

Cipient Predication:
Unifying Double Object, Dative Experiencer and
Existential/Presentational Constructions

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Cipient Predication:
Unifying Double Object, Dative Experiencer and
Existential/Presentational Constructions

Cipient Predicatie:
Unificatie van Dubbel Object, Datief Experiencer en
Existentiele/Presentationele Constructies
(met een samenvatting in het Nederlands)

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Chapter 1

Introduction

This thesis argues that there is a particular type of predication, here dubbed Cipient Predication, that is instantiated in three constructions: Presentational (‘Existential’) *There* Constructions (PTCs), Dative Percipient (‘Experiencer’) Constructions (DPCs) and Double Object Constructions (DOCs). ‘Cipient’ conflates ‘recipient’ and ‘percipient’ and alludes to concepts like ‘grabbing’, ‘holding’ or ‘containing’ (cf. Latin *capere*). The term is intended to cover more traditional notions including ‘goal/receiver’, ‘possessor location’ (Gruber 1965, Jackendoff 1972), ‘affected goal’ (Marantz 1993) as well as (part of) what notions like ‘beneficiary’, ‘indirect object’ (Chomsky 1998) as well as ‘dative experiencer’, ‘(quirky)’ or ‘ethical dative’ are used for.

It is argued that cipients are licensed by predication: cipients are subjects in the syntactic sense of being external arguments carrying structural case and in the logical/semantic/pragmatic sense of carrying a presupposition of definite empirical fact. Cipients are subjects of predicates composed of a propositional meaning, roughly expressing a thing at a location. Cipients behave asymmetrically with respect to the arguments that have always been at the center of attention, that of (accusative) direct objects and (nominative) subjects respectively. We propose that the first type of asymmetry (that with direct (accusative) objects) is due to cipients being grammatical and logical subjects. The second type of asymmetry (that with (nominative) subjects) we argue to be due to the way cipients are interpreted, namely as locations.

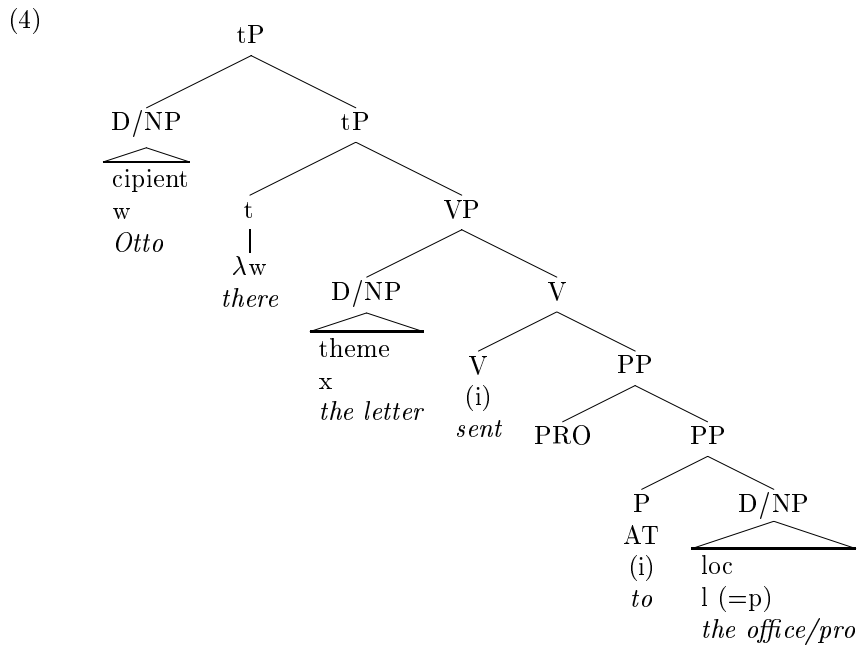
1.1 Aim and Proposal

This study seeks to show that three independently acknowledged constructions share a common structural core and associated interpretation. The constructions are most commonly known as Presentational (or Existential) *There* Construction, Dative Experiencer Construction (here: Dative Percipient Construction) and Double Object Construction.

Initial examples are given in (1) to (3), with the cipient argument in boldface:

- (1) PTC: There {was, appeared} a man in the garden
- (2) DPC: The solution escaped **Otto**
- (3) DOC: Anna sent **Otto** the letter (to the office)

The way of showing that PTCs, DPCs and (part of) DOCs are ‘the same’ at an interesting level of abstraction consists in showing that they can be subjected to a uniform analysis. We argue that the structure shared by PTCs, DPCs and DOCs is as in (4), giving the rough semantic representation that we assume it is mapped onto at the interface to semantic/pragmatic interpretation (LF interface) below the terminal nodes (as well as lexical material that could fill the terminal nodes, corresponding to [Anna] *sent Otto the letter to the office* (cf. (3)). (5) shows the operator variable structure proposed to correspond to cipient predication somewhat more perspicuously:



(The *t* projection is situated in between TP and vP ([TP [tP [vP]]])

- (5) $\lambda w [\exists p AT(x,p,i) \& p=l \& R(p,w)](Otto)$
 (with *x* a variable ranging over ‘ordinary’ individuals, *p*, *l* and *w* variables ranging over (sum-) locations, AT a primitive relation (\approx overlap). The R relation can be instantiated differently, encoding at least inclusion (R_{\leq}).

The structure in (4) ((5)) encodes predication, an ascription relation between an individual and a property that is indexed (can be judged true or false with respect to a context). The subject of this predication – an individual (sum-) location – we call ‘cipient’.

The operator–variable structures in (4)/(5) will be commented on in detail in section 2.1 and (with refinements) in section 3.3.1. Suffice it to say at this point that the cipient predicate corresponds to the characteristic function of superlocations w of p such that something is at p at an index. The cipient (*Otto* in (4)) saturates this predicate and in addition narrows down the possible values of the index-variable i .

Concerning more narrowly conceived syntax, note that *there* corresponds to a head, filling a temporal category (cf. for argument in particular sections 2.3 and 3.1). Further, cipients and PP locations are not in complementary distribution (section 2.1.2), nor are cipients and the element *there* (section 3.1.1).

According to the proposal, cipients are licensed by predication, as external arguments. The traditional and still prevailing view is that cipients are selected by lexical predicates (part of the theta grid of the verb/predicate like e.g. patient/theme roles): A verb/predicate is assumed to carry the information which arguments it licenses in its lexical entry, the projection principle (Chomsky 1981) requiring that argument expressions are realized accordingly.¹

We argue instead that cipients depend only indirectly on lexical information: For cipients to be licensed, the maximal projection of the lexical predicate has to comprise a theme and a location argument. Cipients are licensed by predication, and the predicate that licenses cipients comprises a propositional meaning corresponding to something (theme argument) being at a location (location argument). Cipients are licensed as external arguments of this type of predicate. The need of a location (and theme) argument for cipients to be licensed explains contrasts like in (6):

- (6) a. *Der Ball war Otto gespielt
 The ball was Otto-DAT played
 b. Der Ball war Otto {auf den Fuss, zu-} gespielt
 The ball was Otto-DAT {onto the foot, to-} played
 (German)

The predication relation is established by a functional category ‘little t ’, suggesting a connection between cipient licensing and the tense system as establishing the temporal reference of propositional meanings encoded in natural language utterances. Cipient licensing interacts intimately with the encoding

¹There is now a huge body of work seeking to derive properties of argument structure from the way aspectual information is grammatically encoded, cf. Rosen 1999 and references therein. To my knowledge, these approaches do not treat what we call cipients, an exception being Marantz 1993 (to be discussed in section 2.3.3).

of temporal structure ('perfectivity'), although we will see that cipient licensing does not exclusively hinge on temporal structure eventually (sections 3.2.4, 3.3.1). A category akin to *t* appears to be anyway needed given independently plausible assumptions about the relation between sound, structure and meaning.² To the extent that we can show that a category (akin to) *t* does some work in the realm of argument-predicate structure in licensing what we call 'cipients', the analysis provides an argument in favor of the existence of such a category.³ We argue that cipients are merged in the specifier position of *t*, thereby saturating the predicate created by the *t* head. Merging a cipient argument in the specifier of *t* is but one way of saturating the predicate formed by *t*, which may otherwise be saturated through its relation to the C(omplementizer)/T(ense) complex as hosting a nominative D/NP. In recent Chomskyan terms, the *t* projection needs to be valued, and if the cipient does not value it, C/T can value it. This accounts among other for why cipients are largely optional:

- (7) a. Otto sang (me) a song
 b. (A Gianni) apparso un phantasma
 (To Gianni) is appeared a ghost
 (Italian)

We will argue for PTCs that here, the predicate formed by *t* is not saturated at all in syntax, and that this is at the root of the infamous 'definiteness effects' associated with PTCs (chapter 4):

- (8) a. *There are most students in the garden
 b. *There is every student in the garden

Presentational There Constructions not encoding the information allowing saturation of *t*, they leave syntax unvalued and have to rely on extralinguistic systems for valuation. Quantifiers like *most* and *every* can only be interpreted in structures that leave syntax saturated (in the relevant sense) however.

'Predication is inclusion': the subject (individual) 'falls under' or 'is included in' the predicate (property).⁴ We argue that in the case of cipient predication, there is inclusion as well, but with the direction reversed: It is the cipient (subject) that includes the predicate, and it does so via its relation to the location argument – 'R' in (5). R can be instantiated differently, the

²Categories similar to *t* are frequently assumed by scholars working on tense and aspect in particular. Cf. e.g. Tenny's 1994 'AspP', Stowell's 1995 'Zeitphrase', Giorgi and Pianesi's 1990 'T2', the lower 'T_{anterior} projection of Cinque 1998.

³For a subclass of cipients, 'Icelandic quirky datives', the hypothesis that these are licensed by material pertaining to the tense system is also entertained in Chomsky 1999ff. Cf. as well Boeckx 2000.

⁴More precisely, the individual (particular thing, Fregean 'Gegenstand') falls under the property (concept, Fregean 'Begriff'). The grammatical subject means ('bedeutet') the particular thing and the grammatical predicate means ('bedeutet') the property (Frege 1892 (1994:66)). The standard way of paraphrasing a predication such as *Humans are mammals* set-theoretically consists in saying that 'the set of humans is included in the set of mammals' or equivalently that 'every x that is a human is also a mammal'.

minimal requirement being that it encode inclusion (R_{\leq}).⁵ Intuitively stated, the cipient and the location argument are related as a whole (ipient) and a part (location). The relation between the theme argument and the cipient is only indirect: it obtains via the location argument. We argue that different ‘strengths’ of the R relation as interacting with marking options different languages have account for contrasts like the following (cf. section 3.3.2):

- (9) a. *Anna heeft Otto een spijker in de muur geslagen
 Anna has Otto a nail in the wall hit
 ‘Anna hit a nail in the wall for Otto/in Otto’s wall’
 (with R some kind of ‘possessive’ or ‘affective’ relation)
- b. Anna heeft Otto een spijker in de voet geslagen
 Anna has Otto a nail in the foot hit
 (with R a body-bodypart relation)
 ‘Anna hit a nail in Otto’s foot’
 (Dutch)
- (10) a. Anna hat Otto einen Nagel in die Wand gehauen
 Anna has Otto-DAT a nail in the wall hit
 ‘Anna hit a nail in the wall for Otto/in Otto’s wall’
- b. Anna hat Otto einen Nagel in den Fuss gehauen
 Anna has Otto-DAT a nail in the foot hit
 ‘Anna hit a nail in Otto’s foot’
 (German)

We further propose that cipients are interpreted as locations rather than ordinary individuals. At the object level, cipients correspond to the locations occupied by the cipient referents (at certain times). We argue that the locative interpretation of cipients is reflected in their grammatical feature structure and that this is at the root of their unexpected behavior with respect to certain binding and control phenomena:

- (11) a. *I gave Mary_i a steak hungry_i cf.
 b. I saw Mary_i hungry_i
 (Baker 1996)

Being interpreted as locations, cipients do not make available features that would be necessary to have them figure as arguments of certain predicates.

We propose that the cipient construction meets a scheme consisting of a dimension and two dissociated intervals (sets of indexes) on that dimension, an ‘anchor interval’ consisting of a contextually given set of indices (R_{anch}) and a ‘situative interval’ comprising a set of indices at which the ‘theme at loc’ meaning holds (R_{sit}):

⁵We use the mereological part symbol ‘ \leq ’ instead of the subset relation since it turns out that the relation between w and p relies on more than just inclusion in the set-theoretic sense. Cf. in particular section 3.3.1.

- (12) $--+-----+---->$
 $R_{anch} \quad R_{sit}$
 $R_{anch} = \text{contextually given set of indices; } R_{sit} \supseteq \{i \mid \exists p \text{ AT}(x,p,i)\}$

The cipient itself is (a.o.) interpreted as an interval (sum index/set of indices) overlapping with both these intervals (sum/sets of indices). The index of the propositional meaning corresponding to the predicate licensing cipients (R_{sit}) is fixed ('bound') with the cipient saturating the predicate, allowing representation (= interpretation) of the VP structure in extralinguistic terms. In recent Chomskyan terms, cipients value t which forces spellout of the complement of t . This we argue to be behind the 'blocking effects' that are crosslinguistically attested in structures comprising a cipient argument (section 2.3.5):

- (13) a. Someone passed the ring to Mary
 \implies The ring passed <ring> to Mary [POC]
 b. Someone passed Mary the ring
 \implies *The ring passed Mary <ring> [DOC]
 ('Inchoativization', English, Baker 1996)
- (14) Este taxista (*me) parece [<taxista> estar cansado]
 This taxi-driver to-me seems to-be tired
 'This taxi driver seems to me to be tired'
 ('A-Raising', Spanish, Torrego 1996)

Lastly, we require that the negation of the propositional meaning holding at indices in the situative interval hold at the indices in the anchor interval. This accounts for why the core predicates licensing cipients encode change, at the same time allowing extrapolation to other (nontemporal) domains such as evaluative/comparative constructions in which cipients are crosslinguistically licensed:

- (15) Otto ist mir *(zu) intelligent
 Otto is me *(too) intelligent
 'Otto is *(too) intelligent for me'
 (German)
- (16) a. *O Yargos mu ine eksipos
 The John-NOM me-GEN is intelligent
 b. O Yargos mu paraine eksipos
 The John-NOM me-GEN too-is [sic!] smart
 'John is too smart for me/According to me, John is too smart'
 (Greek)

In sum, we argue that cipient predication is subject to the following three conditions, where A is a condition holding of the syntactic structure, B is a condition holding at the interface to semantic/pragmatic interpretation and C is a condition holding beyond the interface to semantic/pragmatic interpretation:

- A The lexical predicate (the VP in (4)) comprises (projects) a theme and a location argument
- B The cipient bears a particular semantic relation to the location argument, corresponding to at least inclusion of the location in the cipient
- C The cipient shares indices with both the propositional meaning consisting of the theme argument's referent being at the location argument's referent and its complement

1.2 Overview

The rest of this chapter puts the proposal sketched above into perspective: Theoretical choices important for the study are introduced (1.3), as are the constructions under discussion and their main problems (1.4).

The second chapter argues that cipients are licensed by predication, after spelling out the proposal in more detail (section 2.1): Little *t*, a functional category pertaining to the tense system and encoding a split at the reference time level establishes a predication relation between cipients and a propositional meaning encoded in the VP, consisting in a thing being at a location. We review a number of asymmetries holding between cipients on the one hand and themes and locations on the other hand and argue that these asymmetries follow from the way cipients are licensed (section 2.2). The analysis proposed here is compared to prominent earlier proposals from the realm of DOCs in particular (Larson 1988, Marantz 1993) and argued to be superior to these (sections 2.1 to 2.3): Evidence is brought forward that cipients are neither licensed in the VP at base (Larson) nor by a substantive applicative head (Marantz), but in a temporal projection below (standard) T(ense). We argue that cipients corresponding to logical subjects of predication, merger of cipients yields a saturated structure that must be interpreted, and that this accounts for the blocking effects associated with the presence of cipients (section 2.3.5).

The third chapter argues that cipients are interpreted as locations, in a double sense: Beyond the interface, cipients locate (restrict the indices of) the propositional meaning encoded in the VP, as made responsible for the blocking effects at the end of chapter 2. At the compositional level, cipients correspond to locations as well: Syntactically, cipients 'double' the location argument projected in the VP of the constructions under discussion, the element *there* corresponding to a clitic (locative agreement) in t(ense) (cf. Freeze 1992). Semantically, cipients correspond to superlocations of the location argument projected in the VP. The proposal is compared to prominent 'raising' analyses from the realm of PTCs and 'experiencer/possessor' constructions (section 3.1). The analysis proposed hinges on the presence of a location argument in the constructions under discussion, which is argued for in section 3.2. Section

3.3 seeks to state the interface (=licensing) conditions holding of cipient predication in more detail, indicating possible extensions of the proposal made as well as discussing how variation between languages with respect to making the cipient construction available can be accounted for. We argue in section 3.4 that the ‘binding illness’ associated with cipients follows from their locative nature, reflected in grammatical feature makeup. We propose that the ‘feature poverty’ of cipients is responsible for certain syntactic dependents being incompatible with cipients.

On the basis of the discussion so far, chapter 4 advances a proposal as to how the (absence of) definiteness effects in PTCs and DOCs and DPCs respectively can be accounted for: Certain quantifiers can only be interpreted in saturated structures, which cipient constructions are. PTCs are not saturated structures in syntax, lacking a structurally present logical subject expression that anchors the predication to the utterance context, namely the cipient.

Chapter 5 concludes.

1.3 Context of the proposal

This section presents global theoretical choices and convictions, guiding argumentation and determining more particular choices made in the course of the study. The general framework adopted is the Minimalist Program as exposed in Chomsky 1998–2000, on the more basic ideas (in part interpreted) of which we rely. While the slogan of the minimalist program is to ‘look at the interface’, Chomsky remains almost entirely silent on semantic/pragmatic interpretation in particular. It appears though that certain basic ideas are quite similar to fundamental distinctions made in the field of (formal) semantics, to which we seek to establish transfer.

1.3.1 Uniformity

The way natural language data are interpreted here is prejudiced by the hypothesis that languages are uniform, in particular at the level of semantic interpretation. The fact that children are able to learn an arbitrary natural language at the amazing speed they do in spite of the scarce linguistic input available leads to the assumption that abstracting away from surface differences that are ‘easily detectable’ (Chomsky 1999:2), the same (abstract) structures are used to express the same (abstract) meanings across languages. The pertaining methodological principle is stated in Chomsky 1999 as follows:

- (I) In the absence of compelling evidence to the contrary, assume languages to be uniform, with variety restricted to easily detectable properties of utterances.

We adopt the methodological principle of uniformity, leading us to compare languages with diverging surface properties, as long as these differences are not too hard to detect. We expect uniformity not only to hold across languages, but just as well within languages. From an acquisition perspective, it makes sense that the child makes as much use as possible of a particular type of construction once it is acquired. Uniformity is a strong programmatic directive: We want theory to be simple, at the same time covering broad sets of data. The ‘therapeutic value’ of the minimalist program consists in the move away from local ‘engineering solutions’ to a grammar employing the ever same simple core operations (MERGE, AGREE). Analyses accounting for phenomena across domains as well as resting on fundamental and obvious assumptions approach what has been called ‘explanatory adequacy’.

1.3.2 Interpretability

Grammar has to relate sound and meaning in a systematic fashion. Meaning has to be translatable into and recoverable from sound.

Language as a perfect system

The Minimalist Program embodies the thesis that language is a ‘perfect system’, that it relates sound and meaning in an optimal (\approx maximally economic) way. The primitives of syntax are features, ‘properties of sound and meaning’ that are assembled into lexical items (Chomsky 2000:12). Features are what is interpreted at the interface to the extralinguistic systems of sound (PF interface) and meaning (LF interface): the pertaining extralinguistic expressions are what the features operated in syntax translate into. For example, the feature bundle {3rd, pl} is expressed as the plural suffix *-s* regularly in terms of sound in English. In the meaning component, the feature bundle {3rd, pl} restricts the possible semantic representations corresponding to the pertaining nominal to representations of something that is plural and neither speaker or hearer. As a matter of fact, this is the basic heuristics for features: If sound correlates systematically with meaning, the conjecture is that there is a feature this is the expression of.

If syntax were a perfect system, it would put together (MERGE) lexical items (=bundles of features) that are interpretable at the LF/PF interface into larger complexes that are interpretable at the LF/PF interface, and that would be it.

Uninterpretable features and AGREE

There are features however that are not obviously interpretable, structural case features (nominative and accusative and/or ergative and absolutive) being paradigm examples: While structural case may be expressed at PF, it needn’t always. Nor does structural case straightforwardly correspond to anything in

terms of semantics (e.g., a D/NP bearing nominative case may encode the agent in an active sentence and the patient/theme in a passive sentence). Structural case is dependent on structural position/configuration, from there its name ‘structural’. Let us look in some more detail at structural nominative case to introduce the relation AGREE, fundamental in minimalist syntax.

Nominative case is expressed (if at all) on nouns, dependent on the properties of the functional category T(ense): Structural nominative case is licensed if there is a finite T(ense) node, as sketched in the following structures:

- (17) a. $[TP \text{ OttonOM } [T_{[+fin]} \text{ slept }]]$
 b. $[TP \text{ EC } [T_{[-fin]} \text{ to sleep/sleeping }]]$... can be dangerous

Not only is nominative dependent on finiteness, the verb/tense complex furthermore exhibits the standard subject/verb agreement with the nominal bearing nominative case. The idea is that there is a relation between T and the nominal, called AGREE, of which both nominative and the agreement morphology on the verb are the expression. The nominal carries so-called phi-features: person, number and gender information. These features are interpretable, restricting as said above the possible referents of (the extralinguistic representations corresponding to) the nominal.

According to minimalist theorizing, the T(ense) node has ‘uninterpretable’ counterparts of the noun’s phi-features, uninterpretable because they are unvalued (the features do not have a value, e.g. one of 1st/2nd/3rd for person). The agreement morpheme(s) surfacing on the verb/tense complex are the expression of the uninterpretable/unvalued features on T. Nominative case, to the extent that it is expressed, is the expression of an ‘uninterpretable structural case feature’ on the nominal. T and the nominal can enter an AGREE relation because they have the same sets of features: Following ideas of Williams 1994 and Pesetsky and Torrego 2001 that structural nominative case is really a tense feature, there is a perfect match between T and DP_{NOM} in terms of features. Concretely on Pesetsky and Torrego’s proposal with the presubscript ‘i’ indicating interpretability (being valued) and the presubscript ‘u’ indicating uninterpretability (being unvalued), we would have:⁶

- (18) T: $u\text{person}, u\text{number}, u\text{gender}, u\text{tense}$
 DP_{NOM} : $i\text{person}, i\text{number}, i\text{gender}, i\text{tense}$

On the condition that elements match in features, a checking relation can be established between them: In the case at hand, the interpretable features on the nominal value the unvalued features on T, and the interpretable tense feature on T values the uninterpretable tense feature on the nominal. Being valued, uninterpretable features become interpretable: they correspond to pieces of information making up extralinguistic representations.

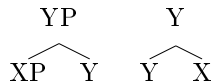
⁶We do not follow Pesetsky and Torrego completely in that we take tense features to be valued on D/NPs. Cf. in particular sections 2.1.1, 2.3.5, 3.3.1).

Until recently, it was assumed that if an uninterpretable feature survives until the interface, the structure comprising that feature ‘crashes’: it cannot be interpreted in extralinguistic terms. Chomsky 2001 weakens the condition in allowing certain uninterpretable features to be valued in the mapping process itself, a move that appears more natural under the interpretation that uninterpretable features are unvalued rather than strictly uninterpretable. Given the basic condition of recoverability, we expect the option of valuing features outside syntax to be heavily restricted and moreover marked.⁷

Feature valuation/checking proceeds in two steps: first, an AGREE relation is established between an element with unvalued features and one with the valued counterparts, under the condition that they match. Next, the unvalued features get checked/valued by the valued ones.

We assume that features can be checked/valued in two local configurations at core: For one, a head may check/value features of a head immediately c-commanded by that head. For another, a maximal projection merged in a specifier position may check/value uninterpretable features of the pertaining projecting head. The core feature checking configurations assumed in the following are given in (19):

(19) Core feature checking configurations



According to Chomsky 1999, there are ‘long distance’ AGREE relations as well, holding between a head that needs to check uninterpretable/unvalued features and a specifier lower in the structure. ‘Long distance agreement’ is assumed to hold in e.g. PTCs between T(ense) and the ‘associate’ D/NP lower in the clause:

(20) There were/*was many students in class

We will assume that feature checking entails presence of the same features on the elements entering AGREE relations, as in (18)⁸

Further, we will assume that morphologically expressed agreement is always the reflex of AGREE relations. Apart from ‘standard’ subject/verb agreement, we count in noun class agreement as well as clitic doubling as forms of agreement.⁹

⁷One may speculate that unvalued features could be responsible for e.g. ‘arbitrary’ or ‘impersonal’ readings of empty categories. The issue will become important in chapter 4 in particular.

⁸Chomsky 1999 weakens this requirement, but it is not at all clear how ‘partial checking’ works, so it is not desirable to assume it.

⁹Cf. e.g. Chomsky 1995:125. Cf. Legendre (to appear) for argument for the close vicinity of agreement and clitic doubling. Cf. Taraldsen 1992 for argument to uniformly analyze agreement as resulting from pronoun incorporation into the verb/tense complex. It is generally assumed in historical syntax that agreement is the last step in a chain of language

Chomsky stresses that the AGREE relation depends on uninterpretable (unvalued) features and as such constitutes an apparent imperfection. Uninterpretable features violate the Interpretability Condition:

- (21) The Interpretability Condition:
L[exical]I[tem]s have no features other than those interpreted at the interface, properties of sound and meaning (Chomsky 1998:27)

While Chomsky 1998 says that the interpretability condition is “transparently false”, he takes back this conclusion in part in subsequent work, suggesting that uninterpretable features do serve an interpretive purpose (satisfy legibility conditions at the interface) after all and are “...motivated by interpretive requirements that are externally imposed by our systems of thought [...]” (Chomsky 2000:13).¹⁰ There is evidence that structural case features do bear on interpretation, relating in particular to the encoding of temporal structure and definiteness/referentiality. For example, accusative case in Turkish appears to correlate with specificity (Enç 1991), accusative case in Finnish appears to correlate with specificity and/or ‘perfectivity’ (Kiparsky 1997). DeHoop 1992 argues that structural case is a property of D/NPs that are interpreted ‘strong’ (Milsark 1977). Similarly Danon 2002 argues for Hebrew that only D/NPs with a ‘definiteness feature’ bear structural case features.

Valuation and Saturation

The concept of feature valuation as achieving interpretability at the interface is as central to minimalist grammar as is the concept of saturation in the realm of formal semantics: In Minimalism, features have to be valued at the interface to be interpretable. Ever since (at least) Frege, it is commonly assumed that for it to be assessable whether a sentence corresponds to the true or the false, it has to be saturated: it has to be complete in the sense of containing no open (\approx unvalued) slots. With Frege, the eventual slot to be saturated is that created by a function that he calls ‘Urteilsstrich’ (‘judgment-line’) or ‘den Waagerechten’ (the horizontal) – this function yields truth when it is applied to the true (that is, it has its own argument as value). What this function does is take a speaker and an utterance context and map it onto a function from a reference context and a proposition to truth – it ‘anchors’ a proposition to its utterance context, corresponding to prosaic: ‘I the speaker assert that ...’, true when its argument is true and false otherwise. In Minimalism, the C(omplementizer)/T(ense) domain is regarded as the locus of the encoding of

development starting with incorporation of a pronoun into the verb/tense complex. There is “a fundamental homogeneity between so-called clitics and so-called verbal agreement.” (Manzini 2001). Cf. for fuller discussion Spencer 1991:section 3.9 and references cited there.

¹⁰As candidates for what kind of interpretive purpose this could be, Chomsky mentions “[...] phenomena that have been described in terms of surface structure interpretation; [...] topic-comment, specificity, new and old information [...]” (ibid.).

the force of natural language utterances (cf. Rizzi 1997, Cinque 1998, Chomsky 2000).

Apart from force, what is needed for the truth or falsity of a proposition to be assessable is information as to when and where the propositional meaning is supposed to hold, for which ‘coordinates’ it is claimed to have force. The encoding of temporal information is largely grammaticalized, it is what the tense system takes care of (cf. the next section). That spatial information bears on grammatical structure and is furthermore intimately linked to the encoding of temporal structure can be witnessed in pairs like the following:

- (22) a. Jan heeft (een rondje) gelopen
 Jan has (a round) run
 b. Jan is (*een rondje) de tuin in gelopen
 Jan is (a round) the garden in run
 (Dutch)

Example (22-a) exhibits ‘unergative’ properties, selecting perfect *have*, making accusative case available, allowing (impersonal) passive and disallowing certain types of cliticization assumed to hinge on the surface subject being an object underlyingly (e.g. ‘*ne*’ cliticization in Italian, ‘possessive datives’ in Hebrew). (22-b) exhibits ‘unaccusative’ properties, selecting perfect *be*, not making accusative case available, disallowing (impersonal) passive and the mentioned types of cliticization. In semantic terms, the core difference between structures as in (22-a) and structures as in (22-b) is that the former do not, but the latter do comprise a location argument. We conclude that there must be features bearing on the encoding of temporal and spatial information.

Trivially, features that are absent cannot be interpreted: Something that is not in the structure cannot be mapped onto something belonging to an extralinguistic representation. If features helping to determine the temporal reference of propositional meanings as encoded in natural language utterances are absent from particular structures, these structures are ‘interpretively poor’, possibly not saturated in the sense that the structures that comprise these features are. As a case in point, a T(ense) node that is ‘defective’ in Chomsky’s sense in not having a full set of phi-features (person, number, gender, cf. above) cannot enter the ‘usual’ AGREE relation with a nominal, which by hypothesis serves some interpretive purpose. To the extent that the pertaining information is needed to successfully map the structure onto an extralinguistic representation, something extra will have to happen to make the mapping possible, at or beyond the interface to interpretation.

We will argue that PTCs are a case in point: Their tense structure being defective (cf. as well Chomsky 1999), PTCs lack information needed to determine the temporal reference of the propositional meaning they encode. PTCs do not come out of the syntactic component as expressions that are saturated in the relevant sense (chapter 4).

It was said above that the Minimalist Program embodies the thesis that

language is a ‘perfect system’, relating sound and meaning in an optimally economic way. We will assume (23) and (24) as two basic principles operative in syntax:

(23) Do not build structure that is not interpreted

(24) Interpret structure as soon as possible

The principle in (23) should be obvious of itself. The principle in (24) states the just as obvious idea that it is preferable to operate the least possible material in syntax. Information that can be independently represented needn’t be kept in syntax and therefore must not be kept there. We assume that structures have to be saturated in order to be representable in extralinguistic terms. Concretely, this means that they comprise information as to the ‘whens and wheres’ of the (propositional) meaning encoded, as well as that a link to the context of utterance can be established on the basis of the structure that is interpreted (cf. above, this section).

Further standard economy conditions that we assume to be operative in syntax are the following:

(25) Do not take apart structure once built (‘extension’)

(26) Establish AGREE relations with the closest element capable of valuating uninterpretable features (‘minimal link’/‘closest’)¹¹

Tense and Time

Tense is ‘grammaticalized temporal location’ (Comrie 1985), it is the grammatical means to relate the time(s) of the situation(s)/event(s) encoded in natural language utterances to the temporal point zero of the deictical context, the real or fictitious time of speech (Brandt et. al. 1999:81ff).¹² With this, the tense system is at the heart of establishing reference: Certain states of affairs obtain at certain times but not others, events occur within certain times but not others.¹³

¹¹B is closer to A than C =_{def} A c-commands B and C and B asymmetrically c-commands C.

¹²Chomsky 1999:7 proposes to construe T(ense) as the locus of tense/event structure. Higginbotham 1985 and similarly Williams 1994 have proposed that T(ense) is associated with ‘binding (the) event variable(s)’. Apart from T(ense), temporal adverbs play a role in temporal reference encoding, as well as anaphoric mechanisms at the discourse level. For example, two conjoined sentences each reporting a Vendlerian achievement/accomplishment are interpreted such that the event reported first occurred previous to the event reported second, cf. e.g.:

- (i) a. The man died and rot away
b. ??The man rot away and died

¹³About the relation between the Tense system and the encoding of (temporal) reference, McGilvray 1991:3f says:

...the tenses of the sentences of our language are intimately connected with some

We adopt the view that the relation between the ‘time of speech’ and the ‘time of situation/event’ is not direct but mediated by a temporal reference point corresponding to Reichenbach’s (1947) R(eference Time).¹⁴ Reference time is clearly needed in semantics to restrict the temporal reference of events/situations, as showing in an example of Partee (1973):

(27) I didn’t turn off the stove

If what was interpreted was just a speech time/event time relation, the sentence should translate as: ‘it is not the case that there is a time in the past where the speaker turned off the stove’. In other words, it should mean that the speaker never turned off the stove before speech time, contrary to fact. A reference time delimiting the times considered is needed. That reference time is syntactically encoded is suggested by the fact that temporal adverbs do not restrict event time but rather a larger temporal interval (usually) comprising event time. It is not the time of the event (or situation) itself that is located by the adverb *yesterday* in the following two sentences but a larger interval within which the event encoded occurred (the situation obtained):

(28) a. I bought a paper yesterday
b. I was in Utrecht yesterday

The sentence in (28-a) clearly does not mean that the purchase took the time denoted by *yesterday*. (28-b) can be true if the speaker was in Utrecht in the morning but left again at noon. If what adverbs modify is linguistically encoded (cf. section 2.3.4), what is needed in syntax is information pertaining to reference time.

That reference time is needed in the meaning component does not prove that there is something corresponding to it in syntax. However, semantic distinctions pertaining to reference time have systematic linguistic expression, they are grammaticalized. Let us consider the perfect tenses to see this. In the traditional Reichenbachian terms, the perfect encodes dissociation of R(eference Time) and E(vent Time) – looking at E as another temporal interval, this

very special abilities we have [...]. We are able to speak of anything, anywhen, and have our listeners know what we are talking about and what we want to say about it. We can do this while remaining tied to a time and a place. It is a fundamental feature of our mental capacity that while remaining where we are, we can, and routinely do, take ourselves in thought and imagination beyond the perceptual horizons of the moment. [...] Specifically, languages reflect this power in their tense and temporal markers.

¹⁴An argument against the view that tense is just a speech time – situation time relation is that this view forces one to iterate the speech time/event time relation for complex tenses. For example, past perfect becomes PPq (‘at a time before a time before now, it is the case that q’). Such a system predicts indefinite iteration of speech time/event time relations, something that is not found in natural languages. There are no tenses expressing e.g. PFFPPFPq (where P is the Priorean past and F the future operator. Cf. McGilvray 1991 and Klein 1994.

amounts to having two distinguished reference time intervals. Designating R with R_1 and E with R_2 , the temporal relations for simple and perfect (anterior/posterior) tenses are shown in the following table (cf. Reichenbach 1947:297. ‘ $x < y$ ’/‘ $x - y$ ’ reads ‘ x precedes y ’, ‘ $x > y$ ’ reads ‘ y precedes x ’, ‘ \approx ’/‘ \sim ’ is the overlap relation):

	$R \approx S$, present	$R < S$, past	$R > S$, future
$R_2 \approx R_1$, simple	R_2, R_1, S	$R_2, R_1 - S$	$S - R_2, R_1$
$R_2 < R_1$, anterior	$R_2 - R_1, S$	$R_2 - R_1 - S$	$S - R_2 - R_1; S, R_2 - R_1; R_2 - S - R_1$
$R_2 > R_1$, posterior	$R_1, S - R_2$	$R_1 - R_2 - S; R_1 - R_2, S; R_1 - S - R_2$	$S - R_1 - R_2$

Semantically, perfect tense achieves a ‘split’ of reference time into two dissociated reference times, of which the second one is ‘up and above’ (posterior) or ‘down and below’ (anterior) the other. In a more recent formulation of Musan:

Any perfect construction as a whole denotes a post-state of a truth interval of the embedded VP (Musan 2001:5)

Morphosyntactically, the perfect tense has a distinguished expression, as with a copula and a participle in e.g. Germanic or Romance. To give an example, the scheme ‘ $R_2 - R_1 - S$ ’ in the middle of the table corresponds to past perfect tense as in

- (29) He had finished
‘There is a time before a time before speech time at which he is finished’

The point is that reference time splitting (meaning) correlates systematically with morphosyntactic expression (sound). By hypothesis (interpretability, cf. section 1.3.2), meaning representations and sound representations are the expression of features in syntax. Hence, a feature (bundle) that is associated with the encoding of reference time and its splitting appears to be called for in syntax. The simple fact that the associated morphology (‘perfective’ auxiliary, participle) has a certain distribution and occupies a position different from that of the morphology associated with distinctions such as PAST vs. PRESENT (as associated under standard assumptions with the T(ense) head) points to the conclusion that it is not just an additional feature (bundle) that is needed to make sense of tense, but one that projects independently, that is, a head.¹⁵

¹⁵That the tense system comprises two temporal heads has been argued by Giorgi and Pianesi 1991. They propose that the Reichenbachian temporal reference points S, R and E are structured as two relations, one between S and R and one between R and E, each relation corresponding to a temporal head in syntax. Temporal reference is always established ‘via’ R (cf. last footnote). The argument given by Giorgi and Pianesi 1990:191 (drawn from Comrie 1985:71) pertains to the interpretation of the future perfect, which is three ways ambiguous. A sentence such as

- (i) John will have finished the manuscript by tomorrow

can mean that (a) John has already finished the manuscript by the time of utterance or that (b) He is going to finish it at the time of utterance or that (c) he is going to finish it in the interval between between utterance time and tomorrow. If temporal reference were

A note is in order as to how the notion ‘Reference Time’ is understood here. In the literature, there is a wealth of suggestions as to what Reference Time corresponds to: According to Klein 1994, Reference Time (his ‘topic time’) corresponds to ‘the time for which an assertion is made’. Giorgi and Pianesi speak of Reference Time as the ‘trait d’union’ between speaker and hearer. Kamp and Reyle 1993 use the term ‘location time’, Bäuerle 1979 has introduced the term ‘Betrachtzeit’ (‘the time looked at’). What all these notions and their uses have in common is the idea that Reference Time has the status of a ‘truth interval’: Reference Time determines the context that is considered when it comes to assessing predications. Following tradition in temporal logic (cf. e.g. Gamut 1991, McGilvray 1991, Fabricius-Hansen 1991 and references therein), this is what we take Reference Time to be: An interval consisting of a set of indices (sum index) on a dimension, with each index corresponding to a context. Tense as encoding temporal reference is a functional category par excellence: While tense has no content of itself, it is only given a time as in part determined by tense that predication relations can be assessed (judged true or false).

It should be stressed that tense is a deictic/anaphoric category and that both speech and reference time are pronominal in nature (cf. Partee 1973, 1984, Fabricius-Hansen 1991): Speech Time is determined deictically on the basis of the utterance. The determination of Reference Time is largely an anaphoric matter, as an example may illustrate:

- (30) At 10.30 on Friday the 7th 1986, Otto entered the bank. He fired a few bullets at the ceiling, went to the counter and looked the accountant fiercely in the eyes.

The first sentence explicitly sets the reference time of the event encoded to a time recoverable from the utterance context. The second sentence picks up a time where Otto is in the bank as the ‘anchor’ for the firing and ‘moves it’ to a time where there are bullets in the ceiling. This time is picked up by the

established via a direct relation between S and E, three distinct representations corresponding to the possible interpretations would be needed (‘X–Y’ to be read as ‘X precedes Y’, ‘X,Y’ to be read as ‘X coincides with Y’):

- (ii) a. E–S–R
 b. S,E–R
 c. S–E–R

Introducing two distinct relations makes it possible to represent the future perfect as one configuration (S–R)*(E–R) (with ‘*’ representing relational composition) that correctly captures the semantic ambiguity of the future perfect due to the fact that the relation between E and S is underspecified. Natural languages appear to have but one expression for the future perfect and not three, as (ii) would seem to predict (cf. Comrie 1985). Further, the ‘two temporal relations’ hypothesis appears favorable from an acquisition perspective in restricting sharply the number of possible configurations and hence linguistically realized expressions. Third, Giorgi and Pianesi show how differences in the expression of tense relations between Latin and Italian can be derived on the basis of the ‘two temporal relations’ hypothesis and the principle that each temporal relation that is interpreted is also expressed as a head carrying the relevant morphology.

third sentence as the anchor for an event of going to the counter etc. As with perfect tense, Reference Time is affected in the predications in (30), although this is not morphosyntactically expressed: There are two reference times for each sentence in (30), one ‘anchor’ reference time and a ‘moved’ reference time, locating the post state of the event occurring in the anchor interval. In analogy to the (anterior) perfect case above, the moved reference time is ‘up and above’ the anchor reference time (although this is not morphosyntactically marked). We will argue that ‘splitting’ the Reference Time is a condition for cipient predication: The predicates licensing cipients have to affect Reference Time in such a way that there are two dissociated Reference Time intervals each hosting different states of affairs. Concerning the semantics of the *t* head, we seek to motivate (31):

- (31) The little *t* head encodes a distinction at the Reference Time level, more in particular, a bifurcation of truth intervals at the Reference Time level (‘R splitting’)

We assume that having an index subsumes having a temporal value (everything is in time). On the assumption that the tense system is the fundamental indexing device in natural language, ‘tensing’ and ‘indexing’ may be reducible to one, where times could be regarded as proto-indices.¹⁶ As a rule, we will speak of ‘tensing’ in the grammatical realm and of ‘indexing’ in the realm of the interface. Where the distinction does not matter, we will write ‘tense/index’ meaning ‘tense and/or index’, similarly ‘tensed/indexed’ etc. Cf. McGilvray 1991 for discussion of tense and reference and integration of modality in the tense domain.

1.3.3 Argument and Predicate Decomposition

We briefly discuss the two main roads to the problem of how argument-predicate structure maps onto syntactic structure: the decomposition of arguments and predicates respectively.

The mapping from thematic roles to syntactic positions is preferably uniform, as expressed in the ‘Uniformity of Theta Assignment Hypothesis’ (UTAH) of Baker 1988:¹⁷

- (32) Uniformity of Theta Assignment Hypothesis (UTAH)
 Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-Structure.
 (Baker 1988)

¹⁶Cf. Husserl 1928.

¹⁷Cf. Pesetsky 1995 for discussion of an earlier and weaker version of UTAH made by Perlmutter and Postal 1984. Larson 1988 proposes ‘relativized UTAH’, requiring that the relative hierarchy between semantic roles is mirrored in syntactic structure.

There are two main roads to the problem of argument structure: one can decompose thematic roles, and/or one can decompose predicates. One can do both at the same time and combine the virtues of both approaches.

Argument decomposition

The argument decomposition approach builds on the common conception of thematic roles as ordered in a hierarchy determining the (relative) structural positions of argument expressions: The more prominent the role, the higher its syntactic position (Larson 1988, Grimshaw 1990 among many others). The main problem of this line is that it is too unrestricted: There is no principled ‘upper bound’ to the number of roles, since thematic roles are not defined in independent terms. There is no principled way of telling which roles are ‘the right ones’. Further, the hierarchical ordering of thematic roles is an extra device that does not follow from anything independent. The hierarchical position of ‘goal/beneficiaries’ (cipients) has been particularly problematic throughout, the debate being whether these are higher on the hierarchy than themes or lower (cf. the discussion between Larson 1988, Jackendoff 1990 and Larson 1990). In part this is due to an idea that we will argue is mistaken, namely that the ‘PP realization’ and the ‘D/NP realization’ of ‘goal/beneficiaries’ are instantiations of one and the same thematic role. Under UTAH, this forces generating them in the same (underlying) position, predicting symmetric structural properties. The ‘PP realization’ and the ‘DP realization’ behave clearly asymmetrically however from a structural perspective, as witnessed in e.g. differing binding properties between ‘D/NP goal/beneficiaries’ and theme arguments and ‘PP goal/beneficiaries’ and theme arguments respectively (cf. section 2.1.2 for more extensive discussion):

- (33) a. Otto gave [every paycheck]_i to his_i owner
 b. *Otto gave his_i owner [every paycheck]_i

More recent examples of the argument decomposition approach are Dowty 1989 and Reinhart 2000, decomposing thematic roles into more primitive features. Mapping principles are then defined that determine the mapping of arguments to structural positions. The central distinction is that between being mapped onto a position external or internal to the maximal projection of the lexical predicate.¹⁸ Dowty defines ‘protoroles’ on the basis of notions such as ‘affect-ness’, ‘volitionality’ etc., more or less ‘perfect’ combinations of these features defining agent (mapped to external position) and patient (mapped onto internal position). On what we call cipients, Dowty remains silent.

Reinhart decomposes thematic roles into bivalent features [+/- m(ental)] and [+/- c(ause change)]. These features are interpreted: The referent of an argument marked [+c+m] for example must be mentally as well as causally

¹⁸Verkuyl 1988 proposed to reduce thematic roles to an external/internal distinction and aspectual structure.

involved in an event/situation that it helps encode. Instead of asking ‘what are the roles and how many are there’, the argument decomposition approach asks ‘what are the features (and their values) and how many are there’. Instead of hierarchies, the argument decomposition approach has mapping principles, determining according to feature makeup whether an argument is mapped onto external or internal position. The idea that thematic roles are really feature combinations is attractive in that it is restrictive and fits well into the minimalist program (arguments becoming a particular type of feature bundle, called ‘coded concept’ by Reinhart). Cipients are however a problem for the argument decomposition approach. To take Reinhart’s approach for illustration, a most obvious problem – a problem to any existing approach we are aware of – is that if we are right, cipients are external. The mapping principles proposed rest on the assumption however that there is just one external position, which leaves one at a loss at analyzing fully blown DOCs with two external arguments (the agent and the cipient). To illustrate, Reinhart defines a rule according to which only arguments that are only marked ‘+’ in terms of features always merge externally. If cipients are external as we argue, this leaves the following clusters (with traditional role labels after the colon):

- (34) a. [+c+m]: agent
 b. [+c]: cause
 c. [+m]: ?

Cipients are not interpreted as having causal force in the events/situations they help encode, which leaves us with the [+m] cluster, translating into ‘?’. In a footnote, Reinhart mentions the subjects of predicates like *know* or *love* as candidates for this role, that is, the external arguments of the clear cases of individual level predicates (Carlson 1978). We will see that cipients are closely akin to individual level predicates in fact. More often than not, cipients are interpreted as mentally capable as well. There are however too many counterexamples to be ignored. For example, the cipient argument in the DPC in (35) is clearly not mental. It can ‘backward bind’ the (nominative) theme however, showing that it c-commands the theme underlyingly (this follows if it is underlyingly external, although the example does not show that it is):

- (35) a. ?Ihr_i Erfinder ist bisher noch [jeder Wunderwaffe]_i
 Her inventor-NOM is so far every wonder-weapon-DAT
 entgangen
 escaped
 ‘So far, every fabulous weapon has been such that its inventor managed to be spared by it’ cf.
 b. *Ihr_i Erfinder hat bisher noch [jede Wunderwaffe]_i
 Her inventor-NOM has so far every wonder-weapon-ACC
 benutzt
 used

‘So far, every fab. weapon has been such that its inventor used it.’
(German)

The ‘+m’ role in Reinhart’s system comes close to defining cipients, but wrongly predicts that cipients are always mentally capable (we return to independent problems in section 3.4.2). Under the proposal put forward here, cipients are a particular type of location argument: cipients are locations that have part structure and are in addition definite/presuppositional, in a sense to be defined below (section 1.3.4) and ongoingly. Taking cipients to correspond to ‘mental’ locations falls short of accounting for examples as in (35) as well as examples as the following, frequent across languages:

- (36) a. She gave the chair a new leg
b. She gave the book a new title

It appears necessary to decompose arguments in order to capture which arguments fit which predicates and at the same time get beyond eventually arbitrary lists of thematic roles. Existing systems such as Dowty’s or Reinhart’s have yet little to say about cipients, which we argue is due to the fact that cipients belong to the domain of locations rather than persons and/or ‘ordinary’ objects which are the focus of these systems.

Predicate decomposition

The alternative to decomposing arguments consists in decomposing predicates. This line is prominent from the generative semantics tradition holding that “... decomposed lexical structures are best regarded as underlying syntactic structures of English (rather than simply aspects of semantic interpretation.” (Dowty 1979: vii). Dowty analyzed complex propositional meanings as composed out of more primitive propositional meanings connected by operators like CAUSE and BECOME, for which he defined truth conditions. The sentence in (37) would receive an analysis along the following lines (we give simplified truth conditions for the BECOME operator for reasons of space:¹⁹

- (37) Anna killed Otto
Anna CAUSE [BECOME [not alive (Otto)]]
BECOME ϕ is true iff $\exists t_1, t_2 \neg(\phi(t_1)) \ \& \ \phi(t_2) \ \& \ t_1 < t_2$

In contrast to the argument decomposition approach, the predicate decomposition approach takes argument structure to be a matter of syntax: the predicates postulated are taken to correspond to heads projecting in syntax, argument structure becoming a consequence of how predicates are combined and saturated.²⁰ An example is the ‘light verb’ little *v*, to the extent that it

¹⁹See Dowty 1979: 140f for discussion of BECOME, *ibid.* p. 191f for discussion of CAUSE.

²⁰More recent versions of the predicate decomposition approach that we do not go into at this point are Jackendoff 1990, Hale and Keyser 1993, Borer 1994 and Kratzer 1994.

is taken to correspond to a causative predicate (or operator). We will adopt the proposal that agents are licensed by a *v* head that encodes a causative predicate (cf. Kratzer 1994/96 for discussion):²¹

- (38) Agent arguments are introduced by a ‘light verb’ *v* that encodes a causative predicate

If a *v* head is projected, an agent or cause argument needs to be projected as well, because this is what is needed to saturate the predicate created by the *v* head.

A major advantage of the predicate decomposition approach over the argument decomposition approach is that it makes thematic hierarchies and mapping principles dispensable in principle: The structural relations between arguments in syntax is a consequence of the predicates projected and the way they combine. Further and importantly, the predicate decomposition approach allows a straightforward account of ambiguities pertaining to the semantic scope of adverbs depending on their syntactic position. Consider the following sentence:

- (39) Anna closed the door again

An interpretive ambiguity (39) carries is that between the ‘repetitive’ reading and the ‘restitutive reading’: (39) can mean that Anna had closed the door before (the repetitive reading) or just that the door had been closed before and that Anna restituted that state (the restitutive reading). Under the predicate decomposition approach, there is a straightforward way of accounting for this ambiguity: If the adverb is attached higher structurally than the head encoding the causative meaning (little *v*), it will have in its scope the event encoded as a whole and the repetitive reading will result. If the adverb is attached below the causative head, it will have in its scope just the ‘becoming’ or ‘result’ part of the event, and the restitutive reading will result. This is sketched in the following structure:²²

- (40) a. *AGAIN* [Anna CAUSE [door closed]]
 b. Anna CAUSE [*AGAIN* [door closed]]

The correlation between the readings available and the syntactic position of the adverb involved is brought out in the following German patterns (to control for scrambling as connected to a definite/presuppositional interpretation of the scrambled D/NPs and distorting the unmarked surface order, indefinite D/NPs are used in the example):

²¹Burzio’s generalization (Only predicates projecting an external argument assign accusative case and vice versa) is captured then by the presence or absence of the *v* head if one assumes in addition that *v* licenses accusative case.

