof.	*[Activity]

(Intended: 'The pupils get/are going with the materials.')

The fact that [+EFF.BOUND] is a requirement for *slag* (but not *gang*) can then be demonstrated by noting that *slag* rejects nouns such as *stijging* 'increase', which have situational reference and refer to Processes (i.e. [+DYNAMIC][-EFF.BOUND][+EVOLVING] situations). These are no problem for *gang*, as shown by the corpus item in (131). But *slag* outright rejects them, as demonstrated by (131'a). *Hand* is possible (cf. (131'b)) but slightly marked, which—since *hand* is fine with Dynamisms (cf. (132))—points at *hand* being less compatible with [+EVOLVING] than *gang*.

^{103.} Example (125) is likewise [+EFF.BOUND]: aan de slag met de gegevens 'busy with the data' denotes an Activity.

^{104.} If *aan de hand* is specified in the co-text to refer to a situation like an Activity, it coerces [-EFF.BOUND], construing it as a Dynamism (cf. (129)).

(131) De slechte economische situatie vertaalt zich ook in meer werkloosheid. [...] the bad economic situation translate.3sG REFL also in more unemployment
Sinds november is die stijging aan de gang. [Process] since November be.3sG that increase AAN the way
'The poor state of the economy also leads to higher unemployment. That increase has been

under way since November.' (WS-U-E-A-0000164888)

- (131')a. *Sinds november <u>is</u> die stijging <u>aan de slag</u>. *[*Process*] (Intended: 'That increase has been busy since November.')
 - b. ²Sinds november <u>is</u> die stijging <u>aan de hand</u>. (Slightly marked reading: 'That increase has been going on since November.')
- (132) Wat is er aan de hand? Regen. [...] Niets om bang voor te zijn. what be.3SG EXS AAN the hand rain nothing for afraid for to be.INF [Dynamism]
 'What's going on? Rain. Nothing to be afraid of.'
 (WR-P-E-G-0000011454)

Taken together, (130') and (131) show that *aan de gang* abstracts over [±EFF.BOUND] situations, denoting an Activity in the former and a Process in the latter. However, the syntactic structure of [+EFF.BOUND] and [-EFF.BOUND] instances of *aan de gang* differs, and this difference crucially corresponds to the structure of *aan de slag* and *aan de hand*, respectively.

The difference in syntax concerns the role of the subject vis-à-vis the phasal-dynamic verb and an optional PP headed by the preposition *met* 'with'. In the case of *slag* and [+EFF.BOUND] gang, this *met*-constituent encodes the patient to the situation in which the subject plays the role of agent. For instance, in (130)—repeated more concisely as (133)—*de leerlingen* 'the pupils', as the subject, are the agent of *aan de slag gaan*, while the complement of the *met*-adjunct, *de stof* 'the materials', are the patient of that abstract situation (i.e. the pupils do something with the materials). The same applies to the constructed variation of (130) with [+eff.bound] *gang* in (130'a), but also to the attested example of *gang* with a patientive *met*-constituent in (134): the subject (*ik* 'I') is the agent, *met*'s complement (*effectapparatuur* 'effects unit') the patient. Below, the patientive *met*-constituents are also underlined.

(133) De leerlingen gaan op hun eigen niveau <u>aan de slag met de stof</u>. the pupils go.3PL on their own level AAN the hit with the material 'The pupils get busy with the materials on their own level.' (134) Als iemand dat zelf kan, ga ik niet aan de gang met effectapparatuur.
if someone that self can.3sGgo.ISG I not AAN the way with effects.unit
'If someone can do it themselves, then I won't get busy with the effects unit.'
(WR-P-P-G-0000019371)

Even when there is no *met*-constituent, the patient of (133)-(134) can be asked for by way of *met (waarmee* 'with what'), as demonstrated in (133')-(134'). And if the abstract situation denoted by *aan de slag/gang* is paraphrased by means of a transitive verb (e.g. *bestuderen* 'study' in (133") and *gebruiken* 'use' in (134")), then *met*'s complement becomes the direct object.

- (133') De leerlingen gaan op hun eigen niveau aan de slag. <u>Waarmee?</u> Met de stof. the pupils go.3PL on their own level AAN the hit with.what with the material 'The pupils get busy on their own level. With what? With the materials.'
- (134') Ik ga niet zelf aan de gang. <u>Waarmee?</u> Met effectapparatuur. I go.ISG not self AAN the way with.what with effects.unit
 'I won't get busy myself. With what? With the effects unit.'
- (133") De leerlingen <u>bestuderen</u> op hun eigen niveau <u>de stof</u>. the pupils study.3PL on their own level the material 'The pupils study the materials on their own level.'
- (134") Als iemand dat zelf kan, <u>gebruik</u> ik <u>de effectapparatuur</u> niet. if someone that self can.3sG use.ISG I the effects unit not
 'If someone can do it themselves, then I won't use the effects unit.'

All of this suggests that that the *met*-constituent is a component of *aan de slag*'s and [+EFF.BOUND] *aan de gang*'s valency, especially since these *met*-constituents only encode these thematic roles with the [+EFF.BOUND] opaque nouns, not with the groups where extension is (semi-)transparent and—most importantly—not with the productive set characterized by 'metonymy based on consumption'. This is demonstrated in (106') (adapted from (106) in §4.3.2.1), in which a *met*-constituent cannot encode a patient, but instead means 'in the company of (as it generally does).

(106') We gaan aan de champagne <u>met de buren</u>.
we go.IPL AAN the champagne with the neighbors
'We start the champagne together with the neighbors.'

Slag is always [+EFF.BOUND], which means that it may always take a patientive *met*-constituent. For *gang*, however, this syntax is lacking when it denotes an [-EFF.BOUND] situation (i.e. when *gang* behaves more like *hand* than like *slag*). But: in that scenario, there is yet another 'special' *met*-constituent, which can occur with *hand* and [-EFF.BOUND] *gang*, but not with *slag*. This *met*-constituent encodes the theme that the (abstract) situation denoted by the *aan*-PP is attributed to. This is illustrated with *hand* and [-EFF.BOUND] *gang* in (135)-(136): in (135), the State of 'something being strange' is attributed to the complement of the *met*-PP: *zijn gezicht* 'his face' (i.e. the strangeness is ascribed to the face); in (136), the Dynamism of 'a weird game going on' is likewise attributed to the type of capitalism). Parallel to the 'patientive *met*-PP' taken bij *slag* and [+EFF.BOUND] *gang*, the *met*-PPs illustrated by (135)-(136) may thus be called 'thematic'.

(135) Er was iets vreemds aan de hand met zijn gezicht. Hij glimlachte Exs was.3SG something strange AAN the hand with his face he smiled.3SG half, maar zijn ogen stonden donker. half but his eyes stood.3PL dark 'There was something strange going on with his face. He was smiling but his eyes were dark.' (WR-P-P-B-0000000230)

(136) Er <u>is</u> een raar spel <u>aan de gang met het casino kapitalisme</u>. exs be.3SG a weird game AAN the way with the casino capitalism

'There is a strange game going on with casino capitalism.'

(WR-P-E-A-0000853082)

The tests from (133')-(134') and (133")-(134") also apply here—the former in the same way (cf. (135')-(136')), while the paraphrases in the latter do not concern a direct object but instead the nominal complement to a copula (cf. (135")-(136")). This suggests that *aan de slag* and [+EFF.BOUND] *aan de gang* have a transitive valency, while *aan de hand* and [-EFF.BOUND] *aan de gang* have.