²²There are more readings available which we ignore here for perspicuity.

- (41) Es zieht weil...
 There is a draught because...
- a. ...wieder irgendjemand irgendwelche Fenster geffnet hat
 ...again someone some windows opened has
- b. ...irgendjemand irgendwelche Fenster wieder geffnet hat
 ...someone some windows again opened has
 (German)

Assuming that there is a light verb present in the structures underlying (41-a) and (41-b) respectively that encodes causative meaning and licenses the agent argument locally, the contrast has a natural explanation: If the adverb *wieder* occurs to the right of the arguments selected by *open* and hence in a structurally lower position than the light verb encoding the causative meaning, the only reading available is the restitutive one, because that is what is in the syntactic scope of the adverb: (41-b) conveys that windows had been open before, but not that someone had opened them before (imagine the house was built with windows open). The causative meaning is not in the syntactic scope of the adverb, and the ‘repeated cause’ reading is absent. (41-a) on the other hand conveys that there occurred an event of someone opening windows before, that is, a ‘repeated cause’ reading. Here, the adverb occurs to the left of the arguments selected by *open* and higher structurally than the light verb.

The predicate decomposition approach therefore appears attractive in offering a straightforward way of accounting for the scope of adverbs dependent on their structural position, something which is outside the scope of the argument decomposition approach.²³

A problem the predicate decomposition approach – like any approach – has is that of deciding what the primitive predicates are. As a case in point, DOCs are often taken to be decomposable into something like the following in the predicate decomposition tradition:

- (42) agent CAUSE [goal/beneficiary HAVE theme]

We will argue against the idea that cipients are licensed by a primitive HAVE or a primitive possessive relation (cf. in particular sections 2.3.1, 3.2.4). The predicate licensing cipients can and should be further decomposed into two relations, one holding between a theme argument and a location argument as selected by the lexical predicate, the other relation being predication.

²³That the semantic scope of adverbs strongly correlates with their syntactic scope is strongly supported by the work of Cinque 1999. Cinque shows that the structural positions of adverbs are largely fixed crosslinguistically according to what they modify semantically. For example, manner adverbs modifying ‘causes’ appear higher structurally than manner adverbs modifying ‘becomings’ which in turn appear higher than adverbs modifying ‘results’. This is shown in the following hierarchy (where ‘->’ stands for ‘c-commands’):

- (i) manner I (causing) – > manner II (becoming) – > manner III (result)

The complete ‘Cinque Hierarchy’ is given in section 2.3.4.

In sum, one wants to decompose arguments to capture selectional restrictions holding between predicates and arguments. At the same time, one wants to decompose predicates in order to arrive at a maximally simple account of how the semantic scope of scope bearing elements such as adverbs correlates with their structural position.

A note concerning notation/terminology is in order here. In minimalism, all there is are features and the relations they enter into. On the other hand, semantic representations are customly written in operator-variable format in most of the more semantic literature. Combining the two ideas, features can be taken to act as restrictors of variables, the following conveying that that the thing/concept/person that is the value of the variable has to have causal force as well as be mentally capable in a system like Reinhart's:

$$(43) \quad \text{agent D/NP} \rightsquigarrow [+c,+m](x)$$

We will take the variable perspective predominantly in chapter 2, integrating the feature perspective at the end of chapter 2 and in chapter 3.

1.3.4 Predication

Predication is a paradigm interface concept, reaching from structure into performance (it is 'saying something of something', 'ascribing a property to something'). In this section, we define predication as understood here, giving identification criteria in the realms of meaning, structure and sound respectively.

Meaning On the meaning side, predication as understood here meets three conditions: One, predication is independently tensed/indexed. Two, predication is an inclusion relation. Three, the subject of predication is definite/presuppositional (cf below).

As to one and following Aristotle, we take true predication to involve three ingredients: A subject, a predicate, and tense (*Peri Hermeneias*, §§ 3, 4). While it is standard to assume that all predication is dependent on tense information, it is important to distinguish 'units of predication' according to whether they comprise tense information themselves (a subclass of what Rothstein 1983 called 'primary predication' (cf. *ibid.* pp. 81ff)) and predication that does not ('secondary predication', 'small-clause predication'). It is the former notion of predication – a subject-predicate relation that comprises tense/index information – that we are interested in and that we argue to be instantiated by cipient predication. We reserve the term 'proposition' for the unit encoding 'tensed predication', referring to saturated structural units lacking tense information with the term 'propositional meaning'.²⁴

²⁴That 'small clause predication' lacks independent temporal location can be seen in the illicitness of examples such as the following, under the interpretation where the temporal adverb has scope narrower than the main predicate:

Concerning two, we require that predication is an inclusion relation between the subject and the predicate. In the case of individual level predication (Carlson 1978), the subject referent is included in or ‘falls under’ the predicate. A possible reflex of this is that if an individual level predication is encoded in the past tense (the predicate is asserted to hold of the subject before but not at speech time), there is a strong tendency to interpret the subject as having ceased (or changed in essential ways, cf. Milsark 1977, Kratzer 1988/95):

- (44) Otto was French
 invited interpretation: Otto is dead

The predicate ‘being French’ is a property of Otto ‘as a whole’, so if the predicate used to hold of Otto but does not hold of him any more, Otto cannot be the same individual anymore either. The inclusion property holds of cipient predication as well as we will argue, but with the direction of the relation reversed. It is here the property that falls under the individual or is included in it. This is intuitive for contrasts like the following (assuming that the theme argument is part of the predicate expression, cf. sections 2.1, 2.2):²⁵

- (45) a. Otto gave a chair a new leg
 b. ??Otto gave a leg a new chair

Apparently trivially, the subject in cipient predication includes the predicate from the perspective of temporal reference:

- (46) The boss gave Otto a raise

is interpreted such that Otto outlives (is in existence before, during and after) the giving as well as (at least part of) the ‘post state’ of the giving, that Otto ‘have a raise’: The indices at which the cipient predicate (a raise being ‘at’ Otto) hold are included in (weaker: overlap with) the indices at which Otto is in existence (cf. sections 2.3.5, 3.3.1). In cipient predication, the cipient subject restricts the temporal reference of the predicate and not the other way around (as in individual level predication).

The inclusion condition on predication is not met by ‘stage level predication’ (Carlson 1978), since here neither the predicate includes the subject, nor does

- (i) Otto considered [Anna the gardener (*tomorrow)]

Similarly, secondary predicates inherit the information as to when they are true of their subjects from the matrix tense:

- (ii) I saw Otto_i hungry_i yesterday
 (Otto was hungry when I saw him)

²⁵Cf. as well ‘have predication’:

- (i) a. The house has a fireplace in it
 b. ??The fireplace has a house around it

the subject include the predicate:

- (47) Otto ran the Berlin Marathon of 2001

The predicate ‘running the Berlin Marathon of 2001’, although located in the past, does not ‘take along’ Otto (as in the case of individual level predication), but only what Carlson has called a ‘spatiotemporal slice’ of Otto. Otto as an individual is not included in the predicate. Nor is the predicate included in Otto: running that Berlin Marathon is not a property exclusively of Otto (in contrast, getting that leg is an exclusive property of that chair in (45-a)). Stage level predication falls outside the range then of the definition of predication used here.

As to three, predication is asymmetric as well from the perspective of reference. Following Strawson 1959, we assume that what distinguishes subject and predicate from a semantic/pragmatic perspective is that

The subject-expression, introducing a particular, carries a presupposition of definite empirical fact; the predicate-expression, introducing a universal, does not.

With Strawson, the speaker has to be ready to supply a definite empirical fact supporting the existence of something that the expression used as a logical subject refers to. This translates into the common idea that ‘referential’ (strong, specific etc.) expressions carry an existential presupposition (cf. already Frege 1892 [1994:54]). We will call expressions carrying a existential presupposition on the part of the speaker/hearer ‘definite’.²⁶

- (48) An expression is semantically definite/presuppositional iff interpreting it involves checking an existential presupposition on the part of the speaker

Intuitions are not clear in the domain of definiteness, but definiteness/ presuppositionality can be tested (cf. section 2.2.4). The strongest but somewhat elusive test environment for whether an expression carries an existential presupposition on the part of the speaker/hearer are opaque belief contexts. If an expression triggers an existential presupposition on the part of the speaker even in contexts like the following, it is clearly definite:

- (49) Joe is completely crazy. He firmly believes that ...exp... drank beer yesterday

An expression most clearly counts as definite as understood here if substituted for ‘...exp...’, it can only be interpreted such that the speaker believes in the

²⁶We use ‘definite’ because it conveys in its literal sense exactly what is crucial, namely that the referent of a semantically definite expression be drawn from a finite set known to the speaker. Our notion of definiteness is close, possibly the same as Enc’s 1991 notion ‘specificity’ and/or Szabolsci’s 1994 as well as de Jong and Verkuy’s 1985 notion of ‘presuppositionality’.

existence of things of the kind denoted by the expression substituted. According to this test, definite descriptions (*the/x's* NP), proper names (*Otto, Anna*), bare (plural) D/NPs under their kind interpretation as well as quantifiers such as *most* or *every* pass as semantically definite as the reader may verify. Further, expressions that are contrastively (identificationally, Kiss 1991) focus-marked pass as definites, cf.:

- (50) a. Joe is completely crazy. He firmly believes that a unicorn drank beer yesterday
 b. Joe is completely crazy. He firmly believes that [_F a UNICORN] drank beer yesterday

While (50-a) is compatible with the speaker not believing in the existence of unicorns, the speaker uttering (50-b) must be convinced that unicorns exist. Note already that the nature of the predicate may trigger a definite reading of the D/NP occupying the subject slot:

- (51) Joe is completely crazy. He firmly believes that unicorns have two horns

The speaker uttering (51), comprising an individual level predicate in the embedded clause, appears to believe in unicorns.

Structure Concerning syntax, there have been various proposals as to how predication is structurally encoded, from ‘not at all’ (Chomsky 1965, but cf. Chomsky 1999) to postulation of a ‘predication phrase’ (Bowers 1993). Williams 1980 has argued that predication is structurally conditioned by *c*-command (the subject expression *c*-commands the predicate expression), Rothstein 1983 has proposed a structural rule of predicate linking relating subjects and predicates. Heycock 1991 has argued that predication relations correspond to one place functions encoded in syntax (cf. above section 1.3.2). We argue that cipient predication is syntactically encoded, the subject and predicate expressions related by the little *t* head (from which the *c*-command requirement of Williams 1980 follows).

Predication is something that happens extra, something that does not follow from independently established principles such as the projection principle. That there is something like predication has forced the invention of the ‘Extended Projection Principle’:

- (52) Extended Projection Principle (EPP):
 Sentences must have (syntactic) subjects

Traditionally, syntactic subjects are defined structurally as expressions occupying the specifier of T(ense)/INFL, taken to host an EPP feature (tied to structural nominative case in at least English, cf. section 3.3.2). According to this view, subject expressions are what ‘completes’ the extended projection of a predicate expression. In recent minimalist theory, the EPP has become a

feature requiring that the specifier of a (semi-) functional projection (v , T) be filled.²⁷

EPP features are crucial: Their presence allows elements to escape the syntactic cycle and are hence at the bottom of locality, defined in terms of phases in Chomsky 1999ff. Phases are “propositional units that are largely independent at the interface in terms of sound and meaning” – they are saturated (hence interpretable) structures (cf. above section 1.3.2). Let us first introduce some technicalities and then consider a toy example to see how phases work. Chomsky 2001 defines phases as follows formally:

$$(53) \quad \text{PH} = [\alpha \text{ [H } \beta]]$$

In (53), α -H is called the ‘edge’ of the phase PH. Chomsky proposes that the complement of the phase-head H, β , must be spelled out (interpreted) when PH has been generated, but not the edge, hosting phrase α and head H. The latter two elements ‘survive’ until the next phase level, that is, they can enter relations with elements merged further up that are contained in the phase defined by the next phase head. Looking at an example designed to our purposes, we have in (dialects of) English the following contrast:

- (54) a. A book was given t to Mary
 b. *A book was given Mary t

On standardly made assumptions and abstracting from irrelevant detail, we have something close to the following for our cases:

- (55) a. $\text{PH} = [{}_vP - [{}_v \text{ was given } [{}_{VP} [\text{a book}] [\text{to Mary}]]]]$
 b. $\text{PH} = [{}_vP \text{Mary } [{}_v \text{ was given } [{}_{VP} \text{a book}]]]$

In (55-a), the edge of the phase is (yet) empty (indicated by ‘-’). By stipulation, the phase head v has an EPP feature allowing to attract the D/NP *a book* which as a consequence of checking EPP ends up at the edge of PH (α in (53), ‘-’ in (55-a)). The next phase head is T, wanting to check nominative case as well as EPP. It can attract the D/NP *a book* since *a book* is at the edge of the foregoing phase and has survived spell out (unlike *to Mary* that is spelled out).

In (55-b), the D/NP *Mary* occupies the edge of the phase. Assuming that *Mary* checks EPP and that there is no other EPP feature, the D/NP *a book* cannot be attracted to the edge, hence is spelled out when PH has been built. All that has survived when T is merged is the D/NP *Mary* (at the edge) and the verb *was given* (the head). These can enter relations with material in the T projection. The D/NP *a book* however has been spelled out, hence is inaccessible and cannot be attracted. The contrast in (54) follows.

²⁷The *semi* in brackets is there for v , which has a somewhat elusive status with respect to the lexical/functional dichotomy. On our assumptions (cf. above), v is lexical rather in that it is a content category encoding causal meaning and licensing cause/agent arguments. There is a link to the tense system however in that causative structures typically encode the bringing about of change. Cf. section 3.2.4.

While technically this type of analysis works, it is more of an engineering solution than an explanation – one would like to know what allows EPP features, but the presence (or absence) of EPP features is plainly stipulated at the vP level, as is the phase-status of vP. According to Chomsky, phases are self-sufficient units at the interface, corresponding to intonatory phases at PF and saturated units with full argument structure at LF. Lacking full argument structure, unaccusative structures are denied phase status.²⁸ We find here the same type of contrast as above in (54) however:

- (56) a. The door opened for her (cf. Someone opened the door for her)
 b. *The door opened her (cf. ?Someone opened her the door)

In sum, phase analyses are yet problematic and unexplanatory, in particular at the vP level. Preferably, one would want to have a deeper conception of what constitutes a phase (cf. as well Chomsky 2001:13). Our cases provide an argument that units encoding predication are what defines the phase. Being tensed/indexed, units encoding predication contain the information needed for interpretation in extralinguistic terms (cf. section 1.3.2). More in particular, we argue that it is the subject of predication that allows interpretation in extralinguistic terms, the idea being that the subject of predication values the phase head the complement of which is spelled out.²⁹

Sound A more accurate version of the EPP given above in (52) would be (57):

- (57) Sentences need subjects that can be recovered from PF

Predication relations as here understood are obligatorily marked. The paradigm (known) case of true predication, what Carlson 1978 called ‘individual level

²⁸This is motivated by the fact that if unaccusative structures were phases, the in-situ theme D/NP could not enter an agreement relation with T (because it would have been spelled out already when T is merged).

²⁹This is a return to the ‘tensed S condition’ and/or ‘specified subject condition’ (Chomsky 1973) known from earlier stages of generative syntax. In essence, these defined the local domain within which local operations had to apply. The specified subject condition is given in (i):

- (i) No rule can involve X, Y in the structure
 ... X ... [a ... Z ... -WYV ...] ...
 where Z is the specified subject of WYZ in a

Specified subjects were defined as D/NPs occupying Spec,IP or Spec,NP position as well as (later) finite AGR (Chomsky 1986). The specified subject condition excluded the binding of anaphors across subjects as well as raising (A-movement) across subjects, cf.:

- (ii) a. The men saw [_{NP} the pictures of each other]
 b. *The men saw [_{NP} [_{NP} John’s] pictures of each other]
 c. *John seems [_{CP} that [_{IP} [_{NP} it] appears _{t_{John}} to be a fool]]

predication’, always exhibits nominative case on the external argument in Germanic and many other languages. In addition, there is an obligatory morphologically expressed agreement relation between the nominal functioning as external argument and the verb/tense complex (showing person and number agreement with the external argument).³⁰ In the case of cipient predication, it can be seen overtly in languages like Spanish, Greek or Bantu that there is agreement (in a broader sense covering clitic doubling, cf. above fn 9) between cipients and the verb/tense complex as well. There is of course variation between languages in marking options, including agreement systems. Under uniformity, if we find languages where a certain marking goes with the cipient meaning, we expect the feature this is the expression of to be present in other languages as well, as long as we find the cipient meaning. This appears to be the case, although the pertaining marking is not always easily detected.

Marking possibilities include position or a particular (irregular) stress marking for example, the latter not shining through in written text. Cipients are destressed under neutral intonation, where destressing indicates ‘givenness’ (cf. e.g. Schwarzschild 1999), an instantiation of definiteness/presuppositionality as defined above. Note for example the difference in default intonational contour between the following two sentences which look analogous in terms of word order:

- (58) a. Someone likes [_F Otto]_{theme}
 b. Something [_F escaped] Otto_{ipient}

In German, cipients are generally marked with morphological dative case. In Spanish, cipients are generally clitic doubled unlike other arguments. In Greek, cipients bear genitive case and are in addition clitic-doubled, the doubling tending to be obligatory. In these languages, cipients are easily recoverable.

Semantic definiteness as constituting a property of cipients qua being logical subjects as we argue is of of course often marked morphologically (cf. Abbott 2001 for a list of prototypical ‘definiteness’ markers). Morphological definiteness can however not be taken to be a reliable criterion for semantic/pragmatic definiteness, as morphological indefiniteness cannot be taken to be a reliable criterion for semantic/pragmatic indefiniteness.

The identification criteria that we assume for predication relations as here understood are summed up in (59):

- (59) Predication relations are characterized by
 a. an inclusion relation holding between the subject and the predicate
 b. independent tensing/indexing
 c. definiteness of the subject (existence presupposition)
 d. marking

³⁰This is usually true of ‘stage level predication as well of course (but cf. section 4.1). Stage level predication does not fall under predication as used here however for the reasons given above (cf. this section, ‘Meaning’).

1.4 The Constructions

1.4.1 Presentational *There* Construction (PTC)

The name ‘Presentational *There* Construction’ conveys already that it is a mix of functional and formal aspects that characterizes the linguistic objects falling under it.³¹ PTCs present or bring into awareness ‘what is the case’, and this appears to go for all their uses:³²

- (60) a. There is a man in the garden [‘presentational’]
 b. (Well,) there is Peter (and Paul, and Mary) [‘mentional/list’]
 c. There is a god (in this universe) [‘existential’]

A PTC such as (60-a) is typically uttered to introduce some fact unknown to the hearer. A PTC as in (60-b) typically lists a set of things that are prone to have escaped the hearer. A PTC as in (60-c) typically serves as a (n often rhetorically used) reminder of the hearer of a fact that cannot be doubted. Concerning their form, PTCs often comprise some element analogous to English *there*, and/or have a particular intonational contour. Looking within and across languages, the presence, absence, status and position of the *there* element appears to be the major varying factor concerning the realization of PTCs:

- (61) a. There are a number of people in the garden
 b. There’s a number of people in the garden
- (62) a. (Da) war kein Bier im Kühlschrank
 There was no beer in-the fridge
 b. Es hat da Bier im Kühlschrank
 It has there beer in-the fridge
 (German)
- (63) yaan huntul ciimin ti in-paapa
 COP one horse in my-father
 ‘My father has a horse’
 (Yucatec)
- (64) exi ena ghaidaro sto kipo
 have a donkey in.the garden
 ‘There is a donkey in the garden’
 (Greek)
- (65) ku- ki- lisa ku- na li- holo
 17- 7- well 17SA- with 5- tortoise

³¹The same is true of the more traditional term ‘Existential *There* Construction’, suggesting that the objects falling under it have to do with the assertion of existence.

³²The intuition that PTCs have to do with bringing into awareness (in some sense) is common and expressed in among many others Brentano 1925, Kuno 1971, Bolinger 1977, Lyons 1975, Kratzer 1994, Kiss 1996, McNally 1998.

‘at the well there is a tortoise’
 (Ndendeule, Bantu. SA = subject agreement,
 numbers = noun classifiers, FV = final vowel)

- (66) Il y’a un homme dans le jardin
 It there-has a man in the garden
 (French)
- (67) yes sefer ‘al ha-Sulxan
 there/exist book on the-table
 (Hebrew)

Predicates and their classification

Traditionally, different types of *there*-sentences are distinguished according to the type of predicate they comprise (cf. Aissen 1975, Milsark 1977). (68-a) exemplifies what is most commonly called an ‘existential’ *there*-sentence while (68-b) and (68-c) exemplify what is most commonly called a ‘presentational’ *there*-sentence:

- (68) a. There is a god (in this universe)
 b. There hung a picture (on the wall)
 c. There jumped out (from the bushes) a man with a stick

Other predicates often called ‘existential’ are e.g. *exist*, *occur*, *follow*, *ensue*, other predicates often called ‘presentational’ are expressed by (nonagentive) verbs of motion and verbs of location and appearance such as *fall* and *appear*, as well as by verbs of motion like *jump* and *run*.³³ Such a grouping into different types of *there*-sentences seems intuitive enough, but one may ask on which grounds it is made. At closer look, the criteria according to which a predicate is grouped in one particular class rather than another seem elusive. Structures as in (68-a), (68-b) and (68-c) all involve D/NPs qualifying as themes as well as a (n apparently optional) locative element. Saying that ‘existential’ predicates are stative but ‘presentational’ ones are in some sense eventive does not help since ‘existential’ verbs like *occur* or *follow* are just as eventive as e.g. ‘presentational’ ones like *fall* or *appear*. Next, not only ‘existential’ predicates give rise to the famous ‘definiteness effects’ associated with the construction, but also ‘presentational’ ones.³⁴ Agentivity cannot be taken to be a reliable criterion to distinguish at least the ‘motion’ group of ‘presentational’ predicates, since

³³Firbas 1966 characterizes the predicates typically occurring in PTCs as follows:

These verbs or verbal phrases undoubtedly imply or even express appearance – a kind of coming into existence – on the scene (i.e. the scene created by the narrow, *ad hoc* context at the moment of utterance) or simply existence on this scene. (Firbas 1966: 243)

³⁴Cf. McNally 1992 [1997 pp.200]. ‘Right dislocation’ of the ‘associate’ weakens definiteness effects in ‘presentationals’ (Milsark 1977). But it weakens them just as much in ‘existentials’, cf. e.g.:

clearly D/NPs that are nonagentive can appear as subjects in these constructions as well, cf. (69-b):

- (69) a. There jumped out (from the bushes) a man with a stick
 b. There stuck out (from the window) a flag with stars and stripes

Locative Inversion alternation and Location

In a detailed corpus-oriented study of *there*-sentences in English, Erdmann 1990 shows that the class of predicates occurring grammatically in *there*-sentences coincides with the class of predicates that may undergo locative inversion. Bresnan 1994 has in turn argued that locative inversion (the fronting of a location argument, usually a PP) occurs just with those predicates that involve a theme and a location argument (but no agent): “In summary, we have seen that in both English and Chichewa the core argument structure of locative inversion is a location predicated of a theme” (Bresnan 1994:85). Illustrating with some examples, consider the following (from *ibid.*):

- (70) a. *Gathered pointlessly in the yard seemed three women
 b. *Busy at the lathes kept three women
 c. *Conspicuously absent became a woman
 d. *Even closer seemed a python
 e. *Spilled all over the floor got pinto beans

Although the examples comprise a locative element, inversion is out. The reason is that the locative elements in the examples have adjunct status (cf. above). Replacing the verbs in (70) with predicates that select a location argument, the examples become fine:

- (71) a. Gathered pointlessly in the yard stood three women
 b. Busy at the lathes sat three women
 c. Conspicuously absent was a woman
 d. Even closer came a python
 e. Spilled all over the floor lay pinto beans

If only predicates selecting theme and location arguments undergo locative inversion and if locative inverting predicates are those occurring grammatically in PTCs, it is predicted that the predicates in (70) do not, but the predicates in (71) do occur grammatically in them. The facts are accordingly, compare (72) and (73). Note as well that overt expression of the location argument is called for in some cases and not in others (examples built on Bresnan 1994):

- (i) a. ??There exists the conviction that the universe is extended in physics
 b. There exists in physics the conviction that the universe is extended.
- (ii) a. ??There fell our old neighbor down the stairs
 b. There fell down the stairs our old neighbor

- (72) a. *There seemed three women gathered pointlessly (in the yard)
 b. *There kept three women busy (at the lathes)
 c. *There became a woman (conspicuously absent)
 d. *There seemed a python (even closer)
 e. *There got pinto beans (spilled all over the floor)
- (73) a. There stood three women gathered pointlessly ??(in the yard)
 b. There were three women busy (at the lathes)
 c. There was a woman (conspicuously absent)
 d. There came a python ?(even closer)
 e. There lay pinto beans (spilled all over the floor)

Erdmann's criterion together with the fact that locative inversion seems possible just in case the predicate selects a theme and a location argument gives strong reason to conjecture that the core empirical distinction relevant for a predicate's occurring felicitously in PTCs lies in argument structure. In this vein, it has been proposed already by Kuno 1971 and Postal 1977 that locative inverted constructions are derived from 'there insertion constructions', with *there* originally forming a complex with a (possibly silent) location argument:

- (74) a. [In the distance there] appeared the towers and spires of a town which greatly resembled Oxford
 b. There appeared [<there> in the distance] the towers and spires of a town which greatly resembles Oxford

In the absence of reliable tests for alleged distinctions between 'existential' and 'presentational' predicates and in view of uniformity, the null hypothesis that seems to be empirically warranted as well is that one is dealing with one class of predicates rather than three different ones.³⁵

The importance of location for PTCs is sometimes more and sometimes less obvious, but shines through in natural language in that the analogue of the element *there* is more often than not homomorphic with a locative proform. The expression of a location argument is always allowed in PTCs, and there are cases of PTCs that are quite odd unless a location argument is realized.³⁶

³⁵In work inspired by a more cognitive line of thought (Brentano 1925, Kuno 1971, Ladusaw 1994), the constructions in (68-a), (68-b) and (68-c) are taken to belong to one class of predicates appearing in what have been baptized 'thetic judgments' by Brentano 1925. Thetic judgments merely 'present' certain states of affairs. Categorical judgments in contrast ascribe a property to an individual. What is ruled out in PTCs according to this line of thought are categorical judgments. Cf. for relevant discussion in the context of other frequently employed distinctions Jaeger 2000.

³⁶Chomsky 1999:16 gives the following examples of 'transitive expletive constructions' (transitive PTCs), a construction that is usually disallowed in English. The predicates are clearly locative:

- (i) a. There entered the room a strange looking man
 b. There hit the stands a new magazine

- (75) a. There is life ??(on Mars)
 b. There hung a picture (on the wall)
 c. There jumped out ?(from the bushes) a man with a stick
 d. There is no even prime number higher than two (in mathematics)
- (76) a. There are holes ??(in the cheese)
 b. There is space ??(in the fridge)
- (77) Il y'a un homme ??(dans le jardin)
 It there-has a man in the garden
 (French)
- (78) yes sefer 'al ha-Sulxan
 there/exist book on the-table
 (Hebrew)

Possession

Freeze 1992 has argued forcefully that PTCs and *have* predication – the basic construction expressing something like ‘possession’ – belong to one and the same universal paradigm. In many languages, what corresponds to ‘possessive have’ predication in Germanic is expressed with the same means as those used for PTCs (cf. Lyons 1977, Freeze 1992). Often, it is hard if at all possible to decide whether one is dealing with a ‘presentational’ sentence or with a construction encoding ‘possession’, cf. the following examples from Greek ((79)), Hindi ((80)), Hungarian ((81)) and Yucatec ((82)):

- (79) exi ena ghaidaro sto kipo
 have a donkey in.the garden
 ‘There is a donkey in the garden’/‘The garden has a donkey in it’
 (Greek)
- (80) larkee -kee paas kutta hai
 boy_{OBL} -GEN proximity dog is
 ‘there is a dog in the boy’s vicinity’/‘the boy has a dog’
 (Hindi, Freeze 1992)
- (81) Mari -nak van -nak kalap -ja -i
 Mari -DAT be-past -3pl hat -poss3sg -pl
 ‘Mari had a hat’/‘A hat was (at) Mary’s’
 (Hungarian)
- (82) yaan huntul ciimin ti in-paapa
 COP one horse in my-father
 ‘My father has a horse’
 (Yucatec)

The examples in (80) and (82) in particular make the vicinity of location and ‘possession’ transparent.

Predicate Restriction, Definiteness Effects, Scope, the Novelty Condition

PTCs exhibit what is known as the ‘predicate restriction’. Certain predicates, in particular those dubbed ‘individual level predicates’ by Carlson 1978, cannot appear in PTCs (in English):

- (83) a. *There loved a boy a girl
b. *There knew a boy the answer

PTCs exhibit ‘definiteness effects’ and particular scopal properties. What Milsark 1977 has called ‘strong’ (\approx quantified) D/NPs are ruled out in PTCs, and ‘weak’ (\approx non-quantified) D/NPs are confined to a narrowest scope interpretation:

- (84) a. *There are most children in the garden
b. Most children are in the garden
(85) a. There must be a ghost in the house (only: $\text{must} > \exists$)
b. A ghost must be in the house (both: $\text{must} > \exists, \exists > \text{must}$)

Have predication patterns largely analogously in this respect:

- (86) a. *Otto has every diploma
b. Otto must have a headache (only: $\text{must} > \exists$)

PTCs are subject to a pragmatic felicity condition requiring that the discourse referents they introduce be novel or ‘hearer-new’. A typical formulation is given in (87) (from McNally 1998:385):

- (87) The use of ‘There be’ is felicitous in context C only if the NP α serving as its argument carries the condition that any discourse referent it licenses be novel.

1.4.2 Dative Percipient Construction (DPC)

As in the case of PTCs, ‘Dative Percipient Construction’ transports formal and functional aspects. The term ‘percipient’ suggests that the construction belongs to the class of ‘psychological constructions’, constructions that carry entailments to the effect that one or more of the arguments involved in the construction has to have semantic traits of ‘mental capacity’. As has been pointed out above already however (cf. (35), section 1.3.3), there are cases where cipient arguments are clearly not mental. The cipient argument is usually marked with what is traditionally taken to be inherent (semantics-associated) case (dative, genitive).

Predicates

The predicates occurring in DPCs typically have some ‘experiencing’ meaning. Prototypical predicates appearing in DPCs translate into English as *appeal to*, *appear to*, *occur to*, *get acquainted with*, *escape* – a large class of predicates that projects DPCs is constituted then by what Belletti and Rizzi 1988 have called ‘*piacere*-type’ predicates, that is, two place unaccusative predicates (projecting a theme and a ‘goal’ in their terms). Accordingly, predicates occurring in DPCs do not allow passivization, nor do they make accusative case available; they select *be* and not *have* in perfect forms, they allow for *ne*-cliticization in Romance and so on. In this, the predicates projecting DPCs overlap with predicates typically occurring in PTCs:

- (88) The solution escaped Otto
- (89) a. Otto erschien ein Geist
 Otto-DAT appeared a ghost
 ‘Otto had a vision of a ghost’
 b. Otto fielen alle zu Füßen
 Otto-DAT fell all to feet
 ‘Everybody bowed to Otto’
 (German)
- (90) A Otto le apareció un error
 To Otto CL appeared a mistake
 ‘Otto noticed a mistake’
 (Spanish)
- (91) To vivlio tis aresi tis Maria
 The book-NOM CL-GEN appeals to-the Mary-GEN
 (Greek)

In many languages, constructions expressing value judgments or ‘emotional affectedness’ (sometimes subsumed under ‘evaluative/ethical dative constructions’) look very similar:

- (92) Ej ocen’ nravilas’ ta kniga
 her-DAT very like that book-NOM
 ‘She really liked that book’
 (Russian, King 1995:135)
- (93) Henni leiddist/likathi strakarnir
 Her-DAT bored/liked the boys-NOM
 ‘She found the boys boring/ She liked the boys’
 ‘The boys annoyed/appealed to her’
 (Icelandic)
- (94) Otto ist die Suppe *(zu) heiss
 Otto-DAT is the soup-NOM *(too) hot

‘The soup is too hot for Otto/Otto finds the soup too hot’
(German)

- (95) a. *O Yargos mu ine eksipos
The John-NOM me-GEN is intelligent
b. O Yargos mu paraine eksipos
The John-NOM me-GEN too-is [sic!] smart
‘John is too smart for me/According to me, John is too smart’
(Greek)

We argue that the examples in (88) to (91) and those in (92) to (95) share in fact the same structural and interpretive core, namely that in (4) (section 1.1, further spelled out in 3.3.1). A list of predicates occurring typically in DPCs in German is given below (this section, ‘location and possession’).

Dative Alternation

‘Ditransitive predicates’, are well known to undergo the ‘dative alternation’ (cf. below). An analogous alternation between a ‘dative’ and a ‘PP’ realization is found with ‘two place unaccusative’ predicates, but this has largely escaped notice. The following examples illustrate:

- (96) a. A gangster escaped Otto
b. A gangster escaped from Otto
- (97) a. Einem Propheten erschien ein Heiliger
A prophet-DAT appeared a saint
b. Ein Heiliger erschien bei einem Propheten
A saint appeared at a prophet
(German)
- (98) a. A Otto le apareci un error
To Otto CL appeared a mistake
b. Aparecio un error Otto
Appeared a mistake to Otto
(Spanish)
- (99) a. To vivlio tis aresi tis Maria
The book CL-GEN appeals to-the Mary-GEN
b. To vivlio aresi s-tin Maria
The book appeal to-the Mary
(Greek)

In English and German, there is an alternation between a ‘bare (dative) D/NP’ and a ‘PP realization’ alternation. In Spanish, there is a ‘dative clitic’ and a ‘PP realization’, the surface difference being the presence or absence of the dative clitic. In Greek, there is a genitive realization with clitic doubling and a PP realization. The (a) examples in (96) to (99) instantiate what we call the

DPC, the (b) examples instantiate what we call the ‘PP location construction’.

It will be shown in sections 2.1.2 and 2.2.2 in particular that from a structural perspective, the alternations in (96) to (99) are analogous, strongly suggesting that they instantiate a single paradigm.

Location and Possession

The locative nature of DPCs is not so obvious, although the connection is already suggested by for example the Spanish clitic doubling examples above ((98)): the mere surface difference between the DPC and the location construction here appears to consist in clitic-doubling the location argument. It seems intuitive as well that ‘experiencers’ should correspond to ‘mental locations’ in some (yet mysterious) sense. The following examples give some initial evidence for the importance of location in DPCs – it can be seen in the German and Dutch examples below that the projection of a location argument determines whether or not the cipient construction is licensed. (103) gives a list of predicates occurring in the DPC in German. Across the board, these predicates comprise a locative element that has incorporated into the verbal form (cf. for argument in favor of the locative origin of the pertaining prefixes a.o. Kluge 1989, Maylor 1998):

- (100) a. Otto hing das Bild *(vor der Nase)
 Otto-DAT hung the picture in-front-of the nose
 b. Otto stand ein Weihnachtsmann *(auf dem Fuss)
 Otto-DAT stood a sinterclaus on the foot
 c. Otto lag die Statue *(im Weg)
 Otto-DAT lay the statue in-the way
 (German)
- (101) a. De steen is me *(op het hoofd) gevallen
 The stone is me on the head fallen
 ‘The stone fell on my head’
 b. Het meisje is me *(op-)gevallen
 The girl is me up-fallen
 ‘The girl struck me’
 (Dutch)
- (102) hofi’a li is ba- gina
 appeared man to-me in-the garden
 ‘There appeared a man in my garden/?in the garden I was in’
 (Hebrew)
- (103) ‘unaccusative’ predicates occurring in the DPC in German:
er-scheinen ‘appear’, *auf-fallen* ‘strike’, *wider-fahren* ‘occur’, *gelingen*, *glücken* ‘be crowned by success’, *ein-leuchten* ‘be enlightening’, *ent-kommen*, *ent-gehen* ‘flee/get away’, *ent-wischen*, *ent-kommen* ‘escape’, *entgegen-kommen* ‘come toward’, *gegenüber-treten* ‘oppose’

The best known ‘possessive’ construction arguably instantiating the DPC hence cipient predication is the ‘Hebrew Possessor Dative.’³⁷ The construction has acquired fame as a test for unaccusative predicates: Only internal arguments can be interpreted as ‘possessee’ of the ‘dative possessor’ (Borer and Grodzinsky 1986). According to the default interpretation of the following German and Hebrew examples, the hen escaping or the shed escaped from is interpreted as belonging to the speaker in some sense:

- (104) a. Da ist ein Huhn (aus dem Stall) entkommen
 There is a hen (from the shed) escaped
 b. Mir ist ein Huhn (aus dem Stall) entkommen
 Me-DAT is a hen (from the shed) escaped
 (German)
- (105) barxa li ha- tarnegolet (me- ha- lul/ la- ya’ar)
 escaped to-me the- hen (from- the- hen-coop/ to the woods
 ‘My hen escaped from the hen-coop/into the woods’ / ‘The hen escaped on me from the hen-coop’
 (Hebrew)

The sense of possession is however not very strong, in particular as concerns the ‘theme as possessee’ interpretation. Consider the following Italian and German examples, analogous structurally to those just given:

- (106) a. E apparso un error
 is appeared an mistake
 ‘there appeared a mistake’
 b. A Gianni apparso un error
 To Gianni is appeared a mistake
 ‘Gianni noticed a mistake’
 (Italian)
- (107) a. Mir ist ein Fehler aufgefallen
 Me-DAT is a mistake up-fallen
 b. Mir ist ein Fehler ins Auge gefallen
 Me-DAT is a mistake into-the eye fallen
 ‘A mistake caught my eye’
 (German)

It need not at all be Gianni’s or my mistake that appeared to him or me. In (107-b), the ‘possession’ relation is clearly with the locative PP, denoting a body-part of the speaker, and not with the theme.

³⁷Linguistically prejudiced native speakers of Hebrew are not always happy with the term ‘possessor dative’, favoring less narrow paraphrases. The rock bottom seems to be that the ‘Hebrew Possessor Dative’ has to do with experience in a broad sense, sometimes reducing to ‘(emotional) affectedness’.

Scope

In DPCs, the theme argument cannot take non-surface scope across the cipient argument, while in the location construction the location argument easily takes non-surface scope over the theme:

- (108) a. Einem Autor erschien jeder Leser (only: $\exists > \forall$)
 An author-DAT appeared every reader
 b. Einem Kind war jede Suppe zu heiss (only: $\exists > \forall$)
 A child-DAT was every soup too hot
 (German)
- (109) Un escritor le apparso cada error (only: $\exists > \forall$)
 An author CL appeared every mistake
 (Spanish)
- (110) Es erschien ein Autor bei jedem Leser (both: $\exists > \forall, \forall > \exists$)
 It appeared an author at every reader
 ‘An author appeared to every reader’
 (German)

In English, the theme argument has to appear sentence-initially in DPCs. From the perspective of scope, DPCs in English are ambiguous:

- (111) Every mistake escaped a lecturer (both: $\exists > \forall, \forall > \exists$)

Variation

The DPC is rare in Modern English, *escape* being one of the few predicates entering it (*elude* is another one). This was different in earlier stages of English, where the construction was much more frequent. The loss of the construction went along with the loss of dative case marking.³⁸ The following are examples from Old English:

- (112) a. Me com to Godes engel
 Me-DAT came to God’s angel
 ‘To me came God’s angel’
 b. ...ende him felleon tearas of tham eagum
 ...and him fell tears from his eyes
 and tears fell from his eyes’
 (Old English)

Interestingly as well, in Old English the dative percipient argument appears in initial ‘subject’ position, not as in modern English where it has to appear to the right of and adjacent to the verb:

³⁸Thanks to Willem Koopman and Olga Fischer for their expertise concerning Old and Middle English. Cf. as a reference van Kemenade and Vincent 1997.

- (113) a. Anna escaped Otto_{cipliant}
 b. *Otto_{cipliant} escaped Anna

In Dutch, there is variation between speakers as to whether they accept DPCs such as the following – it appears that this correlates with loss of case. Speakers of Limburgian, where case loss has occurred more recently, are more ready to accept it:

- (114) Jan_{cipliant} is een kip ontglipt
 Jan is a hen escaped
 (Dutch)

In German, the analogous construction is highly frequent, as in other languages that employ dative case marking. In an ‘out of the blue’ all-focus construction, the dative cipient has to occur to the left of the theme argument:

- (115) Es sind einem Mann Frauen im Garten
 It are-pl a man-sg-DAT women-pl-NOM in-the garden
 erschienen
 appeared
 (German)

In languages with ‘dative’ marking, the situation is analogous, the following examples illustrating with Russian ((116)), Hungarian ((117)), Italian ((118)) and Spanish ((119)):

- (116) U menja pojavilas’ ideja
 At me-GEN appeared idea-NOM
 (Russian)
- (117) megjelent (nekem) egy szellem a kertben
 perf-appeared-3sg (me-DAT) a ghost-NOM the garden-in
 (Hungarian)
- (118) A Gianni apparso un phantasma
 To John is appeared a ghost
 (Italian)
- (119) A Otto le apareci un error
 To Otto CL appeared a mistake
 (Spanish)

1.4.3 Double Object Construction (DOC)

Double Object Constructions are so-called because they are commonly taken to comprise two ‘bare D/NP’ objects. Since traditional phrase structures provide no obvious room for a second object, DOCs have received a lot of attention. The following are examples of DOCs in English:

- (120) a. Otto gave Mary the book
 b. Otto bought Mary the book

It is traditionally held that the ‘first D/NP’ in these constructions, the ‘(affected) goal’ or ‘beneficiary’, corresponds to the direct object. One reason for this is that the first object may become subject in passive:

- (121) a. Mary was given the book
 b. Mary was bought the book

Predicates

Typically, DOCs are taken to encode something like ‘transfer of possession’ (cf. Oehrle 1976).³⁹ Shades go to the ‘first object D/NP’ acquiring some ‘benefactive’, ‘possessor’ or ‘ethical’ meaning down to mere ‘affectedness’. Predicates occurring crosslinguistically in DOCs translate into English as *give*, *send*, *mail*, *tell* (‘verbs of giving/sending/communicated message’), *buy*, *promise*, *allow* (‘verbs of (future) having’), as well as, with a ‘benefactive’ meaning, *buy*, *bake*, *sing*.⁴⁰ For German, the following list illustrates the type of predicate typically entering (adjectival passive) DOCs. As in the case of DPCs, we find locative elements incorporated into the verb across the board (cf. for argument in favor of the locative origin of the pertaining prefixes a.o. Kluge 1989, Maylor 1998):⁴¹

- (122) *an-vertrauen* ”on-trust”, *ab-nehmen* ”away-take”, *an-kündigen* ”announce”, *über-geben* ”over-give (hand)”, *über-mitteln* ”over-mediate”, *über-bringen* ”over-bring”, *vergeben*, *verzeihen* ”forgive”, *auf-tragen* ”on-carry (order)”, *aus-sprechen* ”out-speak”, *aus-leihen* ”out-lend”, *ver-machen* ”be-queathe”, *ver-derben* ”spoil”, *be-fehlen* ”order”

Dative alternation

The predicates entering Double Object Constructions (DOCs) systematically undergo an alternation, traditionally called ‘dative alternation’.⁴² The ‘dative

³⁹A well-known generalization in this context (‘Oehrle effects’) states that the ‘first object D/NP’ in a DOC has to be animate, so as to be able to enter a ‘possession’ relation with the theme argument, cf.:

- (i) a. Otto sent a letter to France
 b. ??Otto sent France a letter

⁴⁰Pesetsky 1995 comprises a detailed list of predicates occurring in DOCs in English, as does Green 1974. Cf. Anagnostopoulou 2001 for a list of Greek predicates occurring in DOCs, cf. Demonte 1995 for Spanish.

⁴¹Adjectival passive DOCs more than fully blown DOCs require verbal forms that comprise some locative prefix.

⁴²Cf. Chomsky 1955/75, Oehrle 1976 and Larson 1988 among many others for English, Anagnostopoulou 2001 for Greek, Demonte 1995 for Spanish, Marantz 1993, Ngonyani 1996

alternation' that (the majority of) this type of predicate undergoes is exemplified in (123). For English and German, (123-a) shows the 'double object' or 'two D/NP' realization, (123-b) the 'PP' realization:

- (123) a. Otto sent Anna flowers
 Otto schickte Anna-DAT Blumen
 b. Otto sent flowers to Anna
 Otto schickte Blumen zu/nach/an Anna (hin)

It is an established fact that in the DOC, the goal/beneficiary can bind the theme syntactically, while the theme cannot bind the goal/beneficiary. Binding relations are more symmetric in the PP location construction (cf. Barss and Lasnik 1986, section 2.2.2 below):

- (124) a. Otto gave [each worker]_i his_i paycheck
 (*his_i owner [every paycheck]_i)
 b. Otto gave [each paycheck]_i to his_i owner
 (??his_i paycheck to [every owner]_i)

The case is reported to be analogous in many languages (binding patterns will be discussed in more detail in section 2.1.2). The following pairs give examples for the 'dative alternation' from Spanish (Demonte 1995, pp 6f), Greek (cf. Anagnostopoulou (to appear) and Bantu (cf. Marantz 1993, Ngonyani 1996). In analogy to the case of DPCs, what has been identified as a DOC features agreement in certain languages (clitic doubling in Spanish or Greek, noun class agreement in Bantu). The construction found to pattern with the Germanic POC lacks agreement:

- (125) a. Le cociné el pollo a Mario
 CL I-cooked the chicken to Mario
 b. Cociné el pollo para Mario
 I-cooked the chicken for Mario
 (Spanish)
- (126) a. (Tou) edosa tou kathe idioktiti vivlio tou
 (cl-GEN) gave-I the each writer-GEN book his
 'I gave each writer his book'
 b. Edosa tou kathe vivlio stou idioktiti tou
 Gave-I the each book-ACC to writer its
 'I gave each book to its writer'
 (Greek)

for Bantu. Much work has been carried out trying to account for why certain ditransitive predicates do and others do not undergo the dative alternation, see among many others Oehrle 1976, Gropen et. al. 1989, Krifka 2001.

- (127) a. Juma a- li- m- nunul -i -a m- toto ki- tabu
 Juma 1SA- PST- 1OA- buy -APP -FV 1- child 7- book
 h-iki
 this-7
 ‘Juma bought the child this book’
- b. Juma a- li- nunul -i -a wa- toto vi- tabu
 Juma 1SA- PST- buy -APP -FV 1- child 8- book
 ‘Juma bought books for children’
 (Ndendeule (Bantu), Ngonyani 1996:197f)

We refer to the bare (doubled, agreeing) realization of the ‘goal/beneficiary’ argument with the term ‘recipient’, recipients being cipients. The construction as a whole we call ‘DOC’ (‘Double Object Construction’) following tradition. The sentences in (123-a), (125-a), (126-a) and (127-a) all exemplify the DOC.

The construction comprising the ‘PP goal’ we call POC (Prepositional Object Construction). The PP realization of the location argument is very common also outside Germanic (at least more common than dative case on the cipient). The sentences in (123-b), (125-b), (126-b) and (127-b) all exemplify the POC.

Adjectival Passive DOCs

DOCs are clearly more complex than DPCs in projecting an agent argument when fully blown.⁴³ However, the adjectival passive construction of DOCs is completely analogous from a surface perspective to the DPC, as the following German examples illustrate:

- (128) a. Da ist ein Huhn (aus dem Stall) entkommen
 There is a hen (from the shed) escaped
- b. Otto ist ein Huhn (aus dem Stall) entkommen
 Otto-DAT is a hen (from the shed) escaped
- c. Otto ist ein Huhn (in die Hand) versprochen
 Otto-DAT is a hen (into the hand) promised
 (German)

In German, adjectival passives are easily identified: they take the copula *sein* (‘be’) in perfect tense and not a form of *werden* (‘become’) like verbal passives. Trivially, adjectival passive DOCs exhibit unaccusative properties like DPCs. First evidence that DPCs and adjectival passive DOCs are analogous from a structural perspective comes from coordination facts: DPCs and adjectival passive DOCs can be coordinated ‘sharing’ the cipient argument (‘equi NP deletion’). It is a standard assumption that only categorially like constituents can be coordinated under ‘Equi Deletion’:

⁴³In fully blown DOCs, locative prefixes are less needed than in adjectival passive DOCs. Cf. above FN 41.

- (129) Es war ein gemischter Abend.
 It was a mixed evening.
 Otto [war zwar kein Job versprochen], [gefiel aber der Film sehr gut]
 Otto was PRT no job promised, pleased but the movie very much
 ‘Otto hadn’t been promised a job, but he liked the movie very much’
 (German)

From a minimalist perspective, it is unsurprising that DPCs and adjectival passive DOCs should be structurally analogous. As was said in section 1.3.2 above, we assume that agents are licensed by a little *v* head encoding a causative predicate. In adjectival passives, there is no agent projected, hence the null assumption is that a *v* head is not either (cf. (23): ‘Do not build structure that is not interpreted’).⁴⁴ There is general agreement that adjectival passives are not built in syntax: they are considered to be a product of the lexicon (Wasow 1977), (Bresnan & Kanerva 1989). In our setup, this means that there is nothing ‘subtracted’ from adjectival passive forms, it is rather that certain parts of structure are not projected to yield e.g. agentive or causative forms.⁴⁵ There is an issue however in the realm of adjectival passives, pertaining to the status of the theme argument in terms of the external/internal distinction. If there is only a theme argument projected in adjectival passives, it patterns with external arguments, as the ‘was fr split test’ indicates:

- (130) ??Was sind für Vorteile zugesagt?
 What are for advantages to-said?
 ‘What type of advantage has been promised?’

However, if a cipient argument is projected as well, the theme argument behaves like an object, that is, an internal argument:

- (131) (?)Was sind Otto für Vorteile zugesagt?
 What are Otto-DAT for advantages to-said?
 ‘What type of advantage has been promised Otto?’

The ‘external’ behavior of the theme argument in (130) is a reflex presumably of the requirement that ‘sentences have (syntactic) subjects’ that we have seen above, the EPP. If there is only a theme argument present, that theme argument has to become subject. If a cipient argument is projected as well, there is no need for the theme argument to appear externally: the cipient satisfies the requirement that there be a subject (external argument).

The assumption that little *v* licenses agents and encodes a causative predicate allows us to look at adjectival passive structures in the context of DOCs

⁴⁴Cf. Kratzer 1994 for argument that adjectival passive constructions lack an agent argument.

⁴⁵(Kratzer 1994) argues that there are ‘phrasal’ adjectival passives as well, on the basis of the fact that they can be modified by certain manner adverbs which are usually regarded part of the VP. This does not pose a problem if the predicate (VP) level is taken to correspond to the lexical domain, as done here.

and POCs, eliminating the structure that has to do with agentivity/causal force and leaving just what we are interested in. Adjectival passive DOCs and POCs are just DOCs and POCs minus the little *v* head licensing the agent argument and adding causal meaning to unaccusative structures.

‘Possession’

For DOCs, the idea that these encode a relation of ‘possession’ is an old one going back at least to generative semantics where DOCs were commonly decomposed into something like CAUSE-TO-HAVE (cf. for recent revival Harley 1996, cf. in particular section 2.3.3 below).⁴⁶ Postulation of a primitive HAVE relation to account for an alleged ‘possessive’ relation between the cipient and the theme argument is questionable though. For example, one can well say (132-a) but not (132-b):⁴⁷

- (132) a. Anna gave Otto a kick
b. ??Otto had a kick

While predicates occurring in DOCs do typically encode a meaning close to ‘transfer of possession’ (cf. above), we will argue against the idea that cipients and themes are related by a ‘possessive’ relation (reasonably narrowly construed).

Scope

In analogy to what was noted for DPCs above, the theme argument in DOCs cannot take non-surface scope over the cipient argument (known as ‘scope freezing’, cf. Larson 1988, Bruening 2001). Again the PP location easily takes scope over the theme argument in the location construction (POC):

- (133) Otto gave a (?? different) student each piece of cake
(134) a. Otto gave a cookie to every student $\forall > \exists, \exists > \forall$
b. A cookie was given to every student $\forall > \exists, \exists > \forall$

Variation

A look at English vs German DOCs casts doubt on the idea that there is something deep behind why certain ‘ditransitive’ predicates do and others do not allow the DOC realization. The following examples are perfectly parallel from a structural perspective – in English, small scale differences in the interpretation of the theme argument appears to disallow the DOC realization, while German appears to care less to not at all about the semantics of the theme:

- (135) a. She opened Otto the can /?the eyes/?*the world of glamour

⁴⁶Gruber 1964 as well as Verkuyl 1978 analyze possession as essentially location.

⁴⁷Cf. Brandt 2000, 2001 for discussion.

- b. Sie öffnete Otto die Dose/Tür/Augen/Welt des Glamour
 She opened Otto the can/door/eyes/world of glamour
 (German)

The felicity of the DOC realization of a ditransitive predicate decreases with the phonological heaviness of the ‘first object D/NP’, cf. e.g.:⁴⁸

- (136) a. Otto baked me a cake
 b. ?Otto baked a woman ?(on the corner) a cake

In English, loan-words from Romance do not allow the DOC realization in general (known as the ‘latinate restriction’). This is hardly due to semantics or anything ‘deep’, as the full grammaticality of the German analogue shows:

- (137) a. *Otto donated the museum a picture
 b. Otto stiftete dem Museum-DAT ein Bild

Obviously, various factors enter into (dis-)allowing the DOC, including in particular (morpho-)phonological differences between languages (cf. section 3.3.2). There is some variation as well in English as to which ‘object’ may become subject in passive. Thus e.g. Fillmore 1971, Green 1974, Jackendoff and Culicover 1971 as well as Allerton accept also the passive in (138-a), and Allerton 1978 accepts the passive in (138-b) as well:⁴⁹

- (138) a. The book was given Mary
 b. The book was bought Mary

If one looks at a wider range at properties taken to define something like ‘direct object’, it turns out that it is the second D/NP ‘object’ that behaves like a direct object rather than the first.⁵⁰ In languages with some ‘dative’ marking, the ‘first object’ is marked dative and it is the second object that behaves like a direct object with regard to passivization as well (cf. the last footnote). The following are examples of DOCs in various languages, (139) exemplifying German, (140) Greek, (141) Spanish and (142) the Bantu language Ndendeule:

- (139) Otto schickte Anna Blumen
 Otto sent Anna-DAT flowers
 (German)

⁴⁸In addition, person distinctions play a role. First person cipients are more easily available than second person cipients which in turn are more easily available than third person cipients. Cf. section 3.3.2.

⁴⁹Cf. Czepluch 1982 for a collection of judgments from the literature.

⁵⁰Hudson 1992 shows that it is actually the ‘second object’ in English DOCs that exhibits the host of direct object properties rather than the ‘first object’. The criteria used by Hudson include extraction (difficult with and from the ‘first object’), optionality (high degree of optionality with the ‘first object’ (cf. above)), idioms (exclude the ‘first object’ generally, cf. below section 2.2.3), as well as depictives (bad when related to ‘first object’, cf. section 3.4.2.

- (140) I epitropi (tis) xarise tis Marias to vradio
 The committee CL-GEN awarded the Maria-GEN the prize
 (Greek, Anagnostopoulou (to appear))
- (141) Le cocin el pollo a Mario
 CL I-cooked the chicken to Mario
 ‘I cooked Mario the chicken’
 (Spanish, Demonte 1995)
- (142) Juma a- li- m- nunul -i -a m- toto ki- tabu h-iki
 Juma 1SA- PST- 1OA- buy -APP -FV 1- child 7- book this-7
 ‘Juma bought the child this book’
 (Ndendeule (Bantu), Ngonyani 1996)

The examples in (140), (141) and (142) show agreement (in the broad sense) as was seen to be the case as well with DPCs above, realized by a clitic in Greek and Spanish and by a noun-class marker in Bantu. The standard assumption is that agreement between an argument and a verbal predicate is the reflex of a relation that argument enters with the verb-tense complex.

1.4.4 Common Problems

‘Two place unaccusative’ realization with location All of the predicates entering PTCs, DPCs and DOCs have a ‘(two place) unaccusative’ realization, projecting a theme and a location argument (the realization that we call ‘location realization’).⁵¹

Alternation The predicates entering DPCs and DOCs undergo an alternation between a ‘cipient’ and a ‘location’ realization, where the cipient is characterized by agreement (Spanish, Greek, Bantu) and/or ‘bare’ D/NP-hood, while the location surfaces as a PP usually. PTCs appear in two different realizations as well, although this is not marked morphologically and seems to involve just fronting of the location argument (locative inversion).

The differences in meaning between the respective realizations may be quite dramatic sometimes, sometimes hard to see (the latter is the case across the board in PTCs):

- (143) a. The solution escaped Otto
 b. ??The solution escaped from Otto
- (144) a. Otto escaped jail
 b. Otto escaped from jail
- (145) a. Nixon gave Mailor a book
 (handed a book to Mailor vs.
 made it possible for Mailor to write a book)

⁵¹That PTCs comprise a location argument is sometimes proposed now (cf. e.g. Bende Farkas and Kamp 2001), but never argued for for all that we have seen.

- b. Nixon gave a book to Mailor
(handed a book to Mailor)
(Oehrle 1976)
- (146) a. There is a man in the garden ((?)pointing gesture)
b. In the garden is a man ((?)no pointing (reporting))

Shared distribution and features of *there* and *cipients* Across languages, what we call a ‘cipient’ argument appears to be licensed with precisely the predicates that enter presentational *there* constructions as well – this is a fact to be accounted for. As the following examples show, the mere surface difference between a PTC and a DPC is often the presence of the cipient argument:

- (147) a. Umrja kon
died horse
‘There died a horse’
b. Umrja mu kon (na Ivo)
died to-him horse (to Ivo)
‘A horse gave up on Ivo’
(Bulgarian)
- (148) megjelent (nekem) egy szellem a kertben
perf-appeared-3sg (me-DAT) a ghost-NOM the garden-in
(Hungarian)
- (149) a. E apparso un phantasma
is Appeared a ghost
‘There appeared a ghost’
b. A Gianni e apparso un phantasma
to John is appeared a ghost
‘to John appeared a ghost’
(Italian)
- (150) a. hofi’a is ba- gina
appeared man in-the- garden
‘There appeared a man in the garden’
b. hofi’a li is ba- gina
appeared man to-me in-the- garden
‘There appeared a man in my garden/?in the garden I was in’
(Hebrew)
- (151) a. utekl pes (do ulice)
ran-away dog (into street)
‘There ran away a dog (into the street)’
b. utekl mu pes (do ulice)
ran-away to-me dog (into the street)
‘There ran away a/the dog (into the street) on me’ (Czech)

A striking example of the vicinity of (analogues of) *there* and cipient arguments is provided by a pattern from Italian. In (dialects of) Italian, the clitic *ci* largely corresponds to English *there*. Thus we have *Ci vado* (“I go there”) and *C’ è un huomo nel giardino* (“There is a man in the garden”). Strong evidence for the kinship between cipients and *there* comes from patterns such as the following:

- (152) a. Spedisce una lettera a noi
Sent-3rd-sg a letter to us
b. Ci spedisce una lettera
{to-us, ?there} sent-3rd-sg a letter
c. *? Ci spedisce a noi
{to-us, there} sent-3rd-sg to us

The example in (152-a) with the locative clitic *ci* but no overt dative D/NP is ambiguous: It can either mean that *he sent a letter there* or that *he sent a letter to us*, where the latter reading seems to be preferred.⁵² (152-c) shows that the locative clitic *ci* cannot replace the direct object.

Patterns as exemplified in the following pair from German support the vicinity of cipient D/NPs and the element *da* (‘there’) – for syntactic well-formedness, it does not appear matter whether an elementary clause contains just *da*, *da* and a cipient D/NP or just a cipient D/NP:

- (153) a. Da wurde erzählt [_{CP} dass Otto geheiratet hat]
There was told [_{CP} that Otto married has]
b. Mir wurde (da) erzählt [_{CP} dass Otto geheiratet hat]
Me-DAT was (there) told that Otto married has]
(German)

The theta problem It is unclear how cipients are licensed thematically, as is the status of *there* from the perspective of argument structure. While cipients behave like core arguments in the constructions they occur in, there is strong reason to doubt that they are selected by the lexical predicate like e.g. themes (cf. in particular section 2.2). The main proposals as to how cipients are licensed are:

1) Cipients are PP locations that have undergone a syntactic transformation (Larson 1988, argued against in section 2.1.2 in particular)

2) Cipients are licensed by a primitive possessive relation (the generative semantics tradition), encoded by an applicative head (Marantz 1993 ff) and/or licensed by a transformation of ‘possessor raising’ that turns an ‘internal’ into an ‘external possessor’ (e.g. Szabolsci 1994, Landau 1999).

⁵²Cf. (Pinto 1997) who notes highly reminiscent phenomena with postverbal subject constructions in Italian. Pinto argues that Italian PTCs comprise a covert locative element in subject position. It is interesting to note as well that the interpretation associated is first plural, which makes sense if what is interpreted is the speaker/hearer’s ‘here and now’ (the thing that is presupposed in / provides the anchor for any utterance).

These proposals are problematic for reasons discussed in particular in sections 2.3.3 and 3.1.2.

The position problem More traditional phrase structure formats do not provide a straightforward structural position for the cipient argument, nor for the element *there*. Problems with existing proposals in more developed phrase structure formats are discussed in particular in section 2.3.

The case problem It is an old question whether the case marking on cipients corresponds to ‘structural’ (structure/configuration-dependent) or ‘inherent’ (theta dependent) case (cf. for recent discussion Steinbach and Vogel 1998). The case associated with cipients shows properties of being structural, at the same time it is clearly related to semantics.

The ‘possession’ problem Across languages, PTCs are expressed with means used as well to express concepts pertaining to ‘possession’. DPCs and DOCs encode some kind of ‘possession’ relation between the cipient argument and the theme. There is no good answer yet as to how this arises (cf. ‘the theta problem’ above).

The scope problem There is a crosslinguistically robust binding and scopal asymmetry between the cipient argument on the one hand and the theme and location argument on the other hand: cipients have to be interpreted with scope wider than that of themes. So far, this asymmetry resists explanation.

Chapter 2

Cipient Predication in PTCs, DPCs and DOCs

This chapter argues that cipients are licensed as subjects of predication: The unit in which cipients are licensed corresponds to a fully fledged proposition comprising the cipient as subject and the VP meaning – a thing at a location – as predicate. The information as to when the propositional meaning holds of the cipient we propose to be supplied by the cipient itself.

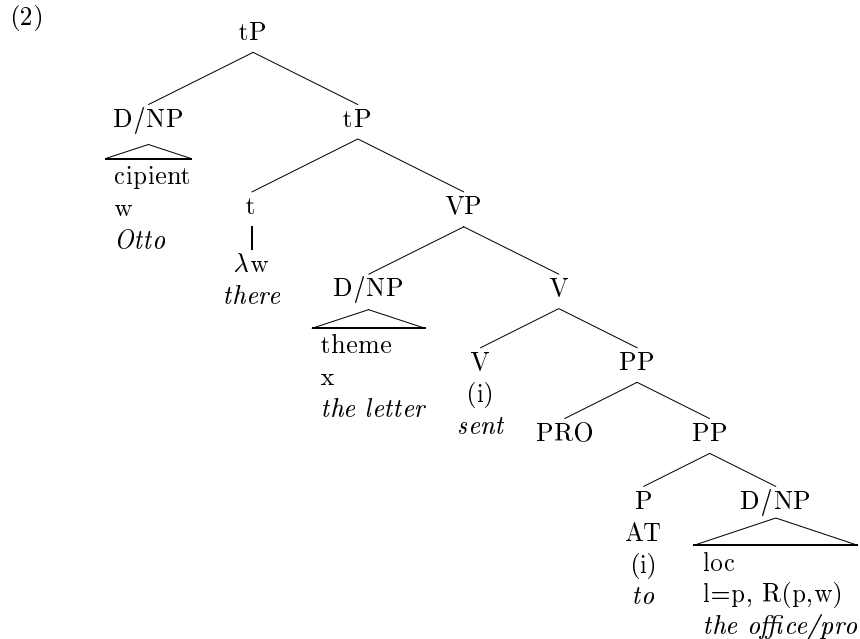
We first give the analysis proposed here in some more detail, focussing on which part(s) of structure furnish(es) which part(s) of the semantic representation in terms of operator-variable structure. We show next that cipients and location arguments may cooccur, arguing against a Larsonian ‘dative shift’ type of analysis of the cipient construction. Section 2.2 presents a number of asymmetries holding between the cipient argument on the one hand and the theme and location argument on the other, pertaining to the scope of presupposition triggering adverbs and temporal interpretation, binding, a number of ‘word building’ asymmetries as well as referential asymmetries. We argue that these asymmetries follow from cipients being subjects, syntactically (external, licensed by tense) as well as semantically (definite/presuppositional, cf. section 1.3.4). Section 2.3. argues that an analysis according to which cipients are licensed by material pertaining to the tense system – the category *t* – is superior to existing proposals as to how cipients are licensed, focussing in particular on ‘applicative’ analyses (Marantz 1993 and followers). It is argued finally that a natural account of the blocking effects associated with the presence of cipients can be given on the basis of the hypothesis that cipients are logical subjects and as such provide the index ‘proving’ the propositional meaning figuring as their predicate.

2.1 Propositional predicates licensing Cipients

The section heading sounds like a contradiction: By definition, a propositional meaning corresponds to a saturated structure, while a predicate corresponds to an unsaturated structure. This is the core of the analysis already: the unit playing the role of predicate in cipient predication – the VP hosting a theme and a location argument – is saturated, so something extra has to happen in order to turn it into a predicate. We propose that the VP, hosting a theme and a location argument, translates into a representation as in (1) in terms of operator-variable structure:

$$(1) \quad \text{VP} \rightsquigarrow \exists p \text{ AT}(x,p,i) \ \& \ p=l \ \& \ \text{R}(p,w) \quad [=thingatloc]$$

The verb and the location argument in combination with the theme furnish a propositional meaning corresponding to the theme argument's referent being located at the location argument's referent at an index (we largely ignore other meaning components such as e.g. manner). For convenience, we will in the following refer to the representation to the right of the squiggly arrow in (1) with the term 'thingatloc'. When we say 'thingatloc meaning', we mean the denotation of the sentence to the right of the arrow in 2.2.1, with an existentially quantified location variable (p) and the free variables l,w,x and i related to this variable, to be commented on presently. The representation in (2) on the next page shows again the overall predication in its relation to the syntactic structure we argue to encode it:



(with x ranging over individuals, p, l and w ranging over (sum-)locations, AT a primitive overlap relation, i an index)

We will elaborate on the variables, the relations they entertain and their values throughout (cf. in particular section 3.3.1), but first comment as to the origin and nature of the variables and the relations they entertain is in order.

p, l and **w** range over locations. We assume that locations are ordered by part structures: individual locations can be combined by a sum operation, yielding ‘bigger’ individual locations (cf. Link 1983, Krifka 1998, section 3.3.1).

The p variable is existentially quantified, as a property of the construction: Cipient predication constructions comprise a location argument (cf. section 3.2).

The l variable is related to p through identity, but free. It provides the slot for PP complements (syntactically expressed location arguments).¹

The w variable is related to p through a relation R that can be instantiated in different ways (cf. section 3.3). The least we require of R is that it encode inclusion (\leq , “less than or equal to”) of p in w . It is maybe natural to assume that R_{\leq} ‘comes free’ given that locations are monotone increasing: Something that is at a location is also at a superlocation of that location. The w variable forms the base of predication and provides the slot for the cipient argument.

¹Saying that ‘ $l = p$ ’ is equivalent as far as I can see to assuming a semantic operation of excorporation defined by Dekker 1993. Excorporation turns an existentially quantified variable into a free variable.

x ranges over ‘ordinary’ individuals, including traditional objects as well as abstract objects and portions of matter. The **x** variable is restricted by the theme argument expression. Syntactically, the ‘AT’ relation that **x** entertains to the location variable is expressed as the theme argument obligatorily controlling a PRO in the specifier of PP locations.²

i corresponds to an index determining a context. We assume that the basic indexing system in natural language is the tense system, being indexed entailing being tensed. Indices can then be taken to be abstractions from times.³ While we argue that it is the location argument that predominantly supplies the **i** variable in our cases, the verb may have a part in furnishing **i** as well (which is why we write ‘(i)’ under the verbal node).⁴ It is the tense system that is responsible for determining the value of **i**. In particular, the value of the **i** variable is comprised in the ‘second’ interval at the reference time level. R-splitting is encoded on the category **t**, and one may say that **t** ‘binds’ **i**. We assume that like locations, indices have part structure: Indices can be summed yielding ‘bigger’ indices (cf. section 3.3.1).

AT is a semantically primitive relation which we may take to denote overlap.⁵

The λ operator binds the **w** variable, forming the characteristic function of superlocations **w** of **p** such that something is at **p** at an index. Conversion is with the cipient argument, yielding a proposition (a unit of predication comprising an independent tense/index, cf. section 1.3.4). Lambda conversion is meaningful only given a domain and range specifying which elements yield truth or falsity when given to the characteristic function as arguments.⁶ The domain is determined by an index, the value of the index is in turn dependent on tense and the context of utterance in natural language. We argue that as a logical subject expression, the cipient is definite/presuppositional (cf. section 1.3.4, section 2.2.4). Interpreting definiteness as carrying a certain (sum) index, we propose that the cipient restricts the possible values of the **i** variable. Converting the predicate formed by the lambda operator with the cipient not only saturates the ‘syntactic’ predicate then but also narrows down the range of the **i** variable. The locus of lambda abstraction is the **t** head, hosting the

²That prepositions encode many-place relations is a standard assumption, cf. e.g. Keenan and Faltz 1985, Hale and Keyser 1993. Cf. Rosenbaum’s 1967 proposal that in obligatory control, the value of PRO is determined by the first *c*-commanding D/NP (The ‘Minimal Distance Principle’ (MDP)).

³Cf. Husserl 1928. Taking the opposite perspective, Verkuyl (e.g. 1993) takes times to be instantiations of more abstract (rational) number structures.

⁴According to Verkuyl 1993, the verb is the sole supplier of indices. PP locations, however, are argued by Verkuyl to provide an ‘upper bound’ to sets of indices, a ‘set terminal point’.

⁵Cf. Quine’s 1960:172 slogan that ‘red wine is red at wine [at **t**]’.

⁶Cf. Reichenbach 1947:80ff for enlightening discussion.

element *there*. We will elaborate on the way the cipient combines with the thingatloc meaning presently in section 2.2.1 and later in section 3.3.1.

Concerning the composition of the verb, the location and the theme argument, our proposal combines features of ‘small clause’ and ‘complex predicate’ analyses: On the one hand, the predicate in cipient predication corresponds to a unit encoding a propositional meaning but lacking tense – this is what small clauses are generally taken to be. The unit on the basis of which the predicate licensing cipients is formed corresponds to an undetermined thing being at a location at an undetermined time. There is an index (time), but it is not determined (there is no tense): the predicate licensing cipients is an ‘indefinite small clause’.⁷ We want to assume however that the propositional unit corresponding to a thing at a location arises not through syntactic merger but in a process of complex predicate formation that involves features of the verb, the (PP) location as well as of the theme argument.

The idea that there are special means to combine verbs with location arguments is by no means new. Marantz 1984 argues that in structures analogous in the relevant respects to the ones investigated here, the verb and the preposition of the PP complement theta mark the DP complement of the preposition together. In Marantz’ words, with predicates involving PP complements the theta role assigned by the preposition is ‘matched’ with a role in the theta grid of the verb (the theme role). Similarly, Larson 1988 argues on the basis of idioms that the semantic relation between the verb and the PP in ditransitive constructions is particularly close. Verbs and their PP complements enter idiom formation frequently, idiom formation standardly taken to be a lexical process. Neeleman 1997 and Neeleman and Weerman 1998 argue that a process of preposition incorporation at the level of semantic interpretation (LF) constructs a complex predicate out of the verb and its prepositional complement, which is possible only if the two entertain a strictly local relation (sisterhood/direct c-command). The complex predicate takes the theme as its argument. Again, there is a particularly close relation between verbs and prepositional phrases.⁸

It has been argued by in particular Hoekstra 1988 that in structures analogous to those investigated here, the theme and the location argument combine to yield a ‘small clause result’ meaning. A strong reason to assume that the

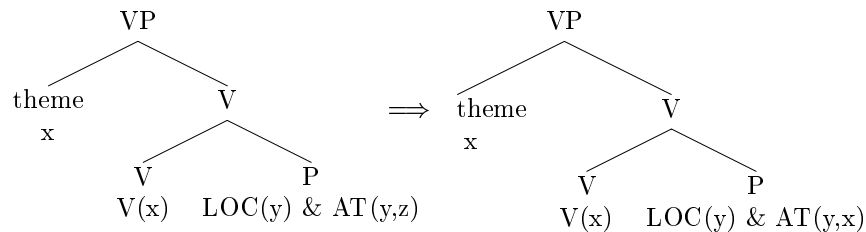
⁷The term ‘indefinite small clause’ is borrowed from McNally’s 1997 discussion of Stowell’s 1978 small clause analysis of PTCs, cf. section 3.2.

⁸Neeleman 1997 and Neeleman and Weerman 1998 give a range of empirical arguments in favor of the hypothesis that the D/NP part of what we call location arguments are licensed by the verb and the preposition together. First, if preposition incorporation is a necessary condition for the licensing of PP complements, it follows that there are no ‘external PPs’. The structural relation between an external argument and the verb is not local enough for incorporation to apply. Second, it follows that crosslinguistically, there seem to be no verbs selecting two PP complements. If branching is binary, there is no way in which two prepositions could at the same time entertain a local enough relation to the verb in order to incorporate into it. Third, coordination of a PP complement with a DP complement is excluded. On the assumption that coordinated phrases are headed by a separate head, again this head would block the kind of local relation needed for preposition incorporation to apply.

location and theme argument enter a relation at the level of VP argument structure lies in the fact that location arguments appear to license theme arguments that are quite clearly not part of the verb's argument structure as such:

- (3) a. *?He washed the soap
 b. He washed the soap out of his eyes
- (4) a. Otto blinked the gangster *(into the living room)
 b. Otto snored his wife *(into despair)

The locus of idiom formation is generally taken to be the lexicon – more neutrally, the lexical domain – as are operations affecting VP argument structure. We assume for concreteness that the VPs under consideration here have the structure in (2) above, with the theme in the specifier of VP position and the PP location the complement to the verb. The thematic link between the theme and the PP location is represented by an obligatorily controlled PRO in the specifier of PP projection. Following a proposal by Higginbotham 1985, we assume that the thematic requirements (argument variables) of verbs and prepositions may be ‘fused’ by a process of ‘theta identification’. The input and output respectively of this process is shown in the following trees, where (simplified) LF representations are written below the terminal nodes as in (2) above:⁹



In sum, we rely on a fundamental distinction between ‘lexical’ and ‘functional’ ways of composition. The verb, theme and location may combine in the lexical domain (the VP), yielding a relation with a free index.¹⁰ The cipient on the other hand is licensed by functional material pertaining to the tense system, establishing the (temporal) reference of propositional meanings. Section 2.2 presents evidence in favor of a strong lexical/functional asymmetry between themes and locations on the one hand and cipients on the other hand.

At this point, we should say more about how we conceive of the predication (lambda abstraction over *w* and conversion with the cipient) in its connection to indexing.

⁹We leave out the index variable in the representation for perspicuity.

¹⁰We will see evidence below that the lexical domain may actually correspond to vP rather than VP, cf. sections 2.2.3, 2.2.5, 4.1.2.

2.1.1 Expletivization and domain subjects

The VP structure corresponding to the thingatloc meaning is saturated in that it comprises no ‘open’ variables (= variables abstracted over). The location variable is existentially quantified, as a property of the construction. All other variables are free:

$$(5) \quad \text{VP} \rightsquigarrow \exists p \text{ AT}(x,p,i) \ \& \ p=l \ \& \ \text{R}(p,w) \quad [=thingatloc]$$

x corresponds to the slot for themes, l to that of PP complements. The features of the verb, theme and location that combine into the thingatloc meaning compose in the lexical domain, the VP (cf. above).¹¹

The variable that serves as the base for cipient predication, w , is abstracted over at the t level and a predicate is thus formed. The cipient argument saturates the predicate, yielding a proposition, a tensed ascription relation. We propose that the cipient interacts with the tense system in restricting the possible values of the i variable: the cipient is interpreted among other as a set of indices (sum index) comprising the i variable.

The process that we propose to achieve the actual predicate formation bears considerable similarity to a process of ‘expletivization’ as employed by Chierchia 1989 (unpublished manuscript) for unaccusative predicates, which it is useful to briefly sketch. Chierchia designs expletivization as a way out of a dilemma posed by unaccusative predicates: Unaccusative predicates take their argument(s) predicate (VP) internally, so all argument slots are saturated already at the predicate (VP) level. If sentences express predication relations and if predicates must have subjects (the predication principle, cf. section 1.3.4), the question is how predication can ever come about with unaccusative predicates which provide no (external) argument slot that could be saturated above the VP level. Chierchia’s proposal is that in these cases, such a slot is created by the expletivization operation, which needs some background though to be understood.

Chierchia 1989 assumes that the domain of quantification comprises properties π and propositions p , as well as ‘ordinary objects’ e as individuals (cf. Chierchia and Turner 1988 for explicit formalization). Predicates are derived from properties by an operation of predication which Chierchia assumes to be associated with INFL (Tense):

$$(6) \quad \text{Predication (P): } \pi \rightarrow \langle e,p \rangle$$

What predication does then is turn a property (individual) into a function (set), a predicate of ‘ordinary’ individuals. This predicate is then saturated

¹¹Following Chomsky 1998ff, we assume that from the lexicon, an array of elements is selected into a numeration that forms the input to syntactic computation (throughout, we understand ‘elements’ to be sets of more primitive features). To the extent that the features combined by theta identification are needed for further computation, there will be two copies of the respective features selected.

by the subject in Spec, INFL. Predication cannot turn unaccusative VPs into predicates since these are of the type of propositions p for which predication is not defined. This is where Expletivization, given in (7), comes into play:

- (7) Expletivization (E):
- a. $p \rightarrow \pi$
 - b. $\text{Pred}[\text{E}(p)](\perp) =_{def} p$
 $\text{Pred}[\text{E}(p)](x) =_{def} \text{undefined for } x \neq \perp$

Expletivization turns a proposition into a property which can then be the input to the operation of Predication. Chierchia defines expletivization such that only a particular type of argument can satisfy the predicate created, calling this argument the ‘funny individual’. Drawing on earlier montagovian treatments (cf. Barwise and Cooper 1981, Keenan 1987), the denotation of this ‘funny individual’ is taken to correspond to the domain as a whole: The funny individual is one that has every property. Ascribing a property to the ‘funny individual’ is therefore meaningless and leaves truth conditions unaltered.¹²

The important parallels between Chierchia’s operation of expletivization and our proposal are the following:

- A A propositional meaning encoded in the lexical domain (vP/VP) is turned into a predicate
- B The predication is established by material pertaining to the tense system
- C The proposition resulting from expletivization and ensuing predication has a ‘domain subject’: the subject determines the domain of quantification.

What are the differences? As to A, we require there to be a location argument projected for the process of predicate formation here relevant to be applicable. It is location arguments that furnish the variable w to be abstracted over. If location arguments come with an open slot for a theme that needs to be saturated syntactically, only thingatloc propositional meanings can be the input to cipient predicate formation.

¹²Chierchia’s proposal builds on existing characterizations of ‘intersective’ D/NPs from the generalized quantifier literature, which are those for which the following equivalence is valid:

- (i) $Q(A,B) = Q(E, A \cap B)$

In words, intersective D/NPs are those which can be replaced by a GQ consisting of the domain as the first (‘subject’) set and the intersection of the noun set and the predicate set as the second set. The first set in a PTC is the ‘universal property’ (‘existing’/ ‘being in the domain’). A sentence such as (ii) can be paraphrased in two equivalent ways:

- (ii) A man slept
- a. Something is a man and slept
 - b. Something is in the domain that is a man and slept

As to B, while we assume as well that it is material pertaining to the tense system that establishes the predication relation, we argue that this is not ‘standard T’ (\approx INFL) that establishes the predication relation, but a lower temporal projection relating to reference time, namely the category ‘little t’.

As to C, we build on the idea that the proposition resulting from expletivization is in a sense ‘about’ what is quantified over (the domain of quantification). The additional idea is that the subject of predication determines the domain of quantification itself. Following the tradition tying PTCs to ‘awareness’ (cf. section 1.4.1) and adopting more recent ideas of Kratzer 1994, Kiss 1996 and similarly Basilico 1997, we argue that in the case of PTCs uttered out of the blue, the logical subject of predication corresponds to the speaker/hearer’s ‘here and now’ (‘there and then’ in past tense), something that is always given with the utterance. In other words, the domain of quantification is the utterance context in the case of PTCs.¹³ In case there is a cipient projected, we propose that it is the cipient referent that determines the domain of quantification relevant for cipient predication: Following ideas of Carnap 1928 and Goodman 1951, we assume that being definite/presuppositional, the cipient has indices (hence contexts) associated with it.¹⁴ We defined definiteness as follows in section 1.3.4:

- (8) An expression is semantically definite/presuppositional iff interpreting it involves checking an existential presupposition on the part of the speaker

We present evidence below (section 2.2.4) that interpreting cipients does involve checking an existential presupposition on the part of the speaker. A presupposition is by definition part of some context (as determined by an index), hence interpreting cipients involves reference to context(s) (indices). In effect, the variable w has a double status under the proposal made here: At the object level, it corresponds to an index in model-theoretic semantics at the interface to semantic/pragmatic interpretation: Cipient predication is a function from an index coming with the cipient and a propositional meaning (thingatloc) to truth or falsity. We have (with w the cipient, p the location argument and g a variable assignment) what is given in (9):

¹³Alternatively, the domain of quantification can be determined by a contextually given (sum)location, cf. below). Matters are complicated as well in the case of past temporal reference, which is anaphoric rather than deictic. Further, there are ‘eternal truths’ that appear to be independent of utterance context:

- (i) $2 + 2 = 4$

these ‘eternal truths’ are however usually such that they can be checked on the basis of the utterance context if one assumes that ‘common knowledge’ is in there.

¹⁴Cf. Carnap’s 1928 definition of ‘individual’ as something having temporal extension, cf. Goodman’s 1951 slogan that ‘individuals have times in them’.

- (9) ‘Cipient/there be D/NP (at LOC)’ = 1 iff $\llbracket \text{D/NP} \rrbracket^{w,g} \in \llbracket \text{AT p} \rrbracket^w$
 where either (a) or (b):
- a. w = ‘here and now’ or a co(n)textually given (sum)location (PTCs)
 - b. w = (prominent) part of the cipient interpretation (DOCs and DPCs)

Both PTCs and the cipient constructions have ‘domain subjects’, computed deictically (anaphorically) in the case of PTCs and computed on the basis of a structurally represented definite individual in the case of the cipient construction. In (9), while the denotation of the theme D/NP is dependent on a variable assignment, this is not so for the denotation of the predicate formed of the location argument and the AT relation. The denotation of this predicate hinges merely on the cipient (the value of the w variable). To repeat, w and $l (=p)$ are related by a relation R that encodes at least inclusion of $l (=p)$ in w . The value of the location variable is therefore given with the value of the cipient variable w .

According to our proposal, the relation between the cipient and the location argument is semantic, as opposed to the view that locations and cipients (goal/beneficiaries) are different syntactic realizations of one and the same semantic role (cf. section 1.3.3). We turn now to arguing against the view that cipients and location arguments realize the same semantic role and are related by a syntactic transformation.

2.1.2 Cipient and Location alternation and Cooccurrence

We argue that both PP complements and cipients depend on the projection of a location argument. If this is so, it is straightforward that the predicates we are looking at should exhibit the alternation that was seen in the first chapter: Both PP complements and cipients are dependent on the same thing. Further, we predict that cipients and location arguments should be able to cooccur in one syntagma: Nothing prevents both a PP location complement and a cipient from being realized at once (although other (PF) factors may interfere). PP locations and cipients do occur in one and the same structure, and this is a serious problem for the type of analysis most prominently proposed by Larson 1988.

According to the ‘Larsonian’ analysis (Chomsky 1955/75, Kayne 1983, Larson 1988, Den Dikken 1995, Baker 1996), PP location complements and ‘first object’ D/NPs in ditransitive constructions are realizations of one and the same thematic role ‘goal/beneficiary’, related by a syntactic transformation best known as ‘dative shift’.¹⁵ If there is a rule for ‘dative shift’, the fact that ditransitive predicates by and large have two different structural realizations is understandable. The following are examples from various languages, where

¹⁵Oehrle 1976 is an early exception to this line, discussing the possibility that the ‘PP realization’ and the ‘dative realization’ of ditransitive predicates are the consequence of a lexical rewrite rule changing the subcategorization frame of ditransitive predicates.

in each pair the first example illustrates the DOC realization and the second example the POC ('prepositional object') realization:

- (10) a. Otto sent Anna flowers
 b. Otto sent flowers to Anna
- (11) a. Otto schickte Anna Blumen
 Otto sent Ann-DAT flowers
 b. Otto schickte Blumen zu/nach/an Anna (hin)
 Otto sent flowers to/to/at Anna (hither)
 (German)
- (12) a. Le cociné el pollo a Mario
 CL I-cooked the chicken to Mario
 b. Cociné el pollo para Mario
 I-cooked the chicken for Mario
 (Spanish, Demonte 1995)
- (13) a. Tu edosa tu Janni to vivlio
 Cl-GEN gave-I the John-GEN the book
 b. Edosa to vivlio s-ton Janni
 gave-I the book to-the John
 (Greek)
- (14) a. Juma a- li- m- nunul -i -a m- toto ki- tabu h-iki
 Juma 1SA- PST- 1OA- buy -APP -FV 1- child 7- book this-7
 'Juma bought the child this book'
 b. Juma a- li- nunul -i -a wa- toto vi- tabu
 Juma 1SA- PST- buy -APP -FV 1- child 8- book
 'Juma bought books for children' (Ndendeule (Bantu), Ngonyani 1996:197f)

In Germanic, there is a realization where the 'goal/beneficiary' surfaces as a bare D/NP occurring to the left of the theme argument – this is what we call the *cipient* construction. There is another realization where the 'goal' surfaces as a PP and to the right of the theme argument – this is what we call the location construction. In Spanish, Greek and Bantu, the 'goal/beneficiary' (our *cipient*) in what has been argued to correspond to the DOC shows agreement, understood in a broader sense covering clitic doubling (Spanish, Greek) and noun-class agreement (Bantu). In addition, there is a realization without agreement, where the 'goal/beneficiary' appears as a PP (except for Bantu, argued not to feature prepositions in the common sense). This PP realization has been argued to correspond to the Germanic POC (cf. the references given with the examples).

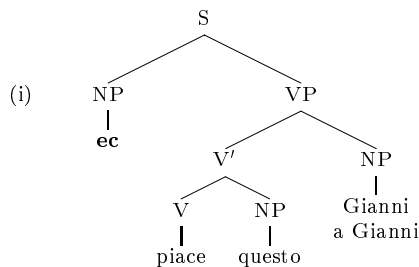
There is an analogous alternation pertaining to predicates of the ‘*piacere*’ type of Belletti and Rizzi 1988. The following pairs illustrate this, examples given for English, German, Spanish and Greek:¹⁶

- (15) a. A gangster escaped Otto
 b. A gangster escaped from Otto
- (16) a. Einem Propheten erschien ein Heiliger
 A prophet-DAT appeared a saint
 b. Ein Heiliger erschien bei einem Propheten
 A saint appeared at a prophet
 (German)
- (17) a. A Otto le apareció un error
 To Otto CL appeared a mistake
 b. Apareció un error à Otto
 Appeared a mistake to Otto
 (Spanish)
- (18) a. To vivlio tis aresi tis Maria
 The book CL-GEN appeals to-the Mary-GEN
 b. To vivlio aresi s-tin Maria
 The book appeal to-the Mary
 (Greek, Anagnostopoulou (to appear))

As in the case of ‘ditransitive’ predicates, there is a ‘bare’ and/or ‘agreeing’ realization of the ‘experiencing’ argument – our ‘(per-)cipient’ realization (cf. the (a) examples), and a PP location realization. While the ‘dative alternation’ has received a lot of attention in the case of ‘ditransitive’ predicates from early on (cf. the references given in chapter 1.4.3), it has been missed largely in the case of ‘experiencing’ predicates.¹⁷

¹⁶In some dialects of English, it appears *escape* has lost its ‘physical’ meaning and acquired a meaning similar to that of *forget*. We ignore this in the following.

¹⁷The standard analysis of unaccusative ‘experiencing’ predicates with dative arguments – that of Belletti and Rizzi 1988 – remains silent on the alternation that the predicates entering it undergo. Under B&R’s analysis, predicates such as *appartenere* (‘belong’) and *piacere* (‘appeal to’, ‘please’) project an unaccusative structure with two internal arguments, an ‘experiencer’ and a theme:



The two respective ‘goal/beneficiary’ and/or ‘experiencer’ realizations – the cipient realization and the PP location realization that is – are not exclusive of each other. The two realizations may peacefully coexist in one syntagma, as shown in the following examples for English and German respectively (cipients are subscripted ‘cip’, locations ‘loc’):

- (19) a. The enemy escaped us_{cip} [into the thick of the battle] $_{loc}$
 b. Otto sent $Anna_{cip}$ flowers [TO HER OFFICE] $_{loc}$

The examples in (19) need marked focus intonation to be felicitous, but they are grammatical. More natural English examples that parallel (19-b) are maybe the following (note that the PP location denotes a bodypart of the cipient here):

B&R propose that either the theme or the ‘experiencer’ may move into the position indicated by ‘ec’ (there is no motivation given for what should move why). The experiencer argument is inserted higher than the theme at base, although within the verbal projection. This captures the fact that the experiencer may bind into the theme argument:

- (ii) a. A Gianni $_i$ piace chiunque accetti le proprie $_i$ idee
 to Gianni pleases whoever accepts his own ideas
 b. *Gianni $_i$ piace a chiunque accetti le proprie $_i$ idee
 Gianni pleases to whoever accepts his own ideas
 (Italian, Belletti and Rizzi 1988)

The (crucial) example that B&R give as evidence for the asymmetric c-command relation between ‘experiencers’ and themes is questionable since it comprises a proper name for the experiencer argument. Proper names take widest scope semantically and hence could ‘bind’ the pronoun by some discourse mechanism. Further, the pronoun B&R use is a ‘long distance’ anaphor that needn’t be bound in the local syntactic domain. It is particularly likely for long-distance anaphora that these are bound by discourse operations and not syntactically. Looking at standard binding cases with universally quantified antecedents and possessor pronouns, it can be seen that each of both arguments can bind the other (data from Raffaella Bernardi and Paola Monachesi p.c.):

- (iii) a. [A ogni padrone] $_i$ é sfuggito il proprio/suo $_i$ cane
 [To every master] $_i$ is escaped his $_i$ dog
 ‘His dog escaped every master’
 b. [Ogni cane] $_i$ é sfuggito del proprio/suo $_i$ padre
 [Every dog] $_i$ is escaped from its $_i$ master
 ‘Every dog escaped from its master’

As cannot be seen in Italian but as will be shown in section 2.2.2 for German, Spanish and Greek respectively, the respective binding patterns go along with the ‘bare/agreeing’ (=cipient) realization of the ‘experiencing’ argument and its PP (=location) realization respectively: The cipient (bare/agreeing realization) can bind syntactically the theme argument but not the other way around. Only the PP location can be syntactically bound by the theme argument. It will be shown in section 2.2.2 that this is completely parallel to the case of ‘ditransitive’ predicates, where the ‘bare/agreeing’ (re-) cipient can bind the theme but not vice versa, and the theme can bind the PP location. Cf. as well Pesetsky 1995 for discussion of B&R’s analysis. Pesetsky shows that the analysis is restricted to B&R’s ‘class III’ predicates (*piacere*, *sfuggire*, *appartenire*...) but cannot be correct for their ‘class II’ predicates (*temere*, *preoccupare*...), for which it was designed as well.

- (20) a. Anna gave Otto_{cip} a punch [in the face]_{loc}
 b. Otto shot him_{cip} a bullet right [between the eyes]_{loc}

In German, structures with a bare dative and a PP ‘goal’ – a cipient and a location that is – are perfectly natural:

- (21) a. Der Mann entkam der Polizei_{cip} [in den Wald]_{loc}
 The man escaped the police into the woods
 b. Otto schickte Anna_{cip} Blumen [ins Büro]_{loc}
 Otto sent Anna flowers into-the office
 (German)

Analogous ‘cipient and PP location’ constructions appear to be available in diverse languages. The following are examples from Hungarian (Kriszta Szendroi p.c.) and Norwegian (/O ystein Nilsen p.c.):

- (22) Elküldtem Hansnak a levelet az irodájába
 prt-sent-I Hans-DAT the letter the office-his-to
 (Hungarian)
 (23) Jeg sendte Hans brevet til kontoret hans
 I sent Hans letter-the to office-the his
 (Norwegian)

How do we know that the PP locations in these examples are the same thing as the location arguments in the ‘PP location only’ construction and not something else, say adjuncts? The most straightforward evidence comes from German, where the D/NP complements of (directional) PP location arguments bear accusative case, an option that is excluded for adjuncts (cf. (25)):

- (24) Otto entkam [in den Wald]
 Otto escaped into the woods_{ACC}
 (German)
 (25) Otto entkam [im Wald]
 Otto escaped in-the woods_{DAT}
 (German)

Tests that have been proposed to distinguish location arguments from adjuncts support the conclusion that the PP locations in the examples have argument status. For example, *do so* substitution cannot strand location arguments but adjuncts (cf. Bresnan 1994), the examples patterning accordingly:

- (26) a. Otto sent Anna flowers in Spain and Ede did so in England
 b. *Otto sent Anna flowers into the office and Ede did so into the gym

In English, the PP complement can (marginally) undergo locative inversion, a trait of location argumenthood (cf. Bresnan 1994):

- (27) a. ?Into the office was she sent a loveletter
 b. *In the office was she sent a loveletter
- (28) a. ?Into the woods escaped me the enemy
 b. *In the field escaped me the enemy

Fronting under WH is possible with location adjuncts but not arguments (Reinhart 1983). The PP locations in the examples pattern with location arguments:

- (29) a. ?In the office, who was sent a letter?
 b. *Into the office, who was sent a letter?

In Dutch, PP location arguments can only occur to the left of the verb in verb-final structures, while PP location adjuncts may appear as well on the right of the verb. In examples analogous to those above, the PP location can only appear to the left of the verb, supporting its argument status:¹⁸

- (30) a. ?Jan heeft Piet een briefje op zijn huisadres gestuurd
 Jan has Piet a letter to his homeaddress sent
 b. *Jan heeft Piet een briefje gestuurd op zijn huisadres
 Jan has Piet a letter sent to his homeaddress
 (Dutch)

The analogous pattern holds in German:

- (31) a. Otto hat Anna Liebesbriefe ins Büro geschickt
 Otto has Anna loveletters into-the office sent
 b. ?*Otto hat Anna Liebesbriefe geschickt ins Büro
 Otto has Anna loveletters sent into-the office
 (German)

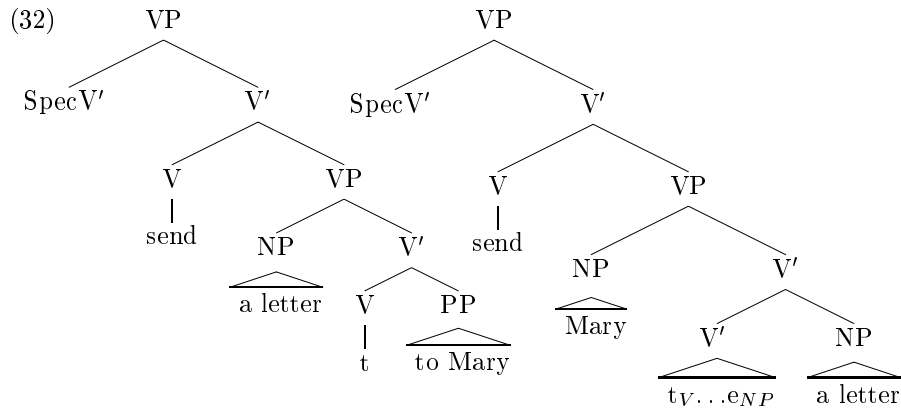
In sum, it turns out that the ‘first object’ D/NP and the PP allegedly realizing the same thematic role ‘goal/beneficiary’ are anything but in complementary distribution. This is however what the Larsonian analysis of ‘dative shift’ predicts: It relies on the idea that the PP location and what we call cipient argument are realizations of one thematic role. If they were, they should not be able to cooccur: the theta criterion requires that each thematic role be realized exactly once. Let us consider Larson’s analysis in some more detail.

According to the Larsonian analysis (similarly Kayne 1983, Baker 1988, 1996, Den Dikken 1995), dative shift works as follows: The preposition case-licensing its D/NP complement in the PP realization is ‘absorbed’, leaving its DP complement caseless.¹⁹ In need for case, the D/NP complement of the (absorbed) preposition raises to SPEC, VP position, which is possible only

¹⁸There is speaker variation as to whether simultaneous realization of cipients and PP location arguments is possible at all. Further, there is variation as to which preposition may occur on the PP complement.

¹⁹Absorption of P is considered to be possible among other things because the preposition (usually (some analogue of) *to*) is taken to be meaningless.

after the theme D/NP originally occupying the SPEC,VP position has been ‘demoted’, assuming adjunct status. After this has occurred, the verb reanalyses with its now empty complement position, turning the verb and its empty complement position into a single verbal head. The reanalyzed ‘complex predicate’ now raises to the light verb position from where it case licenses the ‘goal’ D/NP in SPEC, VP. The theme receives case in a nonstandard fashion, it is somehow transmitted to the theme (note that the theme argument violates the adjacency requirement holding for D/NPs in English generally).²⁰ Larson compares the overall process to a passive operation where an underlying object becomes subject, demoting the original subject. For the theme argument then, the analogy is with by phrases in passive sentences. The input and output respectively of ‘dative shift’ are given in (32):



If the ‘first object D/NP’ (ipient) construction were the result of the process just sketched, it would be hard to see how the preposition that is taken to be absorbed can still occur in the structure – it should be gone.

There is a possible way out for the transformational ‘dative shift’ analysis. One could argue that the structures comprising both a cipient and a PP location argument are in fact derived from a complex PP argument consisting of two PPs of which only one moves. One can say e.g.:

- (33) Otto hat den Brief zu Anna ins Büro geschickt
 Otto has the letter to Anna into-the office sent
 (German)

That the two PPs form a constituent in this structure is suggested by the fact that they can be fronted together:

²⁰Larson adopts the then common view that case is licensed under government. In POCs, the lower V raises to the light verb position governing the specifier of its complement (the theme). In DOCs, the [V-oblique/location] complex is assumed to assign case before actually raising to the higher V, at an intermediate stage where it stands in a V-complement relation to the theme (pp. 343, 359f).

- (34) Zu Anna ins Büro hat Otto den Brief geschickt
 To Anna into-the office has Otto the letter sent
 (German)

There are however problems with this line that have to do with the assumption that the argument that surfaces as the ‘first object’ D/NP (cipient) is the PP location argument with its preposition absorbed, in fact incorporated into the predicate. Incorporation is a type of head movement, and to the extent that head movement exists, it is a strictly local operation that is generally assumed to be subject to the Head Movement Constraint (HMC) of Travis 1984 (cf. discussion at the beginning of section 2.1).²¹ If there were a complex PP underlyingly, the preposition to incorporate would have to escape this complex projection, violating locality conditions holding for extraction (by definition, projections are projections of some head). If this could be amended, one would still be stuck: Structures as in (33) may comprise a particle to the left of the (virtually) complex PP, in a position that is higher than that of either preposition under standard assumptions:

- (35) Otto hat den Brief runter zu Anna ins Büro geschickt
 Otto has the letter down to Anna into-the office sent

If particles are heads as is suggested by the fact that they frequently incorporate into verbal heads, one arrives again at a violation of the HMC. In sum, the head movement/incorporation approach to ‘dative shift’ has a hard time allowing for the fact that cipients and PP location arguments may cooccur.²² Last not least, a largely theory-independent argument against the ‘preposition incorporation’ approach to ‘dative shift’ consists in the fact that there are languages exhibiting the dative alternation that do not feature prepositions to begin with (e.g. Russian, Bantu, Finnish). For these, a different story would have to be told anyway.²³

²¹The HMC says that head movement always targets the next *c*-commanding head position up.

²²Speaking against a WH-like movement relation between the cipient argument and the location argument, parasitic gaps are not licensed in the shifted construction, as they should be if it is true that WH movement licenses parasitic gaps:

- (i) a. *He gave lots of people money without knowing
 b. ?How many people did he give money without knowing?

Apart from this, an analysis relying on a WH-like relation between the cipient and the location does not solve the problem of the copresence of the cipient and the location argument.

²³It should be said that there is a twist in Larson’s analysis: Larson does not equate the base position of his ‘goal’ with ‘trace’ but rather just puts an ‘e’ into the position from which extraction has taken place, suggesting that one is maybe dealing with another kind of empty category. Still, Larson calls the type of movement his ‘goal’ argument undergoes ‘A movement’, that is, movement from a thematic position to a case position leaving a trace (it is not clear whether this is equated with anaphor). It may be that behind writing ‘e’ instead of ‘t’ there is the intuition that the location argument does not just vanish into thin air in the derivation but is still represented somehow. Writing *pro* into the base position lets us

To sum up, the cipient argument and the location argument are not in complementary distribution, as would be predicted if they were realizing the same thematic role. The fact that they do appear in the same syntagma is strong evidence that the cipients and PP locations are not different realizations of ‘the same thing’. Under our proposal, the problems just discussed do not arise. PP location arguments and cipients are dependent on the presence of a location argument that supplies the variables they saturate, but they are not related by a syntactic transformation.

2.2 Cipient subjects, theme at loc predicates

It is no news that across languages, certain classes of ‘dative marked’ arguments behave like ‘subjects’ in various respects.²⁴ It is however seldom if ever said what exactly is meant by ‘subject’, and there appear to be as many different notions of subject as there are tests for ‘subjecthood’, which are many (cf. Sigurdsson 2000). According to our proposal, cipients are licensed as subjects of predicates that really correspond to propositional meanings: They are external to a propositional unit that is predicated of them by expletivization, the predication ($\approx \lambda$ abstraction) being established by the little *t* projection. From this follow a range of asymmetries associated with the cipient construction, to be discussed in this section.

expect antilocality between the cipient and the PP argument, which is what we find (section 3.1).