- (135') Er <u>was</u> iets vreemds aan de hand. <u>Waarmee?</u> Met zijn gezicht. Exs was.3SG something strange AAN the hand with.what with his face 'There was something strange going on. With what? With his face.'
- (136') Er is een raar spel aan de gang. <u>Waarmee?</u> Met het casino kapitalisme. exs be.3sG a weird game AAN the way with.what with the casino capitalism 'There is a weird game going on. With what? With casino capitalism.'

- (135") Zijn gezicht <u>was</u> vreemd. His face was.38G strange 'His face was strange.'
- (136") Het casino kapitalisme <u>is een raar spel</u>. the casino capitalism be.3SG a weird game 'Casino capitalism is a weird game.'

Interestingly, [-EFF.BOUND] *aan de gang* cannot take a thematic *met*-PP (nor a patientive one) if it is clearly [+EVOLVING], such as with *stijging* 'increase' in (131). This is demonstrated in (131"), in which the *met*-PP is not clearly interpretable, and in which the thematic interpretation (attributing the increase to *de economie* 'the economy') is highly marked at best.

(131") Sinds november is die stijging aan de gang <^{??}met de economie>. since November be.3sG that increase AAN the way with the economy
'That increase has been under way since November.' (Highly marked reading: 'That increase has been going on with the economy since November.')

This suggests that the feature [±EVOLVING] is indeed relevant in distinguishing *aan de gang* and *aan de hand*—an observation that was made earlier based on the markedness of *hand*'s Processinterpretation in (131'b). This would mean that *aan de gang* actually has three syntactic templates: one with a patientive *met*-PP, corresponding to *slag*; one with a thematic *met*-PP, corresponding to *hand* (with the difference that *gang*—contrary to *hand*—is never [-DYNAMIC]); and, finally, one that does not have a *met*-PP as a component of its valency, which differs from both *slag* (in being [-EFF.BOUND]) and *hand* (in being [+EVOLVING]).

It thus seems that the clusters of situation-aspectual notions that make up the abstractions constituting the meaning of *aan de slag/gang/hand* correspond systematically to the syntax of the opaque *aan*-PPs. A first attempt at drawing up the syntactic templates corresponding to the semantic features constituting the *aan*-PPs with these opaque nouns is presented in (137).¹⁰⁵ It should be kept in mind that the [+PHASAL] status of the *aan*-PPs means that they are all

^{105.} It should be pointed out here that the possible subjects taken by *hand* are much more limited than those taken by *slag* and *gang*, even if *gang* corresponds to the 'thematic *met*-PP'-template in (137c). Specifically, *hand* mainly takes indefinite/interrogative pronouns like *iets* 'something', *niets* 'nothing' and *wat* 'what' as subjects. This may have something to do with the hard [-EFF.BOUND] requirement imposed by *hand*, but it is clear that further research is needed—for which the syntactico-semantic representation in (137) could be a starting point.

[+DURATIVE]. For the sake of clarity: *slag* was illustrated in this section with (130); *gang* in (137a) with (134); *gang* in (137b) with (131); *gang* in (137c) with (136); and *hand* with (135).¹⁰⁶

(137) a. $[S_{AGENT} [V [aan de slag/gang]_{PP} [met N]_{PP}]_{VP}]$	\rightarrow	<i>slag</i> ↔ [+DYNAMIC][+EFF.BOUND]
	\rightarrow	gang \leftrightarrow [+DYNAMIC][+EFF.BOUND]
b. $[S_{THEME} [V [aan de gang]_{PP}]_{VP}]$	\rightarrow	gang \leftrightarrow [+dynamic][-eff.bound][+evolving]
c. $[S_{\text{THEME}} [V [aan de hand/gang]_{PP} [met N]_{PP}]_{VP}]$	\rightarrow	gang \leftrightarrow [+DYNAMIC][-EFF.BOUND][-EVOLVING]
	\rightarrow	<i>hand</i> \leftrightarrow [±DYNAMIC][-EFF.BOUND][-EVOLVING]

To round off this section, it is interesting to point out that the 'opaque nouns' *slag*, *gang* and *hand*, under the analysis in (137), may be examples of the more general typological phenomenon of 'light nouns' (e.g. Simone & Masini 2009, 2014; Masini 2016),¹⁰⁷ i.e. nouns characterized by weakened referentiality and more grammatical meaning. A lot of the work on light nouns has been done on Romance languages such as Italian. A striking parallel between that work and the 'opaque nouns' discussed in this section is that particularly suitable candidates for development into light nouns with aspectual function are nouns denoting 'hits' or 'blows', such as the Italian light nouns *colpo* 'blow' and *botta* 'blow', illustrated in (138) (taken from Masini 2016:104).

- (138) a. un <u>colpo</u> di telefono a blow of telephone
 'a ring (of the telephone)'
 b. una botta di fortuna
 - a blow of luck 'a stroke of luck'

Masini (2016) calls light nouns like *colpo* and *botta* in (138) 'aspectualizers' (or alternatively: 'actionalizers') since their grammatical meaning—which comes down to "a definite, bounded event or state, especially short and/or abrupt" (*ibid*:104)—is derived from the punctual (i.e. [-DURATIVE]) character of the situation in which the noun occurs. In this case a 'hit' corresponds to the situation of 'hitting': an Effectuateable Semelfactive.

There are at least two parallels with the present discussion: the grammatical meaning of the nouns is derived from object-to-situation extension, and Italian *colpo* and *botta* refer to the same

^{106.} In (137), I use the notation '↔' from i.a. Booij & Audring (2018), who use it to indicate a form-meaning correspondence (cf.fn.7).

^{107.} I thank Sjef Barbiers for drawing my attention to this crosslinguistic category.

type of object as Dutch *slag*: a 'hit', 'blow' or 'strike'. However, where *colpo*'s and *botta*'s grammatical meaning is derived from their punctuality (i.e. [-DURATIVE] status), that of *slag*—according to (137c)—is predicated not upon Effectuateable Semelfactives' [-DURATIVE] feature, but instead their [+EFF.BOUND] component.¹⁰⁸ So although Italian *colpo/botto* and Dutch *slag* correspond to equivalent "force-dynamics" (cf. Talmy 1988; Croft 2012), they have acquired nonequivalent grammatical meanings. Analyzing *slag* as a light noun may thus also be of value to crosslinguistic research into light nouns and force-dynamics, as it exemplifies a parallel yet conceptually distinct development vis-à-vis similar light nouns in the Romance languages.¹⁰⁹

An analogous 'light verb' analysis is applicable to *slaan* as a phasal-dynamic verb as well, seeing as—according to the feature-based analysis laid out §4.2—*slaan*'s distinguishing feature in (81b) is [+EFF.BOUND], just like *slag* in (137a). And *gang* and *gaan* may be accounted for under similar 'light noun' and 'light verb' analyses, as their distinguishing feature in (137a-c) and (81c) is [±EFF.BOUND]. For *hand* in (137c), light noun status is not as evident (nor whether it could have a light verb counterpart in (81)—perhaps *hebben* 'to have' or *houden* 'to keep'?), but this may be an interesting avenue for future research as well.