²⁴That the ‘first object D/NP in DOCs behaves like a subject in certain respects has occasionally been noted, cf. Larson 1988, Bowers 1993, Basilico 1998. In South-Asian languages, arguments carrying some experiencing meaning are regularly marked with dative case, at the same time exhibiting ‘subject properties’. The ability to enter agreement relations with the verb-tense complex or the ability to bind certain subject-oriented anaphora typically serve as criteria. Cf. Hermon 1985 as well as the contributions in Verma and Mohanan 1991. Similarly, it has been argued that certain dative marked arguments in Icelandic have subject status. Here, the dative argument in DOCs as well as the dative ‘subject’ of experiencing predicates (cipients, that is) can bind anaphora that can be bound by ‘subjects’ only:

- (i) a. *Ég sendi Haraldi föt á hann/(?)sig*
 I sent Harold-DAT clothes-ACC for him
 (Maling 1990:285, fn6)
- b. *Henni thykir br’other sinn/*hennar leithinlegur*
 Her-DAT thinks brother-NOM her boring
 (Zaenen, Maling & Thráinsson 1985)

For PTCs, it has been argued that locative inversion – one of the identifying criteria used for PTCs (cf. section 1.4.1) – turns the location argument figuring in the construction into a subject, cf. Bresnan 1994:103. According to various proposals, the (analogue of) *there* occurring sentence-initially in a PTC is itself the subject of the construction (usually assumed to undergo some deletion process when locative inversion occurs). Cf. for variants of this proposal Coopmans 1989, Kuno 1971, Postal 1977, Lumsden 1988, Kiss 1996.

2.2.1 [theme at location]s and thingatlocs at cipients

We argue that the predicate licensing cipients corresponds to a propositional meaning consisting in the theme argument's referent being at the location argument's referent. The unit comprising the cipient again corresponds to a propositional meaning, but one that bears a certain (temporal) index, that is, a fully-fledged proposition (cf. section 1.3.4). In a rough schematic representation, we have two AT relations, an 'inner' one with a free index and an 'outer' one with the cipient argument restricting the index of the 'inner' AT relation:

- (36) a. AT (thing,loc,i)
 b. AT (cipient_{t'} (AT (thing,loc,i)) & i ≤ i')

As first evidence for the presence of something like the meaning sketched in (36-a) – a thing at a location at an index – in constructions projecting a theme and a location argument, note that it is generally possible with this type of construction to pick up anaphorically a propositional meaning corresponding to the theme argument's referent being the location argument's referent, independent of whether the corresponding state is reached in any realistic sense or not. The 'theme at loc' meaning can be picked up anaphorically even if it is explicitly denied that the theme 'reaches' the location:

- (37) a. The kids stopped the ball from rolling into the orchids. That was lucky, because Otto always gets mad about it (=a ball in the orchids)
 b. The car was rolling into the playground when a truck smashed it. The kids wouldn't have appreciated it (=a car in the pg.) anyway.

If a cipient is structurally present as well, an ambiguity arises as to the 'size' of the propositional meaning that is picked up. The anaphor *it* (= German 'es') can pick up the 'smaller' propositional thingatloc meaning as well as the larger 'possessive' relation between the cipient and the thingatloc meaning. Pairs like the following bring this out:

- (38) Otto schickte Anna einen Liebesbrief ins Büro
 Otto sent Anna a loveletter into-the office
 a. Ihr Boss wird es nicht gutheissen
 Her boss will it not appreciate
 b. Ihr Mann wird es nicht gutheissen
 Her husband will it not appreciate
 (German)

The sentence in (38-a) suggests that what is bothersome is the loveletter at the office: Anna's boss may out of principle be opposed to his employees receiving private mail at their workplace. (38-b) on the other hand suggests that the fact that Anna 'have' or receive loveletters from Otto is what bothers her husband, who may be less excited about whether Anna receives loveletters at the office

or somewhere else.²⁵

If the thingatloc meaning figures as the predicate licensing the cipient, it is expected to be encoded below the cipient (this is the c-command condition on predication of Williams 1980, cf. section 1.3.4). That the structure encoding the thingatloc meaning is c-commanded by the cipient is brought out in patterns involving the presupposition-triggering adverb *wieder* ('again') (cf. section 1.3.4, van Stechow 1996, Kamp and Rossdeutscher 1994). Depending on the type of predicate they occur with, adverbs like *wieder* make available (at least) two readings, a 'repetitive' reading and a 'restitutive' reading. Roughly, the repetitive reading is the one according to which a certain (type of) event has to have happened before. The restitutive reading is the one according to which a certain state as ensuing from the occurrence of some event has to have obtained before, without saying anything about a repetition of a pertaining event. The following examples illustrate that the availability of the respective readings correlates with the surface position of the adverb *wieder*:

- (39) a. Otto hat wieder eine Tür geöffnet
 Otto has again a door opened

²⁵Patterns involving ellipsis show the same thing. Under the null hypothesis, ellipsis is licensed if what is elided can be recovered through a structurally (LF) identical antecedent. Consider (i), adopted from (den Dikken, Ludlow & Larson 1998):

- (i) Shall I give you another sausage ? I can't [XP \emptyset]. I'm on a diet.

We understand that what is unpronounced here – traditionally, this projection would correspond to the VP – has a meaning close to *have a sausage*. The most straightforward explanation is that the preceding sentence in fact comprises a structure that encodes this meaning. As further evidence for the presence of a propositional meaning including the cipient argument in the construction, consider the following pair with anaphoric *it*:

- (ii) a. Max offered Anna his crocodile. But her mother won't allow it. cf.
 b. ?Max offered his crocodile to Anna. But her mother won't allow it.

It is not Max's offer that Anna's mother doesn't allow, but rather that Anna *have* or *get* a crocodile. On the null assumption that anaphors need structurally encoded antecedents, this is straightforward if in fact this 'smaller' propositional meaning is encoded in (ii-a).

Although somewhat subtle, a contrast involving comparative ellipsis is worth mentioning here. Assume that comparative ellipsis involves the construction of a predicate that is structurally (LF) identical to an antecedent predicate, where what is compared is abstracted over. Consider now (iii-a) and (iii-b):

- (iii) a. I'll give you more wine
 b. I'll give more wine to you

Both constructions have a reading according to which what is compared is the amount of wine involved in an event of giving: *I'll give you more wine than someone else did before*. (iii-a) however has an additional reading which seems to be absent in (iii-b). This reading amounts to something like: *I'll give you wine and you will have got more wine as a result than you had before*. Without further assumptions, this is predicted if the DOC in (iii-a) indeed encodes a propositional meaning corresponding to *x having (got) y-much wine (at i)*, in contrast to the POC in (iii-b) which does not encode this 'extra' propositional meaning.

- b. Otto hat eine Tür wieder geöffnet
 Otto has a door again opened
 (German)

In (39-a), *wieder* occurs to the left of the direct object *eine Tür* and triggers a presupposition that there has been an opening event involving Otto a door before. (39-b) says that the door in question had been open before, without saying anything about an event leading to this earlier being open.²⁶ This second reading, the restitutive one, merely presupposes that the post state of an opening has obtained before, without presupposing the event leading to that state. On the assumption that the presupposition triggered by *wieder* is computed on the basis of the syntactic scope (c-command domain) of *wieder* (cf. the above references), this indicates that result states are encoded lower structurally than the overall events leading to these states. The repetitive reading is triggered if *wieder* occurs ‘outside’ the direct object and the verb making up the VP, while the restitutive reading is triggered if *wieder* occurs ‘inside’ the VP, to the right of and c-commanded by the direct object. Turning now to our constructions, consider the following pair involving a DOC:

- (40) Anna ist eine gute Nachbarin, weil sie...
 Anna is a good neighbor, because she...
- a. ...einem Nachbarn wieder ein Namensschild an die Tür gebastelt
 ...a neighbor again a name-tag at the door tinkered
 hat.
 has.
- b. ...wieder einem Nachbarn ein Namensschild an die Tür gebastelt
 ...again a neighbor a name-tag at the door tinkered
 hat.
 has.

The example in (40-a) is ambiguous: It has the (preferred) restitutive reading according to which a particular neighbor ‘had’ a name tag at her door before (which at some stage may have fallen off). To some extent, the restitutive reading is available as well: According to the repetitive reading, it is not the first time that Anna tinkered with some neighbor’s name tag. This latter repetitive reading is the only one available in (40-b) where *wieder* occurs to the left of (and c-commanding under standard assumptions) the cipient argument. It appears that the adverb *wieder* cannot ‘access’ the thingatloc meaning alone if it occurs to the left of the cipient. This follows naturally if there is more encoded in the c-command domain of the cipient argument than just the post state of the event encoded. In particular, the material in the c-command domain of the cipient argument encodes at least a change from a ‘pre state’ to a post state, that is, an event as a whole. In terms of indices, the cipient marks a domain

²⁶Under marked intonation (contrastive stress on *eine Tür*), the repetitive reading appears available in (39-b) as well.

that comprises both indices at which thingatloc holds and indices at which thingatloc does not (yet) hold. The case is parallel for DPCs, as illustrated in the following examples:

- (41) Die Jagdgesellschaft ist sauer weil...
The hunting-society is angry because...
- a. ...einem Jäger (wieder) ein Wildschwein (wieder)
...a hunter-DAT (again) a wild boar (again)
entkommen ist
escaped is
- b. ...wieder einem Jäger ein Wildschwein entkommen ist
...again a hunter-DAT a wild boar escaped is
'because a wild boar has escaped a hunter again'
(German)

As long as the adverb *wieder* occurs to the right of the cipient, the restitutive reading is available: (41-a) merely requires that a wild boar was 'away from' the hunter in question before, i.e., only the 'result' of the escape is presupposed. (41-b) requires that there have been previous escapes (events as a whole). If the adverb *wieder* occurs to the left of the cipient argument, it cannot trigger the 'thing at loc' presupposition. Analogously in PTCs, if *wieder* occurs to the right of the analogue of *there* ('da'), the structures are ambiguous between a restitutive and a repetitive reading while only the repetitive reading is available if *wieder* occurs to the left of the analogue of *there*:²⁷

- (42) a. Es sind da wieder Wildschweine im Gehege gewesen
It are there again wildboars in-the shelter been
- b. Wieder sind da Wildscheine im Gehege gewesen
Again are there wildboars in-the shelter been
'There have been wildboars in the shelter again'(German)

The truth of (42-a) is compatible with a situation where there had been wildboars in the shelter all the time, say since there had been a shelter to begin with, which disappeared for some reason at some time. What the sentence asserts is that the state of wildboars being in the shelter is restituted. (42-b) on the other hand only has a reading according to which wildboars have appeared and disappeared again in the shelter – the repetitive reading (note that the predicate in (42) is not even taken to be eventive standardly).

We conclude that the thingatloc meaning is encoded in the c-command domain of the cipient argument (the (analogue of the) element *there*), as is predicted if the cipient (*there*) is the subject of this propositional meaning. Further, we conjecture that what is encoded in the c-command domain of cipients is not just the 'result state' of an event, but rather a change from a

²⁷To get *wieder* to the left of *da* in German, fronting to sentence initial position is necessary, presumably for reasons of PF well-formedness.

pre- to a post (result) state, that is, a complete change of states of affairs.²⁸ The adverb *wieder* can only access this ‘larger’ unit in case it occurs to the left of (c-commanding under standard assumptions) the cipient. The cipient is ‘outside’ the domain encoding the thingatloc meaning as well as the event that leads to this state (more neutrally, the change bringing about that state).

In terms of indices, *wieder* may trigger a presupposition taking the form in (43-a) as long as it occurs to the right of the cipient. If *wieder* occurs to the left of the cipient, it triggers (at least) the type of presupposition given in (43-b):²⁹

- (43) a. $\exists i$ thingatloc
 b. $\exists i, i''$ thingatloc_{*i'*} & \neg (thingatloc_{*i'*} \rightarrow $i', i'' \in i$)

Dissociation of indices ‘below’ the cipient will be discussed in more detail in sections 3.2.4 and 3.3.1., where we argue that dissociation of indices (truth intervals) at the reference time level constitutes a licensing condition for the construction as a whole.

2.2.2 Binding Asymmetries

This section can be skipped by the reader who is already convinced that cipients c-command themes c-command locations while at the same time, the location can bind the theme to some extent (it not being clear whether this binding is syntactic or semantic in nature).

We have argued above (section 2.1.2) that what are allegedly two realizations of a single role ‘goal’ in ditransitive structures are not the same thing – if they were, they would be predicted to be in complementary distribution. The same goes for the ‘bare D/NP’ realization of two-place unaccusative predicates (DPC) and the PP location realization of these predicates. In this section, it is shown that the cipient and the location argument respectively occupy different structural positions, using binding patterns as a probe into the c-command relations the respective arguments entertain with respect to the theme argument as well as with respect to each other. Under our proposal, the binding asymmetries between cipients on the one hand and themes and locations on the other hand follow from the way the construction is put together: While themes and locations are part and parcel of the VP (the lexical domain), cipients are licensed by the category *t* that being part of the tense system is clearly outside the lexical domain.

²⁸Cf. Marantz 1993, proposing that cipients (his ‘affected goals’) are ‘logically outside’ an event encoded in their c-command domain. We turn to Marantz’ proposal in section 2.3.3.

²⁹To repeat, the VP structure corresponding to the thingatloc meaning is saturated in that it comprises no ‘open’ variables (= variables abstracted over). The location variable is existentially quantified, as a property of the construction:

(i) $VP \rightsquigarrow \exists p AT(x, p, i) \ \& \ p=l \ \& \ R(p, w)$ [=‘thingatloc’]

To test c-command relations, we try whether a universally quantified D/NP can bind a possessive pronoun: If a bound variable reading of the possessive pronoun is available, the quantified D/NP c-commands the D/NP hosting the possessive pronoun (cf. Reinhart 1983). We start with the relation between the percipient and the theme argument in the DPC:

- (44) a. Es erschien [jedem Autoren]_i sein_i Lektor
 It appeared [every writer]_i-DAT his_i reader-NOM
 b. *?Es erschien [jeder Autor]_i seinem_i Lektor
 It appeared [every author]_i-NOM his_i reader-DAT
 (German)

Only binding from the (per-)cipient into the theme is possible, but not binding from the theme into the (per-)cipient. Hence, the (per-)cipient c-commands the theme. Stronger, the theme can be bound by the (per-)cipient if the theme appears in subject position (as it has to in English). This backward binding is standardly assumed to be possible only if the binder c-commands the dependent before movement. (45-a) illustrates for German, (45-b) and (45-c) for English:

- (45) a. Sein_i Lektor erschien [jedem Autor]_i
 His_i reader appeared [every Author]_i
 b. His_i (favorite) author escaped [every reader]_i
 c. His_i own weakness (had) escaped [every literary critic]_i
 (German)

Turning to the structural relation between the theme and the location argument in the configuration we call DLC, it is interesting to note that the PP location can marginally bind into the theme. Binding from the theme into the location yields the more natural result however:

- (46) a. Es erschien [jeder Autor]_i bei seinem_i Lektor
 It appeared [every author]_i at his_i reader
 b. ?Es erschien sein_i Lektor [bei jedem Autor]_i
 It appeared his_i reader [at every author]-DAT_i
 (German)

The respective relations are parallel in (adjectival passive) DOCs, where again the bare D/NP cipient syntactically binds the theme, but the converse is impossible. Again, the location can marginally bind the theme argument.³⁰ The structures in (47) and (48) illustrate usual binding, the structures in (49) and (50) illustrate backward binding:

³⁰Larson gives the following English example showing that the location can bind the theme to some degree in POCs:

- (i) ??I {gave, sent} his_i paycheck to [every worker]_i
 (Larson 1988:338)

- (47) a. [Jedem Töpfer]_i ist seine_i Vase {auf den Boden, herunter-}
 [Every potter]-DAT_i is his_i vase {to the floor, down-}
 gefallen
 fallen
- b. [Jedem Dichter]_i ist sein_i schweres Erbe {aufer-, in die
 [Every poet]-DAT_i is his_i difficult inheritance {onto-, in the
 Wiege-} (ge)legt
 cradle} (prt.perf.)put
 (German)
- (48) a. *[Jede Vase]_i ist ihrem_i Töpfer auf den Boden gefallen
 [Every vase]_i is its_i potter onto the floor fallen
- b. *[Jedes schwere Erbe]_i ist seinem_i Träger in die Wiege
 [Every difficult inheritance]_i is its_i bearer into the cradle
 gelegt
 laid
 (German)
- (49) a. Seine_i Vase ist [jedem Töpfer]_i {auf den Boden, herunter-}
 His_i vase is [every potter]-DAT_i {to the floor, down-}
 gefallen
 fallen
- b. Sein_i schweres Erbe ist [jedem Dichter]_i {aufer-, in die
 His_i difficult inheritance is [every poet]-DAT_i {onto-, in the
 Wiege-} (ge)legt
 cradle} (prt.perf.)laid
 (German)
- (50) a. *Ihrem_i Töpfer ist [jede Vase]_i auf den Boden gefallen
 Its_i potter is [every vase]_i onto the floor fallen
- b. *Seinem_i Träger ist [jedes schwere Erbe]_i in die Wiege
 Its_i bearer is [every difficult inheritance]_i into the cradle
 gelegt
 laid
 (German)

In English, the following seems marginally possible for speakers that allow the theme argument to become subject in passive:³¹

- (51) %His_i own fate was told [every prophet]_i

In adjectival passive POCs, the theme can clearly bind the location. Again and as in DLCs, the location can bind the theme argument as well, although the result is marked. (52) illustrates for German, (53) for English:

³¹For speakers allowing only the (per)cipient argument to become subject, backward binding in DOCs cannot be tested.

- (52) a. [Jede Vase]_i fiel auf ihren_i Töpfer
 [Every vase]_i fell onto its_i potter
 b. ??[Auf jeden Töpfer]_i fiel seine_i Vase
 [Onto every potter]_i fell his_i vase
 (German)
- (53) a. ??Its_i inhabitant escaped from [every cell]_i
 b. ??His_i (own) fate was told to [every prophet]_i

To complete the exercise, let us look at the binding relations in the constructions when a cipient, a theme and a location are all projected at once. A small scenario helps to make these admittedly strange sentences appear more natural. Imagine then that Anna is a physiotherapist treating her patients with needles as used for acupuncture. Each patient has his or her personal needle(s), where the needles differ maybe in size. Otto is a frequent visitor, hence there are openings at the relevant positions in his body already. One can then say:

- (54) a. A. stach [jedem Patienten]_i seine_i Nadel in sein_i linkes Ohr
 A. pricked [every patient]-DAT_i his_i needle in his_i left ear
 b. Anna stach Otto [jede Nadel]_i in ihr_i Loch
 Anna pricked Otto [every needle]_i into its_i hole
 (German)

Example (54-a) shows that the cipient c-commands the theme as well as the location, (54-b) shows that the theme c-commands the location. Note as well that the PPs in these examples are ‘parts’ of the cipient argument: the ears in (54-a) are parts of the patients, the holes are ‘part of’ Otto in (54-b).

The analogous pattern obtains in DPCs if a location argument is projected in addition to a cipient and a theme:

- (55) a. [Jedem Wächter]_i entfloh sein_i Gefangener in sein_i Versteck
 [Every guard]_i escaped his_i prisoner into his_i hidingplace
 ‘Regarding each guard, that guard’s prisoner escaped into that prisoner’s hidingplace’
 b. Dem Wächter entkam [jeder Gefangene]_i in sein_i Versteck
 The guard escaped [every prisoner]_i into his_i hidingplace
 ‘Regarding the guard, each of his prisoners escaped into that prisoner’s hidingplace’
 (German)

Before we turn to the relation between the location and the theme argument in PTCs, let’s look at the picture in a sample of languages that use agreement (understood to cover clitic doubling) as a marking strategy for cipient arguments. In Spanish, binding from the (clitic doubled) percipient argument into the theme is possible, but not binding from the (non clitic-doubled) location

into the theme. This is so both for DPCs (DLCs) and DOCs (POCs):³²

- (56) a. A [cada escritor]_i le aparecieron sus_i errores
 To [every writer]_i CL appeared his_i mistakes
 b. *A [cada escritor]_i aparecieron sus_i errores
 To [every writer]_i appeared his_i mistakes
 (Spanish)
- (57) a. La profesora le pasó a limpio su_i dibujo [a cada
 The teacher CL gave to back-cleared his_i drawing [to each
 niño]_i
 child]_i
 ‘The teacher gave each child back his/her cleared drawing
 b. *La profesora entregó su_i dibujo [a cada niño]_i
 The teacher gave his/her_i drawing [to each child]_i
 (Spanish)

In Greek, the (per-)cipient argument is marked by genitive case and (optional) clitic doubling.³³ In the following example, the *tis* in the middle (second from the left) is the clitic that doubles the genitive D/NP. The first *tis* belongs to the theme (‘her child’), the last corresponds to a definite determiner on the doubled genitive-marked argument (‘of the mother’). If the percipient is clitic doubled, the theme may be backward-bound:

- (58) To pedhi tis *(tis) aresi tis kathe miteras
 The child-NOM her CL-her like the each mother-GEN
 (Greek)

Largely analogously in DOCs (POCs) in Greek, the clitic-doubled genitive cipient may bind the theme. A PP location binding the theme appears (marginally) possible when the PP occurs to the left of the theme:

- (59) a. ?(Tu) edhosa tu kathe pedhiu to pehnidhi tu
 CL-gen gave-I the each child the toy its

³²The unmarked structures involve fronting of the clitic-doubled element in addition to doubling, but note that the location argument in (56-b) is fronted as well. Without fronting, the clitic-doubled structure is still marginally acceptable, while the non-doubled structure is ungrammatical:

- (i) a. ?Sus_i errores le aparecieron a [cada escritor]_i
 His_i mistakes CL appeared to [every writer]_i
 b. *Sus_i errores aparecieron a [cada escritor]_i
 His_i mistakes appeared to [every writer]_i

³³In what corresponds to the DOC in Greek (cf. Anagnostopoulou (to appear)), there is speaker variation as to the whether the clitic is required or not. Note that also if there is no clitic doubling, the cipient realization is still marked differently from the PP location argument (genitive case vs. PP realization).

- b. *Edhosa to pehnidhi tu se kathe pedhi
 gave-I the toy its to each kid
- c. (?)Edhosa se kathe pedhi to pehnidhi tu
 gave-I to each kid the toy its
 (Greek)

In Bantu DOCs (POCs), only if the recipient argument agrees in noun class with the verbal complex can it bind the theme (irrespective of relative order between the theme and the recipient, cf. Ngonyani 1996:59, 108.). The following example is from Ndendeule, but Swahili and Chichewa are reported to pattern the same (cf. *ibid.*, Marantz 1993):

- (60) a. na- ki- *(m-) szek -e hundi kila mu- ndu
 I- PST- 1OA- put-APPL -FV 10-check each 1- person
 'I put aside a check for each person
- b. na- ki- *(m-) szek -e kila mu- ndu hundi
 I- PST- 1OA- put-APPL -FV each 1-person 10-check
 'I put aside a check for each person
 (Ndendeule, Bantu)

In sum, what is traditionally called the 'goal/beneficiary' or 'experiencer' argument – our cipient – is higher structurally than the theme argument, if and only if it occurs as a 'bare D/NP' (with dative case) in Germanic, or as a clitic doubled D/NP in Spanish or Greek. In our terminology: the cipient is higher than the theme. The (non-doubled, non-agreeing, PP) location argument appears to be lower than the theme from a structural perspective.

Testing binding patterns in PTCs is more tricky. First, it cannot be tested whether the theme can bind the location due to the definiteness restriction (cf. section 1.4.1). It is already telling though that an indefinite theme may bind the location argument: indefinites are confined to a narrowest scope interpretation in PTCs, making it likely that they bind from their base position. If these were cases of coreference, we would expect the theme to be able to take wide scope, which is however excluded.

- (61) a. There {was, appeared} a man_i (sitting) in his_i car
 b. There escaped a gangster_i from his_i cell
 c. There was a girl_i sent to her_i mother

Similarly, it is hard to test whether the location can bind into the theme due to the fact that a theme with a possessor pronoun gives rise to definiteness effects as well. If the theme is fronted, it is only very marginally possible for the location to bind the theme argument. Fronting the location yields quite good results, cf. (62) and (63).³⁴

³⁴Bill Philip and Sharon Unsworth p.c.

- (62) a. ??Its_i mayor {was sent, came} [to every city]_i
 b. [To every city]_i {was sent, came} its_i mayor
- (63) a. ??Its_i inhabitant {was found, appeared} [in every cell]_i
 b. [In every cell]_i, {was found, appeared} its_i inhabitant

As to the (analogue of) the element *there*, while it cannot bind into an argument like the cipients in DOCs or DPCs as of nature, there is evidence that it does act as a binder in some sense.³⁵ An indefinite coindexed with a possessive D/NP gives rise to weak crossover effects (WCO) in the presence of *there*. A WCO effect is absent if *there* is absent and if the respective D/NP appears in subject position (example from Kamp and Bende-Farkas 2001):

- (64) a. ??Her_i mother knows that there is [a kid]_i smoking behind the woodshed
 b. ?Her_i mother knows that [a kid]_i is smoking behind the woodshed

This pattern is predicted if *there* binds the theme argument, giving rise to a weak crossover violation as schematized in (65):

- (65) *X_i OP_i Y_i

With respect to syntactic binding in PTCs, we put down that the theme argument c-commands the location, as it does in the ‘location-only’ realizations of the predicates entering DPCs and DOCs. The location argument can again bind the theme, in particular if the location undergoes locative inversion.

To sum up: The constructions under discussion pattern uniformly: DPCs and (adjectival passive) DOCs are characterized by a ‘bare’ (Germanic) or ‘agreeing’ (Spanish, Bantu) cipient, DLCs and DPCs by a (nonagreeing) PP location. In PTCs, where the location appears sentence initially, it seems to be able to enter an agreement relation as well, as in Bantu. The languages that we have looked at pattern uniformly: In each case, there is a change in morphological marking involving the cipient/location argument, and this change is associated with differing binding properties. Cipients meet the marking requirement on predication (cf. section 1.3.4) in that they are unambiguously marked. In Spanish and Greek as well as in Bantu, what corresponds to the ‘bare dative D/NP’ in German(ic) enters an overtly expressed agreement relation (broadly conceived, cf. above) with the verb/tense complex, surfacing as clitic doubling (Spanish, Greek) and/or noun-class agreement (Bantu).³⁶ In German, the cipient bears morphological dative case and is unstressed under neutral intonation. Only the latter appears to mark cipients in English.

³⁵That *there be* has to do with variable binding was suggested already by Milsark 1977. Cf. as well Williams 1984.

³⁶It is interesting to note in this context that the crosslinguistically frequent form of PTCs is the one where the location argument appears sentence-initially (Freeze 1992). There may be agreement between the location and the verb-tense complex as well, as in Ndendeule (Bantu) – PTCs with fronted locations appear to be analogous then to the ‘agreeing’ cipient constructions:

The binding patterns show that the c-command relations in our constructions are parallel and as schematized in (66), where ' \rightarrow ' stands for 'c-commands':

(66) cipient (inverted location) \rightarrow theme (\leftarrow)- \rightarrow location

There appears to be symmetry between themes and locations rather than asymmetry with respect to binding: While the theme appears to c-command the location, binding from the location into the theme is (marginally) possible.

The robust binding asymmetries holding between the cipient on the one hand and the theme and location on the other hand are again a problem for analyses that postulate a movement-like relation between the cipient and the location argument. A(rgument) movement (movement from a theta to a case position) as assumed to underly 'dative shift' in Larsonian analyses is quite generally subject to reconstruction into the base position of the moved element (cf. for recent discussion Fox 1999). Thus for example the theme argument that has been A(rgument)-moved in the following German passive sentence is easily bound by the cipient that c-commands the base but not the surface (case) position:

(67) Sein_i Artikel wurde [jedem Autoren]_i t zurückgegeben
 His_i article-NOM was [every author]_i-DAT t back-given
 (German)

Analyses relying on movement predict symmetry in principle between the cipient argument and the theme, but not the asymmetry that is actually found (Hoekstra 1988).

Under our analysis, the robust binding asymmetries between cipients on the one hand and themes and locations on the other follow: Cipients are merged in situ above the predicate (VP) level, as a consequence of their being licensed by predication, established by the little t projection. There is no lower 'reconstruction site' for cipients.

2.2.3 Tensing asymmetries

We understand predication to correspond to an ascription relation between a subject and a predicate that is tensed, i.e., comprises indexical information as to when the predication holds (cf. section 1.3.4). Cipients are licensed outside the lexical domain, they saturate the predicate formed on the basis of the VP at the tense (little t) level. There are compositional processes that disallow functional material to enter – in particular, processes restricted to the lexical

-
- (i) ku- ki- lisa ku- na li- holo
 17- 7- well 17SA- with 5- tortoise
 'at the well there is a tortoise'
 (SA = subject agreement, numbers = noun classifiers, FV = final vowel)

domain. Cipients are predicted to be excluded from these processes under our analysis, in accord with the facts.

Absolute constructions

It was shown above in section 2.2.1 that the theme and location argument make an independently meaningful unit together with the verb that excludes the cipient argument. This shows as well in what are called ‘absolute constructions’, examples being ‘with clauses’ as well as newspaper headlines (‘mad magazine sentences’). Absolute constructions have been taken to show that ‘small clauses’ exist (cf. Stowell 1981), small clauses being propositional units lacking tense information in particular. The theme and location argument together with the verbal participle appear in absolute constructions:

- (68) a. An elephant escaped from the zoo
 b. With an elephant escaped from the zoo, the roads are not safe
 c. Elephant escaped from the zoo (newspaper headline)
- (69) a. A petition was sent to the government
 b. With a petition sent to the government, new hope arose
 c. Petition sent to the government (newspaper headline)

This type of construction is not available with a cipient argument, indicating that the cipient does not belong to this ‘tenseless’ propositional unit:

- (70) a. An elephant escaped Otto
 b. ?*With an elephant escaped Otto, we should be careful
 c. ?*Elephant escaped Otto (newspaper headline)
- (71) a. The government was sent a petition
 b. ?*With the government sent a petition, new hope arose
 c. ?*The Government sent a petition / Petition sent the government
 (newspaper headline)

Units including verbs, themes and locations furnish propositional meanings as appearing in absolute constructions. The cipient appears to be excluded from these units. This follows straightforwardly if cipients are licensed by material pertaining to the tense system: If absolute constructions are tenseless, the null hypothesis under interpretability (section 1.3.2) is that they do not comprise material pertaining to tense. Note that ‘little v’ heads e.g. do not appear to be excluded from absolute constructions: agent arguments as assumed to be licensed by little v are allowed in absolute constructions:

- (72) With Otto singing in our office, I’m certain to get a headache

Synthetic compounds and complex nominals

It is a solid generalization that agent arguments are mapped onto subject, that is, external argument position. Building on insights of Marantz 1984, Kratzer 1994 has argued that agents are not licensed by the lexical predicate but instead by functional material, namely the little *v* projection that is responsible for encoding agentive/causative meaning. If agent arguments are not lexically licensed but syntactically and if the formation of complex nominals is a lexical process, it follows immediately that agents do not enter complex nominalizations, unlike e.g. themes that are licensed by the lexical predicate:

- (73) a. *The Man_{agent}-singing
 b. The song_{theme}-singing

In German with its infamous word-building component, the facts are largely analogous. There are exceptions however to the generalization that agents do not enter complex nominals. You have in German:³⁷

- (74) a. Der Totentanz
 The Dead-dance
 b. Das Vogelgezwitscher
 The Bird-chirping
 c. Männergesangsverein
 Mensingingclub
 ‘club in which men sing’
 (German)

Cipient arguments are robustly excluded from synthetic compounds and complex nominals. The following examples illustrate this for different environments in English and German:³⁸

- (75) a. the gift of a book to me
 b. *the gift (of) me of a book
 c. the gift of a book
 (Roeper and Siegel 78: 254)
- (76) a. I cut meat for a customer \Rightarrow meat cutter
 b. I cut a customer some meat \Rightarrow *customer-cutter
 c. I bought a friend some silver \Rightarrow *friend-buying
 d. I bought silver for a friend \Rightarrow silver-buying
 (Roeper and Siegel 78: 248)

³⁷The exceptions in (74-a) and (74-b) are interesting in that while the incorporated nominals are agents, they are exceptional agents as well. Thus the dead in (74-a) are clearly actors, but they are inanimate presumably. The birds in (74-b) are animate but one may ask whether they pass as (conscious) actors.

³⁸Cf. Marantz 1993, Baker 1996 for more examples.

- (77) a. Das [Aus dem Knast entkommen]_{loc-V} habe ich lange geübt
 The from the prison escape have I long practised
 b. Das Rentenversprechen_{theme-V} war ein Wahlkampfthema
 The pensionspromise was an election-theme
 (German)
- (78) a. ?*Das [der Polizei entkommen]_{cip-V} habe ich lange geübt
 The the police-DAT escape have I long practised
 b. *Das Altenrentenversprechen_{cip-theme-V} war ein
 The old-ones-pension-promise was an
 Wahlkampfthema
 election-theme
 (German)
- (79) a. Vasen-in-Stücke-Schmeisser
 vases-into-pieces-thrower
 b. Metall-Flach-Hämmerer
 metal-flat-hammerer
 c. in-die-Falle-Tapper
 into-the-trap-stepper
 (German)

The facts indicate that in what we call the location construction, both the theme and the location argument are licensed by the verb/predicate without the ‘help’ of functional material.

The generalization one might wish to call upon as underlying the contrasting behavior of cipients is known as ‘Myers’ Generalization’ (Myers 1984, cf. Pesetsky 1995 for discussion):

- (80) Zero-derived words do not permit the affixation of further derivational morphemes (Myers 1984)

If cipients are licensed by functional material that is ‘invisible’, it follows that they cannot enter derivational morphological processes. An account in terms of Myers’ generalization is however doubtful to some extent in addition to not being particularly ‘deep’ (cf. for discussion Pesetsky 95: 130). There is no principled reason why derivation ‘across’ zero material should be blocked. There are indeed German data that cast doubt on the across the board validity of Myers’ generalization – let us consider an example pattern.

There are in German complex nominals that involve the prefix *be-* that is plausibly analyzed as an applicative affix as suggested by the fact that what it appears to be doing is turning an ‘oblique’ PP location argument into a ‘direct’ argument of the verb:³⁹

³⁹Cf. Maylor 1998 for extensive argument that the *be-* prefix should be analyzed as an applicative affix.

- (81) a. Otto lud Heu auf den Wagen
 Otto loaded hay onto the cart
 b. Otto belud den Wagen mit Heu
 Otto loaded the wagon with hay
 (German)

The complex nominal corresponding to the ‘applicative’ version of ‘load’ is the following:

- (82) Wagenbelader
 Wagon-be-loader
 ‘Someone loading wagons with something’
 (German)

There is now another nominal denoting the ‘result’ of an event of loading, in German as well as in English:

- (83) Wagenladung
 Wagonload
 (German)

The nominals in (83) are plausibly derived from (or related to) the ‘applicative’ version of ‘load’: The applicative version of ‘load’ differs in meaning from the PP version in that the former denotes a ‘completed’ loading unlike the latter (this is what Tenny 1994 dubs the ‘measuring out’ interpretation):

- (84) a. He loaded the wagon with hay
 (invited result interpretation: the wagon was full with hay)
 b. He loaded hay onto the wagon
 (invited result interpretation: there was (some) hay on the wagon)

The nominal *Wagenladung* has the ‘measuring out’ meaning: It denotes a portion of stuff ‘filling’ a wagon. If this meaning is associated with applicativization, the natural conjecture is that the nominal comprises the material responsible for this meaning as well, that is, a ‘silent’ *be-* affix. Still it is possible to derive a complex nominal comprising the applied argument, contra expectation under an applicative analysis in so far as Myers’s generalization has validity.

If cipients are licensed by material pertaining to the tense system, this appears to be more of an explanation of their nonability to enter complex nominals: tense is a sentential category, not a nominal one. The tense system establishes the reference of propositional meanings.

Before leaving this section, note that definite D/NP complements of PP locations as well as theme D/NPs that are usually taken to be quantified may enter synthetic compounds in German, there being a sharp contrast however

between quantifiers like *all* and quantifiers like *every* and *most* respectively:⁴⁰

- (85) a. Alles-in-den-Schatten-Steller
All-in-the-shadow-stander
b. ?*Jeden-in-den-Schatten-Steller
?*Everybody-into-the-shadow-stander
c. ?*Die-meisten-in-den-Schatten-Steller
?*the-most-into-the-shadow-stander
(German)

If synthetic compound formation is a process restricted to the lexical domain, what the pattern suggests is that definite location arguments as well as certain (supposed) quantifiers may in fact enter composition at a presyntactic level.

Idioms

The asymmetry between cipients and theme and location arguments in the nominal domain is paralleled in the realm of idioms. Complexes made up from the verb and location in particular regularly acquire ‘special meaning’ and become lexically frozen units:⁴¹

- (86) a. send someone to the showers
b. feed someone to the lions

While verbs and location arguments as well as verbs and theme and location arguments regularly become lexically frozen units, this is very rare for verbs, themes and cipient arguments and virtually never happens with verbs and cipients alone. Thus the first example in the following pairs has an idiomatic use, but not the second, where the variable argument slot is again put in italics:

- (87) a. show *someone* the door
b. *show the boss *something*
- (88) a. *jemandem* den Marsch blasen
someone-DAT the march blow
‘kick someone’s ass verbally’
b. *dem Chef *etwas* blasen
the boss-DAT *something* blow
(German)

In a corpus study of idioms, Everaert 1999 arrives at the following table summing up the frequency of idioms found with the verb and its arguments (IO corresponds to cipient):

⁴⁰These examples (taken from the musician Sammy Deluxe) translate as ‘someone who acts in a way as to make appear everything (everybody, most people) appear second best to himself.’

⁴¹To repeat, this is also one of Larson’s 1988 core arguments for analyzing the verb-location complex as a complex predicate.

DO alone	IO alone	both Do and IO
104	0	2

Again, the facts follow in a natural way if cipients are licensed by material pertaining to the tense system. Tense is a property of propositions formed in syntax, but not of complexes built in the lexicon.

Partial Extraction

We have argued in the last section that cipients are excluded from processes of ‘lexical’ composition because they are licensed by functional material – more precisely, the little *t* head. In this section, it is shown that with respect to partial extraction, cipients behave symmetrically to subjects of individual level predicates (ILP, Carlson 1978). This is interesting for two reasons: First, subjects of individual level predicates behave as if they were external to the lexical predicate (vP/VP) from the start, in distinction to ‘subjects’ of stage level predicates (SLP). We argue that being external at base is a property of cipients as well. Second, partial extraction is known to be bad from definite D/NPs, as the following example illustrates:

- (89) a. What have you bought [a book about *t*]
 b. *What have you bought [the book about *t*]

Subjects of individual level predicates – in fact, all arguments appearing outside the lexical domain – have been argued to receive a ‘specific’ or ‘strong’ interpretation (Diesing 1992, Kratzer 1988/95), which may translate into what we call ‘definite’ (cf. section 1.3.4). To the extent that being external correlates with definiteness, the fact that extraction from cipients is bad provides evidence in favor of their being external as well as of their definite/presuppositional interpretation, to be argued for in more detail in the following section.

The following paradigm from German shows contrasts pertaining to partial extraction between themes and subjects of SLP on the one hand and subjects of ILP and cipients on the other hand:⁴²

- (90) a. [Von wem]_{*i*} hast Du [Verwandte *t*_{*i*}]_{*theme*} beleidigt?
 Of whom_{*i*} have you relatives *t*_{*i*} insulted?
 ‘You have insulted relatives of whom?’
 b. ?[Von wem]_{*i*} haben [Verwandte *t*_{*i*}]_{*agent*} Dich beleidigt ?
 Of whom_{*i*} have relatives *t*_{*i*} you insulted ?
 ‘Relatives of whom have insulted you?’

⁴²That partial extraction is not excluded from subjects of stage-level predicates is noted in Diesing 1992:

- (i) Was haben deine Mutter <was> für Ameisen gebissen?
 What have your mother <what> for ants bit?
 (German)

- c. *[Von wem]_i haben [Verwandte t_i]_{ILP-SU} die Wahrheit
 Of whom_i have relatives t the truth
 gewusst?
 known?
 ‘Relatives of whom have known the truth?’
- d. *[Von wem]_i hast Du [Verwandten t_i]_{cipient} Äpfel
 Of whom_i have you relatives t_i apples
 geschenkt ?
 given-as-present ?
 ‘You gave relatives of whom apples as a present?’
 (German)

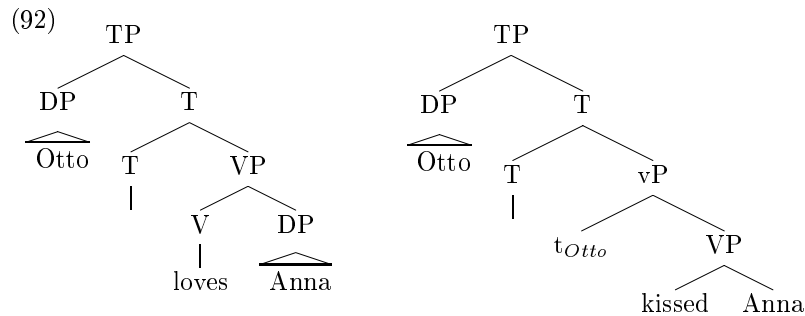
As can be seen, partial extraction from (nonscrambled) themes is good (cf. (90-a)). Partial extraction from subjects of SLP is worse but acceptable (cf. (90-b)). Partial extraction from subjects of ILP is bad, as is partial extraction from cipients, illustrated with a DOC (cf. (90-c), (90-d)). The pattern is paralleled in ‘was für split’ (henceforth: wf-split), a type of extraction that has been argued to be possible only from VP internal position (den Besten 1989):

- (91) a. Was_i sind ihnen [t für Fehler]_i entgangen?
 What are them for mistakes escaped?
 ‘What sort of mistake escaped them?’
- b. ?Was_i haben [t für Politiker]_{agent} Fußball gespielt?
 What_i have t for politicians soccer played?
 ‘What sort of politician played soccer?’
- c. *Was_i haben [t für Politiker]_{ILP-SU} die Wahrheit gewusst?
 *What_i have t for politicians the truth known?
 ‘What sort of politician has known the truth?’
- d. *Was_i sind [t für Lektoren]_i Fehler entgangen?
 What are t for readers mistakes escaped?
 ‘Mistakes escaped what sort of reader?’
 (German)

As can be seen and parallel to the partial extraction patterns above, wf-split is good with themes (cf. (91)) and possible with subjects of SLP ((91-b)), but it is excluded with subjects of ILP as well as with cipient arguments (cf. (91-c), the DPC in (91-d)).

What is the difference between agents and themes on the one hand and cipients and the subjects of individual level predicates on the other? The difference is that themes and agents appear to be reconstructable into a position pertaining to the lexical domain (cf. the VP-internal subject hypothesis, Sportiche 1988), while cipients and subjects of individual level predicates cannot. If Diesing and Kratzer are right in that material in the functional domain is interpreted as presuppositional and if extraction from presuppositional elements is excluded (cf. above and Erteschik-Shir 1979), then the oddity of

extraction from individual level subjects as well as cipients follows from their being licensed by tense material.⁴³ Under standard assumptions, partial trees for individual level predication and stage-level predication respectively look as in (92):



If an indefinite D/NP is used in these examples, an ambiguity between a ‘specific’ (\approx definite/presuppositional) reading and a narrow scope existential reading arises with stage-level predicates, but not with individual level predicates: These always receive a ‘specific’ interpretation.⁴⁴ From the Kratzer/Diesing perspective, it appears that in individual level predication, only the tense-related external position can be interpreted, while in stage level predication there is the possibility of reconstructing the subject D/NP into a position where it is interpreted existentially (i.e., within the vP/VP). This follows if there is no such reconstruction position available for subjects of individual level predicates. Let us briefly review the main evidence that has been taken to show that subjects of ILP are always external while subjects of SLP may be reconstructed into predicate-internal position and ensuingly apply the tests to our constructions.

Subjects of SLP can strand quantifiers below e.g. definite themes in German, while subjects of individual level predicates cannot:

- (93) a. Männer haben diesen Film viele angeschaut
 Men have this movie many watched
 ‘Many men have seen this movie’

⁴³On Diesing’s theory, everything outside the VP is mapped onto the restriction of a tripartite quantificational structure and interpreted presuppositionally. Material inside the VP is mapped onto the nuclear scope (cf. Heim 1982) and caught by existential closure applying above the VP by default. The other half of Diesing’s theory is that presuppositional D/NPs have to leave the lexical domain (the VP), but this part does not really matter here. Cf. for critical discussion of Diesing’s proposal deHoop 1992 and Reinhart 1995.

Kratzer 1988/95 derives the interpretive facts pertaining to individual level predicates by stipulating that these predicates lack a Davidsonian spatiotemporal (or event) argument which when present merges externally, forcing all other arguments to merge internally. If there is no event argument, the (thematically most prominent) D/NP argument is forced to merge externally, since some argument has to merge externally (cf. the EPP/predication principle, section 1.3.4).

⁴⁴The clearest contrasts arise with bare plural D/NPs which can give rise to an existential reading with SLP but only allow a generic/kind reading with ILP.

- b. *Männer lieben viele diesen Film
 Men love many this movie
 'Many men love this movie'
 (German)

It is straightforward that subjects of individual level predicates cannot strand quantifiers if they do not move from a lower position these stranded quantifiers are associated with.

Next and according to Diesing 1992, adverbs such as *stets* ('in the general case') in German mark the divide between the IP (functional/presuppositional) and the VP (lexical/existential) domain. While the subject of a stage level predicate may, the subject of an individual level predicate simply cannot occur to the right of 'stets' in German:

- (94) a. ...weil stets Kinder auf dem Rasen spielen
 ...because stets kids on the lawn play
 'because there are usually kids playing on the lawn'
 b. ...weil Kinder stets auf dem Rasen spielen
 ...because kids stets on the lawn play
 'because kids are usually such that they play on the lawn'
 (German)
- (95) a. ...weil Wildschweine stets intelligent sind
 ...because wildboars stets intelligent are
 b. ?*...weil stets Wildschweine intelligent sind
 ...because stets wildboars intelligent are
 'because wildboars are usually such that they are intelligent'
 (German)

Turning to our constructions, cipients pattern with subjects of individual level predicates in the relevant respects, as illustrated in the following examples:

- (96) a. ...weil Lektoren stets Fehler auffallen
 ...because readers stets mistakes up-fall
 b. ?*...weil stets Lektoren Fehler auffallen
 ..because stets readers mistakes up-fall
 'because readers note mistakes in the general case'
 (German)
- (97) a. ...weil Fussballern stets Millionen zugesagt sind
 ...because soccer-players stets millions to-said are
 b. ?*...weil stets Fussballern Millionen zugesagt sind
 ...because stets soccer-players millions to-said are
 'because soccer players are granted millions in the usual case'
 (German)

The adverb patterns found with cipients and subjects of individual level predicates are paralleled by PTCs, where the analogue of *there* ('da') patterns with cipients and individual level subjects (neither extraction nor stranding can be tested with PTCs):

- (98) a. ...weil da stets einer im Garten ist
 ...because there stets someone in-the garden is
 b. ?*...weil stets da einer im Garten ist
 because stets there someone in-the garden is
 (German)

In earlier stages of generative theory, the distinction that was made responsible for patterns of this type was that between lexically licensed (in Minimalism: L-related, cf. Chomsky 1995) and functionally licensed arguments.

A way of going about would be to say that elements that have checked/valued uninterpretable features are 'frozen in place' for some reason. Being licensed by functional categories with uninterpretable (unvalued) features, external arguments would be 'frozen in place' by definition. One would like to find a less stipulative explanation in terms of conditions on interpretability and economy however. Seeking to develop such an account for 'was für split', consider the following example involving a PTC:

- (99) a. Was_i waren **da** [für Berge]_i sichtbar ?
 What_i were **there** [for mountains]_i visible ?
 b. *Was_i waren [für Berge]_i **da** sichtbar ?
 What_i were [for mountains]_i **there** visible ?
 (German)

The difference between (99-a) and (99-b) is that in the latter, the theme argument has been 'scrambled' around the element *da* ('there'), leaving the VP and attaching higher in the functional structure. Speakers of German have strong intuitions that scrambling is associated with a strong (presuppositional) interpretation on the part of the scrambled argument (cf. above, Diesing 1992). What 'was für split' does is ask for the specification of a set as restricted by the head noun. Clearly, this is at odds with being presuppositional: If you have a determined (presupposed) set, you do not need a further specification of its condition. The non-presuppositional meaning needed for 'was für split' (and similarly partial extraction of 'of complements') to be meaningful is associated with the base position of the theme, hence 'was für split' is good only from base (non-scrambled) position.⁴⁵

⁴⁵That there is indeed movement involved in the example given is suggested by the fact that quantifiers pertaining to the theme may be stranded to the right of *da* with the theme occurring to the left of *da*:

- (i) a. ?Es waren weisse Berge da viele sichtbar
 It were white mountains there many visible

It is as if subjects of individual level predicates and cipients were always scrambled, that is, outside the lexical domain where nonpresuppositional readings are available. This follows if cipients are licensed by material pertaining to tense and merged in the functional layer directly, like subjects of individual level predicates.

To sum up this section, we have seen that in the domains of derivational morphology, idioms as well as extraction, theme and location arguments exhibit properties indicating that they are licensed in the lexical domain: they frequently enter word formation processes and idiom formation. In sharp contrast, cipients do not, and they are in this respect distinguished from agents that do to some extent appear to participate in these processes. The particular behavior of cipients follows in a natural way if cipients are licensed by material pertaining to the tense system, which is by definition excluded from processes applying in the lexical domain. The claim that cipients are external is supported by their behavior with respect to extraction, which closely resembles that of subjects of individual level predicates. Like individual level subjects, cipients cannot reconstruct into a position that belongs to the lexical domain.

In asking for a reason why cipients do not allow ‘was für split’ and/or partial extraction, we have proposed that being external might not agree with the interpretive conditions associated with ‘was für split’. ‘Was für split’ does not make sense with presuppositional remnants since it asks for a restriction of an unspecified set. Presuppositional D/NPs do not denote unspecified sets.

2.2.4 Referential Asymmetries

In the last section we already saw indications that cipients are interpreted as definite/presuppositional in the sense defined in section 1.3.4:

- (100) An expression is semantically definite/presuppositional iff interpreting it involves checking an existential presupposition on the part of the speaker

There is quite direct evidence that cipients are indeed interpreted as definite/presuppositional. To start, a case for the definiteness of cipients can be made for German with patterns involving the demonstrative *diese(r)* in German and similarly *deze* in Dutch. *Diese(r)* and *deze* are special in that they can only pick up antecedents that are non-topical – the demonstrative wants an antecedent the referent of which is not presupposed, but whose existence is just asserted.⁴⁶ Topic expressions are definite in the sense defined above: The existence of a referent of an expression figuring as topic has to be established in the common

-
- b. *Es waren weisse Berge viele da sichtbar
 It were white mountains many there visible
 (German)

⁴⁶The proposal to use Dutch *deze* as a test for topicality is put forward in Reinhart 1995. Cf. Brandt 1999 for discussion of the relation between ‘definiteness’ and ‘topicality’ in DOCs.

ground, hence interpreting a topic involves checking a presupposition on the part of the speaker as well. The following sentences show that the element *diese(r)* cannot refer back to the cipient argument in a DOC, while referring back to the location as well as to the theme argument is fine:

- (101) a. Rotkäppchen brachte einen Korb zu einem Wolf_i.
 Little-Red-Ridinghood brought a basket to a wolf_i.
 Diesen_i hielt sie für ihre Grossmutter
 [This-one]_i she took for her grandmother
- b. ??Rotkäppchen brachte einem Wolf_i einen Korb_{OK:i}.
 Little-Red-Ridinghood brought a wolf_i a basket.
 Diesen_i hielt sie für ihre Grossmutter.
 [This-one]_i she took for her grandmother
 (German)

While (101-a) is felicitous, (101-b) is not. (101-b) is felicitous in so far as *diesen* is coindexed with the theme argument, which makes it however semantically strange, suggesting that Little Red Ridinghood took the basket to be her grandmother. Cipients pass as topics, hence given entities. The same works for DPCs:⁴⁷

- (102) Einem Lektor_i entging ein Fehler_j.
 A reader-DAT escaped a mistake-NOM
- a. ??Dieser_i war neu
 This-one was new
- b. Dieser_j war schwerwiegend
 This-one was grave
 (German)

According to the test with demonstrative *deze(r)* and *diese(r)* then, cipients are topic expressions. Topic expressions are definite in the sense defined here, the existence of things falling under the topic expression's restriction must be established in the common ground.

The *deze/diese(r)* test does not apply to PTCs since *diese(r)* cannot pick up *there*. Kiss 1996 has proposed tests exactly in the context of PTCs to show that (the analogue of) *there* is definite/presuppositional in the above sense. Kiss 1996 argues that "There constructions always predicate about a specific point in space and time: about *here and now* or *there and then*" – 'here and now' and 'there and then' are paradigm definite expressions in that their referents are either directly given in the utterance situation and/or established as discourse antecedents. The tests proposed by Kiss and be used as well to show that cipients are semantically definite.

⁴⁷For Russian, King 1995 proposes that what we call cipients are licensed in a projection reserved for topics.

To start, question tags can pick up the element *there* as well as cipients, but not e.g. themes. The reason is that a tag needs an antecedent that is definite/presuppositional, in this case, established in discourse as a potential bearer of some property in question:⁴⁸

- (103) a. There was a letter sent to Anna, wasn't there?
 b. *A letter was sent to Anna, wasn't there?
 c. *A letter was sent to Anna, wasn't it?
- (104) a. A man_{cipliant} was given a suitcase, wasn't he?
 b. ?*A suitcase_{theme} was given to a man, wasn't it?

Another test proposed by Kiss involves focussing adverbs which do not allow in their scope what she calls 'presuppositional subjects'. Focussing adverbs can appear to the left of and have in their scope clauses involving 'weak' (existence asserting) subjects, but they cannot appear to the left of and have in their scope clauses involving presuppositional (definite) subjects. The element *there* in PTCs as well as cipients in DOCs and DPCs again pattern with presuppositional subjects:

- (105) a. [Only [A BABY WAS BORN]]; nothing else happened
 ['weak' subject]
 b. *[Only [JOHN READ A NOVEL]]; nothing else happened
 ['strong' subject]
 c. *[Only [THERE WAS AN ACCIDENT]]; nothing else happened
 [→ 'strong' subject]
- (106) a. Only a letter_{theme} was sent [to a politician]_{loc}. Nothing else happened
 b. *Only a politician_{cip} was sent a letter. Nothing else happened
 c. Only an elephant (had) escaped [from the zoo]_{loc}. Nothing else (had) happened
 d. *Only an elephant (had) escaped [the zoo]_{cip}. Nothing else (had) happened

According to the tests proposed by Kiss then, cipients as well as the element *there* pass as definite/presuppositional.

Direct evidence for the definiteness of cipients comes from Spanish. As is well known, bare plurals in Spanish (as well as other Romance languages) can only receive an existential interpretation, but not a generic or a kind interpretation as in Germanic. In Spanish, the cipient argument cannot be a bare plural (cf. Masullo 1992 and references therein):⁴⁹

⁴⁸For other reasons, this test does not apply to DPCs. Cf. section 4.1.2.

⁴⁹Possible expressions of the definite interpretation of cipients that are yet more direct can be seen in languages like Indo-Iranian and Russian, although it is not completely clear whether one is dealing with 'scrambling'. Discussion of the relation between scrambling and 'dative alternation' is beyond the scope of the present discussion, although the two are

- (107) a. *Les di caramelos a chicos
 CL I-gave sweets to kids
 b. Les di caramelos a {los, unos} chicos
 CL I-gave sweets to {the, some} kids
 (Spanish)

The generic interpretation of bare plurals that is disallowed in Spanish is the only one available in German for bare plural cipient arguments (in the absence of marked intonation). The exclusively generic interpretation of bare plurals has been proposed to be triggered in presuppositional subject position (cf. Krifka et. al. 1995).

- (108) Laien entgingen die Feinheiten der Darbietung
 Lays-DAT escaped the intricacies of-the performance
 ‘Lays missed the intricacies of the performance’
 ‘Whoever was a lay missed the intricacies of the performance’⁵⁰

clearly related (note e.g. that scrambled D/NPs pattern with cipients as far as extraction is concerned (cf. the above discussion). In Indo Iranian in what appears to correspond to the DOC, the cipient argument is overtly marked with the suffix *-ra* encoding ‘referentiality’. The theme may not be marked with *-ra* in the DOC (the Indo-Iranian data are from (Payne 2000), augmented with native speaker’s judgments:

- (i) a. shah vazir -ra ketab dad
 shah minister -RA book gave
 b. ?*shah vazir -ra ketab -ra dad
 shah minister -RA book -ra gave
 c. ?*shah vazir ketab -ra dad
 shah minister book -RA gave
 ‘The shah gave (a/the) the minister (a/the) book’
 (Indo-Iranian)

Similarly in Russian, two ‘indefinite’ determiners ‘kakomuto’ and ‘kakomunibud’ exist, of which only the first may appear on a cipient argument. What distinguishes the two determiners is the suffix: ‘-to’ may only be used when the DP refers ‘specifically’, that is, refers to a given particular. ‘-nibud’ is the true ‘weak indefinite’, and it is prohibited on cipients. (ii-c) and (ii-d) show that in the position of the location argument, both suffixes are fine:

- (ii) a. starushka sdala kakomu-to poetu odnu komnatu
 the-old-lady lent a-REF poet a room
 b. ??starushka sdala kakomu-nibud poetu odnu komnatu
 the-old-lady lent a-INDEF poet a room
 ‘The old lady lent a poet a room’
 c. starushka sdala odnu komnatu kakomu-to poetu
 the-old-lady rent a room a-REF poet
 d. starushka sdala odnu komnatu kakomu-nibud poetu
 the-old-lady lent a room a-INDEF poet
 ‘the old lady lent a room to a poet’
 (Russian, Olga Borik p.c.)

⁵⁰Admittedly in DOCs, judgments are subtle. If an indefinite subject is chosen, it appears an existential reading of the bare plural is available. One would rather say ‘*n paar*’ (‘sm’) however to indicate an intended existential reading.

- (109) Der Typ gab Obdachlosen ein paar Kröten
 The guy gave homeless-people a few bucks
 ‘Whoever was homeless got a few bucks from the guy’

Judgments are more subtle with (morphologically) indefinite singulars. That the cipient is interpreted as definite is brought out in pairs modelled on a classical example from the literature (cf. Oehrle 1976, Krifka 1999):

- (110) a. Ede sent god a prayer
 b. Ede sent a prayer to god

Someone uttering (110-a) has to believe in god, while someone uttering (110-b) may well be an atheist. Someone uttering (111-a) as to believe in martians, while someone who does not would rather utter (111-b):

- (111) a. Otto promised a martian his fortune
 b. Otto promised his fortune to a martian

Even if embedded in a belief context, the speaker still appears to commit himself to the existence of things of the kind denoted by the cipient argument restriction, cf. (112-a) and (112-b). The cases are less clear-cut compared to the patterns found with individual level predicates (cf. section 1.3.4), but the nonbeliever lifts an eyebrow at (112-a):

- (112) a. Joe is crazy. He insists that he sent a martian a letter
 b. Joe is crazy. He insists that he sent a letter to a martian.

Finally, cipients are generally destressed under unmarked intonation, destressing robustly correlating with givenness, i.e., being established in the common ground (cf. Schwarzschild 1999, Büring 1999 and references given there).⁵¹

- (113) a. Anna gave Otto a KISS (unmarked intonation)
 b. Anna gave OTTO a kiss (marked (contrastive) intonation)

This concludes the more direct evidence put forward here in favor of the semantic definiteness of cipients, which we will henceforth assume.

⁵¹Richard Larson (p.c.) gives the following apparent counterexamples to the claim that cipients are ‘definite’ in our sense:

- (i) a. This machine is designed to give NOONE a prize
 b. I’ll give WHOEVER NEEDS ONE (if anybody) an invitation to P.’s party
 c. I’ll give ANYONE WHO NEEDS ONE (if anybody) an invitation to P.’s party

The expressions in capitals seem to have to bear contrastive focus marking (indicated by caps) for felicity. Contrastive focus marking of an expression signals that there is a set of things in the common ground falling under the restriction of the contrastively focus-marked expression (cf. Kiss’ 1991 notion of ‘identificational focus’). It does not seem then that Larson’s examples constitute counterevidence to the claim that cipients are definite/presuppositional as defined in section 1.3.4.

The definite/presuppositional interpretation of cipients as well as (the analogue of) *there* contrasts sharply with the default interpretation associated with themes: In the environments under discussion, themes receive an existential interpretation qua default, witness the above examples. That themes are interpreted ‘existentially’ (existence asserting) is clearest in PTCs. PTCs are just famous for the property of not allowing presuppositional D/NPs in the scope of *there* (the definiteness restriction).⁵² We turn to the more complicated relation between the cipient and the location argument in terms of reference in sections 3.2.3 and 3.3.1 in particular.

While the theme argument receives an existential interpretation in the constructions under discussion by default, the existence of something falling under the theme argument’s restriction is not asserted for the speaker/hearer’s utterance context but rather for a context determined by the cipient argument. This comes out clearest with predicates of ‘coming into existence’ as in the following example:

- (114) Einem Mann erschien ein Einhorn
 A man-DAT appeared a unicorn
 (German)

The speaker uttering (114) does commit himself to the existence of a certain man (the cipient argument’s referent). There is however no commitment to the existence of any unicorn. It may be exclusively the ‘world’ of the referent of *a man* in which a unicorn exists and appears to that man, but the speaker uttering (114) may be convinced that unicorns do not exist.

What examples like (114) bring out is that the material in the scope of the cipient argument is dependent on the reference of the cipient argument rather than on the speaker’s beliefs. The cipient determines the domain of quantification that matters for interpreting the thingatloc meaning:

- (115) ‘Cipient/there be D/NP (at LOC)’ = 1 iff $[[D/NP]]^{w,g} \in [[AT\ p]]^w$

That there is (possibly weak) modality in between the utterance context and the context in which the thingatloc meaning is evaluated shows as well in examples like the following:

- (116) Otto sent Anna a letter (but it never got there)

⁵²Szabolsci 1986 gives a list of Hungarian predicates that show definiteness effects pertaining to the theme argument. Interestingly, apart from appearing in PTCs, many of these predicates project what we call DPCs and/or DOCs. To give examples, Szabolsci lists among other the predicates *kap* (‘receive/get’), *vesz* (‘buy’), *érkezik* (‘arrive’), *kerül* (‘become available’), *hoz* (‘bring’) *ad* (‘give’), *kerít* (‘make available, acquire’). Osam 1996 reports that in Akan, definite (presuppositional) theme arguments are disallowed with many ‘give’ verbs. Asymmetries pertaining to the (non-)referential interpretation of ‘objects’ in ditransitive constructions have been noted and discussed before, in particular in more discourse oriented studies in the seventies and more recently in e.g. Basilico 1998, Beckmann 1996, Essegbey 2001, Givón 1984, Lefebvre 1998. The results of these studies square with the claim put forward here that cipients are semantically definite/presuppositional (section 1.3.4).

While the speaker uttering (116) does assert the sending of a letter for the context under discussion, there is no assertion that the letter end up at the cipient, as the continuation shows. While clearly examples such as (116) carry some post state meaning consisting in the theme being ‘at’ the cipient in some sense, there is no ‘success entailment’ (Oehrle 1976) that the post-state of the event encoded come about in the context under discussion. We observe that there are at least two dissociated contexts involved in interpreting cipient predication, one ‘anchored’ to the utterance context, the other one dissociated from it. The cipient reaches into both contexts.

Consequences for the Scope Problem

If cipients are definite/presuppositional in the sense defined in section 1.3.4, then the scope problem (section 1.4.4) presents itself differently. In the simplest case where semantic definiteness corresponds to unique existence (Russellian 1905 definiteness), even if themes took scope syntactically over cipients (quantifier raising (QR)), this could not be seen due to the cipient having a unique referent.⁵³

Supportive of the idea that what is at the root of the scope asymmetry between cipients and themes is the presuppositional interpretation of cipients rather than a(n exclusively) structural restriction, Nakanishi 2000 notes for Japanese that D/NPs that are not quantified hence do not undergo QR under standard assumptions do not seem to be able to distribute over cipients either. Nakanishi gives examples from Japanese, but the same contrast can be found in German:

- (117) a. Otto gab zwei Bettlern drei Mark (2 > 3 or collective)
 Otto gave two beggars three marks
 b. Otto gab drei Mark an zwei
 Otto gave three marks to two
 Bettler (2 > 3, 3 > 2 or collective)
 beggars
 (German)

Nakanishi analyzes the scope facts in terms of choice functions (Reinhart 1997), with the cipient interpreted as a choice function. What a choice function does is take you from a(n unspecified but nonempty) set to a(n) (certain) individual from that set, which assuming existential closure of set-denoting expressions translates as turning a narrow scope existential into a wide scope or ‘specific’ indefinite. The choice function approach is compatible with the approach here, but to the extent it is wanted it is motivated as well: the possibility of receiving the choice function (\approx specific) interpretation is tied to the cipient’s logical subject status.

⁵³Cf. Brandt 1999.

Another fact that brings out the parallel between PTCs, DOCs and DPCs in terms of scope and that casts further doubt on the prospect of an account of the scopal asymmetries in purely structural terms is that if the theme argument denotes a property, the scope freezing property becomes somewhat elusive. In some sense, and in analogy to an observation made by Lumsden 1988 for PTCs, property denoting D/NPs seem to be allowed to scope over cipients, although not distribute over them. Again this points to a semantic/pragmatic explanation of the scope freezing effects:

- (118) Sie gab einem Studenten jede erdenkliche Freiheit (OK?: $\forall > \exists$)
 She gave a student every thinkable freedom
 (German)
- (119) There is every type of linguist at the party (OK: $\forall >$ there at the party)

Third and turning to the less straightforward case of definiteness, contrastive topic (Kiss' 1991 'identificational focus') intonation on the part of the cipient appears to enable the theme to scope over the cipient. The 'scope freezing' is not absolute as would be expected if it had a purely syntactic explanation (as argued by e.g. Bruening 2001):⁵⁴

- (120) Ich habe einem [STUDENTEN]_F jedes Stück Kuchen
 I have a student every piece-of cake
 gegeben (OK: $\forall > \exists$)
 given
 (German)

A possible explanation for the theme's ability to take scope over the contrastively focus-marked cipient is that the contrastive intonation is associated with in-situ (quasi-) existential quantification over part of the set that comes as a presupposition with the cipient argument – it is part of the presupposed set that is scoped over then by the universally quantified theme (cf. Büring 1999 for relevant discussion). The sentence in (120) presupposes that there is a set of potential cookie-receivers, and it asserts that among the elements of this set is at least one student.

We are led to conclude then that there is no scope freezing in the cipient construction, but that the (general) inability of the theme to scope over the cipient is an effect of the cipient's presuppositional interpretation.

⁵⁴The fact that themes can take scope over cipients under contrastive focus intonation was brought to my attention by Robert van Valin. According to Bruening's analysis, both the cipient and the theme undergo QR, but the theme has to 'tuck in' below the cipient and therefore does not c-command, hence scope over it. Cf. for discussion section 3.2.1.

2.2.5 Summary

After having given more detail to the proposal, we have started discussing the alternation the predicates undergo, noting that what corresponds to the ‘bare dative’ D/NP in Germanic gives rise to agreement (clitic doubling, noun class agreement) in certain languages (Spanish, Greek, Bantu). We pointed out that cipients and PP location arguments are not in complementary distribution, providing a strong argument against the Larsonian analysis according to which they realize the same thematic role. The cooccurrence of cipients and PP locations is allowed for (and expected) under our proposal since both PP location arguments and cipients are furnished by the location argument coming with the construction. Next we turned to binding asymmetries between cipients on the one hand and themes and locations on the other hand. These asymmetries (again a problem for the Larsonian analysis) follow under the proposal that cipients are licensed in situ by material pertaining to tense, hence external to the VP (as well as vP) at base. The asymmetries pertaining to derivational morphology as well as idiom formation support the view that cipients are licensed by functional material. The hypothesis that cipients are licensed by material pertaining to the tense system in particular yields a natural and ‘deep’ explanation of these asymmetries, since tense is a property of propositions and not of lexical complexes. The discussion of extraction asymmetries brought out the parallel between cipient predication and individual level predication, the latter standardly assumed to license its subject externally ‘at base’, in Spec,TP. The analogy suggests that cipients are licensed analogously from a structural perspective. We presented evidence then that cipients – like the subjects of individual level predicates – are semantically definite, in sharp contrast to themes that are interpreted existentially. If cipients are definite, then themes cannot scope over them because cipients do not bear scope to begin with (alternatively: take widest scope always).

In sum, we presented evidence converging to the conclusion that cipients are syntactic subjects, i.e., external arguments, as well as logical subjects in Strawson’s sense, i.e., expressions carrying a presupposition of definite empirical fact. The asymmetries between cipients and ‘object’ arguments appear to be reducible to the asymmetry of predication (section 1.3.4).

2.3 The locus of *there* and cipients

This section addresses the question where cipients as well as the element *there* are located structurally. We argue that cipients are licensed by material pertaining to the tense system, in particular, the little *t* projection situated below the ‘usual’ T(ense) projection and above the little *v* head that we assume to license agent arguments (cf. section 1.3.3). We first present evidence indicating that with respect to agreement phenomena, cipients behave symmetrically to ‘standard’ subjects largely (section 2.3.1). Under uniformity, an analysis

according to which cipients enter an agreement relation with the verb/tense complex is therefore desirable. Section 2.3.2 briefly discusses ‘standard’ options as to where cipients could be licensed, discarding proposals according to which they are licensed in the lexical domain (vP/VP) or in an AGR projection. Section 2.3.3 discusses in more detail a recently more prominent line according to which cipients are licensed by an applicative affix (APPL) that has been proposed to encode some ‘possessive’ meaning, arguing against this view. Section 2.3.4 argues in favor of the view that cipients and *there* are hosted by a second temporal projection, the little *t* projection. Evidence comes from possibilities pertaining to temporal interpretation, the distribution of cipients/*there* with respect to negation as well as ‘ordinary’ subjects and the agreement they trigger, as well as from infinitives and scope and binding interactions between cipients and in particular temporal adverbs. Section 2.3.5 presents an account of the blocking effects that are associated with the presence of cipients. We argue on the basis of what has been discussed that the blocking effects can be derived from the fundamental assumption that the grammar seeks to get rid of structure as soon as possible (section 1.3.2): Cipients are logical subjects that value (make interpretable the complement of) the *t* projection. Merger of a cipient therefore leads to a structure that is interpretable, forcing interpretation (spellout) and disallowing certain (purely grammatically motivated, ‘A’-) processes to apply ‘across’ cipients.

2.3.1 Cipient agreement

Cipients appear to interact with the ‘standard’ agreement between T(ense) and nominative ‘subjects’, which has more recently been brought forward as an argument for analyzing cipients as entering a relation with T(ense) (e.g. Boeckx 2000). To repeat, morphosyntactically expressed agreement is standardly taken to be a reflex of an argument entering a(n AGREE) relation with the verb/tense complex (section 1.3.2). In e.g. Icelandic, the presence of cipients may have an impact on the expression of morphosyntactic ‘standard’ subject/verb agreement – thus the presence of a cipient may trigger ‘default’ 3rd singular agreement and prevent agreement with the nominative ‘subject’:

- (121) Henni leiddist/likathi strakarnir
 Her-DAT bored/liked-3rd-Sg the boys-NOM
 ‘She found the boys boring/ She liked the boys’
 ‘The boys annoyed/appealed to her’
 (Icelandic)

Distortion of ‘primary’ agreement appears to be restricted to cipients and moreover fragile in Icelandic. Sigurdsson 1996:24 states the result of his “Investigation of Agreement” as follows:

As it turned out, lack of agreement with nominative third person objects is exceptional and largely limited to clauses with either *lei-*

thast ‘find boring’ or *lika* like’. Even in sentences with these two verbs, agreement, as in (49), is preferred to nonagreement [(49) corresponding to the examples in (93) with plural agreement].

So-called ‘secondary’ agreement seems to more robustly lead to 3rd person singular ‘default agreement’, preventing an embedded nominative argument from agreeing with the tensed verb. The examples given in Boeckx 2000 again involve cipients:

- (122) Mér hefur/??hafa alltaf virst honum hafa verith
 Me-DAT has/have often seemed him-DAT have been
 seldar/*selt thessar baekur á alltof hár verthi
 sold-pl/sold-sg these books at far-too high a-price
 ‘It has often seemed to me that he was sold these books at far too high a price’
 (Icelandic)

The obvious idea is that the cipient (*honum* in (122)) disturbs agreement between T(ense) and the nominative argument because it is closer to T(ense). The T(ense) node checks its uninterpretable (unvalued) features against the cipient argument because this is the closest element that can value T’s unvalued features.⁵⁵ That cipients are closer to T(ense) than nominative arguments at base can be seen as well in German, where the cipient occurs to the left of (and c-commanding under standard assumptions) the nominative argument in ‘all focus’ constructions. In German however, no distortion of agreement is found (compare to (93) above):

- (123) a. Es sind einem Mann Frauen aufgefallen
 It are-PL a man-SG-DAT women-NOM-PL up-fallen
 b. *Es ist einem Mann Frauen aufgefallen
 It is a man-SG-DAT women-NOM-PL up-fallen
 ‘A man was struck by women’

If ‘standard’ agreement is disturbed, it appears to be disturbed by cipients (Icelandic), but needn’t be (German). It is not so clear then whether cipients compete directly with nominative arguments as concerns the triggering of agreement. It is clear however that cipients do enter agreement relations with the verb/tense complex from a look at data from Bantu as well as Spanish and Greek as discussed in section 2.2.2. In Bantu, Spanish or Greek, what has been proposed to correspond to the ‘bare dative’ DOC or DPC in Germanic exhibit obligatory agreement between the cipient and the verb/tense complex, surfacing in noun class agreement (Bantu) and clitic doubling (Spanish, Greek):⁵⁶

⁵⁵B is closer to A than C =_{def} A c-commands B and C and B asymmetrically c-commands C.

⁵⁶Cf. section 1.3.2, fn 9.

- (124) hokolo a- ki- ssa- pel -a ssa- chokolo hi-tabu
 grandpa 1SA- PST- 2OA- give -FV 2-grandchildren 8-book
 'grandpa gave the grandchildren books
 (Ndendeule, Bantu)
- (125) *(Le) gusta la musica a Juan
 to-him pleases the music to Juan
 (Spanish)
- (126) To vivlio *(tis) aresi tis Maria
 The book *(CL-GEN) appeals to-the Mary-GEN
 (Greek)

It was noted above for Icelandic that to the extent that cipients do trigger agreement, the agreement corresponds to the 3rd singular form. There appear to be few known cases of cipients triggering an agreement form that is not part of the 'standard' agreement paradigm employed in the language under discussion.⁵⁷ It is unsurprising that the agreement phenomena found with cipients are non-uniform: agreement systems and the paradigms instantiating them vary between languages. The most straightforward explanation for the differences in agreement between languages in the context of cipients lies in the agreement paradigms themselves: Some languages may have particular 'cipient agreement' (Maithili, cf. fn 57, possibly Bantu), while others may lack it. In the absence of particular cipient agreement expression, cipients may interact with the 'standard' agreement (Icelandic) or not (German, English).

The type of 'default' agreement seen above in the Icelandic examples is most frequently found in PTCs – in many languages, agreement is 3rd singular in PTCs across the board, a possibility found as well in English in cases where the element *there* and the tense morpheme form a complex morphosyntactically. In Bantu, PTCs surface with a particular form of locative agreement:

- (127) There's a lot of people here
- (128) Il y'a un homme dans le jardin
 It there-has a man in the garden
 (French)
- (129) ku- ki- lisa ku- na li- holo
 17- 7- well 17SA- with 5- tortoise
 'at the well there is a tortoise'
 (Ndendeule, Bantu. SA = subject agreement, numbers = noun classifiers, FV = 'final vowel')

Under uniformity, the fact that morphosyntactically expressed agreement varies with the presence of cipients and the (analogue of) *there* to begin with makes it attractive to analyze cipients/*there* as entering a relation with the verb/tense

⁵⁷The South Asian language Maithili appears to constitute a case where cipients have their own agreement paradigm (Mishra 1991:111)

complex. ‘Cipient agreement’ is much more fragile than the ‘standard’ nominative subject/verb agreement however and it appears to uniformly involve 3rd person singular forms. Cipients are not on a par structurally with nominative ‘subjects’ then as respects the checking of features of T(ense). A possible reason is that cipients are ‘outside’ the agreement systems of particular languages altogether. Further, cipients may not enter the same type of agreement relation as ‘standard subjects’, that is, they may not be on a par with nominative subjects as respects the checking of features of T(ense). We present evidence in favor of the first option in section 3.4, where it is argued that cipients are ‘defective’ with respect to their feature makeup as respects the standard phi features (person, number, gender), which we propose to be due to their being interpreted as locations. Evidence for the second option – that cipients do not in fact enter an agreement relation with T(ense) like nominative arguments (under standard assumptions) is collected in what follows. We consider options as to how cipients (*/there*) are structurally licensed, arguing that it is the little *t* head below ‘standard’ T(ense) that licenses cipients, and that the agreement relation is with this lower tense head.⁵⁸

2.3.2 VP, vP, AGR-IO

In this section, we consider existing proposals as to how and where cipients are licensed that can be quickly discarded.

Consider first the possibility that cipients originate within VP, as on Larson’s as well as Belletti and Rizzi’s analysis. We discussed these analyses in section 2.1.2, pointing out among other things that neither of them can account for the robust structural asymmetries between cipients and themes but predicts symmetry between them. In addition, Larsonian analyses have a problem in that cipients and locations may cooccur in one syntagma – this is unexpected if the two are realizations of one and the same thematic role as assumed on this type of analysis. Belletti and Rizzi’s 1988 analysis remains silent on the alternation found to pertain to ‘experiencing’ predicates in analogy to predicates projecting ‘ditransitive’ structures.

If cipients were licensed in the lexical domain, we would expect them to pattern symmetrically with theme arguments, which they clearly do not. It seems that unless additional (nonstandard) stipulations are made, there is not much hope making sense of structures comprising cipients, themes as well as locations with a single VP projection.⁵⁹

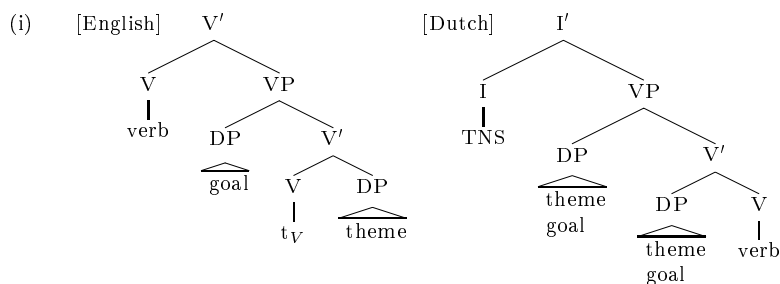
⁵⁸Under this view, parametrization of the interaction between the two temporal heads in terms of agreement/feature checking may be one source of variation, an option that appears favorable in view of the fact that the expression of particular temporal meanings in terms of tense forms independently varies considerably between languages.

⁵⁹A recent analysis according to which ‘goals/beneficiaries’ (our cipients) and themes are generated in one and the same VP is that of Neeleman and Weerman 1998, which is however part of a larger theoretical proposal such that evaluating it in isolation is problematic. A central assumption is that surface argument positions are in fact theta positions: there is

Moving up in the tree, consider vP as the locus for cipient arguments. Under the assumption made here that v encodes agentive/causative meaning, v is an a priori improbable candidate for licensing cipients: It is a paradigm property of cipient predication that it is completely independent of agentive/causative meaning, hence the pertaining structure as well under interpretability (section 1.3.2). Postulating different v heads (one for causatives, one for experiencers etc.) is viable in principle but amounts to restating the problem rather than solving it. Evidence was presented in section 2.2.3 in particular showing that the assumption that cipients are licensed by some projection akin to little v (including applicatives) does not explain the strongly asymmetric behavior of cipients compared to themes as well as – although to a lesser extent – agents. We saw that agents behave as if they were in the lexical domain to some extent, which is expected under the view taken here that little v is a content category carrying some kind of causative meaning.

An until recently popular route of accommodating cipients consists in postulating that they are licensed by an extra agreement projection, called most

no movement for case on N&W's theory. Another central assumption is that VO and OV order is a basic parameter, with far-reaching consequences for surface structures. On N&W's analysis, only languages like English with a case adjacency requirement (the VO languages) project a VP shell structure along the lines of Larson 1988. In OV languages, arguments are free in principle to be projected anywhere in V's maximal projection. Therefore, OV languages can do with one VP both for the DOC and the POC. The different structures of English as opposed to Dutch DOCs proposed by N&W look as follows:



On N&W's analysis, 'little v' is nonsubstantial but merely projected for case reasons, in opposition to what is assumed here. This goes against interpretability (section 1.3.2), and it is in addition unclear how the crosslinguistically robust asymmetries pertaining to binding, nominalizations etc. between the two 'objects' in DOCs would follow in e.g. English as compared to Dutch. In addition, it is unclear how structures comprising both a cipient and a location argument would look on an analysis such as Neeleman and Weerman's.

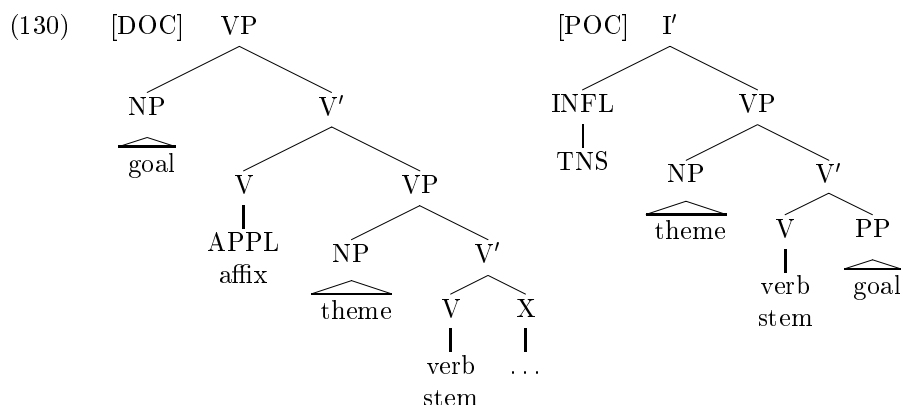
A feature of N&W's analysis that will play a role later on (section 3.3.2) is the idea that case works differently in English than in e.g. Dutch or German. N&W use the VP shell structure for English to capture that case licensing in English is subject to strictly local syntactic conditions (head government, adjacency), which is different in Dutch or German where D/NPs appear to be freer with respect to case licensing. In essence, English puts 'surface' restrictions on D/NPs that need case, while Dutch or German do not. A related proposal as to how the fact that Dutch and German allow scrambling while English does not can be derived from different conditions on case licensing is Neeleman and Reinhart 1998, to be sketched in section 3.3.2.

often ‘AGR-IO’. Interpretability (section 1.3.2) precludes analyses in terms of structure that is not interpreted, but it has never been said what ‘pure’ agreement projections achieve in terms of interpretation. An analysis of cipients in terms of AGR projections is therefore questionable from a conceptual point of view. Apart from that, postulating an agreement projecting hosting cipients says nothing about where cipients actually ‘come from’, that is, where and how they are thematically licensed. Putting cipients into an AGR phrase has little if any explanatory force then. On the other hand, proposals relying on AGR-IO as the licensing category for cipient arguments are on the right track in that they appreciate that cipients enter agreement relations and are external to the lexical domain.

2.3.3 APPL

An approach that inspired what we propose with respect to the syntactic representation of DOCs started with Marantz’ 1993 analysis of ditransitive structures. Basing himself mainly on data from Bantu, Marantz proposes that the DOC and POC encode different types of event structure.⁶⁰ Marantz argues that his ‘affected goal’ (our cipient) argument in the DOC is an argument that is ‘logically outside’ an event affecting the theme/patient. Since syntactic structures are assumed to reflect the compositional encoding of event structure, affected goals (cipients) have to be higher than theme/patients, in effect higher than the event involving the theme/patient as a whole. The asymmetries between the affected goal (cipient) and the theme argument are proposed to follow then from the ‘affected goal’ (cipient) being affected by an event encoded lower in the structure that comprises the theme argument. The structures Marantz assigns to the double object and prepositional object construction respectively are as follows (cf. Marantz 1993:119f):

⁶⁰On this view, theta roles are really abbreviations of the roles that arguments play in the encoding of event (or aspectual) structure: themes are the things undergoing certain events/processes, agents are the entities causing and/or controlling certain events/processes etc.. Marantz does not really drop theta roles though but still speaks of e.g. ‘goal’ and ‘affected goal’. The idea that theta roles are derivative in some form or another from event structure is quite common now, examples being e.g. the work of Jackendoff 1990, Parsons 1985, Kamp and Rossdeutscher 1994, Dowty 1989, Borer 1994.



An important feature of Marantz' analysis is that the POC is 'simpler' than the DOC in not projecting a VP shell structure but just comprising a single VP projection. DOCs comprise an extra domain headed by a verbal applicative affix. This applicative affix licenses the affected goal (ipient) and is not present in POCs. From this, the asymmetries between cipients and themes that we noted above could in principle be made follow. Marantz addresses the incorporation asymmetries, proposing that these instantiate the generalization that there is no incorporation 'across' zero-derived categories ('Myers' generalization', cf. above section 2.2.3):

- (131) Zero-derived words do not permit the affixation of further derivational morphemes (Myers 1984)

If I understand correctly however, the applicative head is taken to have a status that is on a par with the little *v* head in essence: It licenses an extra argument, and it bears meaning, i.e., it is a content category (cf. as well below). As was discussed in section 2.2.3 in the context of nominalizations, it is not clear whether a content category really blocks the processes noted to exclude cipients in section 2.2 – in fact, the applicative affix has morphological expression in Bantu, hence does not fall under Myers' generalization.

There are other worries and open questions concerning Marantz' analysis. First of all, it is unclear what the role is that applicative affixes play in licensing 'extra' arguments. As a consequence, the question of when an applied argument (goal, beneficiary etc.) is licensed is little more than shifted to another question, namely that when an applicative affix may occur and when it may not. This question lacks an answer so far to the best of my knowledge, pertaining proposals frequently proven wrong by new data becoming available. It is unclear as well what the semantic contribution of applicative heads is. The element appearing as an applied argument seems to be largely unrestricted from a thematic perspective: traditional 'benefactives' and 'goals' appear as applied arguments as much as 'locations' and to some extent 'instruments' as well (cf. Marantz 1993 as well as e.g. Ngonyani 1996). For this reason, it

seems advantageous not to conceive of the applicative affix and what it may correspond to in languages not featuring it overtly in not too substantive terms. Marantz does not commit himself to any particular semantics associated with applicative heads, saying only that the argument licensed by the applicative head is ‘logically outside an event’ encoded lower in the structure (cf. as well section 2.1 above).⁶¹

On the other hand, the vagueness concerning the semantics associated with applicative heads makes the approach as a whole less attractive: While it is semantically motivated and based on the assumption that syntactic structures reflect event structure, the very same semantics is not explained. It is unclear what it means for the ‘affected goal’ to be ‘logically outside the event affecting the theme’. In effect then it remains unclear what the licensing conditions of ‘affected goals’ (cipients) are.

Finally, Marantz’ analysis does not address the question whether and how the DOC and the POC are related. Saying that the two are not transformationally related by e.g. some movement operation does not mean that the two structures have nothing in common. To the contrary, we expect the two structures to share crucial features and parts of structure: It remains to be explained after all why DOCs and POCs are so close in meaning and why it is just certain classes of predicates that occur in both constructions.⁶²

Substantive APPL (\approx HAVE)

Recent proposals following up on Marantz’ analysis are more outspoken on the semantics assumed to be associated with applicative affixes. Combining ideas of Marantz 1993 and Pesetsky 1995, Pylkkaenen 2000 and similarly McGinnis 2001 propose that applicative heads encode a ‘possessive’ meaning (cf. section 1.4.4). In addition, they propose that there is variation between languages as to which type of applicative affix they employ: there are two different applicative affixes, a ‘low applicative’ establishing a possessive relation between the applied

⁶¹Marantz’ cautiousness seems to be based on examples such as the following (Marantz 1993: 123), where *pa- mchenga* (‘sand’) corresponds to the applied object (‘affected goal’) on his analysis:

- (i) a. Alenje a- ku- luk -ir -a pa- mchenga mikeka
 hunters SP- prs- weave -APPL -fv sand mats
 ‘The hunters are weaving mats on the beach’

In a footnote, Marantz writes: “The availability of locative applicative constructions in Chichewa and Chaga employing the same applicative affix (-*ir*- in Chichewa) as benefactive or instrumental constructions seems related to the presence in these languages of locative class prefixes that take a nounstem and produce a classified noun that indicates a location of a particular type. (p. 122 fn9)

⁶²Interestingly on Marantz’ analysis as on Larson’s (cf. above section 2.1.2), the lower verb in the DOC has a complement the nature of which remains however unspecified. Marantz simply writes dots under the node that is in complement position of the lower V.

object and the theme and a ‘high applicative’ establishing a possessive relation between the applied object and the event encoded lower in the structure.⁶³ The proposal is substantive, hence welcome under interpretability (cf. 1.3.2). In addition, McGinnis’ proposal is successful in accounting for differences between symmetric vs. asymmetric object languages (which is however not our direct concern).⁶⁴ We think however that the Pylkkaenen/McGinnis proposal is in fact too substantive. English is claimed to have only a ‘low applicative’ affix, from which the ‘direct object behavior’ of the ‘first object D/NP’ is made follow. It could be seen already in section 1.4.3 that there is considerable variation among speakers and dialects of English as to which object may become subject in passive, i.e., behave as the ‘direct object’.⁶⁵ If the difference were due to a substantive/semantic property of English, this would be mysterious. Rather, low-scale variation among speakers and dialects points to the conclusion that the differences are due to something ‘shallow’ rather than substantive, e.g., they could be due to some PF property.⁶⁶ Further, the low applicative head is assumed to encode a relation between individuals. This is a semantic restriction, hence the following sentences should be out in English according to Pylkkaenen/McGinnis:

- (132) a. Otto gave Anna a kick (cf. *Anna has a kick)
 b. Nixon gave Maylor a book

⁶³McGinnis 2001, combining these ideas with Chomsky’s 1999 ‘phase’ idea argues that languages with low applicatives have a lower phase boundary than languages with high applicatives. With some additional assumptions, she accounts for the syntactic ‘inaccessibility’ of the lower object in asymmetric (low applicative) languages and for the accessibility of the lower object in symmetric (high applicative) languages: in essence, the low phase boundary forces spellout of the theme argument before it could enter an agreement relation with T(ense) and be attracted to it.

⁶⁴Marantz’ original analysis sets out to account for certain asymmetries holding between what are called ‘symmetric’ and ‘asymmetric’ Bantu languages. Essentially in a symmetric Bantu language, both objects of a ditransitive construction show ‘direct object properties’, whereas in an asymmetric language only the ‘first’ (leftmost/ applied) object has the full range of direct object properties. The criterium that is usually highlighted here is the ability of a D/NP to become subject in passive constructions; extractability, cliticization and the applicability of WH movement serve as criteria for classifying a D/NP as a direct object as well. Marantz pins the difference between symmetric languages and asymmetric ones onto a difference in how the applied constructions are derived syntactically. As a result of different syntactic mechanisms used in deriving the applied construction, the lower D/NP in an applied object construction may either keep or lose its syntactic direct object status. The core idea that Marantz employs is that in asymmetric languages, the verb and the applicative affix merge/incorporate into one head that then governs the lower D/NP which consequently does not count as a ‘direct object’ anymore, where ‘direct object position’ is defined as an ungoverned SPEC,VP. In contrast in symmetric languages, the verb raises and adjoins to the applicative affix, leaving the lower SPEC,VP ungoverned.

⁶⁵To repeat, many speakers allow ‘long passives’ where the theme (the ‘second object D/NP’) becomes subject in passive, as should be forbidden if English only had low applicatives.

⁶⁶Looking carefully at the data across dialects and speakers, Hudson 1992 has shown that in English it is still the theme and not the goal/dative that shows the host of direct object properties (contra what is predicted by Pylkkaenen/McGinnis).

What these sentences encode is a relation between the first object D/NP and an event (a kick in (132-a) and under the ‘nixon sentence’ interpretation the writing of a book in (132-b), cf. Oehrle 1976, section 1.4.4 above). This should be ruled out in English, claimed to lack the applicative head responsible for relations between the first object D/NP and an event encoded lower in the structure. Note that one cannot say in English *Anna has a kick*, and that *Maylor had a book* is not what (132-b) expresses under the ‘nixon sentence’ interpretation.

In German, adjectival passive DOCs can still be modified by event-related adverbs, strongly suggesting that there is more encoded than a (stative) ‘possessive relation between two individuals’, as claimed for English by Pylkkaenen/McGinnis:

- (133) Ewige Treue ist einer neuen Liebe schnell versprochen
 Everlasting loyalty is a new love quickly promised
 ‘Everlasting loyalty is quickly promised to a new love’
 (German)

It seems implausible that German has a ‘high applicative’ (expressing a relation between an individual and an event) and that English doesn’t have it, given their vicinity and the desirable assumption that languages do not or only marginally differ at the level of interpretation (uniformity, cf. section 1.3.1).

Taking it that it can be made clear what it means for an individual to ‘possess’ another individual let alone an event, it is hard to see how e.g. instruments can ‘possess’ individuals or events respectively – as has been noted above, it seems possible in Bantu to license these by means of an applicative head as well (cf. fn 61 above). The fact is that neither DOCs nor DPCs encode a (reasonably narrowly construed) ‘possessive’ relation across the board (cf. above sections 1.4.2, 1.4.3). Consider for instance the structurally parallel examples in (134):

- (134) a. Otto showed/?opened her the door
 b. ‘Strip me that’, he said to Pilar
 (Hemingway, for whom the bell tolls (p. 287))
 c. Otto trank Anna den Wein weg
 Otto drank Anna-DAT the wine away
 ‘Otto drank up the wine such that there was none left for Anna’
 (German)

It is hard to see how examples like these translate into something like the cipient bearing a ‘possessive’ relation to the theme. The cipient appears to have rather abstract semantics, down to merely being ‘affected’ by something. In examples like (134-c), this something corresponds not just to be the theme argument but rather to a propositional meaning ‘that the wine is gone’.⁶⁷

⁶⁷If predicates entering DOCs were composed out of primitive relations like CAUSE and in

Assuming the basic validity of Myers' generalization (no derivation across zero-derived words, cf. above and section 2.2.3), the following argument can be construed against the idea that something like a possessive relation encoded by a(n) (high) applicative head is responsible for the licensing of cipient arguments. In German, the adverbs *wieder* ('again') and *zurück* can incorporate morphologically into the verb/predicate with verbs like 'give' or 'bring' occurring in the cipient construction:

- (135) a. Otto hat Anna das Fahrrad wiedergebracht
 Otto has Anna the bicycle againbrought
 b. Otto hat Anna das Buch zurückgegeben
 Otto has Anna the book backgiven
 (German)

The cipients here should be licensed by high applicatives (in German, the theme becomes subject in passive), that is, outside the lexical domain and above the little *v* head. However, the exclusive readings the sentences in (135) have is that 'the bicycle (the book) was with Anna' at some previous stage, and that this state of affairs is restituted (the restitutive reading, cf. section 2.2.1). If it were a (n empty) functional head – a high applicative in particular – that were responsible for this 'have' relation, Myers' generalization would predict incorporation of the adverbs *wieder* and *zurück* to be forbidden as far as I can see. What the examples in (135) suggest instead is that the respective state meaning ('the bicycle/book be with Anna') is encoded in the lexical domain, more precisely, the VP.

In sum, postulation of different applicative heads gives rise to a number of empirical problems. More seriously maybe, the claim that certain languages have and others don't have particular semantically substantial material goes against the principle of uniformity (section 1.3.1). If possible, we want to maintain that languages differ minimally at the level of interpretation, but claiming that languages differ with respect to the means they have to semantically in-

particular HAVE or POSS), we would expect that the constructions quite generally have this meaning, that is, that the 'having' is entailed by the 'causing'. As was pointed out already in section 2.2.4, this is not the case. Some run-of-the-mill examples show this again:

- (i) a. I sent Otto a letter \nrightarrow Otto ended up having a letter
 b. I threw Otto the ball \nrightarrow Otto ended up having the ball

It is felicitous to utter (i-a) and (i-b) also in circumstances where Otto does not end up having a letter or a ball. For example, the mail might have lost the letter; Otto might have failed to get hold of the ball because he stumbled. It is possible to put the blame on the CAUSE predicate, which amounts to the claim eventually that the CAUSE relation is idiosyncratically dependent on the particular verb entering the construction. This move would however deprive the idea of decomposition of its motivation, which is to capture systematically patterns of entailment. What is entailed by the examples given seems to be just what the sentences *Otto was sent a letter* and *Otto was thrown a ball* express – or maybe, putting more weight on the state following the sending: *Otto has been sent a letter (thrown a ball)*.

tegrate arguments is just the opposite.⁶⁸ Finally, using a primitive is just not the way in which languages encode ‘possession’.

The hypothesis present in Marantz as well as Pylkkaenen and McGinnis that cipients are licensed by an extra head above the VP appears to be an important step in the right direction, and it is part of our proposal as well. However, we argue that the relevant head is little *t*, a head pertaining to the tense system that is presumably needed independently (section 1.3.4) and that puts hardly any semantic restrictions on the argument that it licenses (cf. section 3.3.1).

2.3.4 *t(ense)*, not *T(ense)*

This section presents evidence in favor of the idea that cipients are licensed by a lower temporal ‘little *t*’ head. We first discuss briefly an earlier proposal according to which DOCs comprise two temporal heads, that of Collins and Thrainsson 1993. The main problems with this proposal come from the assumption that the agent argument occurs above this second tense head, while the cipient occurs lower. We propose that the relations are the opposite, the cipient being above (licensed in the specifier of) the *t* head and the agent being licensed below it at base.

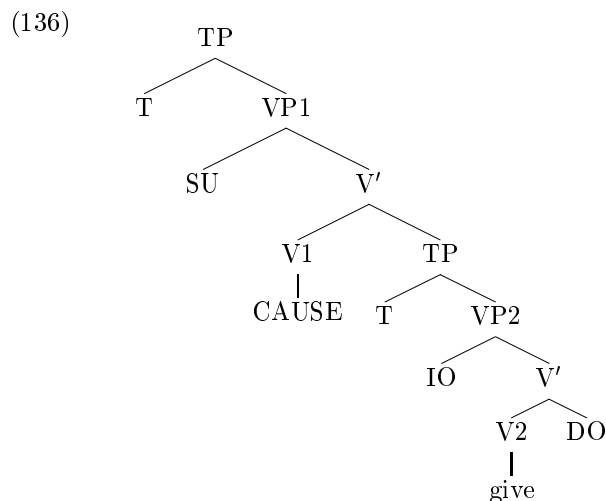
We then turn to evidence showing that DOCs encode two temporal domains (2.3.4). If we are right in that DOCs encode cipient predication, they provide the strongest evidence for cipients not being licensed by (associated with) the ‘standard’ *T(ense)* projection: Taking the standard view that *T(ense)* in DOCs is responsible for accommodating the nominative subject, the cipient cannot be there as well.

We present evidence indicating that the head licensing cipients and hosting *there* is below the standard *T* projection, arguing then on the basis of infinitival constructions that cipients are altogether independent of ‘standard’ *T(ense)* as licensing nominative case. Finally, evidence drawing on scope and binding interactions between adverbs and cipients indicate that the head position we are looking at is in the vicinity of, possibly the same as, the ‘*T_{anterior}*’ head proposed by Cinque in his analysis of adverb order in terms of functional heads.

Preparing some ground: Collins and Thrainsson 1993

That DOCs comprise two temporal heads has been proposed before by Collins and Thrainsson 1993 who assign to DOCs the structure in (136) (we leave out the AGR projections postulated by Collins and Thrainsson for perspicuity):

⁶⁸The same worries apply to a proposal of Harley (1996) that languages featuring an element meaning HAVE do project double object constructions while languages not having it do not.