4.3.3 Verb stems and nominals: Habituality. A final relevant observation regarding [*aan de* V_{STM}] and [*aan* DET N] in their relation to [*aan het* V_{INF}] concerns habitual interpretations. It is well known that [*aan het* V_{INF}]—particularly [*zijn aan het* V_{INF}]—cannot be used to express habituality (cf. Boogaart 1999:185-187), in contrast to the English progressive, i.e [*be* V-*ing*]. Boogaart (1999) illustrates this by contrasting the English sentence with [*be* V-*ing*] in (139a)—which yields a habitual reading—with the Dutch translation featuring [*zijn aan het* V_{INF}] in (139b), which is not an acceptable way to express habituality (examples from Boogaart 1999:185; acceptability judgement added here—MB).

- (139) a. In those days they were having breakfast in the dining room. [Habitual]
 - b. [?]In die tijd <u>waren</u> ze <u>aan het ontbijten</u> in de eetkamer. in that time were.3PL they AAN the have.breakfast.INF in the dining.room [*Non-habitual; uni-actional Activty*]

(Marked reading: 'In those days they were in the middle of having breakfast in the dining room.')

^{108.} What *colpo/botta* and *slag* do have in common is Effectuateable Semelfactives' [+DYNAMIC] component.

^{109.} Simone & Masini (2014:62-63)—citing Gross (1984), Bosque (2006) and Orlandini (p.c.)—also provide examples from French (*coup de fer* 'quick iron'), Spanish (*golpe de suerte* 'stroke of luck') and Latin (*ictus oculi* 'quick glance'), all of which feature a 'hit'-like noun (*coup* 'hit', *golpe* 'stroke', *ictus* 'strike') contributing a [-DURATIVE] semantics. In my view, this makes Dutch *slag*'s apparent lack of emphasis on [-DURATIVE] (and instead on [+EFF.BOUND]) all the more intriguing.

As Boogaart points out, *waren aan het onbtijten* 'were having breakfast' in (139b) steers in the direction of "one particular occasion of having breakfast" (1999:186), whereas the adjunct *in de tijd* 'in those days' opens up a longer temporal interval. In terms of §3.3, *zijn aan het ontbijten* steers toward a uni-actional reading while *in die tijd* requires a situation-external pluractional predicate,¹¹⁰ which in my view leads to a 'clash' in pluractionality that makes (139b) marked at best. Crucially, no habitual (i.e. situation-external pluractional and gnomic) interpretation is available in (139b) to make the predicate and adjunct agree pluractionality-wise—contrary to the English counterpart in (139a). The situation-external pluractional, non-gnomic potential¹¹¹ of [*zijn aan het* V_{INF}] can be activated by adding a frequency adjunct like *vaak* 'often', as Boogaart (1999:186) demonstrates with the version of (139b) shown below in (140).

(140) In die tijd <u>waren</u> ze daar vaak <u>aan het ontbijten</u>. in that time were.3PL they there often AAN the have.breakfast.INF [Non-habitual; situation-external pluractional Activity]

'In those days they were often having breakfast there.'

When it comes to [*aan* DET N] and [*aan de* V_{STM}], however, habitual readings do not seem to be excluded quite as strictly. In fact, Booij & Audring (2018) expressly include habituality in their semantic characterization of both patterns: "Dutch PPs with the preposition *aan* may be used to denote an event or a habitual action" (*ibid*:220). They offer several examples of [*aan* DET N] interpreted habitually, three of which are presented in (141) (from *ibid*:220).

(141) a. aan de drank AAN the drink

'being in the habit of drinking alcohol'

b. aan het pasta AAN the pasta

'being in the habit of eating pasta'

c. aan de pil AAN the beer

'being in the habit of using contraceptives'

^{110.} Lemmens (2015) would call this a 'situational' reading of [*zijn aan het* V_{INF}] as opposed to the 'processual' predicate required by *in die tijd* 'in those days' (cf.§3.3).

^{111.} In terms of Lemmens (2015): 'processual profile' (cf.fn.110).

While Booij & Audring (2018) do not provide any clear examples of [*aan de* V_{STM}] interpreted habitually, their claim that [*aan de* V_{STM}] allows for habitual readings (especially when compared to [*aan het* V_{INF}]) is correct, as can be demonstrated by using the 'habitual template' from (139b) and replacing the instance of [*aan het* V_{INF}] with one of [*aan de* V_{STM}]. (142)-(144), under (a), provide three constructed examples according to this tempate, using stems from the corpus query from §4.3.1 (*wandel* 'stroll' and *vreet* 'gobble') and from Booij & Audring (*zwem* 'swim'). Under (b), (142)-(144) include the [*aan het* V_{INF}] equivalent of (a), which exhibit the same difficulty as (139b) in licensing habitual interpretations, cf. the 'marked' judgements.

(142) a. In die tijd <u>waren</u> ze <u>aan de wandel</u> in de bossen. [Habitual] in that time were.3PL theyAAN the stroll.STM in the forests 'In those days, they were taking strolls in the forest.'

b. In die tijd <u>waren</u> ze <u>aan het wandelen</u> in de bossen. in that time were.3PL theyAAN the stroll.INF in the forests [Non-habitual; uni-actional Activity]

(Marked reading: 'In those days, they were in the middle of taking a stroll in the forest.')

- (143) a. In die tijd <u>waren</u> ze <u>aan de vreet</u> bij fastfoodrestaurants. [*Habitual*] in that time were.3PL theyAAN the gobble.STM at fast-food.restaurants 'In those days, they were eating a lot at fast-food restaurants.'
 - b. In die tijd <u>waren</u> ze <u>aan het vreten</u> bij fastfoodrestaurants. in that time were.3PL they AAN the gobble.INF at fast-food.restaurants [*Non-habitual, uni-actional*]

(Marked reading: 'In those days, they were in the middle of eating a lot at fast-food restaurants.')

- (144) a. In die tijd <u>waren</u> ze <u>aan de zwem</u> in de Noordzee. [*Habitual*] in that time were.3PL theyAAN the swim.STM in the North.Sea 'In those days, they were swimming in the North Sea.'
 - b. [']Indie tijd <u>waren</u> ze <u>aan het zwemmen</u> in de Noordzee. in that time were.3PL they AAN the swim.INF in the North.Sea [Non-habitual; uni-actional Activity]

(Marked reading: 'In those days, they were in the middle of swimming in the North Sea.')

The acceptability of habitual readings with [*aan de* V_{STM}] in (142a)-(144a) does not entail that all instances of the pattern license habituality, however. Specifically, it appears that the instances analyzed as 'fixed patterns' in §4.3.1—i.e. *aan de haal* 'stealing', *aan de praat* 'up and running',

aan de kook 'boiling' and *aan de weet* 'knowing'—cannot be interpreted habitually. I would argue that this is because of the specific meanings tied to these fixed patterns (which, as pointed out in §4.3.1, do not conform to the meaning of the productive pattern): 'having made off with someone or something' (*haal*), 'being up and running' (*praat*), 'boiling' (*kook*) and 'knowing' (*weet*) are not dynamic situations with the potential for situation-external iteration, which is a requirement for the type of generalization that makes up habituality (cf.§3.3). On the other hand, as a productive pattern, [*aan de* V_{STM}]—like English [*be* V-*ing*]—does not seem to impose the non-gnomic requirement that characterizes [*aan het* V_{INF}]. This is especially interesting in light of the observation that [*aan de* V_{STM}] is 'more of a progressive construction' than [*aan het* V_{INF}] in regards to its self-standing [+EFF.BOUND] requirement (cf. §4.3.1): when it comes to gnomicity, the roles are reversed, as both [*aan het* V_{INF}] and [*aan de* V_{STM}] allow situation-external pluractional readings but only the latter licenses the 'gnomic surplus' that is constitutive of habituality, thus deviating from the 'paradigmatic instance' of progressive meaning postulated in §3.4, as one of the four 'core components' is precisely non-gnomicity.

Booij & Audring (2018) make the same claim for [*aan* DET N] as for [*aan de* V_{STM}] regarding habitual interpretations, and demonstrate it with the aforementioned examples in (141), which may indeed be interpreted habitually. However, the fact that habitual interpretations are possible in (141a-c) again does not mean that this is possible with all instances of [*aan* DET N]. In §4.3.2, the 'nominal group' was subdivided in terms of semantic extension, and it appears that the different extension types that were distinguished behave differently with regard to habituality. I will start with cases that—contrary to the examples in (141)—do not license habituality.¹¹²

First, the metaphorical and metonymic-metaphorical groups do not appear to allow habitual readings. For the metaphorical group, this is likely because the metaphorical shift from location (e.g. *aan de top van de berg* 'at the top of the mountain') to situation (e.g. *aan de top van het bedrijfsleven* 'at the top of the business world') results in a type of stative predication: when put into the habitual template, the *bedrijfsleven* example does not entail a generalization over a situation-external pluractional set of instances of being *aan de top* 'at the top', but constitutes a single stage-level State (SLS)—cf. (145). Contrary to the examples in (141), therefore, (145) is uni-actional and does not profile multiple situations substantiating a habitual generalization (e.g. instances of *drinken* 'drinking' for *aan de drank* 'in the habit of drinking alcohol' in (141a)).

^{112.} Because of the highly abstract semantics of the 'opaque nouns' from § 4.3.2.4 (i.e. *slag, gang* and *hand*), I will not include these nouns in the present discussion of habituality.

(145) In die tijd was zij aan de top van het bedrijfsleven. [Non-habitual SLS] in that time was.3sG she AAN the top of the business.life
'In those days, she was at the top of the business world.'

Similarly, the metaphorical step following metaphoric extension in the case of the metonymicmetaphorical group produces a uni-actional stage-level State. This is illustrated with *aan de stok* 'in conflict' in (146).

(146) In die tijd <u>hadden</u> wij het met elkaar <u>aan de stok</u>. [Non-habitual SLS] in that time had.IPL we it with each.other AAN the stick
'In those days, we were having a conflict.'

If metaphorical extension is what is blocking habituality, then it is to be expected that habitual readings are found in the metonymic group. And indeed, all the habitual examples provided by Booij & Audring (2018) under (141) are based on metonymic extension. But even within this group, certain subtypes seem more compatible with habituality than others. This is already the case for the first distinction, metonymy based on concrete versus abstract objects: none of the members of the 'abstract metonymy' group—i.e. *orde* 'order', *macht* 'power', *beurt* 'turn' and *woord* 'word'—lend themselves to habitual readings, as demonstrated by (147).¹¹³

- (147) a. In die tijd was ongehuwdsamenwonen niet aan de orde. [Non-habitual SLS] in that time was.3sG unmarried cohabit.INF not AAN the order
 'In those days, living together without being married was not a possibility.'
 - b. In die tijd <u>was</u> Margaret Thatcher <u>aan de macht</u>. [Non-habitual SLS] in that time was.3sG Margaret Thatcher AAN the power 'In those days, Margaret Thatcher was in power.'
 - c. In die tijd <u>was</u> de lhbt-beweging <u>aan de beurt</u>. [Non-habitual SLS] in that time was.3SG the LGBT.movement AAN the turn
 'In those days, it was the turn of the LGBT movement.'
 - d. "In die tijd <u>was</u> de burgemeester <u>aan het woord</u>. in that time was.3SG the mayor AAN the word [Non-habitual; uni-actional Activity]

(Highly marked reading: 'In those days, the mayor was in the middle of talking.')

^{113.} Combined with *zijn*, *aan de orde* appears to be a negative polarity item—i.e. one that requires some form of negation (or: one that is only licensed by an environment containing negation)—so that *niet* 'not' had to be added in the constructed example in (147a). Still, (147a) does not negate a habit (contrary to a negated version of (141a), for example: *niet aan de drank* 'not be in the habit of drinking'). Therefore, the point that 'abstract metonomy' does not license habituality is still demonstrated by (147).

The first three examples of abstract metonymy, in (147a-c), do not allow habitual interpretations because they denote extended stage-level States, just like the metaphorical and metonymicmetaphorical cases in (145)-(146). (147a-c) are thus acceptable, yet not habitual. (147d) is also non-habitual, but in a different way: *aan het woord* 'talking' does denote an Activity, but one that—similarly to [*aan het* V_{INF}] in 139b)—does not allow gnomic generalization, which is why (147d) is highly marked. Just like [*aan het* V_{INF}], it does have situation-external pluractional potential though, which again can be activated by adding *vaak* 'often', making the sentence acceptable, cf. (148).

(148) In die tijd <u>was</u> de burgemeester vaak <u>aan het woord</u>. in that time was.3SG the mayor often AAN the word [Non-habitual; situation-external pluractional Activity]

'In those days, the mayor was often talking.'

Within the 'concrete metonymic' group, then, three subdivisions were made in §4.3.2.1: metonymy drawing from consumption, from using a device, and from working on something. As Booij & Audring's (2018) habitual examples in (141) suggest, the productive consumption-based pattern is the first straightforwardly licensing habitual readings: *aan de drank, aan de pasta* and *aan de pil* all denote situations in which the object is in some way consumed. These patterns may be used uni-actionally—cf. (149)—but situation-external pluractional readings are also possible, which then allow gnomic generalizations that make up habitual predication—cf. (150). It should also be noted here that the 'default' [+MEDIAL] verb for this particular group, *zitten* 'to sit' (cf.§4.3.2.1), is compatible with both types of readings—cf. (149')-(150').

	/	<u>aan de dra</u> Idy AAN the dri	5]
'Are	you drinkin	g already?'	(WR-P-E-L-000000286))

(150) Volgens de politie was de man werkloos, had hij psychologische according.to the police was.3SG the man unemployed had.3SG he psychological problemen en was hij ook aan de drank. [Habitual] problems and was.3SG he also AAN the drink
'According to the police, the man was unemployed, had mental issues and was drinking alcohol.' (WR-P-P-G-0000228782)

(149') <u>Zit</u> je al <u>aan de drank</u>? 'Are you drinking already?' [Non-habitual; uni-actional Activity]

(150') Volgens de politie <u>zat</u> de man ook <u>aan de drank</u>. [*Habitual*] 'According to the police, the man was also drinking alcohol.'

By contrast, [*aan* DET N]-patterns drawing from 'device'- or 'work'-related metonymy do not seem suitable for habitual interpretations. In (151), for instance, device-based *aan de telefoon/computer* 'using the telephone/computer' function similarly to [*aan het* V_{INF}] in (139b) and *aan het woord* 'talking' in (148) in that they profile a uni-actional Activity and do not allow pluractional and gnomic extension in the 'habitual template'.¹¹⁴ And in (152), work-based *aan de studie/scriptie* 'studying/working on the thesis' function similarly to the stage-level States in (145)-(147a-c) in that they attribute the *aan*-PPs as extended properties but not habitual ones. For the work-based group, this may have to do with the fact that the situations that these objects extend to—e.g. 'completing one's studies' and 'writing a thesis'—generally have an inherent endpoint (i.e. are [+TELIC]). This clashes with the idea of a 'habit', which one may pursue indefinitely. In (151)-(152), using *zijn* or *zitten* does not make a difference for these readings.