Collins and Thrainsson argue that DOCs are biclausal, comprising two tensed domains. Their arguments for this are however largely technical and rely heavily on assumptions no longer generally made (pertaining to equidistance in particular), so we will not try to repeat them here. While we think that the idea that DOCs have two tensed domains is right, there are other problems with Collins and Thrainsson's analysis. They maintain that both 'objects' in a DOC are generated in the VP, leaving the robust asymmetries between cipients and themes without a straightforward explanation (cf. above section 2.3.2). In addition, Collins and Thrainsson's structure predicts a strong asymmetry between the cipient and the agent argument since the two are separated by the extra tense projection. There is however symmetry between the subject and the cipient as we have seen above in various respects, and this symmetry extends to the relative structural position the two arguments have with respect to each other: both the agent may bind into the cipient and the other way around (Brandt 2000), as is unexpected on a structure as given by Collins and Thrainsson:

- (137) ...weil seine_i Eltern [jedem Kind]_i Liebe schulden
 ...because its parents-NOM every child-DAT love owe
 (German)

In DOCs, the cipient can take semantic scope over the subject:

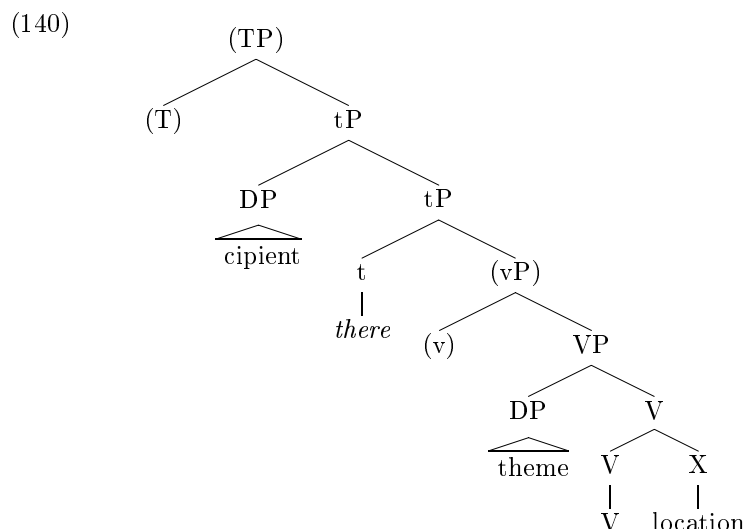
- (138) A (different) teacher gave every student a book

Intriguingly and as noted by Bruening 2001, a universally quantified theme argument can distribute over an indefinite agentive subject as well, also in the presence of a cipient argument:

- (139) A (different) teacher gave me every book

Again this is unexpected if the extra temporal projection postulated by Collins and Thrainsson appears ‘in between’ the agent and the ‘two objects’. There is symmetry largely between agents and cipients, the true asymmetry being between cipients and themes. Under our proposal, agents are base generated below cipients, in the specifier of *v*. QR could therefore in principle adjoin a quantifier below the cipient but above the agent.⁶⁹

In the following sections, we motivate our own proposal, according to which the cipient is licensed in an extra temporal projection from the start that is above the structural position where the agent argument is licensed but below T(ense). The structure proposed here is repeated in (140):



In order to show that (140) is a viable basis for an analysis of cipient predication, we have to provide evidence that there is in fact a ‘second’ t(ense) head present in the cipient construction. We have seen already that cipients behave much like (individual level) subjects that are standardly assumed to be licensed by T(ense), so an analysis along similar lines seems desirable. Further, we have seen that cipients are characterized by agreement in some languages (Spanish, Greek, Bantu), standardly assumed to be a reflex of an argument expression entering a relation with the verb/tense complex. This is expected if cipients

⁶⁹That themes can take scope over agents but not cipients could therefore be made fall under standard analyses such as based on e.g. Aoun and Li’s Minimal Binding Requirement:

- (i) Minimal Binding Requirement (MBR):
Variables must be bound by the most local potential antecedent
- (ii) Scope Principle:
A quantifier A may have scope over a quantifier B iff A and/or its trace c command B and/or its trace

are licensed by material pertaining to the tense system. The picture in (140) has some *prima facie* appeal then.

DOCs: Two tensed domains

The most straightforward case for the presence of an extra temporal projection in the cipient construction is maybe that of DOCs. As said above, the cipient can hardly be in Spec,TP in DOCs since that is where the standard (agent/cause) subject sits. Further, DOCs provide straightforward evidence against the view that T(ense) relates a situation or event to the time of speech, and that this is all there is to the encoding of temporal reference in natural language utterances. DOCs furnish two temporal reference points, as already suggested by the following type of example due to McCawley 1974:

- (141) a. At the meeting yesterday the salesmanager gave Anna Europe
next year
b. ??At the meeting yesterday the salesmanager gave Europe to Anna
next year
- (142) a. Yesterday, Otto promised Anna the bike next week
b. ??Yesterday, Otto promised the bike to Anna next week

As it turns out, DOCs can accommodate two temporal adverbs (in contrast to POCs) that can be mutually incompatible. Intuitively, what the fronted adverb in the DOC in (141) locates is the meeting and some transfer action carried out by the boss. The sentence-final temporal adverb locates a situation corresponding to Anna's being responsible for Europe, the post state of the transfer. Similarly in (142), the sentence final temporal adverb locates temporally a situation where 'the bike is with Anna'. DOCs furnish two domains that are independently 'tensed'.⁷⁰

We are led to conclude that there are two propositions – two tensed subject-predicate relations – encoded in DOCs (cf. section 1.3.4).⁷¹ Intuitively, the two tensed domains in DOCs seem to correspond to the 'relieving' and the 'receiving' end of some transfer.⁷²

⁷⁰Cf. Brandt 2001 for more examples.

⁷¹Not all DOCs allow independent temporal modification so easily. Clearly, world knowledge and context play a decisive role here. No matter what the context is, however, 'simple' transitive predicates as well as 'oblique object constructions' do not allow it. It would seem that the possibility to have independent temporal modification relates to a verb's ability to license a clausal complement overtly. However, as also the example with 'give' above shows, this is not a necessary condition for the availability of independent temporal modification.

⁷²That there are two 'anchors' for temporal modifiers in the DOC but not in the POC shows nicely in a 'Timezone argument' suggested to me by David Pesetsky. Imagine that A is in N.Y. where it is Wednesday, and B is in Moscow where it is Thursday already. Now A faxes B a letter. B says later

- (i) a. A faxed me a letter on Wednesday
b. A faxed me a letter on Thursday

That there are two independently tensed domains in DOCs is further brought out by a test proposed by Cinque 2000. Cinque argues that the temporal adverbs *always* and *already* can occur only once in a clause, thus providing a test for the number of clauses one is dealing with. What we find is that in DOCs, these adverbs can appear twice:

- (143) Immer verkauft Otto Eskimos immer (nur) Kühlschränke
 Always sells Otto eskimos always (only) refrigerators
 (German)
- (144) Schon hat er ihr schon (wieder) einen Kuss gegeben
 Already has he her already (again) a kiss given
 (German)

On the assumption that it is propositions are independently tensed, Cinque's test supports the hypothesis that fully-blown DOCs are 'biclausal', comprising two tensed domains and encoding two propositions.

If DOCs are biclausal unlike POCs, a generalization pertaining to which predicates do and which do not undergo the alternation between POC and DOC has a natural explanation. It has been observed that lexically negated verbs like *disallow*, *forbid*, *deny* are special in that they only allow the DOC but not the POC:

- (145) a. Anna denied Otto the bicycle
 b. *Anna denied the bicycle to Otto
- (146) a. Otto forbid Anna the library
 b. *Otto forbid the library to Anna

We can explain this as follows: DOCs comprise the propositional 'thingatloc' meaning (cf. section 2.2.1) that is dissociated temporally from the agentive or causal meaning associated with the overall structure (cf. section 2.1). It is expected that negation can take this meaning as its argument. In POCs on the other hand, there is no independently tensed propositional meaning, so the negation would have to take scope over the overall predication, which is not feasible.⁷³ To make this clearer, suppose that DOCs and POCs respectively have the simplified semantic representations in (147-a) and (147-b):

- (147) a. DOC: $\exists e$ CAUSE(e,p) & p = (AT (Otto, bicycle))
 b. POC: $\exists e$ CAUSE(e,p) & to Otto(e) & THEME(e, bicycle)

c. A faxed a letter to me on Wednesday

but not: ??A faxed a letter to me on Thursday

It seems that B can make reference to the 'sending' as well as to the 'receiving' end in the DOC, while there is no such 'receiving' end accessible in the POC.

⁷³Note that inherent lexical negation cannot take e.g. just D/NP arguments of a verb as its scope.

In (147-a), negation can take as argument the propositional meaning consisting in ‘the bike being at Otto’. In (147-b), this meaning is not encoded structurally, so negation can only take the overall predication as argument, negating the ‘causal’ meaning as well. A POC with a lexically negated verb would thus express that nothing at all has happened, and there are arguably better ways of saying this (e.g., saying nothing at all). In a DOC, the structurally encoded ‘result’ meaning can be negated to the exclusion of the causative part of the structure, which makes sense.

In sum, there is evidence that DOCs encode two independently tensed/-indexed domains. Given that cipients independently pattern with subjects of individual level predicates and on the basis of our definition of predication relations (section 1.3.4), more is needed for DOCs than just the ‘standard’ T(ense) projection.

PTCs and DPCs:

there and cipients ‘below’ T

There is evidence that the element *there* as characterizing PTCs is not generated in the T(ense) projection, as is standardly assumed in the literature on English. A look at Romance strongly suggests that the analogue of *there*, *y*, originates lower than Spec, TP. Manzini notes for certain dialects of Italian that ‘incorporated’ cipients occur in between the verbal form and the standard subject-verb agreement:

- (148) Purtæ -m -ite -le
 bring me -PL -it
 ‘Bring it to me’
 (Italian (*Senise*))

If affixing of incorporated elements succeeds in a successive cyclic fashion (cf. Baker’s 1985 ‘Mirror Principle’), Manzini’s example is strong evidence that cipients are licensed ‘above’ the verb but below T(ense) as standardly assumed to be responsible for subject-verb agreement.

Staying with Romance, the element *il* ‘it’ occurs (maybe is generated in) Spec,TP, not the element *y* ‘there’ in French:

- (149) a. Il y a une fille dans le jardin
 It there has a girl in the garden
 b. Y il a une fille dans le jardin
 There it has a girl in the garden
 (French)

Evidence that the analogue of *there* in Italian is lower than the usual subject position is provided by Freeze 1992:567f. For example, while standard subjects precede negation in Romance, the element *ci* ‘there’ has to follow it:

- (150) a. Pedro non é nella plaza
 Pedro neg is in-the place
 b. *Non Pedro é nella plaza
 neg Pedro is in-the place
 ‘Pedro is not in the/this place’
 (Italian)
- (151) a. Non ci sono uomini in casa
 Neg there are men in-the house
 b. *Ci no sono uomini in case
 There neg are men in-the house
 ‘There are no men in the house’
 (Italian, Freeze 1992:568)
- (152) a. No hi ha peix al menu d’avui
 Neg there have fish on-the menu of-today
 b. *Hi no ha peix al menu d’avui
 There neg have fish on-the menu of-today
 ‘Isn’t there fish on today’s menu?’
 (Catalan, Freeze 1992:568)

Further and as is well known, PTCs often furnish a special copula (cf. a.o. Spanish *hay*, French *y’a*, see among others Witkos 1998, Freeze 1992). This does not appear to happen with ‘regular subjects’ or subject clitics, which would be mysterious if the element *there* were on a par structurally with these elements. Freeze 1992 shows that in verb-initial languages (VOS), the locative proform corresponding to *there* is adjacent to the verbal inflection (in T(ense) under his assumptions), while subjects are not (Freeze 1992: 569). These facts suggest strongly that the (analogue of the) element *there* is ‘closer’ in the relevant sense to the verb/tense complex than usual (nominative) subjects, allowing the copula and the element *there* to fuse: If the (analogue of) *there* is merged below usual nominative subjects, the asymmetries pertaining to ‘subject *there*’ are expected.

Turning to cipients, standard word order patterns in German support the conclusion that cipients are higher than (nominative) themes, but lower than the C/T domain hosting ‘expletive it’. In German, the following sentences show the unmarked order, with c-command relations from left to right under standard assumptions:

- (153) a. Es ist einem Mann eine Frau aufgefallen
 It is a man-DAT a woman up-fallen
 ‘A woman struck a man’
 (German)

Coordination facts from German as discussed by Höhle 1983 as well as Heycock 1991 and Heycock and Kroch 1993 provide further evidence that cipients in

DPCs are not located in the specifier of TP – more carefully, they do not enter a relation with T in a way analogous to nominative subjects (cf. above section 2.3.1).

The (standard) assumptions made by Heycock and Kroch 1993 concerning coordination in the context of ‘equi D/NP deletion’ are the following:

- (154) a. the coordinated constituents have to be of like category
 b. the deleted element has to be ‘outside’ (\approx higher structurally than) the first conjunct

Further, let us assume that the verb in German verb-second sentences is in C (cf. den Besten 1989).

In German verb-second sentences, both preverbal nominative subjects and cipients can undergo equi-deletion, fulfilling the conditions given in (154):

- (155) a. Otto hat einen Film gesehen und EC hat dann eine Bratwurst
 Otto has a movie seen and EC has then a sausage
 gekauft
 bought
 ‘Otto saw a movie and bought a sausage afterwards’
 b. Otto gefiel der Film aber EC missfielen die
 Otto-DAT appealed the movie but EC disappaled the
 Darsteller
 actors
 ‘Otto liked the movie but not the actors’
 (German)

Under the above assumptions, both types of construction are fine, the part of structure that is coordinated under equi-deletion corresponding to everything below the Spec,TP position.

There is a well defined exception to the rule that the shared element has to be ‘outside’ the coordinated constituent: Nominative subjects as standardly assumed to enter an agreement relation with T maybe deleted under conjunction, although the verb is higher than their position (Spec,TP or lower) in verb-second sentences:

- (156) Das Gepäck schmiss er in die Ecke und EC rannte zum
 The baggage threw he into the corner and EC ran to-the
 Ausgang
 exit
 ‘He threw the baggage into the corner and ran to the exit’
 (German, Heycock and Kroch 1993)

Without attempting a deeper understanding of these facts (cf. Heycock and Kroch 1993 for a proposal), note that cipients cannot be the shared constituent under coordination unless they are fronted (i.e., in Spec,CP, cf. above):

- (157) a. *Gestern gefiel ihm der Film und missfielen EC
 Yesterday pleased him-DAT the movie and EC displeased
 die Darsteller
 the actors
- b. *Gestern war ihm kalt und wurde EC nicht wärmer
 Yesterday was him-DAT cold and got EC not warmer
 'He was cold yesterday and didn't get warmer'
 (German)

If cipients were licensed in a way analogous to 'standard nominative subjects', we would expect them to pattern with these in the deletion under coordination paradigm, which they do not however. The coordination under deletion paradigm suggests that cipients are not associated with (licensed by) the standard T projection.

Cipients in 'small' Infinitives

Supporting the conclusion that cipients are not associated with 'standard T', nominative subjects are not licensed in infinitives, but cipients are:

- (158) *Otto-NOM to do the dishes is dangerous
- (159) a. It is impossible [to escape *Otto_{cipient}*]
 b. It is dangerous [to give *Otto_{cipient}* a kick]
 c. Es ist gefährlich [da unangenehm aufzufallen] (German)
 It is dangerous [there unpleasantly up-fall/strike-INF]

Given the symmetry that we have seen between (individual level) subjects and cipients, it is desirable to analyze them along analogous lines. Given that cipients are licensed in infinitives, maintaining that cipients are licensed in (associated with) TP like nominative subjects would amount to postulating a TP projection with altogether different properties, a move that is independently excluded for the case of DOCs (since here the standard T projection accommodates the agent/cause).

Wurmbrand 1999 has argued that certain infinitives lack a T(ense) projection altogether, which according to her is why certain operations (such as long passivization and scrambling) are allowed to apply across these infinitives. The relevant type of infinitive as occurring e.g. as the complement of verbs like *try* still allows cipient arguments to appear:⁷⁴

⁷⁴In English, the element *there* is not licensed in this type of infinitive, but in German its analogue is:

- (i) Wir versuchten da abzuhaufen
 We tried there escape-INF
 (German)

- (160) a. We tried to give Otto a kiss
 b. We tried to escape Otto

Under interpretability, the null assumption is that if the interpretive properties associated with T(ense) are not present, T(ense) is not projected either. If T(ense) is not projected but cipients are licensed, trivially cipients cannot be licensed by T(ense). The main argument that Wurmbrand brings forward in favor of the hypothesis that infinitival complements of verbs like *try* lack a T projection is that they cannot be independently modified temporally, compare (161) to (162), while ‘ordinary’ infinitives can. Under interpretability, the conjecture is that they lack something substantially bearing on temporal interpretation:

(161) ??We tried to buy a book tomorrow

(162) We promised to buy a book tomorrow

Interestingly now, as soon as a cipient argument is projected as well, temporal modification of the infinitive becomes much better if not altogether fine. If a cipient is projected, independent tensing is possible, compare (163) to (164):

- (163) a. ?*Wir versuchten nächste Woche zu entgehen
 We tried next week to escape
 ‘We tried to escape next week’
 b. ??Wir versuchten nächste Woche ein Fahrrad zu besorgen
 We tried next week a bicycle to get
 ‘We tried to get a bicycle next week’
 c. ??Wir versuchten eine Woche später anzukommen
 We tried a week later arrive-INF
 ‘We tried to arrive a week later’
 (German)
- (164) a. Wir versuchten Otto(’s Party) zu entgehen nächste Woche
 We tried Otto(’s party)-DAT to escape next week
 ‘We tried to dodge Otto’s party next week’
 b. Wir versuchten Otto nächste Woche ein Fahrrad zu besorgen
 We tried Otto next week the bicycle to get
 ‘We tried to get Otto a bicycle next week’
 c. ?Wir versuchten da eine Woche später anzukommen
 We tried there a week later to-arrive
 ‘We tried to arrive there a week later’ (German)

In sum, while cipients relate to the encoding of temporal reference as usually assumed to be taken care of by T, they do not appear to enter a licensing relation with T as standardly conceived of. Rather than making up an altogether different variant of T, we propose that the relevant projection is little t.

Adverbs, Scope and Structure

We have argued in section 2.1 on the basis of interpretive patterns pertaining to the presuppositional adverb *wieder* that there are two propositional meanings encoded in cipient predication, one corresponding to the theme being at the location – the thingatloc meaning – and one corresponding to this meaning being ‘at’ the cipient.

The argument presupposes the view that syntactic structure reflects semantic compositionality, an assumption that is standardly made and without which linguistic inquiry can be hardly imagined. In the realm of adverbs, a standard assumption is that adverbs are licensed in particular positions in the tree according to which ‘semantic portion’ of it they modify. The most elaborate version of this view is represented by Cinque’s universal hierarchy of functional projections, given in (165):⁷⁵

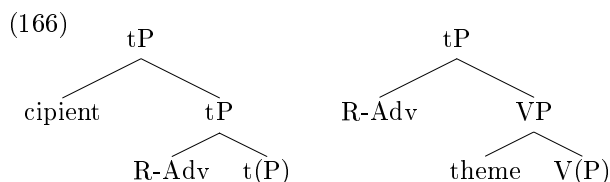
- (165) $\left[\begin{array}{l} \text{[mood}_{speech-act} \text{ frankly [mood}_{evaluative} \text{ fortunately [mood}_{evidential} \text{ al-} \\ \text{legedly [mod}_{episthemic} \text{ probably [T}_{past} \text{ once [T}_{future} \text{ then [mod}_{irrealis} \\ \text{perhaps [mod}_{necessity} \text{ necessarily [mod}_{possibility} \text{ possibly [asp}_{habitual} \\ \text{usually [asp}_{repetitive} \text{ again [asp}_{freq(I)} \text{ often [mod}_{volitional} \text{ inten-} \\ \text{tionally [asp}_{celerative(I)} \text{ quickly [T}_{anterior} \text{ already [asp}_{terminative} \text{ no} \\ \text{longer [asp}_{continuative} \text{ still [asp}_{perfect(?)} \text{ always [asp}_{retrospective} \text{ just} \\ \text{[asp}_{proximative} \text{ soon [asp}_{durative} \text{ briefly [asp}_{generic/progressive} \text{ characteristi-} \\ \text{cally(?) [asp}_{prospective} \text{ almost [asp}_{sg.completive(I)} \text{ completely [asp}_{pl.completive} \\ \text{tutto [voice} \text{ well [asp}_{celerative(II)} \text{ fast/early [asp}_{repetitive(II)} \text{ again} \\ \text{[asp}_{freq(II)} \text{ often [asp}_{sg.completive(II)} \text{ completely } \end{array} \right]$

Assuming the basic validity of Cinque’s proposal, adverbs can be used as a probe into the relative syntactic position of arguments in the syntactic structure. Making the null assumption that the semantic scope of adverbs is determined on the basis of their syntactic c-command domain, let us look at evidence bearing on the position of cipients relative to adverbs that pertain to the encoding of temporal reference in natural language sentences. The region that we are particularly interested in is that immediately below Cinque’s head ‘T_{anterior}, a head which is associated precisely with the encoding of reference time distinctions and beneath which adverbs bearing on the encoding of the inner temporal structure of eventualities are licensed according to Cinque’s findings. We will be looking at adverbs encoding broadly speaking ‘reference time distinctions’ in the following, using the term ‘R-adverb’ as a cover term for convenience.

If as we argue cipients are licensed in the specifier position of the category *t* that pertains to encoding a distinction at the level of reference time (R splitting), we expect to find evidence that cipients c-command adverbs that supply reference time information (R-time adverbs). In particular, we should find evidence

⁷⁵Cf. Nilsen 2003 for the proposal to derive the ordering of adverbs from deeper pragmatic principles.

marking a contrast between cipients and themes in their relative position to adverbs bearing on reference time distinctions if cipients are licensed higher in the tree than these adverbs, but themes are licensed lower in the tree:



A look at standard binding patterns (cf. section 2.2.2) confirms that cipients are higher than temporal adverbs bearing on the encoding of reference time distinctions (R-adverbs). Unlike theme or location arguments, cipients can bind variables that are part of R-adverbs:

- (167) a. The boss promised everybody_i a day off on his_i birthday
 b. *?The judge guaranteed him every_i child on her_i birthday
 c. *?The boss promised a day off to everybody_i on his_i birthday
- (168) a. Usually, a lot of mistakes escape every lecturer_i on his_i first day
 b. *Usually, a lot of cows escape from every_i farmer on his_i birthday
- (169) a. Ich versprach jeder Ex-Frau_i einen Kuchen an ihrem_i
 I promised every ex-wife_i a cake on her_i
 Geburtstag
 birthday
 b. ?*Ich versprach einer Ex-Frau jedes Kind_i an seinem_i Geburtstag
 I promised an ex-wife_i every child on his_i birthday
 (German)
- (170) a. Ein Geist erschien jedem_i Kind an seinem_i ersten
 A ghost appeared every_i child on his_i first
 Schultag
 day at school
 (German)
 b. Peter erschien jeder_i Geist an seinem_i Geburtstag
 Peter-DAT appeared every_i ghost on his_i birthday
 (German)

The patterns follow if cipient arguments c-command the portion of the tree that comprises the R-adverbs in (167) to (170), while themes do not.

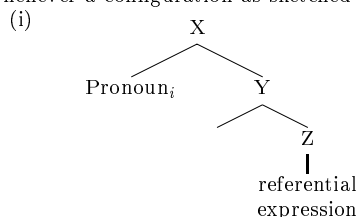
Similarly, Cipients may bind syntactically D/NPs embedded in temporally modifying clauses, but themes may not:

- (171) a. Es ist jedem Mann_i eine Frau aufgefallen als er_i
 It is every man-DAT a woman upfallen when he
 reinkam
 came-in

- ‘Every man was struck by woman when he came in’
 b. ?*Es ist jemandem jede Frau_i aufgefallen als sie_i reinkam
 It is someone every woman up-fallen when she came-in
 ‘Someone was struck by Anna when she came in’
 (German)
- (172) a. Otto gab jedem Besucher_i ein Brötchen wenn er_i reinkam
 Otto gave every visitor a roll when he came in
 b. ?*Otto gab Besuchern jedes Brötchen_i wenn es_i fertiggebacken
 Otto gave visitors every roll when it ready-baked
 war
 was
 ‘Otto gave every roll to visitors when it was baked’
 (German)

If cipients c-command the R-adverbs in the examples but themes do not, then the contrasts follow from a violation of the c-command requirement on the binding of pronouns.⁷⁶

⁷⁶We would predict to find principle C effects as well. A principle C violation arises whenever a configuration as sketched in (i) is produced:



In words, a principle C violation arises if a pronoun c-commands a referential expression with which it is coreferential. Indeed Stroik 1996 provides examples suggesting that manner/reason adverbs are lower structurally than cipient arguments. Referential expressions contained in manner/reason adverbs appear to give rise to principle C-effects when coindexed with cipients, but the contrasts are less sharp than one would wish:

- (ii) a. ?John recited Mary it_i without knowing ‘the wasteland’_i very much.
 b. ?*John recited her_i the wasteland without knowing Mary_i very much

Speakers of German do not feel strong contrasts between examples such as (iii-a) and (iii-b), although the tendency goes in the right direction. Everything else being the same, (iii-a) should be strongly odd since here the pronoun should c-command the adverb, unlike in (iii-b):

- (iii) a. ?Sie war Otto schon an Annas Geburtstag begegnet
 She-NOM was Otto-DAT already on Anna’s birthday come-across
 ‘She came across Otto on Anna’s birthday already’
 b. ??Ihm war Anna schon an Ottos Geburtstag begegnet
 Him-DAT was Anna already on Otto’s birthday come-across
 ‘Anna came across him on Otto’s birthday already’
 (German)

Plausibly however, it is not the case that everything else is the same: it is unclear in particular where in the tree the pronouns needed to produce principle C effects are located in German.

For DPCs in German, a look at the following paradigm suggests that the cipient here is located somewhere in between adverbs making reference to the perspective of the speaker (*wohl* ('presumably')) and adverbs restricting reference time (*am Sonntag* ('on sunday')), but quite clearly higher than adverbs making reference to the inner temporal makeup and location of the 'eventuality' (*plötzlich, im Wald*).⁷⁷

- (173) Was ist los? (Kontext: Die Hobbits sind aufgeregt)
 What's the matter? (Context: the hobbits are upset)
- a. Es ist (wohl) einem Hobbit (*wohl) ein Ork
 It is (presumably) a hobbit-DAT (presumably) an Ork
 begegnet
 become-aware
 - b. Es ist ((?)?am Sonntag) einem Hobbit (am Sonntag) ein Ork
 It is (on sunday) a hobbit-DAT (on sunday) an Ork
 begegnet
 Ork become-aware
 - c. Es ist (??plötzlich) einem Hobbit (plötzlich) ein Ork
 It is (suddenly) a hobbit-DAT (suddenly) an Ork
 begegnet
 become-aware
 - d. Es ist (*im Wald) einem Hobbit (im Wald) ein Ork
 It is (in-the woods) a hobbit-DAT (in-the woods) an Ork
 begegnet
 become-aware
 (German)

More substantively, a pattern observed by Basilico 1998 suggests that cipients act as restrictors for temporal modifiers (in their c-command domain):

- (174) a. While on patrol, the policeman gave a (??different) speeding motorcyclist occasionally a ticket
 b. While on patrol, the policeman gave a ticket occasionally to a speeding motorcyclist

In the DOC example in (174-a), the referent of *a speeding motorcyclist* remains constant over occasional ticket-givings, the scope-bearing element *occasionally* cannot distribute over it. This is different in (174-b) illustrating the POC: here it is unproblematic to distribute over referents of *a speeding motorcyclist*.

PTCs exhibit interesting patterns with respect to adverbs that are standardly assumed to be particularly high structurally, adverbs relating to the perspective

Possibly, these are 'scrambled' hence relatively high in the structure quite independently of whether they correspond to cipient or theme arguments.

⁷⁷We use all-focus structures and indefinite D/NPs only to control for noise arising from definiteness/scrambling etc., but the judgments are admittedly still quite subtle.

to the speaker, that is, the encoding of force structure. While an adverb like *fortunately* has no problem appearing in between a nominative subject and the predicate, it cannot appear in between the element *there* and the predicate:

- (175) a. ?*There fortunately came a fireman (OK: ‘suddenly’)
 b. A fireman fortunately came

The analogous pattern pertains to PTCs in which locative inversion has taken place:

- (176) a. *Down the hill fortunately came a prophet
 b. A prophet fortunately came down the hill

If the element *there* were situated in Spec,TP and similarly locative inversion would target Spec,TP (as is standardly assumed), it would be hard to see where these contrasts come from. If on the other hand *there* is situated lower than the layer responsible for the encoding of force (the C/T domain under standard assumptions), it is straightforwardly explained: the ‘right’ projection is simply not there in between the element *there*, the inverted location and the cipient respectively and what it c-commands.

In sum, there is evidence from the domain of adverbs and their interaction with cipients indicating that cipients are generated in a relatively high structural position, supporting the conclusion that they are external arguments. In particular, cipients appear to c-command adverbs bearing on the encoding of reference time distinctions. Cipients are lower structurally on the other hand than adverbs pertaining to the encoding of force as assumed to be associated with the C/T domain. The patterns are predicted if cipients are licensed as specifiers of the category little *t* that we argue pertains to reference time encoding.

2.3.5 Cipient islands and tensing

It has been noted for many languages that cipients act as ‘blockers’. In particular, processes traditionally classified as A-movement (grammatically motivated movement from a theta to a case position) often appear to be blocked ‘across’ cipient arguments (cf. a.o. Larson 1988, Baker 1988, 1996, Marantz 1993, McGinnis 1998), while no such blocking arises with location arguments. We argue here that the blocking associated with cipients is better understood in terms of domains than in terms of minimality. More in particular, the hypothesis entertained here that cipients are licensed by material pertaining to the tense system that they value offers a way of explaining the blocking effects associated with cipients in terms of the fundamental idea that it is preferable to keep as little syntactic structure for computation as possible (cf. section 1.3.2): Acting as ‘specified subjects’ (cf. Chomsky 1973) of a propositional unit, cipients provide the information necessary for the interpretation of their complement, which is therefore forced. Following ideas of Carnap 1928 and Goodman, we

propose to interpret the definiteness/presuppositionality of cipients evidenced above in terms of having temporal extension: Corresponding to definite individuals, cipients ‘have times’ and can therefore supply a tense/index value for the *t* head. Elements in the VP that need to enter a relation beyond the *t* head to satisfy interpretability cannot do this, quite simply because they are not part of the structure anymore when the element they need to enter a relation with is merged. The ‘blocking effects’ are then another consequence of cipients being subjects of predication, understood in the above defined sense of an ascription relation between an individual and a property that is temporally located. The view this leads to is quite surprising: Certain structures are ruled out because the directive to interpret structures as soon as possible trumps grammatical needs.

‘A-processes’

‘A-process’ is a cover term for syntactic processes affecting arguments that are purely grammatically motivated (in particular case checking) and subject to strict locality. In more traditional terms, A-processes are restricted to apply within one and the same ‘tensed sentence’, ‘governing category’ or ‘complete functional complex’ – this translates into minimalist terms as ‘saturated units’ that can be interpreted in extralinguistic terms (what phases encode, cf. above section 1.3.2).

Cipients systematically interfere with A-processes, which appear to be incapable of applying ‘across’ cipients. For example, passive formation is often ruled out across a cipient argument, such as in English or Swahili. If there is no cipient argument present, passive formation is unproblematic: ⁷⁸

- (177) a. Someone promised a book to John
A book was promised to John
b. Someone promised John a book
%A book was promised John
- (178) a. Juma a- li- m- nunul -i -a m- toto ki- tabu
Juma 1SA- PST- 1OA- bring -APP -FV 1- child 7- book
'Juma bought the child a book'
b. *ki- tabu ki- li- nunul -i -w -a m- toto
7- book 7SA- PST- buy -APP -PASS -FV 1- child
'A book was bought (for) the child'
(Swahili, Bantu. SA = subject agreement, OA = object agreement, numbers = noun classifiers, FV = final vowel, PST = past tense, APP = applicative affix)

The pattern is paralleled, actually stronger, in ‘pure’ unaccusative constructions, discussed by Baker (1996). There appears to be a crosslinguistically ro-

⁷⁸The Swahili data are from Ngonyani (1996) Cf. *ibid* for parallel data from Ndendeule, Cf. Alsina & Mchombo (1993) for parallel patterns in Chichewa.

bust gap pertaining to unaccusative realizations of ‘dative shifted’ predicates, that is, predicates licensing a cipient argument. Reminiscent of the passive case, movement of the theme to subject position is perfectly natural in the location construction, but it is ruled out in the cipient construction (examples from Baker (1996)):

- (179) a. The ring passed *t* to Mary [POC]
 b. *The ring passed Mary *t* [DOC]

Again, it appears that the cipient argument blocks movement of the theme for case – in more recent terms, the theme cannot enter a checking relation with T which would be needed to check EPP and NOM as well as value uninterpretable phi-features on T (section 1.3.2). Torrego 1996 notes that raising of an argument across what she calls an ‘experiencer dative’ results in ill-formedness in Spanish, while it is possible in the absence of a cipient argument:⁷⁹

- (180) Este taxista (*me) parece [*t* estar cansado]
 This taxi-driver to-me seems to-be tired
 ‘This taxi driver seems to me to be tired’
 (Spanish, Torrego 1996)

In German, long passivization as encountered in section 2.3.5 in the context of infinitival structures is blocked across cipients:⁸⁰

- (181) a. Sie versuchten (mir) das Auto zu reparieren
 They tried (me) the car-ACC to repair
 ‘They tried to repair the car for me’
 b. Das Auto wurde *(mir) zu reparieren versucht
 The car-NOM was (me) to repair tried
 ‘It was tried to repair the car for me’
 (German, Wurmbrand 1999)

Across languages then, it appears that cipients interfere with the theme entering a relation beyond the cipient that needs to be established however for the resulting structure to be interpretable.

⁷⁹In Icelandic, movement for case is similarly blocked across (per-)cipients, cf. Holmberg and Hróarsdóttir 2001 and references therein.

⁸⁰It can be seen in Bantu that the blocking occurs only if there is agreement, which we interpret as a reflex of an argument expression entering a relation with tense. Ngonyani (1996, p.34) reports that in Ndendeule and Swahili, ‘agreement’ (clitic climbing) of the direct object is impossible ‘across’ an agreeing cipient, that is, what corresponds to the DOC (this is irrelevant of the order between the theme and the cipient, cf. *ibid.*):

- (i) a. hokolo a- ki- ssa- pel -a ssa- chokolo hi-tabu
 grandpa 1SA- PST- 2OA- give -FV 2-grandchildren 8-book
 b. *hokolo a- ki- hi- pel -a hi- tabu ssa- chokolo
 grandpa 1SA- PST- 8OA- give -FV 8- book 2- grandchildren
 ‘grandpa gave the grandchildren books’
 (Ndendeule, Bantu)

Not just A-processes

A possible account of the blocking of A-processes is in terms of Minimality, and this is the route usually taken: the cipient argument, being closer to T than the theme, acts as an intervener for the agreement relation that needs to be established between T and the theme argument. In the tradition of Rizzi's relativized minimality, interveners have to be of the 'right' type: arguments act as possible interveners for relations between arguments, heads act as interveners for relations between heads etc. In feature terms, the intervener has to bear the 'right' features to disturb agreement relations: In the A-movement case, only arguments that have 'competing features' are expected to intervene – under the simplest assumptions, only a D/NP that can do the same job in terms of feature checking and that is closer structurally to the element needing to check uninterpretable (unvalued) features than its competitor will disturb an agreement relation with a lower D/NP.⁸¹

We will argue in the next chapter however that cipients are poorly equipped with features, lacking number information in particular (as well as, possibly, being defective with respect to person encoding). Cipients are hence not on a par with theme arguments with respect to feature makeup, making a relativized minimality solution doubtful, in particular if one wishes to keep the stricter condition of Chomsky 1999 that there has to be a one-to-one relation between uninterpretable (unvalued) and interpretable (valued) features on probes and goals respectively (cf. last footnote).

Further, an account in terms of minimality is implausible in light of the fact that cipients disturb diverse kinds of extraction processes. If minimality were at the root of the blocking, the blocking would be predicted to obtain only with elements that are 'well defined competitors' with cipients in terms of features. Cipients make all kinds of extraction systematically worse however, quite independently it appears of the types of features involved.

To give examples and to start with PTCs, for many speakers of English extraction 'across' the element *there* generally yields bad results. Note that *there* is assumed to be particularly poorly equipped with features – under standard analyses, *there* bears just a feature allowing it to appear in Spec,TP (a strong D feature according to Chomsky 1995, a person feature according to Chomsky 1999). The following examples illustrate WH extraction in PTCs (from Law 1997:117f):

- (182) a. *Where has there been a book put t by John?
 b. *What has there been t put on the table?
 c. *How many books have there been t put on the table?

It is hard to see how *there*, given its feature poverty (it clearly does not bear

⁸¹We noted above that it is in the interest of symmetry and restrictiveness to keep the strict condition (same features on probe and goal) on feature checking. Cf. sections 1.3.1, 2.3.1 above.

a WH feature) can intervene with WH movement, which would be the line of explanation that a (relativized) minimality account calls for however.

Turning to structures comprising cipient arguments and looking at a set of examples from German, topicalization as well as WH movement as well as Was-für split get notably worse in the presence of a cipient argument:

- (183) a. Ein Auto hat Otto erwägt (?Anna) zu kaufen
 A car has Otto considered (Anna) to buy
 b. Welches Auto hat Otto erwägt (?Anna) zu kaufen?
 Which car has Otto considered Anna to buy?
 c. Was hat Otto (?den Studenten) für Sachen gesagt?
 What has Otto the students for things said?
 (German)

Whatever the features involved in these processes, it is unexpected under minimality that cipients should act as interveners for the movements involved. Again, cipients clearly do not bear WH. Fronting of adjuncts degrades with the presence of a cipient as well, but does not with a location argument:

- (184) a. Durch die heilige Schrift bringen die Propheten t das Wort
 Through the holy bible bring the prophets t the word
 Gottes zu den Menschen
 of-god to the people
 b. ?Durch die heilige Schrift bringen die Propheten den
 Through the holy bible bring the prophets the
 Menschen t das Wort Gottes
 people t the word of-god
 (German)

According to Starke 2002, speakers of English get contrasts of the following type:

- (185) a. What did you give t to Paul
 b. *What did you give Paul t
 (186) a. What do you wonder who gave t to Paul?
 b. *What do you wonder who gave Paul t?
 (Starke 2001)

It is clear enough that the cipient argument in (185-b) does not bear a WH feature, hence should not intervene in the WH movement that is triggered by a WH feature. The contrast between (186-a) and (186-b) is still more puzzling from the perspective of relativized minimality: If anything, the WH-agent argument should intervene here, but it does not as (186-a) shows.

What the queer mix of relations that are disturbed by cipients suggests is that the blocking effects are not due to an inherent property of the dative that would block matching between e.g. the theme D/NP and its attractor.

It rather appears that it is a property of the construction connecting to the presence of the cipient that induces the blocking.

The next section investigates a possible account for the blocking effects in terms of domains and the directive to ‘interpret as soon as possible’ (cf. section 1.3.2). We restrict attention to a subset of traditional ‘A processes’, neglecting entirely what is traditionally called A-bar movement, known to fall outside strict locality constraints.

A tensing account

We just saw that cipients interfere with diverse types of extraction operations, a fact speaking against a (relativized) minimality explanation of the blocking effects they induce but in favor of a domain explanation.

In this section, we put forward an analysis of the blocking effects in terms of tensing, focussing on processes that are purely grammatically motivated. The core idea is that being definite, cipients can supply a value for the *t* head which forces spellout of *t*’s complement. Interpreting cipients involves checking a presupposition on the part of the speaker (section 1.3.4), hence merger of a cipient yields a structure that is fully saturated in the sense of being anchored to the utterance situation (section 1.3.2). What prevents argument expressions from entering agreement relations beyond *t* is that cipients saturate the structure headed by *t* which is therefore interpretable in extralinguistic terms and needn’t hence must not be kept for further syntactic computation.

The structure of this section is as follows: We first sketch Baker’s 1996 and Everaert’s 1990 accounts of the blocking effects associated with cipients. Both accounts are problematic in the light of the discussion so far, still they provide the core ingredients for the analysis presented here – the idea that the blocking effects have a domain explanation (Baker 1996), and the idea that a distinction between lexical and syntactic processes is crucially involved in the licensing conditions of constructions of the ‘unaccusative/inchoative’ and ‘middle’ type (Everaert 1990). We then present our own account in terms of phases, discussing relevant patterns from English, Dutch and German. At core, the account is that in order to derive the constructions, a checking relation has to be established between the theme and *T* ‘across’ the cipient (and *t*). In English and Dutch, this is not possible because the ‘case-moved’ theme in English and the element *zich* need to be interpreted in (reconstructed into) their base position in the VP, so the relevant relation can never be established. In German, there is no movement for (nominative) case and the element *sich* can be interpreted in its surface position, German being a ‘syntactic SE language’ (unlike Dutch, a ‘lexical SE language’).

The workings of the analysis proposed will be exemplified comparing and seeking to unify the (absence of) blocking effects associated with inchoativization and middle formation in English, Dutch and German respectively (passive will be discussed as well to some extent):

- (187) a. *The door opened Mary
(cf. The door opened for Mary)
b. *These books sell students <books> badly
(cf. ?These books sell badly to students)
- (188) a. *De deur heeft zich Jan <zich> geopend
The door has SE Jan <SE> opened
(cf. De deur heeft zich voor Jan geopend)
b. *Deze boeken verkopen zich studenten <zich> (niet zo) goed
Theses books sell SE students <SE> (not so) good
(cf. Deze boeken verkopen zich niet zo goed aan studenten)
(Dutch)
- (189) a. Die Tür hat sich Jan geöffnet
The door has SE Jan opened
b. Diese Bücher verkaufen sich Studenten nicht so gut
These books sell SE students not so well
(German)

Previous accounts Baker 1996 offers an analysis of the blocking effects associated with cipients in terms of domains. According to Baker, what is robustly blocked across languages in the presence of cipients is the unaccusative/inchoative structure as exemplified in (187-a) to (189-a).⁸² Baker's proposal is that the VPs of unaccusative structures correspond to a complete functional complex in the sense of Chomsky 1986. Complete functional complexes (\approx saturated structures, structures the argument-selecting head of which has checked all its features) define the domain in which elements dependent on syntactic binding have to be bound (principle A of the traditional binding theory). Adopting the essence of Larson's analysis of 'dative shift' – that the cipient is a moved PP location – Baker argues that the cipient argument fails to bind its trace in unaccusative structures: the VP is a CFC excluding the cipient argument which therefore cannot bind the PP location position, as sketched in the following structure:

- (190) *[cipient_i [$VP=CFC$ theme location_i]]

To account for the fact that in passive structures, cipients do not appear to be ruled out, Baker proposes that the VP structure here does not correspond

⁸²To the extent that the German structure should be analyzed along the same lines as the English and Dutch ones, i.e. as an unaccusative type structure, the example in (189-a) provides a counterexample to his claim. Mchombo and Alsina 1990 provide counterexamples such as the following from Chichewa (Bantu):

- (i) Yèsu a- ná- wá- f -er -a (anthu)
Jesus 1Sg- Pst- 2OA- die -APPL -FV 2-people
'Jesus died for them (the people)'
(Chichewa, Bantu)

to a CFC: unlike unaccusative structures, passive structures comprise an agent argument role which is not assigned within the VP (and absorbed in the derivation): the passive VP is not saturated like the unaccusative VP, as sketched in the following structure

(191) [cipient_i (by-agent) [_{VP} theme location_i]]

The important assumption is that from a structural perspective, cipients are contained in the same CFC as agent arguments. Hence, the cipient is in the ‘first’ CFC together with the agent and can bind the PP location position. Under the assumption that passive VPs are not, but unaccusative VPs are CFCs hence constitute a domain relevant for syntactic binding, Baker’s analysis accounts for contrasts like the following holding in English:

(192) a. Mary_{ciipient} was given a book
 b. *Mary_{ciipient} opened the door / *The door opened Mary_{ciipient}

We have argued above that the VP in the constructions under discussion indeed encodes a propositional meaning (theme at loc at t) and is in this sense ‘complete’, like Baker proposes. However, Baker pins the ungrammaticality of the cipient structures on the dependency between the cipient and the PP location, adopting the Larsonian transformational analysis of ‘dative shift’. We have argued above that the cipient and the PP location are not related by syntactic transformation. To repeat, the transformational analysis cannot account for the cooccurrence of cipients and PP locations, and it predicts symmetry between cipients and theme arguments instead of the robust asymmetry that is actually found. The problem cannot be due to the cipient and the PP location not being in the same domain relevant for syntactic binding.

Everaert’s 1990 analysis crucially relies on a dichotomy between lexical and syntactic ‘unaccusative/inchoative’ formation, an idea that will enter our analysis as well. In a nutshell, Everaert argues for Dutch that in the process of inchoative/middle formation, the agentive role in the theta grid of the lexical predicate is absorbed. The hierarchical relations between the remaining to-be projected arguments are then reassigned: the cipient is hierarchically more prominent than the theme argument, and is as a consequence marked as the external argument of the construction. If the cipient becomes the external argument and if there is just one external argument (an assumption shown to be wrong by DOCs if we are right), then the theme cannot become subject in unaccusative/inchoatives. A crucial assumption in Everaert’s analysis is then that cipient arguments are part and parcel of the thematic grid of the lexical predicate, an assumption that goes against what we argued: cipients are not licensed by the lexical predicate but syntactically, by predication. To repeat, if cipients were selected arguments of lexical predicates, we would expect them to pattern largely symmetrically with themes and location arguments which they however do not. The assumption that cipients are lexically selected leaves one

at a loss explaining the robust asymmetries between cipients and themes and locations respectively (cf. sections 2.2.2.–2.2.5).⁸³

Phases. Cipients as ‘tensors’ What has been discussed so far offers an account of the blocking effects in terms of the fundamental principle that structure that can be interpreted must be gotten rid of (spelled out) immediately. We propose that what goes wrong in having cipients with unaccusative/inchoative and middle structures respectively is that the theme argument, situated in Spec,VP, needs to enter a checking relation with an element beyond (c-commanding) *t* for purely grammatical reasons (< ‘A process’). This is impossible if there is a cipient, merger of which values *t* and forces spellout of the VP.

We argue that cipients are licensed by *t*, a category pertaining to the tense system. Along the lines of Pesetsky and Torrego’s 2001 proposal that nominative case is in fact a tense feature valuing T(ense), we say that the little *t* projection has an uninterpretable/unvalued tense feature pertaining to reference time: the cipient provides a value for this feature, allowing interpretation of the structure comprising the ‘theme at loc’ meaning associated with the constructions under discussion. Like nominative case can be viewed as a tense feature, cipient marking (‘dative’) can then be interpreted as a tense feature valuing *t*.⁸⁴

- (193) cipient: valued *t* feature
 t: unvalued *t* feature

We have argued above that cipients are definite/presuppositional (cf. definition in section 1.3.4). We interpret definiteness in the Carnapian (1928, cf. as well Goodman 1951) sense of having temporal extension. Cipients can value *t* exactly because they come with times/indices (cf. section 1.3.4, section 2.2.4): Interpreting cipients involves checking a presupposition on the part of the speaker and thus establishes a link to the utterance context. Merger of a cipient therefore yields a fully saturated structure, cf. the discussion in section 1.3.2. Further, it is natural to assume that the possible values of the *i* variable (the index at which *thingatloc* holds) are restricted by the cipient. Consider:

- (194) Otto erschien ein Geist (vor der Nase)
 Otto-DAT appeared a ghost (in-front-of the nose)
 ‘A ghost appeared to Otto (in front of his nose)’
 (German)

Clearly, the time/index at which it holds that there is a ghost in front of Otto’s

⁸³In addition, the view that cipients are lexically selected cannot account for the fact that cipient arguments are largely optional.

⁸⁴Under Pesetsky and Torrego’s proposal, NOM is an uninterpretable tense feature on D. Differently under what we propose, tense is interpretable on Nominals. Cf. as well Lecarme 1997.

nose has to be one where Otto is in existence as well. Hence, only models containing Otto have to be checked in order to assess the truth or falsity of the proposition in (194). We propose that when it comes to assessing the meaning encoded in cipient predication, the *w* variable has the status of an index in model-theoretic semantics: Cipient predication is a function from an index coming with the cipient and a propositional meaning (thingatloc) to truth or falsity. We have (with *w* the cipient, *p* the location argument and *g* a variable assignment):⁸⁵

$$(195) \quad \text{'Cipient/there be D/NP (at LOC)'} = 1 \text{ iff } \llbracket \text{D/NP} \rrbracket^{w,g} \in \llbracket \text{AT p} \rrbracket^w$$

In terms of features, cipients value the *t* head, the complement of which must be spelled out: the information necessary to interpret the propositional meaning encoded in the VP is there, hence the VP structure can be represented in extralinguistic terms and must not be kept in syntax. The theme argument in Spec,VP is spelled out with the VP:

$$(196) \quad [{}_{tP} \text{ cipient } [{}_{t} \dots [{}_{VP} \text{ theme location } \dots]]] \rightarrow \text{spell out VP}$$

A grammatical checking relation cannot be established across the cipient: If something above *t* needs the theme for grammatical checking purposes (English T needing EPP,NOM checking), the structure ends up being unvalued/uninterpretable. If the theme needs something from above *t* in order to be interpretable (Dutch *zich*), the structure ends up being unvalued/uninterpretable as well.

We propose that if there is no cipient merged in *t*'s specifier, *t* is valued by T. In short, nothing happens in case there is no cipient merged, all the structure is kept and the T head fuses with *t*. We have then an operation corresponding to head movement or head merger, with consequences for feature checking (T may value features of *t* and the other way around, cf. section 1.3.2):

$$(197) \quad [{}_{T} T [{}_{t} t [{}_{X} X]]] \implies [{}_{T/t} T/t [{}_{X} X]]$$

The theme argument is therefore still present when T is merged and can enter an agreement relation with T:

$$(198) \quad [{}_{TP} T [{}_{tP} t [{}_{VP} \dots \text{theme } \dots]]]$$

If there is no cipient present, there will be no blocking effects since nothing forces spellout of the VP before T is merged.

⁸⁵Cf. Musan's 1995 generalization that

- (i) D/NPs can refer temporally independently iff they are presuppositional or if they are arguments of existence independent predicates.

The crucial part of the generalization is that presuppositional (covering our 'definite') D/NPs may get a temporally independent interpretation. 'Existence independent predicates' is meant to cover adjectives like *famous* in *Frege is famous*.

Chain formation with the theme We blame the ungrammaticality of A-processes across cipients on the theme argument not being able to enter a checking relation across the cipient. Under certain circumstances, a relation between a position in the VP (the lexical domain) needs to be established for purely grammatical reasons, and it appears that these are the cases that are most robustly blocked across cipients (cf. the ‘A-processes’ listed above).

To exemplify how the analysis we propose works in practice and what type of auxiliary assumptions are called for, let us consider inchoativization/middle formation in some more detail in English, Dutch and German respectively. The relevant patterns, repeated from above, are the following:

- (199) a. *The door opened Mary
 b. *These books sell students <books> badly
- (200) a. *De deur heeft zich Jan <zich> geopend
 The door has SE Jan <SE> opened
 b. Deze boeken verkopen zich studenten <zich> (niet zo) goed
 These books sell SE students <SE> (not so) good
 (Dutch)
- (201) a. Die Tür hat sich Jan geöffnet
 The door has SE Jan opened
 b. Diese Bücher verkaufen sich Studenten nicht so gut
 These books sell SE students not so well
 (German)

We assume that inchoativization/middle formation in English as well as Dutch involves establishing a relation between the base (theta) position of the theme and the T(ense) head: The surface subjects are generated as themes in Spec,VP, but they have to enter a relation with T to check nominative case (EPP). This is a purely grammatical requirement (something has to check NOM,EPP in English).⁸⁶

Dutch employs the anaphor *zich* to derive inchoative/middle structures.

⁸⁶The question arises as to why the cipient cannot check NOM,EPP in English unaccusative constructions as it appears to be able to in passive structures for most speakers:

- (i) a. Mary_{ciipient} was given a book
 b. *Mary_{ciipient} opened the door

We return to the issue in section 3.3.2 but may remind us here already that in older stages of English as in some dialects today, the theme became subject in passive in English (like in today’s German):

- (ii) a. % A book was given Mary

In unaccusative structures, the theme appears to be forced to appear initially nowadays, again unlike in old/middle English:

- (iii) a. The mistake escaped Mary_{ciipient}
 b. *Mary_{ciipient} escaped the mistake

Similarly at surface, German uses the anaphor *sich*. Abstracting away from special cases, we assume following Reinhart and Reuland 1993 and Reuland 2001 that Dutch *zich* has to enter a local syntactic relation with an antecedent to be interpretable, the reason being that *zich* lacks feature (value)s that are needed for interpretation at the interface. The relevant features are inherited from (checked against) a syntactic antecedent. We will assume that the same goes for German *sich*, an anaphoric element that clearly needs a local syntactic antecedent (cf. Cole and Hermon 2001, cf. below section 3.4.2). More precisely, let us assume that *zich/sich* needs to enter a chain relation with a syntactic antecedent if a possible antecedent is syntactically expressed in the structure:

- (202) *zich/sich* must enter a syntactic chain with an antecedent if it can in principle.

Further, we assume (203):

-
- (iv) a. Me com to Godes engel
 Me-DAT came to God's angel
 'To me came God's angel'
 b. ...ende him felleon tearas of tham eagum
 ...and him-DAT fell tears from his eyes
 'and tears fell from his eyes'
 (Old English)

A development taking place in Dutch suggests that what is at the root of these developments is indeed loss of case and ensuing ordering conventions as pushed by considerations of use (parsability). In Dutch, more and more speakers are forced to English order in DPCs with certain predicates, as with the verb *bevalen* ('please'):

- (v) a. Jan_{theme} bevalt Marie_{cipliant}
 Jan appeals to-Mary
 b. ??Jan_{cipliant} bevalt Marie_{theme}
 to-Jan appeals Mary
 (Dutch)

A predicate more liberal with respect to which argument appears initially is Dutch *ontglippen* ('escape, slip away'). Here, speakers judge that with the cipient in initial position, the construction is more natural in perfect tense, featuring auxiliary *be*:

- (vi) a. ?Jan ontglipte een kip
 to-Jan escaped a chicken
 'a chicken escaped Jan'
 b. Jan is een kip ontglipt
 Jan is a chicken escaped
 'a chicken has escaped Jan'
 (Dutch)

The example in (vi-a) is easily mistaken for a standard agent/theme transitive structure (as with e.g. *ving* ('caught')), there being no surface marking differences. In (vi-b), it is not possible to mistake the structure for a standard transitive, since these take auxiliary *hebben* ('have') in perfect tense. Similar factors may (have) be(en) at play in English. This would also explain why the DPC is so rare in English: Movement of the theme across the cipient is illegal, but necessary in English to yield an interpretable structure (check NOM,EPP in unaccusative structures). See section 3.3.2 for further discussion.

- (203) *Zich/sich* may leave the VP for PF reasons (cliticization)

To get a clearer picture, let us look at the facts through the definition of chain formation given in Reuland 2001:

- (204) Chain
 (α, β) forms a Chain if (a) β 's features have been (deleted by and) recovered from α and (b) (α, β) meets standard conditions on chains such as uniformity, c-command, and locality.
- (205) If (α, β) is a chain, and both α and β are in A-positions, (α, β) is an A-chain.
 (Reuland 2001:457)

What remains undefined in the definition of chain is ‘locality’, which we want to derive following Chomsky from the principle that structure that can be interpreted must not be kept in syntax. Interpreting an older principle (cf. the tensed S condition and the specified subject condition, section 1.3.4), we propose that what is crucial for the locality effects observed is that the cipient is definite/presuppositional (sections 1.3.4, 2.2.4): Interpreting cipients involves checking a presupposition on the part of the speaker, hence establishes a link to the utterance context (cf. section 1.3.2). More concretely, we take the view of Carnap 1928 and Goodman 1951 according to which the distinguishing property of individuals (\approx definiteness) is that they have temporal extension (Carnap) or that they have ‘times in them’ (Goodman). The cipient times correspond to contexts that restrict the possible contexts with respect to which the thingatloc meaning is to be evaluated (cf. section 3.3.1 for elaboration). Supposing that this is sufficient to interpret the thingatloc meaning, there is no reason to keep the corresponding material – situated in the VP, the complement of t – in syntax, forcing spellout and making material in t 's complement (the vP/VP) inaccessible for further syntactic computation.⁸⁷ The value that the t head needs is supplied by the cipient argument. The local domain is the minimal projection with a definite tense value (a valued head pertaining to the tense system).

Concretely, the cipient has both a valued tense feature and place feature that value the phase head t , and this forces spellout of t 's complement (cf. above (196), section 1.3.4):⁸⁸

⁸⁷Cf. Everaert 1986 for a development of binding theory capitalizing on the role played by (finite) tense.

⁸⁸To repeat, phases are propositional units with an independent status at the interface. Chomsky 2001 defines phases as follows formally:

- (i) PH = [α [H β]]

In (i), α -H is called the ‘edge’ of the phase PH. Chomsky proposes that the complement of H, β , must be spelled out (interpreted) when PH has been generated, but not the edge, hosting phrase α and head H. The latter two elements ‘survive’ until the next phase level, that is, they can enter relations with elements merged further up that are contained in the

(206) $[_{tP} \text{cipient}^{+p,+t} [_{t^{-p,-t}} [_{VP} \text{theme loc}]]]$

Turning to the data, starting with English and using the abbreviations entering the definition of chain above, clearly the NOM D/NP (α) has to enter a relation with Spec,VP (β) if that is where theta assignment/identification takes place. In the cipientless case, this is fine: T and t fuse valuing t, the theme enters a checking relation with T that gets rid of NOM (Tense feature) as well as EPP. The chain is an A-chain, defined as a relation between positions bearing theta or (V) structural case.

If a cipient is merged, t is valued before T is merged, and VP is spelled out. No chain can be formed between T and the theme for the trivial reason that the theme is spelled out with merger of the cipient. For independent reasons (cf. above fn 86 as well as section 3.3.2), the cipient cannot check NOM,EPP in the unaccusative structure, and a structure with unvalued features, hence uninterpretable, arrives at the interface and ungrammaticality results.

The Dutch and German cases are similar at surface in involving *zich* and *sich* respectively, but there is a crucial difference between Dutch and German that can be witnessed in the following paradigm:

- (207) a. *Zij_i hebben Otto zich_i getoond
 They have Otto SE shown
 b. *Zij_i hebben zich_i Otto getoond
 They have SE Otto shown
 ‘They have shown Otto themselves’
 (Dutch)
- (208) a. ?*Sie haben Otto sich gezeigt
 They have Otto-DAT SE shown
 b. Sie haben sich Otto gezeigt
 They have SE Otto-DAT shown
 (German)

As can be seen, *zich* binding is impossible in Dutch in the presence of a cipient (cf. for more examples Everaert 1990), independent of whether *zich* occurs to the left (c-commanding) or to the right of (c-commanded by) the cipient. In German, moving *zich* across the cipient saves the structure. The independently motivated assumption accounting for the difference between Dutch and German in allowing inchoativization/middle formation ‘across’ cipients is that in Dutch, *zich* must be interpreted in its thematic (lexical) position, while in German it can be interpreted in its surface position in the functional domain. *Zich/sich* both cliticize in the functional domain, but Dutch *zich* cannot be interpreted there, unlike German *sich*. The difference corresponds to a parametric choice between languages as to whether they feature ‘syntactic SE’ or ‘lexical SE’ (cf. Reinhart 2000). German is a ‘syntactic SE’ language (like Romance in general),

phase defined by the next phase head. For our cases, the cipient corresponds to α and t corresponds to H. Merger of the cipient (α) values t (H) and thus forces spellout.

while Dutch is a ‘lexical SE’ language like e.g. English. The ‘lexical’ (Dutch) vs. ‘syntactic’ (German, Romance) SE distinction immediately accounts for the fact that at large, ‘lexical SE languages’ do not have ‘dative SE’, while ‘syntactic SE languages’ do. Under our analysis, this follows straightforwardly since cipients are licensed in the functional domain, which is where ‘lexical SE’ cannot be interpreted. Cf.:

- (209) a. Jean s'est achetée une voiture
 John SE-DAT-is bought a car
 b. Jean se plait
 John se pleases
 (French)
- (210) a. %Jan heeft zich een auto gekocht/aangeschaft
 Jan has SE-DAT a car bought/bought
 b. *Jan bevalt zich
 Jan pleases SE
 (Dutch)
- (211) a. Jan hat sich ein Bier eingeschenkt
 Jan has SE a beer poured
 b. Jan gefällt sich
 Jan pleases SE
 (German)

We assume that in Dutch, *zich* cliticizes to the functional domain but the relation relevant for interpreting it cannot be established: Spec,VP is spelled out when the cipient is merged. In German on the other hand, *sich* cliticizes and can be interpreted in its ‘surface’ position, outside the VP that is spelled out with merger of the cipient.⁸⁹

Problems, Discussion A problem arises for the above account in the context of DOCs. We analyze agents as being generated in little *v*, so without more being said they should never be able to get past cipients but be spelled out with merger of the cipient like the theme in unaccusative structures. Taking essentially Baker’s line according to which passive VPs are not, but unaccusative VPs are CFCs, we offer as a solution to the problem that in the case of passive, *t* and little *v* may fuse into one head analogously to *T* and *t* (cf. above) and count as a single phase head:

$$(212) \quad [t \ t [v \ v [VP \ VP]]] \implies [t/v \ t/v [VP \ VP]]$$

⁸⁹Cf. as well Chomsky’s 1995:142ff analysis of differences between the verb’s position in French and English respectively (Pollock 1989), making use of a parametric choice according to which French has ‘strong AGR’ that ‘passes on’ thematic licensing while in English, the base theta position is needed to license arguments semantically.

The arguments licensed by *t* and *v* respectively – cipients and agents – will then both count as specifiers of the phase head and survive spellout. The assumption that *t* and *v* may fuse (‘head movement/head merge’) appears less of a stipulation given what we noted above, namely that from the syntactic binding perspective, there is symmetry between agents and cipients (cf. section 2.3.3). Conceptually and under the assumption made here that *v* encodes causal structure, it has a clear affinity with the encoding of temporal reference, which is what tense heads do (cf. the traditional categorization of *v* as a ‘semi-lexical head’).

The assumption that the *t/v*-phase allows *v*’s specifier to escape the phase provides a possible account of the above noted ‘murkiness’ with respect to passive formation in English across cipients (cf. section 1.4.3):

(213) % The book was bought Mary

Under the standard assumption that the *v* head is present in passives (but not unaccusatives), the theme can use it as an ‘escape hatch’ to escape the phase: the theme moves to (empty) Spec,vP, *v* and *t* succinctly conglomerating. This is not possible in unaccusative structures that we assume not to comprise a *v* head.

We find more variation in DOCs than in DPCs with respect to ‘A processes’ across cipients, which may be due to the restricted possibility of *v/t* merger.⁹⁰ Another problem for a domain account as put forward here lies in the fact that agent arguments appear to be able to bind anaphors ‘across’ cipients (in

⁹⁰One could maybe seek to extend the line taken here to account for the queer fact that in Dutch, *zich* is not licensed with individual level predicates, unlike in German:

- (i) *Jan haat zich
Jan hates SE
- (ii) Jan hasst sich
Jan hates SE

We assume that subjects of ILP are always external, licensed by T (cf. section 2.2.3). Assuming that individual level subjects force spell out like cipients, we have the following scenario: In Dutch, *zich* cliticizes to T but cannot be interpreted there – the position relevant for interpretation of the theme (Spec,VP) is spelled out with merger of the NOM subject. Ungrammaticality results. Interpretation would have to be forced immediately though, before an agreement relation can be established. In German, cliticization yields a *sich* that is interpretable above the VP, resulting in grammaticality. A problem arising is that

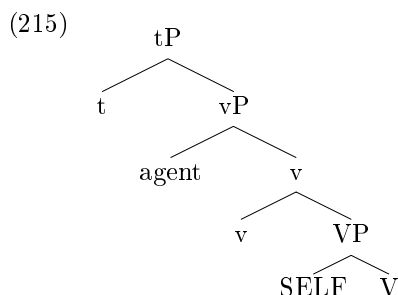
- (iii) Jan wordt gehaat
Jan is hated

is grammatical contrary to prediction if passive is an A-process and if traces are subject to the chain condition just like *zich* as we assumed above for English. The stipulation that *t* and *v* may fuse might help here as well: Unlike active ILP constructions, passive ILPs might feature a *v*-head, allowing the relevant relation to be established along the *t-v* fusion line.

English, but also e.g. German):⁹¹

(214) The women_{*i*} showed Otto each other/themselves_{*i*}

The agent argument appears to be able to bind a theme anaphor ‘across’ the cipient, which is expected to be impossible if cipients define domains relevant for local binding of anaphors (traces). A possible solution to the problem lies in assuming that being licensed below cipients at base, agents can enter the relevant relation with the anaphor in the lexical domain, cf. (215):



This would be in agreement with Reinhart and Reuland’s reflexivity account according to which the licensing of reflexives is defined on the semantic predicate.⁹²

Clearly, this is only the beginning of an account of the blocking effects associated with cipients. What we wanted to show is that the hypothesis that cipients are licensed by a temporal head might well lead some way toward an account of the blocking effects in fundamental terms. Cipients value the *t* head, forcing spellout of its complement.⁹³ The discussion of the English, Dutch and

⁹¹Cf. Pesetsky 1995 for discussion. Note that it is not so clear in fact whether SELF- and reciprocal binding is subject to a strict version of the chain condition, cf.:

- (i) They thought [_{*CP*} there were things for themselves/each other]

⁹²According to Reinhart and Reuland 1993, SELF-anaphora are elements marking a predicate as reflexive. The relevant definitions are:

- (i) a. A predicate is reflexive iff two of its arguments are coindexed
 b. A reflexive marked predicate is reflexive

⁹³If cipients provide the temporal value needed to interpret the structure they c-command, we predict that elements that escape the cipient island must be interpreted independently of the cipient. There is evidence that this is the case – for German, Buring 2000 notes following Lenerz that

... if the dative object [= cipient] precedes the accusative object [...], any distribution of focus and (in)definiteness is possible; but the accusative object can precede the dative object only if DatO [=cipient] is in focus and AccO is definite [≈ presuppositional] (Buring 2000, cf. Lenerz 1977).

The Lenerz/Buring generalization ties in nicely with the fact noted above that if cipients are contrastively focus-marked, it appears to be possible for the theme argument to take

German patterns in the context of inchoativization/middle formation suggests that the obvious assumption that structures should be interpreted as soon as possible in tandem with the restricted option of functional head merger may derive the core facts if independently evidenced parametric differences between languages are acknowledged. The ‘blocking effects’ associated with cipients are then the instantiation of a larger well known pattern, namely the domain effects associated with (finite) tense. An analysis according to which cipients are licensed by material pertaining to the tense system appears attractive in view of the prospect of a deeper and uniform account of blocking effects across domains.⁹⁴

2.4 Chapter Summary

We propose that the variable *w* forming the base for cipient predication is related to the variable *p* corresponding to the location argument semantically by at least an inclusion relation (R_{\leq}). The variable *w* is bound by a lambda operator associated with the *t*(ense) head that licenses the cipient argument expression saturating the predicate thus formed in situ. Under this proposal, the alternation that the predicates undergo is expected: the variable furnishing cipient predication comes with the location argument usually realized by a PP. Further, we predict that cipients and PP locations can cooccur. This was shown

scope over them. If the cipient were not contrastively focus-marked but interpreted as a ‘simple’ definite (unique existence, cf. section 1.3.3), there would be no interpretive difference arising from the theme taking (syntactic) scope over it – movement of the theme across the cipient would therefore be vacuous and ruled out by a ban on operations that are not grammatically necessitated and yield no interpretation different from the one(s) available without the operation having taken place (cf. Reinhart 1993).

⁹⁴It is well known that finite Tense systematically blocks extraction processes of different kinds, turning ‘weak islands’ into ‘strong’ ones (cf. Den Dikken and Szabolsci 1999. Cf. Everaert 1986 for a development of binding theory crucially strengthening and differentiating the role played by (finite) tense). (i-a) to (i-c) show extraction out of WH islands, (ii-b) shows A-extraction out of a tensed clause:

- (i) a. (?)This is a topic about which *t* John asked whether to talk
- b. ?This is a topic which John asked whether to talk about *t*
- c. *This is the way that John asked whether to behave *t*
- (ii) a. The book was said to have been read *t*
- b. *The book was said that had been read *t*

Last not least, tense plays a crucial role in determining scopal possibilities: A universally quantified D/NP generally cannot take scope out of a tensed clause (examples built on Reinhart 1995):

- (iii) a. A linguist {expected, believed} every philosopher to be rude
(-TNS, forall > exists possible)
- b. A linguist {expected, believed} (that) every philosopher was rude
(+ TNS, forall > exists impossible)

to be the case and a serious problem for Larsonian analyses of ‘dative shift’ (section 2.1.2). The binding asymmetries between the cipient argument on the one hand and the theme and the location argument on the other hand – again a problem for Larsonian analyses – follow from the cipient being licensed at base as the subject (external argument) of a propositional predicate formed on the basis of the VP projecting a theme and a location argument.

The proposal that the predication is established by a lower temporal *t*(ense) head yields a deeper explanation of a range of further asymmetries between cipients and themes and locations respectively: the (non)occurrence in small clauses, the (non)participation in word and idiom formation, as well as extraction and referential asymmetries (section 2.2.3, 2.2.4). Further, the agreement associated with cipients, overtly visible in e.g. Bantu, Spanish and Greek, can be analyzed in analogy to ‘standard’ subject-verb agreement: it is the reflex of cipients entering a relation with the tense system (section 2.3.1). We presented evidence from scopal and binding interactions between cipients (the element *there*) and adverbs bearing on the encoding of reference time distinctions that support the hypothesis that cipients are licensed in a domain encoding a distinction at the level of reference time (R-splitting).

We argued that analyses according to which cipients are licensed by a contentful applicative affix suffer from being too substantive and too vague at the same time, giving rise to empirical problems that the approach here does not meet (section 2.3.3)

Finally, the hypothesis that cipients are ‘domain subjects’ (i.e., restrict the domain of quantification, cf. section 2.1) promises a deeper explanation of blocking effects associated with the presence of cipients. Under the proposal made here, merger of a cipient allows hence forces interpretation/spellout of the complement of *t*, which is the reason for elements being unable to enter relations beyond the cipient (AGREE with *T*(ense)) that are purely grammatically motivated (section 2.3.5).

The progress made on the problems noted to come with the cipient construction in section 1.4.4 can be summarized as follows:

- **The theta problem** is partly solved on the assumption that location arguments are special in furnishing superlocation variables forming the base for cipient predication. Cipients and PP locations do not realize the same thematic role, although they are semantically related. A question arising is what happens if there is no cipient argument. We will argue in the next chapter that in the case of individual level predication, predicate formation is undefined (there being no location argument hence no *w* variable). For stage level predication, we propose the nominative subject may saturate the predicate formed by *t* via its relation to *T*.
- **The position problem** disappears for cipients: the *t* projection provides an extra specifier position for them. In the next chapter, we argue that the element *there* has its locus in the *t* head itself.

- **The case problem** has a partial answer: the cipient case is structural, as evidenced by agreement, the parallel with nominative case of in particular individual level predicates as well as the blocking effects that we argue to be configurational. At the same time, the cipient marking appears to signal a certain interpretation, the nature of which is not yet completely clear though. The discussion so far leads to acknowledging that structural case may be associated with semantics, a property of lexical/inherent case on more traditional views. Further, cipients do not ‘move’ to check structural case but are licensed in situ according to our proposal.
- **The scope problem** has been argued to have a semantic/pragmatic explanation rather than a purely structural one. We argued that cipients are definite in the sense defined in section 1.3.4, carrying an existential presupposition on the part of the speaker. Cipients correspond to referential rather than scope-bearing expressions. The question of what accounts for the definiteness effects and narrow scope facts associated with PTCs is still open (cf. chapter 4).
- **The possession problem** does not appear to have a solution in postulating a primitive HAVE or ‘possessive’ relation, reasonably narrowly construed (cf. the discussion of the applicative analyses, section 2.3.3). To the extent that there is a ‘possessive’ meaning associated with the constructions under discussion, it is of a rather abstract nature.

As further results, we note that if we are right in that DOCs encode cipient predication, it has to be acknowledged that constructions may comprise two external arguments. This is in disagreement with most if not all formulations of mapping principles from argument structure to syntactic positions, which would therefore seem to need reformulation (there is no unique external argument). On the basis of the discussion so far, the possibility of having two external arguments (subjects) should be restrictable to constructions furnishing two tensed domains, as predication has been defined to comprise an independent temporal value (tense/index).

A possibly surprising conclusion evolving from the discussion of the blocking effects (section 2.3.5) is that to the extent that the proposal is on the right track, the directive to ‘interpret as soon as possible’ appears to trump the seemingly more basic requirement of arriving at an interpretable structure to begin with. What needs to be investigated further in the context of the blocking effects discussed is the role of *v* (as an ‘escape hatch’) and the conditions under which it may merge with *t*.

Throughout the chapter, we have seen reason to believe that something like a distinction between lexical and functional (syntactic) grammatical processes is crucial for phenomena at diverse levels (e.g. word formation, extraction, inchoativization/middle formation).

Chapter 3

Locative and Locating Cipient Predication

We argued in the last chapter that cipients are logical and grammatical subjects, and we proposed that the asymmetries discussed so far stem from this. In essence, the strong asymmetries obtain between cipients on the one hand and themes on the other, while cipients pattern largely symmetrically with respect to in particular subjects of individual level predicates. From a structural perspective, the patterns are accounted for if cipients are external arguments and themes make up part of the predicate that licenses cipients, the predication relation established by the category *t*.

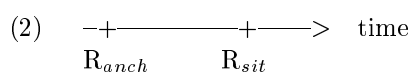
We proposed at the end of the last chapter that cipients temporally locate the thingatloc meaning encoded in the VP, and that they act as locators in the ‘indexing’ sense, a proposal to be developed (cf. section 3.3.1). In this chapter, we argue that cipients are locations as well at the content level: Cipients correspond to superlocations of the location argument projected by the predicates under discussion, and they entertain a doubling relation to these location arguments syntactically.

The feature structure of cipients reflects their interpretation as locations: Cipients are ‘defective’ with respect to number and person encoding, and this we argue to be at the root of an asymmetry between cipients and ‘ordinary’ arguments (subjects and objects respectively) that is unexpected if cipients are subjects. The ‘binding illness’ associated with cipient arguments is due to a lack of features – number in particular – on part of the cipient that would be necessary to license categories that need syntactic antecedents. For example, cipient arguments cannot control depictive secondary predicates while subjects (agents as well as – in a more restricted fashion – individual level subjects) and objects (themes) generally can:

- (1) a. *Ede gave Anna_i a steak hungry_i
 b. Ede_i went to school hungry_i
 c. Ede_i knows his password by heart/half asleep_i
 d. Ede fears Anna_i hungry_i

The structure of this chapter is as follows: We first discuss proposals that have been made with respect to the syntax of PTCs and ‘possessor constructions’. We argue against the ‘associate/possessor raising’ type of analysis, arguing instead that the element *there* should be analyzed as a clitic (location agreement) on *t*, as proposed similarly by Freeze 1992. Regarding *there* as agreement between the location argument and little *t* allows integration of cipients as specifiers of little *t*, the resulting structure being one of clitic doubling (section 3.1). The location argument is at the heart of both the syntactic and the semantic analysis proposed: *there* is agreement between the location and *t*, and the location provides the variable that cipients relate to as well. Section 3.2 presents evidence that the cipient construction as well as PTCs always comprise a location argument, arguing that the existential interpretation associated with the theme argument (cf. section 2.2.4) as well as the predicate restriction are tied to the projection of a location argument with particular referential properties.

Section 3.3 investigates the interface conditions that have to be met in order for cipient predication to be licensed. We concentrate here on the semantic side, arguing that cipient predication lives on a scale (a directed set of points/intervals) along which the thingatloc meaning is located, as well as, in an interval dissociated from it, its complement. The most common case satisfying the conditions for cipient predication are ‘eventive’ predicates as bringing about ‘reference time movement’ (cf. section 1.3.2). This can be depicted in a scheme like the following:



In (2), the scale corresponds to the time axis, the propositional thingatloc meaning encoded in the VP holding in what we call the ‘situative interval’, its complement holding in the ‘anchor interval’ (a reference time given by discourse and eventually anchored to speech time). The scheme in (2) can be instantiated in ontologically different domains: Allowing the dimension in (2) to correspond to a scale of degrees to which certain properties are instantiated, we can extend the analysis to comparative/evaluative constructions that license the cipient construction as well. Section 3.3.2 discusses directions for how to account for variation between languages as concerns the availability of the cipient construction. Unsurprisingly, the major source of variation are conditions holding at the PF interface: case marking and the ‘heaviness’ of cipients crucially matter for whether or not the meaning encoded in cipient predication is recoverable, hence for the availability and prominence of the construction in particular languages.

Section 3.4 argues that the asymmetric behavior of cipients in the domain of binding and control in particular – unexpected if cipients are subjects and yet unexplained – can be accounted for in terms of cipients’ ‘feature poverty’, a consequence of their being interpreted as locations: Locations are like mass terms in not being conceptualized as countable, hence they do not provide number information that is however needed by certain syntactic dependents (SE-anaphora, certain types of PRO) to be interpretable at the interface.

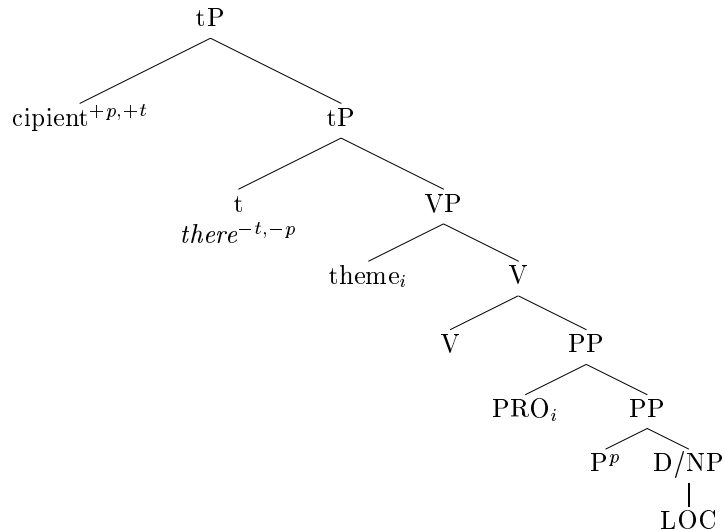
3.1 [cipient [there [theme location]]]

In section 2.3.5 we translated the definite interpretation of cipients in terms of a temporally independent interpretation: definite (presuppositional) D/NPs are independently ‘tensed’ (/indexed) – functioning as logical subjects, they supply the information necessary to interpret propositional meanings (thingat-loc) which is therefore forced. Building on ideas of Williams 1994 and Pesetsky and Torrego 2001 concerning the nature of nominative case (cf. section 1.3.2), ‘dative’ case can be taken to reflect the presence of a tense feature pertaining to the reference time level that is cancelled out in the relation between *t* and the cipient argument. In particular, what the *t* head encodes is that there is a tense/index ‘up and above’ an anchor interval as supplied by the context.¹ Like nominative is dependent on finite tense then, dative is dependent on a property of tense, namely a split encoded at the reference time level.

We argue that cipients denote locations. From the feature perspective, the little *t* head bears an unvalued tense feature, and an unvalued *p*(lace) feature. In full, we propose that the structure of cipient predication in terms of features is as in (3), with agreement features indicated by superscripts:

¹Pesetsky and Torrego 2001 propose that nominative case is a tense feature that is cancelled in an agreement relation between *T* and the nominative D/NP (cf. section 1.3.2).

(3)



Features are what is interpreted at the interface. In (3), the PP location has a place feature. More concretely, the preposition (*to* in the prototypical case) signals that its complement is interpreted as a location.² The PP location may enter a relation with *t*, under the condition that the lexical predicate as a whole furnish an index (cf. below). This is what *t* ‘binds’. We assume that *t* has an unvalued *p* feature and an unvalued *t* feature. *There*, argued by Freeze 1992 to have the status of (a) locative clitic/agreement, can be taken to signal that the *p* and *t* feature are not valued syntactically (cf. the remarks about recoverability in section 1.3.2 above). The cipient has both a valued *t* feature (definiteness/presuppositionality) and a valued *p* feature (the cipient’s location, cf. below section 3.3.1). Looking at the traditional phi features, the *p* feature is closest to person: Person features say ‘interpret me as a 1st, 2nd etc. person.’ The place feature says: ‘interpret me as a location’. We remind us that features can be regarded as restricting variables of operator-variable structures:

(4) $[+t,+p](w)$

encodes the information that the value of the variable *w* has to correspond to an independently tensed location.

There are two syntactic dependencies under our analysis: The structural relation between the cipient, the element *there* and the PP location that en-

²That the D/NP complement of the preposition is interpreted as a location independently of the preposition is strongly suggested by the fact that a WH fronted D/NP complement takes the locative form in e.g. Dutch, stranding the preposition:

- (i) Waar heb je Piet het pakket <waar> naartoe gestuurd?
Where have you Piet the parcel <where> to sent?

codes the predication, and a ‘thematic chain’ holding between the theme and the PP location that encodes the ‘theta matching’ between the verb and the PP location (cf. section 2.1). Taking up the ‘feature checking is saturation’ metaphoric introduced in section 1.3.2, the cipient saturates the unvalued *t* and *p* feature on *t*.

It follows straightforwardly now that predicates occurring in PTCs should license cipient arguments as well (cf. section 1.4.4): cipients are the interpretable counterparts of what *there* is the spellout of. It is predicted at the same time that cipients and *there* should not cooccur, as is usually the case. Under our account, *there* signals unvalued *p* and *t* features, but what the cipient does is just value the *t* and *p* features on the *t* head. If there is no cipient projected but a cipient predicate is, a nominative D/NP in the specifier of T may take care of the unvalued features on *t*, as sketched in the last section. If there is no cipient projected nor is an agreement relation established between T/*t* and a NOM subject, the structure will reach the interface with an unvalued *p* and *t* feature: PTCs are in this sense unsaturated structures, which we argue is at the root of the definiteness effects associated with them (section 4.1).

The relation between cipients, *there* and the location comes close to a clitic-doubling structure, with the location argument corresponding to the ‘doubled element’, *t* hosting *there* corresponding to the clitic(/agreement), and the cipient corresponding to the ‘doubling element’. The term ‘doubling’ is somewhat misleading however since cipients are not ‘the same’ as the doubled element, but relate as wholes to parts to it (the PP location). The same can be said for locative inversion, the whole-part relation improper (identity) in the case where a ‘doubling’ of the PP location applies. That locative inversion structures are the same as cipient structures with a projected cipient with respect to the relation between the element saturating the cipient predicate and the location argument it comprises is suggested by the fact that the following is possible in German:

- (5) Im Haus liegt ein Teppich im Wohnzimmer
 In-the house lies a carpet in-the livingroom
 ‘in the house, there is a carpet lying in the living room’
 (German)

In (5), the location occurring initially is a superlocation of the VP internal PP location.

In this section, we seek to motivate is the feasibility of the proposal. The following points are crucial to the analysis: First, *there* corresponds to a head/clitic. Second, *there* relates to the PP location argument. Third, a ‘clitic doubling’ analysis squares with the properties found to be associated with the cipient construction. We argue each point in turn in the following, turning then to a comparison with existing analyses of the constructions under discussion that have not been discussed above – these are analyses running under the headings ‘associate raising’, ‘possessor raising’ and ‘*there* raising’ respectively.

3.1.1 Cipients ‘doubling’ locations via *there*

There as clitic/agreement

The proposal that *there* has the status of a clitic/agreement is not new. Freeze 1992 has argued that *there* corresponds to locative agreement. Toward this view, Chomsky 1999 assumes that EXPL(ative) has head status (cf. as well discussion in Chomsky 1995:249).³

If *there* has the status of a clitic/agreement, it is expected that the presence, absence, status and position of the *there* element should be the major varying factor concerning the realization of PTCs across languages – languages vary as regards agreement systems, and the position and realization of clitics/agreement is heavily dependent on phonological properties of particular languages, the core locus of variation (examples repeated from section 1.4.1):

- (6) a. There are a number of people in the garden
b. There’s a number of people in the garden
- (7) a. (Da) war kein Bier im Kühlschrank
There was no beer in-the fridge
b. Es hat da Bier im Kühlschrank
It has there beer in-the fridge
(German)
- (8) yaan huntul ciimin ti in-paapa
COP one horse in my-father
‘My father has a horse’
(Yucatec)
- (9) exi ena ghaidaro sto kipo
have a donkey in.the garden
‘There is a donkey in the garden’
(Greek)
- (10) ku- ki- lisa ku- na li- holo
17- 7- well 17SA- with 5- tortoise
‘at the well there is a tortoise’
(Ndendeule, Bantu. SA = subject agreement, numbers = noun classifiers, FV = ‘final vowel’)
- (11) Il y’a un homme dans le jardin
It there-has a man in the garden
(French)

³To repeat, (cf. section 1.3.2, fn 9) Legendre 2001 argues for the close kinship between processes of clitic doubling and agreement. Cf. as well Taraldsen 1992, analyzing agreement as uniformly resulting from pronoun incorporation, as well as Chomsky 1995:125. It seems to be more or less generally assumed in historical syntax that agreement is the ‘last step’ in a chain of language development starting with incorporation of a pronoun into the verb-tense complex, motivating to some extent the “fundamental homogeneity between so-called clitics and so-called verbal inflection” (Manzini 2001).

It is well known that clitics cross the boundaries between traditional distinctions made in the domains of categorial status as well as function: Clitics show oscillating behavior with respect to the distinction between head and phrase, and they seem to serve a variety of functions, ranging from (merely) indicating agreement to serving as fully-fledged argument expressions. To repeat a case in point, Manzini 2001 cites data from Italian where a dative clitic occurs ‘in between’ the verbal root and the standard verb/tense agreement, supporting for one thing the claim that cipients enter a relation with the verb/tense complex below T (section 2.3.1), for another showing the vicinity between clitics and agreement affixes:

- (12) Purt -m -ite -le
 bring me -PL -it
 ‘Bring it to me’
 (Italian (*Senise*))

Similarly, the element *there* may occur in sentence initial position and occupy what is standardly taken to be subject position (spec,TP), witness Germanic verb-second structures:

- (13) Da ist ein Mann im Garten
 There is a man in-the garden
 (German)

The position of *there* in what appears to be ‘subject position’ strongly suggests that it has phrasal status. The fact that the grammatical occurrence of *there* depends on properties of the predicate further suggests that *there* has argument status:

- (14) a. There are firemen available
 b. *There are firemen intelligent

Further, *there* can appear in case positions, speaking for its D/NP argument status:

- (15) a. I believe Peter to be in the garden
 b. I believe there to be a man in the garden

There can be conjoined with PPs, which under the standard assumption that what can be coordinated must be of like category again points to the phrasal status of *there*:

- (16) [[There] and [in Chomsky 1995]], it is claimed that ...

The above uses of *there* suggest that *there* has phrasal status. There is on the other hand evidence that *there* has the status of a syntactic head. For example, *there* cannot inhabit prenominal genitive positions, which are restricted to

phrasal D/NP projections:⁴

- (17) a. It bothered me that Otto was in the garden \implies Otto's being in the garden bothered me
 b. It bothered me that there was someone in the garden \implies *There's being someone in the garden bothered me.

As was remarked already, *there* can incorporate into verbal forms, in particular, yield a special 'locative copula'. The following examples illustrate 'incorporation' of the *there* analogue into the verbal form:

- (18) ng- nar -ngij a sers -ek a bilis
 3sg- cop -it(p) NP garden -my NP dog
 'There is a dog in my garden'
 (Palauan, Freeze 1992: 563)
- (19) Hay gente en el pasillo
 there.COP people in the hall
 'There are people in the hall'
 (Spanish, Freeze 1992: 568)

As noted by Freeze as well, the analogue of *there* has to occur immediately adjacent to inflectional elements in verb-initial languages, speaking for its head/clitic status:

- (20) 'oku 'i ai 'ae jurii 'i he poopao
 PRES P 3sg ABS.ART dog P ART canoe
 'There is a dog in the canoe'
 (Tongan, Freeze 1992: 569)

Further, *there* may form complex words with prepositional elements – again this is expected if *there* corresponds to a head, but unexpected if it has phrasal status:

- (21) Thereupon, thereto
- (22) Darüber, Daran, darunter ...
 thereabove, thereat, thereunder ...
 (German)

In sum, there is conflicting evidence as to the head vs. phrasal status of *there*, and the evidence is strong for both cases. The other case known to pattern this way is that of clitics, appearing to function now as fully fledged phrases, then as mere agreement elements. Rather than postulating a massive lexical ambiguity as to the categorial status of *there*, it appears preferable to acknowledge that *there* does not obey the traditional head/phrase dichotomy, a property independently known to be characteristic of clitics.

⁴Thanks to Leslie Saxon for pointing out this contrast.

We want to assume following in essence Freeze 1992 that *there* is the spellout of location agreement on *t*. We do not have much to say about its capacity to occur in positions usually assumed to be reserved for phrases, apart from suggesting that this is presumably due to PF requirements imposed by particular languages.⁵

There relates to LOC

The intuition that presentational sentences are locative in some sense is unsurprising. Across languages, the analogue of *there* appears both as what is traditionally taken to be a meaningless ‘dummy’ subject expression and as a locative proform:

- (23) Otto went to the pub. It was warm there.
 (24) Jan was [in Amsterdam]_i. Er_i was geen kamer vrij
 Jan was in Amsterdam. There was no room free
 (Dutch)

There can in fact occur twice in the same structure, once functioning as ‘subject *there*, once standing in for the PP location argument. As was noted in the last section, *there* may stand in for and conjoin with locative PPs:⁶

- (25) there is a man there

There are cases where it clearly shows that the grammatical occurrence of *there* is dependent on a location argument:

- (26) a. There is life ??(on Mars)
 b. There are holes ??(in the cheese)

Whenever *there* can appear, a location argument may as well:

⁵Cf. for relevant discussion Holmberg 2000. According to Holmberg’s analysis, ‘expletive *there*’ fulfills the ‘phonological half’ of the EPP, namely the requirement that something has to appear in Spec, IP overtly.

⁶It should be noted that *there* is by no means restricted to having locative reference. In German, the analogue of *there*, *da*, can function as a temporal proform as well:

- (i) [Am Montag]_i? Da_i kommt der Eiermann
 On Monday? There comes the egg-man
 ‘On monday comes the man selling eggs’

(The analogue of) *there* can in fact pick up a whole state of affairs in combination with a prepositional element (traditionally known as ‘pronominal adverbs’), witness:

- (ii) Otto ate the whole cake. Thereupon, everybody applauded.
 (iii) Otto ass den Kuchen. Anna war sauer darüber
 Otto ate the cake. Anna was angry thereabout
 ‘Anna was angry about that’

- (27) a. There is no even prime number higher than 2 (in mathematics)
 b. There is a god (in the universe)

The link between *there* and location arguments is further suggested by the fact that the crosslinguistically common way of expressing a PTC is not by ‘inserting’ an element like *there* but rather by ‘raising’ the location itself (cf. Freeze 1992). It is directly visible in certain languages that the location argument enters an agreement relation with the verb/tense complex, surfacing in locative agreement in e.g. Ndendeule or Chichewa (Bantu):

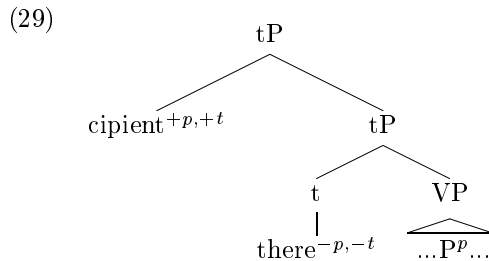
- (28) a. ku- ki- lisa ku- na li- holo
 17- 7- well 17SA- with 5- tortoise
 at the well there is a tortoise’
 (Ndendeule, Bantu)
 b. Ku mu-dzi ku- li chi- tsime
 17 3-village 17- be 7-well
 ‘In the village is a well’
 (Chichewa, Bantu. Cf. Bresnan 1994:7)

As shown by Freeze 1992, English is really the exception as concerns the encoding of PTCs: The rule is that the location argument itself is fronted, sometimes entering an agreement relation with the verb/tense complex. Crosslinguistic considerations suggest that what happens in PTCs is that the location argument enters an agreement relation with the verb/tense complex, as under our analysis (that follows Freeze 1992 in this respect).

There is, in sum, good reason to assume that the element *there* entertains a relation with a location argument in the structure. Further and from the perspective of reference, *there* appears to be itself functioning as a (broadly speaking) locative proform.

Doubling and Predication

We argue that the status of *there* is that of a head/clitic, ‘doubling’ a location argument lower in the structure. The structure of cipient predication is parallel to that of clitic doubling configurations which should therefore be employed as the syntactic basis for analyzing the cipient predication structure. To repeat, we propose that the element *there* acts as a clitic that sits in the little *t* position and that is related to (‘doubles’) the location argument. The cipient argument is licensed in the specifier position of little *t*:



We have seen evidence above speaking in favor of the vicinity of cipients and *there* in terms of features (cf. sections 1.4.4, 2.3.1), and we will present further evidence in its favor in section 3.4. At this point, assume the structure in (29) to be correct and note that it immediately accounts for why predicates occurring in PTCs should license cipients as well.

Looking at the proposals pertaining to clitic doubling structures in the literature, a central idea is that the clitic together with an empty pro element provides a predicate expression (an open variable slot) that is saturated by the doubled element (Iatridou 1991, Schneider-Zioga 1993, Aoun 1999).⁷ In other words, the clitic relates to a variable lower in the structure that it ‘opens’ and that may be bound by the ‘moved’ doubled element. The structure that Schneider-Zioga assigns to clitic doubling structures is given in (30):⁸

- (30) ‘doubling element’ clitic [_{XP} ... (pro) ‘doubled element’ ...]
 Subject Predicate

Translating the idea that clitic doubling is a relation between the doubling element and a variable lower in the structure into abstraction over that variable ties in the proposal that the variable providing the base for cipient predication hinges on the location with a feasible and empirically warranted syntactic analysis: Semantically, cipient predication corresponds to abstraction over a superlocation coming with the location argument that makes up part of the construction. Syntactically, cipient predication translates into a relation between the cipient and a clitic/agreement element (*there*) as hinging on the presence of a location argument.

Clitic doubling configurations have the properties that we have found to be associated with our constructions. We have argued that the cipient is in-

⁷The doubled element is generally assumed to be moved into the specifier of the clitic/head overtly or covertly.

⁸For comparison, Sportiche’s 1992 analysis of clitic doubling structures is given in (i):

- (i) [DP(doubling element) [[Cl(head)] ... DP(doubled element)]]

Sportiche assumes that clitics are licensed in ‘their own’ head positions, an assumption that raises questions concerning learnability: How can the child acquire clitic constructions if it has to assign a particular structure to each different clitic? On our analysis, there is no ‘extra’ head position for clitic *there*: It sits in the little *t* projection, a category that is independently needed presumably for purposes of encoding temporal reference.

terpreted as definite/presuppositional. That clitic doubled elements are interpreted as definites ('carrying an existence presupposition', 'strong') appears to be an established fact (cf. a.o. Montrul 1995, Gutierrez-Rexach 2000). Clitics are generally assumed to be licensed in the domain of T(ense) – under our analysis, the element *there* is the spellout of location agreement on *t*. In Greek or Spanish, cipient predication surfaces as a clitic doubling structure, the doubling being obligatory in Spanish DPCs and DOCs as well as Greek DPCs (For Greek, doubling is reported to be obligatory to yield the 'experiencing' meaning of DPCs but appears largely optional for DOCs. The cipient here bears genitive case in Greek however and may therefore be recoverable independently):

- (31) to vivlio *(tu) aresi tu Petru
 the book cl-DAT appeals the Peter-DAT
 (Greek, Alexiadou and Anagnostopoulou 97: 152)
- (32) a. La musica *(le) gusta a Juan
 The music him-DAT pleases to Juan
 b. A Juan *(le) gusta la musica
 To Juan him-DAT pleases the music
 (Spanish, Montrul 1995: 183)

The relation between the cipient argument and the location argument is characterized by antilocality, as is expected if the element providing the variable on the PP has the status of a free variable and is hence subject to condition B of the (traditional) binding theory. The following examples show that a pronoun ('free in the clause containing it') on the PP can be bound by the cipient argument, but that anaphora generally cannot in German:⁹

- (33) a. Otto schickte Anna_i das Paket zu ihr_i
 Otto sent Anna_i the parcel to her_i
 b. Otto schickte Anna_i das Paket zu *sich_i selbst_i
 Otto sent Anna the parcel to herself
 c. Otto_i erschien der Geist bei ihm_i
 Otto_i appeared the ghost at him_i
 d. ?*Otto erschien der Geist bei sich selbst
 Otto-DAT appeared the ghost at himself
 (German)
- (34) Otto hatte einen Traum über sich und Anna...
 Otto had a dream about himself and Anna...

⁹The element *ihm selbst* in (34-a) is an empathic pronoun and not an anaphor, see Everaert 1990 for discussion. To be sure, the D/NP complements of the PP locations are taken to fall outside principle A or B of the binding theory of Reinhart and Reuland 1993 (since the PP as a whole counts as the relevant argument). There is however still a clear contrast between anaphora and pronouns in German, suggesting that the respective expressions do fall under certain (anti)locality requirements.

- a. (?) Otto erschien Anna auf ihm (selbst)
 Otto appeared Anna on (top of) him (EMPH-self)
- b. *?Otto erschien Anna auf sich selbst
 Otto appeared Anna on (top of) SE SELF
 (German)

In sum, an analysis of cipient predication in terms similar to those known from clitic doubling analyses appears empirically motivated. What needs to be argued is that there is indeed a location argument projected in the structures. Before we do so, however, let us briefly compare the ‘doubling’ analysis to existing analyses of PTCs as well as the cipient constructions in terms of raising.

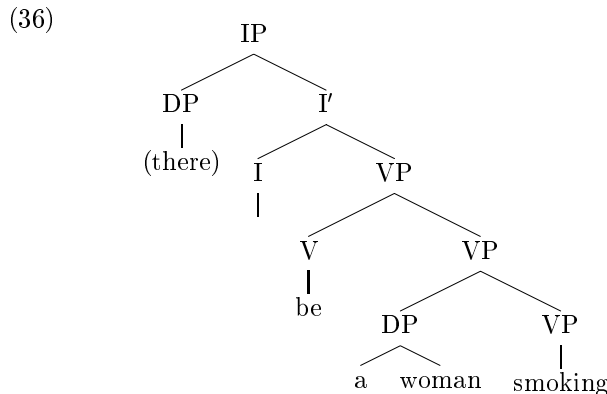
3.1.2 Associate Raising and Possessor Raising

Associate raising

Traditionally in generative grammar, the element *there* is viewed as a ‘dummy’ expletive that is ‘inserted late’ to satisfy the requirement that sentences have syntactic subjects (e.g. Chomsky 1986). According to this view, *there* does not contribute substantially to interpretation. Rather, it is assumed that *there* forms a particular kind of chain with what is called its ‘associate’:

- (35) a. There_{*i*} is [a man]_{*i*} in the garden
 b. A man is t_{*i*} in the garden

A concrete example of an analysis of PTCs in terms of raising of the ‘associate’ is Stowell’s 1978 small clause analysis. According to Stowell, copula constructions and presentational *there*-sentences share a common underlying structure as depicted in (36). The small clause meaning is encoded by a VP in the example, but it could just as well be projected by some other category, for instance an AP. What happens to satisfy surface (case and EPP) needs is that either *there* is inserted and some mechanism of case transmission licenses the ‘associate’ argument or that the ‘associate’ is raised to the Specifier position of T to receive nominative case.



Importantly under the associate raising analysis in its various instantiations, the structure where the associate appears sentence-initially receives an interpretation identical to the structure where *there* appears initially, i.e., the two structures have identical LFs. It is however a fact that presentational sentences with ‘subject *there*’ do not receive the same interpretation as their counterparts where the ‘associate’ occurs sentence-initially:¹⁰

- (37) a. There must be a ghost in the house (only: $\text{must} > \exists$)
 b. A ghost must be in the house (both: $\text{must} > \exists$ and $\exists > \text{must}$)

In presentational sentences with *there*, the ‘associate’ D/NP is confined to a narrow scope interpretation, that is, it cannot take semantic scope ‘above’ *there*. This difference in scope and accordingly truth conditions is unexplained if LF is the level encoding scope relations and (37-a) and (37-b) are taken to be identical at that level.

Looking at the problem from the other end, certain D/NPs that occur felicitously in presentational *there* constructions cannot be raised overtly to yield the ‘raised’ construction, examples repeated from above (cf. Jenkins 1975, Felser and Rupp 2001, McNally 1998):

- (38) a. There are holes in the cheese
 b. ??Holes are in the cheese
 (Lewis and Lewis 1970)
- (39) a. There is space in the fridge
 b. ??Space is in the fridge

If LF associate raising yielded a structure isomorphic to the one where the associate has been raised overtly, we would expect each and every presentational *there* sentence to have a counterpart where the ‘associate’ occurs sentence-initially, which is however not the case. Analyses relying on the idea that *there* is but a dummy expression satisfying purely formal needs miss these facts.

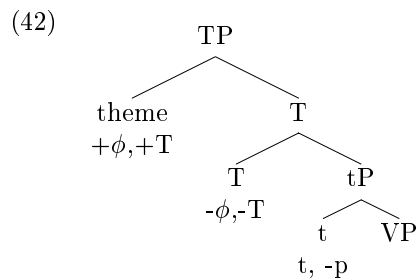
An analysis according to which *there* is deleted to ‘make room’ for the associate runs into independent problems: In German and Dutch for example, the analogue of *there* survives raising of the theme:

- (40) Ein Mann ist da im Garten
 A man is there in-the garden
 (German)
- (41) Een man is er in de tuin
 A man is there in the garden
 (Dutch)

¹⁰There are more recent treatments according to which only certain features of the associate D/NP are raised. I do not see how this avoids the problem if features are what is interpreted (cf. section 1.3.2).

Under uniformity, it is undesirable to require that one language does and the other does not delete *there*. Under interpretability, postulating an element that does not bear on interpretation is undesirable to begin with.

As said above, we postpone discussion of the scope and definiteness effects associated with PTCs to chapter 4. We are in a position already however to say something about the patterns in (38) and (39). Under the simplest assumptions, the raised counterparts of PTCs are like the unraised ones, except that there is a T projection present as well that wants to check the usual phi-features (person, number, gender), and Tense (/NOM). In section 2.3.5 we proposed that T and t may undergo fusion (head movement/merger), with T deleting features on t. From this perspective, t's unvalued tense feature may be valued by a nominative in the specifier of T(ense), after T/t merger. However, it may well be that certain nouns are unable to check/value T/t's unvalued place feature. In particular, nouns the denotation of which is such that their referents are not independently located are expected not to be 'interpretable locations', hence will be unable to check/value the unvalued p feature on t. *Space* and *holes* are just such nouns: *space* really denotes an a priori category of perception, but does not give rise to individuating reference. *Holes* denotes an inherently relational concept, there being no holes without there being something these holes are holes of as well. In sum, we suggest that patterns as in (38) and (39) can be accounted for in terms of certain nouns being unfit to be interpreted as locations of themselves. The structures in (38) and (39) reach the interface as follows, with the unvalued p feature unchecked, the consequence being that the structure is not saturated (contains unvalued features, cf. section 1.3.2):



What is central is that one acknowledge the importance of location and the link between the occurrence of *there* and a location argument. That there be a connection between the occurrence of *there* and properties of argument structure appears independently motivated by the simple fact that the occurrence of *there* clearly depends on properties of argument structure – as we argue, the projection of a location argument:

- (43) a. There is someone drunk
 b. *There is someone beautiful cf.