- (151) a. ^{??}In die tijd <<u>was</u>> <<u>zat</u>> ik aan de telefoon.
 in that time was.ISG sat.ISG I AAN the telephone [Non-habitual; uni-actional Activity]
 (Highly marked reading: 'In those days, I was in the middle of using the telephone.')
 - b. "In die tijd <<u>was</u>> <<u>zat</u>> ik aan de computer. in that time was.ISG sat.ISG I AAN the computer [Non-habitual; uni-actional Activity]

(Highly marked reading: 'In those days, I was in the middle of using the computer.')

- (152) a. In die tijd <<u>was</u>> <<u>zat</u>> ik aan de scriptie. [Non-habitual SLS] in that time was.ISG sat.ISG I AAN the thesis
 'In those days, I was working on the thesis.'
 - b. In die tijd <<u>was</u>> <<u>zat</u>> ik aan de studie. [Non-habitual SLS] in that time was.ISG sat.ISG I AAN the study
 'In those days, I was studying.'

^{114.} Again, the pluractional potential can be activated by adding *vaak* 'often': *In die tijd was/zat ik vaak aan de telefoon/computer* 'In those days, I was using the telephone/computer a lot'. Hence, in (139b), (148) and (151), habitual interpretations are not so much blocked by the unavailability of situation-external pluractionality, but by the unavailability of gnomic generalizations over that pluractional structure.

All in all, it seems that [*aan het* V_{INF}]'s exclusion of habituality is shared by most of [*aan* DET N]'s subtypes (i.e. metaphor, metonymy-metaphor, abstract metonymy and work-/device-based concrete metonymy), while only [*aan de* V_{STM}] and one [*aan* DET N] subtype (i.e. concrete consumption-based metonymy) *do* license habitual interpretations. The observation that the latter patterns include habitual interpretations is thus more surprising than it may seem at first. Although several ad hoc explanations were put forward in this section as to why habituality is so unequally distributed over the situational *aan*-PPs (e.g. the stativity of metaphorical extension and the telicity of work-based metonymy), these remain speculative in the absence of a more comprehensive account of phasality and gnomicity.

4.4 Summary: Situational PPs beyond progressivity

The aim of this chapter was to 'move beyond' the analysis of [*zijn aan het* V_{INF}] as a progressive construction, and beyond the treatment of related *aan*-PPs as mere 'variations' on that progressive construction. To this end, the conceptual account of progressive aspectuality drawn up in Chapter 3 was first applied to [*zijn aan het* V_{INF}] by examining the behavior of the construction in terms of selection (of situation types) and shift (toward other situation types) (§4.1). Then the semantics of the 'other main verbs'—which were termed 'phasal-dynamic verbs' in the course of the chapter—were analyzed in terms of binary features, which allowed for a fairly precise overview of the similarities and differences between these verbs (§4.2). Last, the 'other complements' of *aan*—verb stems and nouns—were discussed; in both cases, productive and non-productive instances of the patterns were identified (§4.3). Regarding [*aan de* V_{STM}], the productive pattern turned out to be based on metonymical object-to-situation extension, mainly drawing from 'consumption'. And somewhat surprisingly, both productive patterns turned out to license habitual interpretations, contrary to [*zijn aan het* V_{INF}].

If the 'four components of progressive meaning' are taken as a reference point, the productive patterns corresponding to [*aan het* V_{INF}], [*aan de* V_{STM}] and [*aan* DET N]—when combined with the phasal-dynamic verb *zijn* 'to be'—align with *and* deviate from the conceptual account of progressive aspectuality in interesting ways. To get a precise overview of these relations, the four components of progressive meaning postulated in §3.4 are repeated in (153).

(153) Four components of progressive meaning (from §3.4)

- 1. **DYNAMICITY.** Progressive aspectuality presupposes that a given situation has a heterogeneous and non-contractible temporal structure;
- 2. DECOMPOSABILITY (MEDIAL PHASALITY). Progressive aspectuality decomposes a situation into at least three phases (initial-medial-terminal) and foregrounds the medial phase (immediate scope) while backgrounding the residual phases (maximal scope), i.e. defocusing boundaries;
- 3. **BOUNDARY EFFECTUATION.** Progressive aspectuality presupposes the ability of the subject (i.e. the 'progressive agent') to effectuate the boundaries within maximal scope;
- 4. **NON-GNOMICITY.** Progressive aspectuality may produce uni-actional or pluractional interpretations, the latter of which may be situation-internal or situation-external; situation-external pluractional interpretations of progressive aspectuality are by definition non-gnomic (i.e. do not entail a generalization over micro-situations in the direction of a defining property of the subject involved in those situations).

The starting point for the analysis in this thesis was that situational *aan*-PPs, by their very definition, share a conceptual basis of aspecto-temporality: along a temporal axis, they profile situations with particular aspectual properties (cf. §2.2).¹¹⁵ It was assumed that these properties would be specified by the variable parts of the form of situational *aan*-PPs, i.e. the main verbs and complements.

The three types of productive 'progressive' situational *aan*-PP—[*zijn aan het* V_{INF}], [*zijn aan de* V_{STM}] and [*zijn aan* DET N]—are thus first and foremost aspecto-temporal in nature. Next, they share the first and second components listed under (153): dynamicity and decomposability (or medial phasality in the case of *zijn* and other [+MEDIAL] verbs). After all, it was shown that both [*zijn aan het* V_{INF}] and [*zijn aan de* V_{STM}] require (or coerce) dynamic situations. As for [*aan* DET N], the 'consumption-based' metonymy allowing productive object-to-situation extension yields the interpretation of 'consuming the object', which is itself an Activity, i.e. a [+DYNAMIC] situation.¹¹⁶ As operations on *aan*-PPs' aspecto-temporal conceptual basis, dynamicity and decomposability thus seem to be specifications supplied by the situational *aan*-PPs in a maximally general sense—i.e. separately from the type of main verb or complement taken by the PP.¹¹⁷ This insight is represented schematically in (154), which postulates that there is an

^{115.} As such, they were contrasted with locational *aan*-PPs with a conceptual basis of spatio-temporality, which likewise construe a temporal axis but instead profile locations with particular spatial properties.

^{116.} Strictly speaking, 'consuming an object' would be an Accomplishment, but this subtype of [*aan* DET N] appears to construe it as [-TELIC]. The two other bases for metonymy—devices and work—correspond to Activities and Accomplishments, respectively, cf. §4.3.3.

^{117.} This observation was made previously based on the semantic contribution of the main verbs, being the main motivation to coin the terms 'phasal-dynamic verbs and 'phasal-dynamic verb set' (cf.§4.2.3).

overarching (abstract) form subsuming all productive situational *aan*-PPs, and that this form corresponds to the aspecto-temporal features [+PHASAL] and [+DYNAMIC]. Adding 'progressive' *zijn*, then, specifies [+PHASAL] as [+MEDIAL].

(154)
$$[aan \text{ DET } V_{\text{inf}}/V_{\text{STM}}/N]_{\text{PP}} \leftrightarrow [+aspecto-temporal][+phasal][+dynamic]$$

(155) $[zijn aan \text{ DET } V_{\text{inf}}/V_{\text{STM}}/N]_{\text{PP}} \leftrightarrow [+aspecto-temporal][+phasal][+medial][+dynamic]$

The remaining two components of progressive meaning—boundary effectuation and nongnomicity—serve to set the three types of situational *aan*-PP apart. First, [*aan de* V_{STM}] presupposes that the subject of the verb with which it combines has the ability to effectuate temporal boundaries. In terms of situational features, the complement '*de* V_{STM} ' adds to the aspecto-temporal basis the specification [+EFF.BOUND]. This is not the case for the complements '*het* V_{INF} ' and 'DET N', which are underspecified for boundary effectuation, i.e. [±EFF.BOUND]. [*Aan de* V_{STM}] is thus the only situational *aan*-PP requiring a true 'progressive agent', whereas [*aan het* V_{INF}] and [*aan* DET N] also cover continuous, non-progressive meanings. This finding is schematized in (156), which builds upon the representation in (154).

(156) a. [*aan het* V_{INF}] \leftrightarrow [+aspecto-temporal][+phasal][+dynamic][±eff.bound] b. [*aan de* V_{STM}] \leftrightarrow [+aspecto-temporal][+phasal][+dynamic][+eff.bound] c. [*aan* DET N] \leftrightarrow [+aspecto-temporal][+phasal][+dynamic][±eff.bound]

Second, non-gnomicity applies to the complement '*het* V_{INF} ', which blocks habitual readings. But it does not apply to '*de* V_{STM} ' and the productive, consumption-based metonymical pattern with 'DET N' as a complement. That is to say, these patterns license the gnomic generalizations that are needed for habituality, but they do not necessitate them. Hence, [*aan de* V_{STM}] and [*aan* DET N] are underspecified for gnomicity—i.e. they are [±GNOMIC]—whereas [*aan het* V_{INF}] is expressly [-GNOMIC]. This insight is represented by (157), building further on (154)-(156). For comparison, (158) shows the 'four components of progressivity' in the same way as (154)-(157).

(157) a. [*aan het* V_{INF}] \leftrightarrow [+ASPECTO-TEMPORAL][+PHASAL][+DYNAMIC][±EFF.BOUND][-GNOMIC] b. [*aan de* V_{STM}] \leftrightarrow [+ASPECTO-TEMPORAL][+PHASAL][+DYNAMIC][+EFF.BOUND][±GNOMIC] c. [*aan* DET N] \leftrightarrow [+ASPECTO-TEMPORAL][+PHASAL][+DYNAMIC][±EFF.BOUND][±GNOMIC] What (158) makes clear is that all three situational *aan*-PPs—when combined with *zijn* 'to be' and thus also [+MEDIAL]—diverge in at least one feature from the conceptual definition of progressive aspectuality developed in Chapter 3: [*aan de* V_{INF}] does not impose the [+EFF.BOUND] requirement; [±*aan de* V_{STM}] does impose [+EFF.BOUND] but is not necessarily [-GNOMIC]; and [*aan* DET N] is neither necessarily [+EFF.BOUND] nor [-GNOMIC]. This also means that the three patterns are highly similar, but each impose subtly different conceptual specifications on [+ASPECTO-TEMPORAL]. Combined with *zijn* 'to be', the situational *aan*-PPs are thus progressive to varying degrees (the infinitival and stem patterns are 'more progressive' than the nominal one) and in different respects (with the infinitival pattern stressing non-gnomicity and the verb stem pattern focusing on boundary effectuation).

This chapter also worked out the aspecto-temporal specifications imposed by the phasaldynamic verbs in terms of the feature-based approach taken in (154)-(158). Assuming that these verbs operate on the specific conceptual structure displayed by the *aan*-PPs in (157), the ultimate aspecto-temporal interpretation of a sentence featuring a situational PP is determined by the interaction between the conceptual structure of the PP and the verb. For the sake of completeness, the feature-based representation of these verbs (from §4.2.3) is repeated below in (159).

(159) a. komen, (ge)raken	[+initial][-modal][-caus.][-eff.bound]
b. slaan, zich zetten	[+initial][-modal][-caus.][+eff.bound]
c. gaan	[+initial][-modal][-caus.][±eff.bound]
d. <i>krijgen</i>	$[+INITIAL][-MODAL][+CAUS.][-EFF.BOUND]_{S}[\pm EFF.BOUND]_{O}$
e. <i>maken</i>	$[+INITIAL][-MODAL][+CAUS.][\pm EFF.BOUND]_{S}[-EFF.BOUND]_{O}$
f. zetten	$[+INITIAL][-MODAL][+CAUS.][\pm EFF.BOUND]_{S}[+EFF.BOUND]_{O}$
g. brengen	$[+INITIAL][-MODAL][+CAUS.][\pm EFF.BOUND]_{S}[\pm EFF.BOUND]_{O}$
h. <i>kunnen, moeten,</i>	[+initial][+modal][-epist.][+eff.bound]
mogen, willen	
i. <i>zijn</i>	[+medial][-modal][-cont.][-caus.][±eff.bound]
j. hebben	$[+MEDIAL][-MODAL][-CONT.][+CAUS.][+EFF.BOUND]_{S}[\pm EFF.BOUND]_{O}$
k. <i>blijven</i>	[+medial][-modal][+cont.][-caus.][±eff.bound]
1. houden	$[+MEDIAL][-MODAL][+CONT.][+CAUS.][\pm EFF.BOUND]_{S}[\pm EFF.BOUND]_{O}$
m. blijken, lijken, schijnen	[+MEDIAL][+MODAL][+EPIST.][±EFF.BOUND]
n. horen, zien, vind	en $[+MEDIAL][+PERCEP.][-EFF.BOUND]_{S}[\pm EFF.BOUND]_{O}$

Taken together, (157) and (159) make it possible to analyze any given situational *aan*-PP combining with a phasal-dynamic verb in terms of an exhaustive (or at least: hypothetically exhaustive) set of relevant aspecto-temporal features. They thus allow for a more precise semantic analysis of the multitude of aspectual expressions subsumed by the situational *aan*-PPs in Dutch.

Chapter 5 Conclusion

5.1 Main findings

This thesis started out with the observation that the Dutch 'progressive construction' [*zijn aan het* V_{INF}]—illustrated by (163) on the next page—shares relevant formal and semantic properties with various other types of *aan*-PP in Dutch. This included locational PPs (cf. (160)), dative PPs (cf. (161)) and *aan*-POs (cf. (162)), but also PPs that are neither locational nor dative (i.e. non-locational), yet feature something else than a verbal infinitive as *aan*'s complement. Specifically, this concerned the PPs [*aan de* V_{STM}] and [*aan* DET N], illustrated in (164) and (165), respectively.

(160) Locational aan-PP

Big Sur ligt in Californië, <u>aan de westkust</u> van Amerika. Big Sur lie.3SG in California AAN the west.coast of America

'Big Sur is located in California, on America's west coast.' (WR-P-E-G-0000000503)

(161) Dative aan-PP

Dit instituut heeft jarenlang adviezen <u>aan de overheid</u> gegeven over this institute have.3SG many.years advice.PL AAN the government give.PCP about

integratiebeleid.

integration.policy

'This institute has provided the government with advice on integration policy for years on end.' (WR-P-P-G-0000112051)

(162) Aan-PO

De Spaanse wielrenner Igor Gonzalez de Galdeano mag komende zomer niet the Spanish cyclist Igor Gonzalez de Galdeano may.35G coming Summer not

meedoen <u>aan de Tour de France</u>. take.part AAN the Tour de France

'The Spanish cyclist Igor Gonzalez de Galdeano is not allowed to take part in the Tour the France this coming Summer.' (WR-P-P-G-0000100475)

(163) [aan het $V_{INF}]_{PP}$

Ik ben <u>aan het zoeken</u> in de buurt naar een grotere woning, maar I be.ISG AAN the search.INF in the neighborhood to a bigger house but

het is moeilijk! it be.3sg difficult

'I'm looking for a bigger house in the neighborhood, but it's difficult!'

(WR-P-E-A-0004363923)

(164) [aan de V_{STM}]_{PP}

Ok super ik ga <u>aan de zoek</u> en laat t even weten THANKS. ok super I g0.1SG AAN the search.STM and let.1SG it PRT know.INF thanks

'OK, great, I'll go and look and will let you know, THANKS.' (http://www.w124club.nl/richtingaanwijzers-snel-knipperen-t8375.html)

(165) [aan DET N]_{PP}

Als je me nou had uitgenodigd voordat ik <u>aan de wijn</u> was gegaan... if you me PRT had.2SG invite.PCP before I AAN the wine was.ISG gO.PCP 'If only you'd invited me before I had started drinking wine...'

(WR-P-E-L-000000301)

The main idea underlying this thesis was that the *aan*-PPs in (163)-(165) share a particular semantics that those in (160)-(162) do not. While *aan de westkust* 'on the west coast' in (160) indicates a spatial location, *aan de overheid* 'to the government' (161) encodes a 'path' relation of an object toward a recipient, and *aan de Tour de France* 'in the Tour the France' (162) provides the object of the PO-verb *meedoen aan* 'take part in', (163)-(165) all denote situations along a temporal axis: *aan het zoeken* 'searching', *aan de zoek* 'searching' and *aan de wijn* 'drinking wine'.

The type of PP exemplified by (163)-(165) was thus termed 'situational *aan*-PP', which was argued to be defined by having an aspecto-temporal conceptual basis (Chapter 2). This made it possible to examine these patterns—including the one approached almost exclusively as a 'progressive construction': [*zijn aan het* V_{INF}]—in an integrated and precise way, establishing the semantic contribution of each of the constituent parts (i.e. the situational *aan*-PP itself, the verbs selected by that PP, and the complements selected by *aan*). Those semantic contributions were approached as 'specifications' of the aspecto-temporal basis provided by each situational *aan*-PP.

As a way of building upon previous research into this type of PP, the concept of 'progressive aspectuality' was taken as a conceptual starting point. From previous work on this aspectual category, four 'core components' of progressive aspectuality were distilled: decomposability (medial phasality), dynamicity, boundary effectuation and non-gnomicity (Chapter 3). These

core components were then applied to the situational PPs under study (Chapter 4); first specifically to [*zijn aan het* V_{INF}], then to other verbs combining with [*aan het* V_{INF}], and finally to other complements selected by *aan*, i.e. [*aan de* V_{STM}] and [*aan* DET N]. For [*aan* DET N], an account was given of the types of extension necessary for interpreting the object-denoting nominal complement as a situation: by way of metonymy, metaphor, and both at the same time.

The analyses revealed that all verbs and complements under study make different conceptual specifications on the aspecto-temporal basis provided by the situational *aan*-PP in abstracto, which itself consists of the features [+PHASAL] and [+DYNAMIC] (i.e. the first two 'core components' of progressive aspectuality). For the complements, the four components of progressivity distinguished in Chapter 3 suffice to characterize them semantically. The verbs, on the other hand, require at least eight features for their conceptual characterization, including two types of phasality ([±INITIAL] and [±MEDIAL]) and boundary effectuation (a feature proposed here: [±EFF.BOUND]), but not gnomicity, which does not seem to play a role at the level of the verbs. At the close of Chapter 4 (§4.4), the conceptual structure of each of the complements and verbs was represented by way of specifications on an aspecto-temporal basis in terms of binary features, e.g. [+EFF.BOUND] (or underspecification for a given binary feature, e.g. [±EFF.BOUND]). These representations are the main outcomes of the research reported on in this thesis. They are repeated below in (166) and (167), which characterize each of the complements and verbs.

 $(166) a. [aan het V_{INF}] \leftrightarrow [+aspecto-temporal][+phasal][+dynamic][\pm eff.bound][-gnomic]$ b. [aan de V_{STM}] \leftrightarrow [+aspecto-temporal][+phasal][+dynamic][+eff.bound][\pm gnomic] c. [aan DET N] \leftrightarrow [+aspecto-temporal][+phasal][+dynamic][\pm eff.bound][\pm gnomic]

(167) a. komen, (ge)raken	[+initial][-modal][-caus.][-eff.bound]
b. <i>slaan, zich zetten</i>	[+initial][-modal][-caus.][+eff.bound]
c. gaan	[+initial][-modal][-caus.][±eff.bound]
d. <i>krijgen</i>	$[+INITIAL][-MODAL][+CAUS.][-EFF.BOUND]_{S}[\pm EFF.BOUND]_{O}$
e. maken	$[+INITIAL][-MODAL][+CAUS.][\pm EFF.BOUND]_{S}[-EFF.BOUND]_{O}$
f. <i>zetten</i>	$[+initial][-modal][+caus.][\pm eff.bound]_{s}[+eff.bound]_{o}$
g. brengen	$[+INITIAL][-MODAL][+CAUS.][\pm EFF.BOUND]_{S}[\pm EFF.BOUND]_{O}$
h. kunnen, moeten,	[+initial][+modal][-epist.][+eff.bound]
mogen, willen	
i. <i>zijn</i>	[+medial][-modal][-cont.][-caus.][±eff.bound]
j. hebben	[+medial][-modal][-cont.][+caus.][+eff.bound] _s [±eff.bound] _o
k. blijven	[+medial][-modal][+cont.][-caus.][±eff.bound]
1. houden	$[+MEDIAL][-MODAL][+CONT.][+CAUS.][\pm EFF.BOUND]_{S}[\pm EFF.BOUND]_{O}$
m. blijken, lijken, schijnen	[+MEDIAL][+MODAL][+EPIST.][±EFF.BOUND]
n. horen, zien, vinden	$[+MEDIAL][+PERCEP.][-EFF.BOUND]_{S}[\pm EFF.BOUND]_{O}$

Put concretely, the main findings of this thesis are threefold. First, all three situational *aan*-PPs are productive morphosyntactic constructions (although to different degrees), and all three of them could be called 'progressive' (again, to different degrees, and only partially). The latter point can be specified by saying that [*aan het* V_{INF}] and [*aan de* V_{STM}] each fulfill three of the four postulated components of progressivity, while [*aan* DET N] fulfills two. Specifically, [*aan het* V_{INF}] does not impose a strict [+EFF.BOUND] requirement, while [*aan de* V_{STM}] does not strictly exclude [+GNOMIC] interpretations, and [*aan* DET N] does neither. At the same time, all three situational *aan*-PPs (including [*aan* DET N]) are compatible with the 'complete' quadripartite cluster of progressive meaning (i.e. [+MEDIAL][+DYNAMIC][+EFF.BOUND][-GNOMIC]), but whether they fully express it depends on the semantics of the complement (e.g. V_{INF} 's or V_{STM} 's situation type) and phasal-dynamic verb selected in a given case. It thus seems that the situational *aan*-PPs is progressive.

The second finding is that the semi-aspectual feature of [±EFF.BOUND] plays a constitutive role in how the domain of situational *aan*-PPs (and of the phasal-dynamic verbs that they combine with) is shaped. This semi-aspectual feature—which stands for 'boundary effectuation'—was developed in Chapter 3 on the basis of earlier work on progressivity that emphasized its association with agentivity, control and volition. These notions were applied with maximal specificity to progressive meaning, which led to the idea of the 'progressive agent': a subject that has the ability (and probably—but not necessarily—the willingness) to initiate the temporal boundary of a given situation and refrain from effectuating its terminal boundary. The aim of introducing this feature in Chapter 3 was to formalize notions of agentivity, control and volition in a situational taxonomy geared specifically to an analysis of progressive and related aspects. The fact that it proved to have explanatory power throughout Chapter 4 shows, in my view, that it captures a key empirical component of the situational PPs under study.

The third and final finding is both general and specific. At a general level, this thesis has shown that the expression of aspect in Dutch is not just related to a single, incidental progressive construction [*zijn aan het* V_{INF}], but instead corresponds to a complex, interrelated system: the different complements and verbs involved make it possible to encode a range of (semi-)aspectual notions. And although the various 'moving parts' of this system seem to have grammaticalized to different degrees (e.g. [*aan het* V_{INF}] is more flexible and wide-ranging than [*aan* DET N]), the organization of the system as a whole does shed new light on how aspect is encoded in Dutch. On a more specific level, the detailed examination of the category [*aan* DET N] revealed a set of three 'opaque nouns'—*slag* 'hit', *gang* 'way' and *hand* 'hand'—which by themselves reflect the general idea that encoding aspect in Dutch may be more systematic and grammatical than previously assumed. The tentative 'light noun' analysis suggested here (§4.3.2.4) may be an interesting way forward for research into the expression of aspect in Dutch—both as far as the language itself is concerned and in relation to other languages, especially those in which such 'aspectual light nouns' have already been identified and investigated (e.g. Italian).

5.2 Suggestions for further research

As the first study approaching [*aan het* V_{INF}], [*aan de* V_{STM}] and [*aan* DET N] from an integrated perspective, this thesis has several shortcomings, which at the same time provide possible avenues for further research. I will briefly discuss four of them here, before rounding off.

First, the emphasis on the semantics of the situational PPs—and only a secondary focus on their syntax—makes it so that the present account had to abstract from some of their syntactic characteristics. Specifically, as observed by Haseryn et al. (1997), IJbema (2001) and Broekhuis et al. (2015), among others, [*zijn aan het* V_{INF}] easily takes a direct object—contrary to other main verbs and other complements (cf. e.g. *Hij is z'n sleutels aan het zoeken* 'He is looking for his keys' versus **Hij is z'n sleutels aan de zoek*). This syntactic property may imply a different grammatical status for [*zijn aan het* V_{INF}] vis-à-vis the other situational *aan*-PPs, their conceptual overlap notwithstanding. The semantic account laid out here may thus require adjustment in order to accommodate these syntactic facts. A particularly interesting observation in this respect is that two of the 'opaque nouns' subsumed by [*aan* DET N] may also encode a kind of direct object through a so-called 'patientive *met*-PP' (e.g. *Hij is met z'n sleutels aan de slag/gang* 'he is busy with his keys'), contrary to all other instances of [*aan* DET N].

Second, although the relevant verbs and complements were discussed in detail and at length, the *combinations* of each verb and complement require more attention, especially quantitatively. From both a theoretical and empirical point of view, it seems that not all combinations occur, and that some combinations may be more frequent than others. Theoretically, some combinations are expected to be blocked, e.g. [*aan de* V_{STM}]'s [+EFF.BOUND] requirement blocking *raken* due to it being [-EFF.BOUND] (e.g. **Hij raakte aan de zoek*). But empirically, combinations that are theoretically possible may also turn out to be unacceptable (e.g. **Zij maakte hem aan de drank*, where *maken* is [-EFF.BOUND]_{PARTICIPANT} but [*aan* DET N] does not require [+EFF.BOUND]), while theoretically incompatible combinations do occur (e.g. *Ze raakten aan de praat* 'they got talking'). A quantitative, corpus-based approach is needed here in figuring

out which combinations typically occur, and in establishing what is going on in unexpected cases (e.g. coercion). Frequency comparisons would be a particularly interesting next step, as significant differences between complements in selecting groups of verbs (e.g. [+INITIAL] over [+MEDIAL] verbs) may further substantiate or perhaps cast (partial) doubt upon the qualitative characterizations of [*aan het* V_{INF}], [*aan de* V_{STM}] and [*aan* DET N] given here.

Third, a broader crosslinguistic point of view would be of added value. The crosslinguistic concept of 'light nouns' came up very briefly in §4.3.2.4, but in other respects this study was very much limited to Dutch. Besides a more elaborate comparison with light nouns in other languages (such as Italian, French and Spanish), another crosslinguistic perspective that may be of interest is a similar construction in Afrikaans: the '*aan die* N'-construction, which has been researched more extensively than its Dutch [*aan* DET N] 'counterpart' (cf. Breed & van Huyssteen 2015; Conradie 2019; Ponelis 1979). A comparative perspective may be beneficial here to understand the development of both constructions, and perhaps situational (*aan*-)PPs in a more general sense.

Fourth and last, the phenomenon of 'situational PPs' is not (at all) limited to the preposition *aan*. The "from space to time" extension (Haspelmath 1997) is a ubiquitous one, it seems, and this is reflected in the many prepositions combining with the phasal-dynamic verbs in Dutch that primarily have situational, not locational meaning. To name just a few: *op zoek gaan/zijn* 'go/be searching', *op touw zetten* 'to launch', *in zwang komen* 'to come into fashion' and *uit zwang raken* 'to go out of fashion', *in de clinch gaan/raken* 'to get into a tussle', *in gang zetten* 'to get going', *aan zet zijn* 'to have one's turn'—and so on. And the phenomenon is not restricted to Dutch either, cf. the English cases *on the go, on the move, on the run* and *in the know* (again, naming just a few). Interestingly, some of these situational PPs have a determiner (thus resembling [*aan* DET N], just with a different preposition), while others do not—and these are invariable (e.g. **aan gang zetten* versus **in de gang zetten*). It is an interesting question whether all these patterns—Dutch, English and otherwise—are situational PPs in the same way, and whether there is something that conditions the obligatory presence or absence of the determiner.

And with that, this thesis comes to an end. I hope to have made a reasonable case here for the concept of 'situational PPs', and to have shed some light on the complex domain of such PPs headed by the preposition *aan* in Dutch. The integrated perspective on 'situational *aan*-PPs' in Dutch put forward here is, in my view, very much complementary to the commonplace analysis of [*zijn aan het* V_{INF}] as a progressive construction. What it shows, is that this construction may be the most frequent or salient way to encode aspect in Dutch, but that it does not stand alone.

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