- (44) a. The police stopped a TV moderator in a state of absolute drunkenness
 b. ?*The police stopped a TV moderator in a state of absolute beauty

An appropriate analysis of PTCs should capitalize on the role of location then rather than on the ‘associate’. Before moving to discussion of an analysis that makes the link between *there* and the argument structure projected, we discuss briefly another prominent ‘raising’ analysis that ascribes centrality to the theme (\approx associate) argument, namely the ‘possessor raising’ type of analysis that has frequently been proposed for structures comprising a cipient argument.

Possessor Raising

It has been proposed to analyze what we call cipient predication in terms of ‘possessor raising’ – as was remarked several times earlier, the constructions under discussion here supposedly carry a ‘possessive’ meaning relating the cipient argument to the theme (cf. section 1.4.4). ‘Possessor raising’ analyses (e.g. Szabolsci 1994, Landau 1999) rest on the hypothesis that what we call the cipient construction is derived via a syntactic transformation from a construction incorporating the cipient as a possessor of the theme argument. The two structures are often referred to as encoding ‘external’ versus ‘internal’ possession’, and they are indeed often close in meaning (motivating maybe a syntactic approach).

We have seen already, however, that in the ‘external’ construction the theme receives an existential reading by default. Unlike this in the ‘internal possessor’ construction, the theme is interpreted as a unique presuppositional individual (‘Russellian’ definiteness), due to the relation with the possessor element. Typical pairs exemplifying ‘internal’ vs. ‘external possession’ are the following, the second one taken from Keenan and Ralalaoherivony 1998 (the rough structure is indicated in brackets for each case):

- (45) a. [[Ottos Huhn] ist gestorben]
 [[Otto-GEN chicken-NOM] is died]
 ‘Otto’s chicken died’
 b. [[Otto ist [das Huhn gestorben]]]
 [[Otto-DAT is [the chicken died]]]
 ‘the chicken died/gave up on Otto’
 (German)
- (46) a. [Maty [ny vadin-dRabe]]
 [died [the spouse-of-Rabe]]
 ‘Rabe’s spouse died/is dead’
 b. [[Maty vady] Rabe]
 [died [spouse Rabe]]
 ‘Rabe was widowed’
 (Malagasy)

Without going into any detail, the transformation of possessor raising as supposedly relating the two structures can be sketched as follows quoting Keenan and Ralalaoherivony 1998:

Syntactically a classical PossR [Possessor Raising] transformation would derive (46-a) [(45-a)] from (46-b) [(45-b)] by stripping the subject of (46-a) [(45-a)] of its definite article *ny*, incorporating the possessive head *vady* ‘spouse’ into the predicate, eliminating the genitive morphology *-n-* [...] and presenting the semantic possessor *Rabe* as a sister to the derived P1 [one-place predicate].

Reminiscent of the Larsonian ‘dative shift’ analysis then, the possessor raising analysis involves a number of absorption operations – these are on the part of the genitive possessor of the theme which is succinctly raised (for case reasons e.g. according to Landau 1998). Abstracting from the questionable nature of these operations, we think that the possessor raising analysis meets two basic obstacles which appear to have been largely missed in the literature. First, it is not true that ‘external possessor constructions’ necessarily encode a possessive relation between the ‘external possessor’ (\approx cipient) and the theme. In the following examples repeated from section 1.4.2, if there is a possessor relation, it is certainly not with the theme:

- (47) a. Da ist ein Huhn (aus dem Stall) entkommen
 There is a hen (from the shed) escaped
 b. Mir ist ein Huhn (aus dem Stall) entkommen
 Me-DAT is a hen (from the shed) escaped
 (German)
- (48) barxa li ha- tarnegolet (me- ha- lul/ la- ya’ar)
 escaped to-me the- hen (from- the- hen-coop/ to the woods
 ‘My hen escaped from the hen-coop/into the woods’ / ‘The hen escaped
 on me from the hen-coop’
 (Hebrew)

While a possessor relation between the cipient and the theme is possible in (47-b), it is by no means forced. It could be the shed as well that is possessed, or nothing at all, the interpretation being that the cipient is somehow (emotionally) affected by the chicken’s escape. The case is stronger in the following examples, where it clearly needn’t be ‘Gianni’s mistake’ that appeared to him:

- (49) a. E apparso un error
 is appeared an mistake
 ‘there appeared a mistake’
 b. A Gianni apparso un error
 To Gianni is appeared a mistake
 ‘Gianni noticed a mistake’
 (Italian)

Italian (49) translates into German as (50-a), or into the more picturesque (50-b), neither of which encodes any possessive relation between the cipient and the theme argument. In (50-b), what is clearly interpreted as being ‘possessed’ by the cipient is the location argument, denoting a body part:

- (50) a. Mir ist ein Fehler aufgefallen
 Me-DAT is a mistake up-fallen
 b. Mir ist ein Fehler ins Auge gefallen
 Me-DAT is a mistake into-the eye fallen
 ‘A mistake caught my eye’
 (German)

If ‘external possessor constructions’ were derived from ‘internal possessor’ constructions, we would expect the possessive relation to be with the theme argument however. There are cases where there appears to be a necessary association between the cipient and an argument lower in the structure. In these cases, the relation is with the location argument and not with the theme:

- (51) He hit me in the face \approx He hit in my face
 (52) Otto hämmerte Anna einen Nagel in den Fuss
 Otto hammered Anna-DAT a nail in the foot
 ‘Otto hammered a nail into Anna’s foot’
 (German)

The fact that if a ‘possessive’ interpretation involving the external possessor (cipient) is forced, the pertaining relation is with the location rather than with the theme is predicted under our analysis: The cipient bears a semantic relation with the location argument, which are related as whole/superlocation (cipient) and part/sublocation (PP location).

Second, it is perfectly possible to have both an ‘external possessor’ and an ‘internal possessor’ on the theme argument at the same time. In the following German examples exemplifying the DOC and DPC, there is a possessor on each and every argument expression, but what is allegedly a ‘raised possessor’ (our cipient) can still appear in the structure:

- (53) a. Otto schob Anna sein Auto in ihre Garage
 Otto pushed Anna his car into her garage
 ‘Otto pushed his car into her(=Anna’s) garage for Anna
 b. Otto schob Anna ihr Auto in seine Garage
 Otto pushed Anna her car into his garage
 ‘Otto pushed her(=Anna’s) car into his garage’
 (German)
 (54) Otto entkam Edes Huhn
 Otto-DAT escaped Ede’s chicken
 ‘Ede’s chicken escaped from Otto’ (German)

The problem is similar to that pointed out in connection with Larson's 'dative shift' analysis: If the 'external possessor' (shifted dative (cipient)) were the result of absorption on the part of the base position/extraction site, it would be expected that the relevant position cannot be occupied in the presence of an external possessor. There are no 'multiple possessor constructions':

(55) *This is Otto's Anna's house

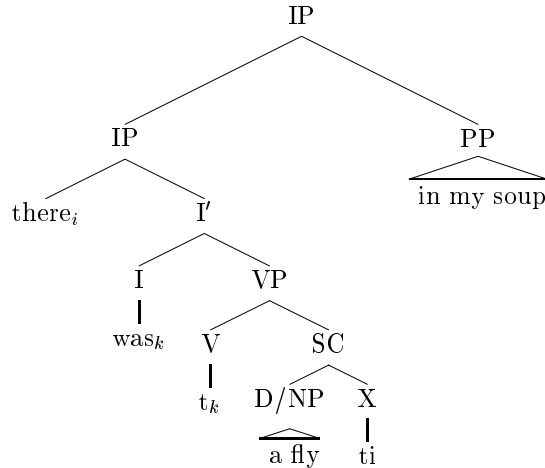
The fact that 'internal possessors' can coexist with 'external possessors' is strong evidence against the idea that the latter are derived from the former. Our analysis is independent of any unique relation the cipient entertains with another argument in the structure. Under our assumptions, cipients are superlocations of the locations coming with the structure, and nothing excludes that a superlocation contains a 'possessed' location.

In sum, 'possessor raising analyses' deriving 'external possessors' (cipients) from 'internal possessors' transformationally have at least two fundamental problems that our proposal does not meet. Like in the tradition of PTC analyses, the trouble comes from capitalizing on the theme argument rather than the location that we argue to be crucial for cipient predication.

3.1.3 *There* Raising

We have discussed above problems that the 'associate raising' analysis of PTCs meets. It appears desirable to pin the occurrence of *there* on an argument structure property rather than viewing it as a purely formal device. After all, one wants to explain why it is certain predicates only that can appear in PTCs. A relatively recent analysis according to which *there* relates to argument structure is that of Moro 1997. Moro's analysis of PTCs makes use of small clause structure like that of Stowell that we have seen in the foregoing section. The central idea behind Moro's analysis is to stand the 'associate raising' hypothesis on its head: According to Moro, it is not the associate that raises but the element *there* that undergoes raising in PTCs, the raising being overt. The derivational history of a presentational sentence according to Moro's analysis can be sketched as follows:

(56)



According to Moro, *there* functions as a locative small clause predicate contained in the VP. The PP – our location argument – is analyzed by Moro as an adjunct to IP. By an operation of ‘predicate raising’ proposed in this form by Hoekstra and Mulder 1990, *there* is extracted from the small clause predicate position and inserted in SPEC, IP (=TP), where it satisfies EPP. Moro’s proposal seems problematic for the following reasons (cf. discussion in Felser and Rupp 2001): First, the assumption that *there* is a locative predicate and raises from VP internal position leads us to expect that sentences such as (57) should be ungrammatical, contrary to fact. We are reminded of the problem of the noncomplementary distribution of PP locations and cipients as constituting a problem of Larsonian analyses of DOCs (cf. section 2.1.2):

(57) There is a god there

Without additional assumptions, it is unclear how *there* can raise and at the same time appear in what is its base position on Moro’s analysis. Next, the assumption that the locative phrase occurring in presentational *there* sentences is an IP adjunct seems untenable. For one thing, this assumption leaves the importance of the location argument for the overall structure to be licensed a mystery: adjuncts are generally not supposed to play a licensing role (this is abstracting away from middle constructions). For another, binding possibilities as examined in section 2.2.2 as well as patterns pertaining to negative polarity elements suggest that the locative element is lower structurally and c-commanded by the D/NP functioning as small clause subject on Moro’s analysis (note that the theme argument in PTCs has to take in-situ scope, so it does not raise and bind from a higher position):

- (58) a. There was a man_i (sitting) in his_i car
 b. There appeared someone to himself (in the mirror)
 c. There was nobody in any garden

Moro's analysis remains silent on the interpretive differences between PTCs where the 'associate' occurs sentence-initially and where it does not, a problem left open as well by the 'associate raising' analysis. But it raises additional theoretical problems: It is a standard assumption that grammatical needs are satisfied by the structurally closest element that can satisfy these needs (cf. section 1.3.2), as is the assumption that 'small clause subjects' asymmetrically c-command their predicates. Under these assumptions, Moro's analysis predicts that the small clause subject should raise and not the small clause predicate.¹¹ That the (small clause) predicate raises to check EPP may appear conceptually questionable as well, under the (standard) assumption that predicate expressions are not referential (do not bear a 'strong D feature' in terms of Chomsky 1995).

In sum, while the idea that *there* raises rather than the associate argument may give a clue as to why *there* appears only with certain predicates, it faces the same problems as the 'associate raising' analysis with respect to the meaning differences between presentational *there* sentences and their 'raised' counterparts. In addition, the structure proposed by Moro leaves the importance of the location argument for the licitness of the overall construction unexplained and meets some empirical problems.

Under the hypothesis that what is really crucial for cipient predication (PTCs) is the projection of a location argument that licenses the cipient as a superlocation, the problems that the 'raising' analyses meet can be avoided. Further, the idea that cipients are in a doubling configuration with the location argument via *there* accounts for the shared distribution of cipients and *there* and has a substantial value concerning the question what it is that licenses the cipient construction after all. It is crucial that there be a location argument projected in the constructions under discussion. The next section argues in favor of this.

3.2 Location in Cipient Predication

This section presents evidence in favor of DOCs, DPCs and PTCs always comprising a location argument projected in the VP. The presence of a location argument is crucial since it serves as the basis for cipient predication, both from a syntactic and a semantic perspective. Semantically, the projection of a location argument is crucial because the location variable *p* relates to a superlocation *w* that provides the base for cipient predication. Syntactically, the location argument is just as crucial: We argue that the cipient argument (the element *there*) entertains a relation to the location argument that is akin to the relation between clitics and what they double. If there were no location ar-

¹¹As Felser and Rupp note, the minimality problem becomes more dramatic in transitive expletive constructions, where *there* in its base position would be c-commanded by in fact two D/NPs.

gument, there would be nothing to double, hence no source for cipients and/or *there*.

As first suggestive evidence, note that it appears to be always possible to realize a PP location argument syntactically in PTCs but also in the cipient construction:

- (59) There is no even prime number higher than two (in mathematics)
 (60) The enemy escaped me (into the woods)
 (61) I sent Mary the letter (to the office)

There are cases as well where it is necessary to realize a PP location argument syntactically:

- (62) There is life ??(on mars, after marriage)
 (63) Ik heb Anna een spijker *(in de voet) geslagen
 I have Anna a nail in the foot hit
 ‘I hit a nail into Anna’s foot’
 (Dutch)
 (64) Die Vase ist mir *(auf den Fuss) gefallen
 The vase is me onto the foot fallen
 ‘The vase fell on my foot’
 (German)
 (65) T taibhs’i *(ann)
 be ghosts in-it
 ‘There are ghosts’
 (Irish, Chung and McCloskey 2001)

Under uniformity, the fact that PP locations are sometimes necessary for DOCs, DPCs and PTCs to be grammatical already speaks in favor of the omnipresence of location arguments in the constructions: If DOCs, DPCs and PTCs uniformly express a certain (abstract) meaning and if a location argument can be seen to be an integral part of this meaning, we would not want to say that sometimes, this location argument is there and sometimes it is not. Uniformity already pushes one to the hypothesis that a location argument is always present but may be unarticulated at times.

3.2.1 Silent locations

An unarticulated constituent is one which is not directly observable yet cannot be disregarded without an utterance becoming semantically inevaluable (Recanatì 2002). There are quite direct and relatively technical arguments in favor of the presence of a location argument in the cipient constructions, stemming from patterns pertaining to quantificational binding, coordination as well as antecedent contained deletion.

Quantificational Binding

A standard argument for the presence of an unarticulated constituent pertains to quantificational binding, making the standard assumption that vacuous quantification is disallowed. Consider the following examples (we leave out indices in the formulas for perspicuity):

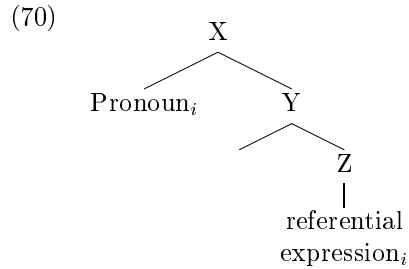
- (66) Wherever you go, there are rats.
 wherever_p you go p $\rightarrow \exists x$ rat(x) & AT(x,p)
- (67) ?Wherever she looks, simple solutions escape every student in this class
 wherever_p $\forall w$ student(w) & look (w,p) $\rightarrow \exists y$ simple solution(x) & \neg AT(x,p)
- (68) Wherever she ends up, her parents have already sent every spoilt student enough money to live in comfort
 wherever_p $\forall w$ spoilt-student(w) & AT(w,p) $\rightarrow \exists x,y$ parents (y,w) & money(x) & AT(x,p)

Since the quantifiers have to bind something, there must be something in the structure providing a variable. This variable can hardly be provided by the cipient arguments since these are quantified themselves and hence ‘closed’ from a binding perspective. What appears to be bound by the quantifiers in (66) to (68) is the location of the theme argument (as resulting from the occurrence of a pertaining event), hence an obvious candidate for providing the needed variable is the VP-internal location argument. That it is indeed the location argument that supplies the needed variable is supported by the fact that in (66) to (68), the quantifier contains in its restriction a variable that is bound by the cipient argument. Under standard assumptions, this means that the quantifier has to be base-generated in a position c-commanded by the cipient argument.

It could still be objected that what the quantifiers in the examples bind is not a location argument but a location adjunct that is just as well lower structurally than the cipient argument as we have seen above (cf. section 2.3.4). Examples analogous to those in (66) to (68) are easily constructed for predicates that do not project location arguments but may take locative adjuncts:

- (69) a. Wherever you go, people drink coke
 b. Wherever one looks, people wash their cars

We can make a case for the argument status of the location variable in our constructions by looking again at principle C effects as was done in section 2.3.4 in the context of adverbs. To repeat, a condition C effect arises if a pronoun c-commands a referential expression that is coindexed with and c-commanded by the pronoun, that is, whenever a configuration as given in (70) is produced:



As shown in the following example, WH-movement reconstructs for principle C, that is, a constituent WH-moved from a position where it gives rise to a principle C effect still gives rise to a principle C effect:

(71) *Which argument that $Otto_i$ is right did he_i t_{WH} like?

Now in case of the predicates we are looking at, a condition C effect results if the theme is the pronoun in question. A condition C effect does not result with predicates not selecting location arguments but allowing locative adjuncts:

- (72) a. *Wo immer die Bibel_i auftaucht haben Missionare sie_i
 Where ever the bible up-dives have missionary-men it
 (uns) hingeschickt
 (us) to-sent
 ‘Wherever the bible shows up, missionary men have sent it there for us’
- b. Wo immer die Bibel_i auftaucht wollen Gläubige sie_i lesen
 Where ever the bible up-dives want believers it read
 ‘Wherever the bible shows up, believers want to read it’
 (German)
- (73) a. *Wohin auch immer die Bibel_i gelangt haben Missionare
 Where-to also ever the bible gets have missionary-men
 sie_i (uns) geschickt/gebracht
 it(us) sent/brought
 ‘Wherever the bible gets, missionary-men have sent/brought it for us’
- b. Wohin auch immer die Bibel_i gelangt wollen Gläubige sie
 Where-to also ever the bible gets want believers it
 lesen
 read
 ‘Wherever the bible gets, believers wat to read it’
 (German)
- (74) a. *?Wo immer Jesus_i Reden hielt ist er_i (uns) durch seine
 Where ever Jesus speeches held is he (us) through his
 Barfüßigkeit aufgefallen
 barefootedness up-fallen

- ‘Wherever Jesus gave speeches, his barefootedness struck us’
- b. Wo immer Jesus; Reden hielt erregte er; grosses Aufsehen
 Where ever Jesus speeches held caused he great up-look
 ‘Wherever Jesus gave speeches, he caused great excitement
 (German)

We can explain the contrast as follows: As we argued above in section 2.2.2 as well as in 2.1.2, location arguments are *c*-commanded by themes, but locative adjuncts are not. Locative adjuncts may be adjoined at the VP (or vP) level for example, a position from which they *c*-command the theme rather than the other way around. Regarding quantificational binding, the case for an unarticulated location argument (not adjunct) in the constructions under discussion is quite strong then.

Coordination of likes

Another argument for a silent location argument in the cipient construction comes from coordination facts, in conjunction with verb raising. It is generally assumed that only constituents of like category can be coordinated. One can say:

- (75) Otto sent [Anna a letter] and [a parcel to Ede]

If what can be coordinated are constituents of like category, the structure of (75) must be as indicated in (76):

- (76) Otto sent Anna [a letter [*PP* e]] and [a parcel to Ede]

Similarly, the following examples are acceptable, suggesting that the cipient construction has a location argument in its structure:¹²

- (77) a. ?The gangsters escaped Otto [*t_{theme}* *PPe* *t_V*] and [*t_{theme}* into the woods *t_V*]
 b. The boss promised ME [a vacation *PPe* *t_V*] and [fewer hours to the WORKERS *t_V*]

Antecedent Contained Deletion

As was pointed out above, the theme argument cannot take scope over the cipient argument (under normal circumstances):

- (78) Otto gave a (??different) student each piece of cake

¹²As was pointed out already, marked focus is needed in English according to some native speakers for the constructions to be licit. In German the corresponding constructions are perfectly natural. The pattern points to differing PF licensing conditions between the two languages. Cf. section 3.3.2.

Standard approaches would blame the inability of the theme to take scope over the cipient on QR being disallowed across the cipient. We argued above that cipients are interpreted as definite/presuppositional, so even if the theme QRed across the cipient this could not be seen due to the cipient not bearing scope to begin with. The issue whether or not the theme can or cannot QR across the cipient is therefore open on the basis of what we have argued. However, we have seen in section 2.3.5 that local processes affecting argument expressions (raising, passive etc.) are blocked across cipients, so QR in so far as it is a local operation is expected to be blocked as well. That QR as applying to universally quantified D/NPs is local is quite generally assumed and evidenced in patterns such as the following:

- (79) a. It seemed to someone that everybody is a winner (only: $\exists > \forall$)
 b. Everybody seemed to someone t to be a winner ($\exists > \forall$, $\forall > \exists$)
 c. Es schien jemandem jeder ein Gewinner zu
 It appeared somebody-DAT everyb. a winner to
 sein (only: $\exists > \forall$)
 be
 ‘To somebody, everybody appeared to be a winner’

As shown in the examples, the embedded quantifier *everybody* cannot take non-surface scope across the existential *somebody*. Overt movement for case as required in the infinitival construction makes it possible for *everybody* to scope over *somebody*. The German example supports the conclusion that it is not possible for *everybody* (*jeder*) to scope over *somebody* (*jemandem*) covertly, i.e., unless there is overt movement.

In light of the fact that A-processes are blocked across cipients and under the assumption that QR is local, the data plead for QR being disallowed across cipients as well. If QR is disallowed across cipients, a serious problem arises for the analysis of the constructions under discussion in so far as they involve antecedent contained deletion:

- (80) Otto told someone everything (that) Anna did

Antecedent contained deletion involving a quantified theme argument is possible in the cipient construction, which is a puzzle: Antecedent Contained Deletion is the paradigm pattern constituting evidence for QR, but it appears that QR is just what is disallowed across cipients. QR across the cipient is however what would seem to be necessary to derive the ACD structure. Under the standard analysis, the ACD analysis of (80) would look roughly as follows:

- (81) Otto everything [tell someone x] (that) Anna did [tell someone x]

Assuming that ACD is licensed under structural identity of the conjoined constituents and that the theme has to raise in order to avoid infinite regress, clearly QR has to take place in the cipient construction. Without QR of the

theme, we would get something like the following:

- (82) Otto told someone everything (that) Anna did [tell someone everything that Anna did [tell someone everything that Anna did ...]]

Bruening 2001 discusses the puzzle, proposing that both the theme argument and the cipient undergo QR. The analysis necessitates the assumption that the cipient QRs first, the theme argument ‘tucking in’ (cf. Richards 1997, Mulders 1997) below the cipient ensuingly as to guarantee that it take scope below the cipient. ‘Tucking in’ is an operation violating extension and hence threatening compositionality: Tucking in involves taking apart structure that has been built (decaptivating the structure of the cipient), changing it (QRing the theme) and putting the cipient together with the changed structure again. Changing lower parts of structure in a derivation goes against the virtually necessary assumption that the interpretation of a structure is a function of its parts and the way they have been put together (compositionality/inclusiveness).

Under the assumption that there is a location argument present lower in the structure that is related to the cipient argument by a part-whole relation (up to identity, the whole-part relation then being improper), the assumption of (something like) ‘tucking in’ is unnecessary and the problem can be avoided: The theme can QR out of the to be conjoined constituent (theVP or vP) before the cipient is merged. What we get then is the following structure, where what is deleted/substituted in the second conjunct is really just the VP (or vP):

- (83) Otto told someone everything [_{vP/VP} x <tell> to someone] that Anna did [_{vP/VP} x <tell> to someone]

If what is conjoined is just the vP/VP, antecedent contained deletion works out fine: the theme ‘raises’ to a position below the cipient (overtly), the conjoined structures still comprising a variable bound to the cipient argument. There is no need to tamper with structure and violate the basic extension condition (cf. section 1.3.2).

Again *wieder*, and *beinahe*

As further evidence in favor of the presence of a(n unarticulated) location argument in the cipient construction, we repeat the patterns pertaining to incorporation involving the adverb *wieder* as brought forward above (section 2.3.3) against postulating an abstract applicative head to account for the ‘possessive’ interpretation associated with the constructions. In German, the adverb *wieder* can incorporate into the verb:¹³

- (84) Otto hat Anna den Schlüssel wiedergebracht
 Otto has Anna the keys againbrought (German)

¹³This is in fact only possible in the cipient construction but not in the location construction.

The only reading that (84) makes available is the restitutive one, that is, a reading according to which Otto restitutes a state that consists in the key being with Anna. (84) does not have a reading according to which Otto brought Anna the keys before, i.e., the repetitive reading is lacking. If the ‘possessive’ meaning were encoded in the functional domain (say by a silent applicative head meaning HAVE), we would not expect incorporation of *wieder* across this head to be possible (cf. section 2.3.3): Affixation across silent (functional) material is blocked according to Myers’ generalization. The fact that the structure in (84) does not make available a repetitive reading strongly suggests that *wieder* does not have in its scope the little *v* head which we assume to encode causal meaning (hence ‘eventhood’, roughly speaking). If the possessive ‘result’ interpretation were due to a (silent) functional head, it would be surprising then that it is available with incorporated *wieder*. If there is a location argument realized in the lexical domain in constructions like (84), we do not face this problem: *Wieder* will have the relevant meaning (AT (Anna, the keys)) in its scope even if it incorporates into the verb (and raises with it succinctly).

A similar point can be made with adverbs that appear particularly low structurally such as *almost* (*beinahe* in German). Assuming that these adverbs are situated low in the extended verbal projection (cf. Cinque’s hierarchy given in section 2.3.4), we do not have a problem in accounting for the fact that they can modify the ‘possessive result’ meaning in the cipient construction, which according to our analysis is encoded in the VP. Again it is questionable that adverbs like *almost* should be situated high enough in the structure to have in their scope a (silent) applicative head:

- (85) Als Otto sich den Fuss brach ...
 When Otto broke his foot
- a. hatte er die Botschaft beinahe an den Boss übermittelt
 had he the message almost at the boss overmediated
 - b. hatte er dem Boss die Botschaft beinahe übermittelt
 had he the boss-DAT the message almost overmediated
 (German)

The cipient construction only has a reading where *beinahe* modifies the ‘result’ meaning: the message is almost ‘at’ the boss. *Beinahe* cannot modify the ‘causal’ part of structure, the sentence in (85-b) does not have a reading according to which Otto almost embarked on bringing the message but then decided otherwise. If (silent) applicative heads are essentially on a par with little *v* encoding causal meaning under our assumptions, it is again not at all obvious how the applicative type of analysis can account for this.

In sum, the hypothesis that there is a location argument present in the cipient construction that composes with the theme at the lexical level to yield the thingatloc meaning accounts naturally for the scopal possibilities of incorporated *wieder* as well as low adverbs in the cipient construction, unlike the applicative analysis.

Hin und her (*hither and thither*)

In German, the separable prefixes *hin* (*hither*) and *her* (*thither*) strictly depend on the presence of a location argument in the structure: Intuitively, these particles signal the ‘directedness’ of an event away from some implicit source to some location (*hin*) or toward the source from some location (*her*):

- (86) a. Otto ging hin
 Otto went thither
 b. Otto kam her
 Otto came hither
 (German)

Predicates that do not comprise location arguments are incompatible with *hin* und *her* respectively:

- (87) Ein Hase war/hatte...
 a rabbit was/had...
 *hin/her-gegessen (‘hither/thither-eaten’), *hin/her-geschlafen (‘hither/thither-slept’), *hin/her-gestunken (‘hither/thither-stunk’) ...
 (German)

The predicates disallowing *hin* and *her* do not license cipients either, as predicted:

- (88) *Otto war/hatte ein Hase {gegessen, geschlafen, gestunken}
 Otto-DAT was/had a rabbit {eaten, slept, stunk}
 (German)

In the cipient construction, *hin* und *her* are possible, pointing again to the presence of a location argument in the construction:

- (89) Otto war der Brief...
 Otto-DAT is a letter...
 hin/her-geschickt (‘hither/thither-sent’), hin/her-gebracht (‘hither/thither-brought’), hin/her-gemailt (‘hither/thither-mailed’) ...
 (German)

According to Kluge 1989, the element *hin* (Dutch *heen*, English *hither*) is a pronominal form denoting the ‘point of origin’, ‘from here’, with origins in Indogermanic. It may show up as well with a PP location:

- (90) Otto schickte das Buch zu Anna hin
 Otto sent the book to Anna hither
 (German)

It might be interesting to investigate in how far *hin* could be taken to be the overt realization of the variable *w* (a superlocation that is ‘from here’).

3.2.2 LOCs licensing force

German provides still more obvious evidence for the presence of a location argument in the constructions under discussion. We argue that the verbal predicate and the location argument compose at an essentially presyntactic level, which is also why it is not surprising that the location argument may be realized alternatively as an incorporated preposition (or particle) or lack any direct surface reflex altogether. In German, the presence of a location argument in the cipient construction is quite generally reflected morphologically, by the presence of incorporated prepositions (or particles). We have patterns like the following systematically:

- (91) a. *Da war eine Vase gefallen
 There was a vase fallen
 b. *Mir war (da) eine Vase gefallen
 Me-DAT was (there) a vase fallen
 c. Mir war (da) eine Vase auf den Boden gefallen
 Me-DAT was (there) a vase onto the floor fallen
 d. Mir war (da) eine Vase {hin-, herunter-} gefallen
 Me-DAT was (there) a vase {hither-, down-} fallen
 (German)

As can be seen in (91), the element *da* ('there') and a cipient respectively are licensed only if there is a location argument projected as well, be it as a fully blown PP or as a particle that has undergone incorporation. Again, the respective (incorporated) prepositions (particles) are in complementary distribution with fully blown PP location arguments.

As concerns DOCs, the locative nature of the predicate is less visible in many cases, presumably due to frequency of use and associated morphophonological change. Less frequently and/or productively used DOCs still obligatorily comprise a PP argument or some prefix with a locative origin:

- (92) a. *Der Ball war Otto gespielt
 The ball is Otto played
 b. Der Ball war Otto (direkt) vor die Füße gespielt
 the ball was Otto (directly) in-front-of the feet played
 c. Der Ball war Otto zu-gespielt
 the ball was Otto to-played
 (German)

What is generally required in German DPCs and (adjectival passive) DOCs is that there be some locative morphology present on the verb, if there is no overt PP expressed. Nearly without exception, predicates entering PTCs and DPCs comprise locative prefixes in German, as do predicates entering (adjectival pas-

sive) DOCs.¹⁴ It seems reasonable to interpret the locative morphology on the predicates appearing in PTCs, DPCs and DOCs in German as a trait of lexical incorporation of a location argument having taken place.¹⁵

While there is little if any overt morphosyntactic evidence in English that the constructions under discussion involve location arguments as realized by a prefix frequently in German, there is indirect evidence that English too projects some kind of verb-particle structure in the constructions under discussion. Keyser and Roeper 1984 propose that the possibility or *re-* prefixation can serve as a probe for whether one is dealing with a verb-particle structure or not: verbs associated with an (abstract) particle do not allow *re-* prefixation, while verbs without one do, cf.:

- (93) a. The tire was pumped (up)
 b. *The tire was re-pumped (up)

Looking at predicates entering the constructions under discussion, one finds that these generally do not allow *re-* prefixation, indicating that they do project a verb-particle structure underlyingly.¹⁶

¹⁴As was noted above, there is a difference here between adjectival passive and fully blown DOCs. While the former always seem to require a locative prefix, the latter don't, although it is possible to have a 'stranded' particle/preposition in the latter:

- (i) a. Der Brief ist Otto ?*(zu-) geschickt
 The letter is Otto (to-) sent
 b. Anna schickte Otto den Brief (zu)
 Anna sent Otto the letter (to)

¹⁵The following (inexhaustive) lists of predicates entering PTCs, DPCs (cf. (i)) and (adjectival passive) DOCs (cf. (ii)) in German shows again the type of prefix occurring on the respective predicates (cf. for argument in favor of the locative origin of these prefixes a.o. Kluge 1989, Maylor 1998):

- (i) x ist Otto
 x is Otto-DAT
 er-schienen ('appeared'), auf-gefallen ('up-fallen'), wider-fahren ('against-driven'), ein-geleuchtet ('in-lightened'), ent-kommen ('away-come'), ent-gangen ('away-gone'), entgegen-gekommen ('opposite/toward-come'), entgegen-gestanden ('against-stood'), gegenüber-gestanden, ('opposite-stood'), 'gegen'uber-getreten ('opposite-stepped')
- (ii) x ist Otto...
 x is Otto...
 auf-erlegt ('up-laid'), über-tragen ('over-carried'), an-vertraut ('at-trusted'), ab-genommen ('away-taken'), an-gekündigt ('at-announced'), über-geben ('over-given'), über-mittelt ('over-mediated'), über-bracht ('over-brought'), ver-geben/ver-ziehen ('for-given'), auf-getragen ('up-carried'), aus-gesprochen ('out-spoken'), aus-geliehen ('out-lent'), ver-macht ('for-made'), ver-dorben ('for-wasted'), be-fohlen (PRF-ordered)

¹⁶There are some exceptions to this generalization which seem telling. Exceptions that come to mind concern loanwords from Romance which could be argued to be complex at the lexical level, that is, incorporating a locative prefix:

- (94) a. *There refell an apple
 b. *The gangster reescaped Otto
 c. *Anna regave Otto the book

The observation that projecting (a theme and) a location argument is crucial for licensing what we call a cipient argument is not new. Landau 1999 discusses the case of what is known as Hebrew Possessor Dative, a construction that has acquired fame because it seems to constitute a reliable test for unaccusativity in Hebrew (cf. section 1.4.2, Borer and Grodzinsky 1986). The Hebrew Possessor Dative, so-called for its broadly speaking possessive meaning, is only available with predicates projecting unaccusative structures, where it seems to be ‘possessively’ associated with the theme.¹⁷ Landau shows that the Hebrew Possessor Dative construction is available only with object-locating verbs but not with subject-locating ones. In our terms, the presence of the Hebrew possessor dative requires a predicate internal location argument that entertains a relation with the theme argument. The following examples are from Landau 1999, where in (95) a location argument is overtly realized, while it appears to be tied to the verb lexically in (96):

- (95) a. Gil ganav le-Rina me-ha-tik
 Gil stole to-Rina from-the-bag
 ‘Gil stole (something) from Rina’s bag (p. 17f)
 b. *Gil pitpet le-Rina biglal/lema’an ha-hofa’a
 Gil chatted to-Rina because/for the-performance
 ‘Gil chatted because of/for the benefit of Rina’s performance
 (Hebrew)
- (96) a. *sney xadarim hexilu le-Rina et ha-rahitim
 two rooms contained to-Rina Acc the-furniture
 ‘Two rooms contained Rina’s furniture’; Two of Rina’s rooms contained the furniture’
 b. ha-rahitim tafsu le-Rina sney xadarim
 the-furniture caught to-Rina two rooms
 ‘The furniture took up two of Rina’s rooms’
 (Hebrew)

(i) ?There reappeared an old problem

Appear (German *er-scheinen* is arguably made up from a form going back to *ad-* (now Romance *a-* ‘at’ and *parere* ‘seem’, cf. Romance *parecer*).

Talmy 1983 argues that in Romance location is expressed lexically on verbs generally, while manner is expressed syntactically (by PPs). Concerning Germanic, Talmy argues for the opposite situation (location expressed syntactically at large, manner lexically).

¹⁷As was pointed out already, linguistically prejudiced native speakers of Hebrew are not always happy with the term ‘possessor dative’, favoring less narrow paraphrases. The rock bottom seems to be that the Hebrew Possessor Dative has to do with experience in a broad sense, frequently reducing to ‘(emotional) affectedness’.

To the extent that the Hebrew Possessor Dative construction falls under the construction under discussion here, it provides another piece of evidence for the licensing role of the VP-internal location argument for the construction under investigation.¹⁸

Another look at the relation between PTCs and DPCs underlines the relevance of the location having argument (as opposed to adjunct) status. In section 1.4.1, we took the possibility of undergoing locative inversion – the fronting of a location argument – as a criterion to identify the predicates that enter PTCs. If, as we argue, PTCs and DPCs share the structure crucial for cipient licensing, the predicates undergoing locative inversion should in principle license DPCs as well: These are just the predicates projecting a theme and a location argument internally. It is not sufficient for a predicate to project just a theme – in more theoretical terms, it is not (one place) unaccusative predicates that enter the cipient construction but really two-place unaccusative predicates that project a theme as well as a location argument internally. Levin and Rappaport 1995 give the following examples showing that not all unaccusative predicates undergo locative inversion:

- (97) a. *On the top floor of the skyscraper broke a dozen windows
 b. *On the streets of Chicago melted a lot of snow
 c. *On backyard clothes lines dried the weekly washing

Modulo a seemingly slight change, locative inversion becomes possible with these predicates:

- (98) a. Into pieces broke a dozen windows
 b. Into a barrel melted the snow from the roof
 c. Into hard clay dried the most recent piece of Otto

¹⁸Landau notes in addition that the Hebrew pattern carries over to Romance, showing the crosslinguistic importance of the encoding of theme-location relations for the licensing of cipient arguments. The following examples from French and Spanish are cases in point:

- (i) a. *Les armoires lui contenaient trois bites
 the closets to-him contained three boxes
 'The closets contained three of his boxes'
 b. Les bites lui prenaient trois armoires
 the boxes to-him took three closets
 'The boxes took-up three of his closets'
 (French)
- (ii) a. *Los closets le contenieron tres cajas
 The closets to-him contained three boxes
 'The closets contained three of his boxes'
 b. Las cajas le llenaron tres closets
 the boxes to-him filled three closets
 'The boxes filled three of his closets'
 (Spanish)

The PPs in (97) are adjuncts, while those in (98) are arguments (cf. the tests offered in chapter 2.1.2). Now while a cipient argument is not licensed on the basis of the constructions in (97), a cipient argument is licensed on the basis of the examples in (98), the difference being that the latter project location arguments unlike the former (cf. again the tests mentioned in section 2.1.2):

- (99) a. *Otto brach eine Vase in der Küche
 Otto-DAT broke a vase in the kitchen
 b. *Otto schmolz Schnee auf dem Dach
 Otto-DAT melted snow on the roof
 c. *Mir trocknete die letzte Erinnerung an Otto im Kino
 Me-DAT dried the last memory of Otto in-the cinema
 (German)
- (100) a. Otto brach eine Vase in Stücke
 Otto-DAT broke a vase into pieces
 b. Otto schmolz Schnee auf den Fuss
 Otto-DAT melted snow onto the foot
 c. Mir vertrocknete die letzte Erinnerung an Otto
 Me-DAT prf-dried the last memory of Otto
 (German)

Analogous patterns obtain in a range of languages that we have been able to test. Among these are Spanish, Italian, Hebrew, Dutch dialects and Hungarian. In sum, what appears to be crucial both for locative inversion and for the licensing of cipient arguments is not just unaccusativity, but projecting a theme and a location argument internally. The possibility of having a cipient argument crucially hinges on having a location argument as well.¹⁹

¹⁹Levin and Rappoport also give examples supposed to show that predicates that do undergo locative inversion are not unaccusative:

- (i) a. On the wall hung a picture of Picasso
 b. In the garden stood a statue of Schiller
 c. On the lawn lay a nice mattress

L&R propose that the grammaticality of these examples is "...due to the fact that this construction is associated with a particular discourse function, which in turn favors certain semantic classes of verbs. (p. 216)". Notably, this discourse function is just that usually associated with PTCs, namely that of 'presenting something on the scene'. But are the predicates in (i) really unergative? There is reason to doubt this.

Quite generally, the type of predicate exemplified in (i) has a transitive as well as an intransitive realization, cf. Torrego 1989 for discussion. In the transitive realization, a theme and a location argument are projected apart from an agent, and the location argument is obligatory:

- (ii) a. Otto hung the picture *(on the wall)
 b. Otto stood the proposal *(on its head)
 c. Otto laid the mattress *(onto the lawn)

In sum, there is independent morphosyntactic evidence from a range of languages that what is crucial for the licensing of cipient predication is the projection of a location argument (apart from a theme), be it realized overtly or incorporated into the predicate.

3.2.3 Toward existential interpretation

More substantial evidence for the presence of a location argument in the constructions under discussion comes from the connection between projecting a location argument and the availability of existential readings of theme arguments.

We remarked in section 2.2.4 that the interpretation of the cipient as definite/presuppositional contrasts sharply with the interpretation of the theme argument in the constructions under discussion: by default, the theme receives an existential interpretation. The existential interpretation of the theme is another argument in favor of our constructions projecting a location argument: there is a close connection between an argument's being interpreted existentially and that argument being located with respect to another argument. The first part of this section reviews this point, adding that the referential status of the PP location expression matters crucially as well for an existential interpretation of the theme argument to be available: the PP locations are themselves definite with respect to the subject of predication.

The second part prepares some ground for an account of the definiteness effects in PTCs and their apparent absence in DPCs and DOCs. We do not suggest that what we propose here is superior in particular aspects to what has been proposed. Rather, we want to show that existing results are easily accommodated to our analysis.

It is conceivable that the examples in (i) are derivative of these transitive forms, that is, that they are really passive/unaccusative realizations of the transitive forms, where the corresponding marking for some reason does not surface, maybe due to historical change. Interestingly, the type of predicate in (i) is just that that has been argued to systematically undergo a lexical unergative/unaccusative alternation by a.o. Torrego 1989. In English, the transitive (unaccusative) forms are sometimes distinguishable from the supposedly unergative ones, but not always, cf. e.g.:

- (iii)
- a. seat sit
 - b. lay lie
 - c. stand stand
 - d. hang hang

In any event, the examples do not provide clear counterexamples to the claim that what matters for locative inversion is the projection of a theme and a locaiton argument. Rather, they support the claim that projecting a location argument is a crucial factor in cipient predication (cf. (ii)).

Existing themes and definite locations

The theme argument receives an existence asserting ('indefinite') interpretation by default in the constructions under discussion, in contrast to the cipient that is interpreted as definite/presuppositional (section 2.2.4). More recently, there have been proposals according to which what matters crucially for an existential interpretation is the 'location dependence' of the pertaining predicate. According to these proposals, which are substantive hence welcome (Chierchia 1995, Dobrovie-Sorin 1995, McNally 1998), it is space localization that provides the empirical distinction relevant for a predicate's allowing existential readings of its arguments, rather than an inherent distinction like that between stage-level and individual-level arguments. McNally argues specifically that 'location dependence' is the crucial property a state must have to be encodable in a presentational sentence. What is ruled out are states that are 'location independent' (\approx Carlson's (1978) individual level predications), where in essence "the entities participating in these states will do so no matter what their location happens to be" (McNally 1998b, p. 298). Thus (101-a) does not make a good presentational sentence while (101-b) does:

- (101) a. *?There is a man bald
 b. There is water available

Location does not matter for a man's baldness, but it does matter for the availability of water. A concrete proposal that draws explicitly on the impact of location for the availability of existential readings of particular arguments is that of Dobrovie-Sorin 1995 who formulates conditions for alternative binding mechanisms:

- (102) Argument variables may be bound:
 a. by lambda abstraction (unrestricted)
 b. by existential closure (iff located with respect to a co-argument)
 (Dobrovie-Sorin 1995)

According to Dobrovie-Sorin's proposal, binding variables via lambda abstraction is unrestricted: it is defined for all predicates and argument variables (that are not already bound). Binding by existential closure on the other hand is only defined for arguments that are located with respect to a co-argument (cf. McNally 1998 for a related proposal).

Why should an argument's existential interpretation hinge on location? Possibly, it is because 'being is being somewhere' (Bolinger 1977), or at least, that is how we conceptualize it. If existence hinges on location, then the location better be certain. Looking at PTCs, it is striking that there are virtually no examples of PTCs with (morphologically) indefinite location arguments to be found. As the following run-of-the-mill examples illustrate, having a morphologically indefinite location yields a funny result under normal circumstances:

- (103) a. There is an apple in the basket
 b. (?)There is an apple in a basket
- (104) a. There is a man in the garden
 b. (?)There is a man in a garden

That there is an asymmetry between themes and locations in PTCs as far as their referential properties are concerned shows again in the following patterns, repeated from above (Lewis and Lewis 1970):

- (105) a. There are holes in the cheese
 b. ??Holes are in the cheese
 c. In the cheese are holes
- (106) a. There is some space in the fridge
 b. ??Some space is in the fridge
 c. In the fridge is some space

Supposing that locative inversion has the effect of making the location argument the grammatical and logical subject of the construction (cf. Bresnan 1994) and assuming further that fronting the theme argument has an analogous effect, what the patterns suggest is that the theme does not ‘refer on its own’, while the location may. In the cases just given, the theme argument has reference in construction with the location only, cf.:

- (107) a. Space in the fridge is a good thing
 b. Holes in the cheese are something Otto detests

Next, in a PTC, the location argument can be referred back to by a tag, independently of whether it is fronted or whether *there* appears sentence-initially. The theme cannot, unless it is fronted:

- (108) a. There was an apple in the (?a) basket, wasn’t there?
 b. In the (?a) basket was an apple, wasn’t there?
 c. *?There was an apple in the basket, wasn’t it/one?

In section 2.2.4, we saw similar patterns holding between the cipient and the theme argument, the possibility of being picked up by a tag indicating the referential status of the argument: something that is picked up by a tag must carry an existence presupposition (be definite/presuppositional in the sense defined in 1.3.4).

Prefinally, that the location argument corresponds to a referring expression is indicated by the fact that it does not bear stress in PTCs. Not bearing stress correlates robustly with givenness (cf. e.g. Schwarzschild 1999).

Finally, the ‘referential overweight’ of the PP location argument provides a possible explanation for the symmetry with respect to binding between the theme and the location argument:

- (109) ??I {gave, sent} his_i paycheck to [every worker]_i
 (Larson 1988:338)

We presented evidence in section 2.2.2 that the theme does *c*-command the PP location. Still, it appears to be possible for the PP location to bind the theme. Similarly, it is particularly natural for the PP location to take semantic scope over the theme:

- (110) There was an apple in every basket

Taking it that the location is definite in the relevant sense (cf. below), the fact that the theme can so easily be scoped over by it may be the simple effect of the PP location providing a ‘frame’ for the interpretation of the theme. The scopetaking is then not syntactic (the result of QR), but semantic (cf. Zimmermann 2001 for a worked-out proposal).

Staying with the referential status of the location argument in connection to the existential interpretation of the theme, note that not any realization of the location argument will do to yield an existential interpretation of the theme. The following pattern illustrates this:

- (111) a. Apes live in trees (generic)
 b. Apes live in the jungle (generic)
 c. Apes live in this tree (existential)
 d. Apes live in this jungle (existential)

What appears needed for an existential interpretation of the theme argument to be available is that the location argument be definite in a particular sense. Borshev and Partee 2001 propose that the location argument in PTCs corresponds to the ‘perspectival center’ of the construction. Delfitto 2001 proposes that the existential interpretation in presentational sentences is due to a default interpretive procedure that is based on the adoption of a speaker-oriented perspective. Looking at the examples in (111) where the theme is interpreted existentially, the link to the speaker is expressed on the location argument: It is a demonstrative, an expression that is usually taken to exploit the presence of its referent in the utterance situation, that is, the speaker/hearer’s ‘here and now’ (but cf. below). Some more examples illustrating the relevance of a definite location for the availability of existential interpretations of theme arguments are the following:

- (112) a. Ponds belong to this property (OK existential)
 b. Ponds belong to any decent property (*existential)
- (113) a. Students stay at this hostel (OK existential)
 b. Students stay at hostels/at the hostel (*existential)

Before putting down the generalization stating what correlates in our constructions with the existential interpretation of the theme argument, we have to say

more about what it means for the location to be definite. Consider the following passage from Bolinger concerning the presence of ‘subject *there*’ in PTCs:

The two deictic-presentative schemes [contextual and figurative] are also the clue to the use of *there*. If a party of would-be picknickers parks at a roadside and looks vaguely around, a ranger would not greet them with **Ten miles down the road are some picknick tables* (though this would do very well after some preliminary remark to set a CONTEXTUAL stage), but would add *there*. On the other hand, *Across the road are some tables* would be normal, out of the blue, if the tables could be pointed to.
(Bolinger 1977:114)

Putting Bolinger’s observation into somewhat different terms, if the location argument’s referent is directly perceivable in the utterance context (or aforementioned), it is fronted. If not, then *there* serves to ‘announce’ or ‘foreshadow’ the location argument’s referent (Lyons 1977). To give another example illustrating the same point, someone driving a car and looking for the way would say to his passenger sitting next to him (114-a) but not (114-b) in German:

- (114) a. Im Handschuhfach ist eine Karte
In-the glove-compartment is a map
b. ??Da ist eine Karte im Handschuhfach
There is a map in-the glove-compartment
(German)

To the extent that the location argument’s referent – the glove department in the example – is directly perceivable in the utterance situation, use of *da* is odd. It improves with growing distance and decreasing presence in the utterance situation (e.g., (114-b) improves with the passenger sitting on the back seat). If the location argument’s referent is directly perceivable there is no need for announcing it – the location is in the extralinguistically given context (in the field of perception or aforementioned) already and serves to introduce something meeting the restriction imposed by the theme D/NP argument expression. Assuming that in PTCs the speaker/hearer’s ‘here and now’ corresponds to the logical subject expression (cf. section 1.4.1, 4.1.2, Kratzer 1994, Kiss 1996), the location argument is definite then with respect to the subject of predication in PTCs, but not ‘in it’: The location argument’s referent is not in the immediate utterance context, but ‘announced’ or ‘foreshadowed’ (Lyons 1977) by the element *there*.²⁰

We observe that in the case of PTCs, the location argument is definite but its referent is not in the immediate utterance context (at ‘here and now’) but

²⁰Cf. as well Bolinger’s 1977 observation that

- (i) The less vividly on stage a situation [expressed in a PTC], the more *there* is needed

given with respect to it: the location argument's referent is 'from here and now', which is also what the element *hin* cooccurring with location arguments means (Cf. section 3.2.1, 'hin un her'/'hither and thither').

The location argument is definite with respect to the cipient in case one is projected – this is most easily seen in case the location argument denotes a body part of the cipient:

- (115) Otto stand was auf dem Fuss
 Otto stood something on the foot
 'There was something standing on Otto's foot'
 (German)

We can put down for our constructions the following generalization underlying the existential interpretation of the theme argument:²¹

- (116) The theme argument is interpreted existentially (by default) if it is related to a location argument that is definite with respect to the logical subject of predication.

The generalization in (116) squares with proposals according to which what is essential for an existential interpretation of an argument expression to be available is that there be an 'alternative' expression in the structure that can function as the logical subject of predication (cf. Delfitto and Pinto 1993, Kratzer 1995, Pinto 1997). It differs in that this subject expression is not part of the lexical projection of the predicate – under our proposal, the logical subject in cipient predication corresponds to a superlocation of the location argument, the location argument being part of the lexical projection of the predicate, the superlocation standing in the R relation to the location argument and being licensed structurally by predication.

There again

The paradigm environment in which theme arguments are interpreted existentially is the PTC. A traditional idea is that *there (be)* functions as an existential quantifier (Milsark 1977): It follows that variables in the scope of *there (be)* that are not bound receive an existential interpretation. Further, the account of the definiteness effects associated with PTCs is straightforward under Milsark's account: *There (be)* has to bind a variable, which it cannot if the theme is inherently quantified:

- (117) a. There is a woman in the garden
 $\exists x$ woman(x) & in-the-garden(x)
 b. *There is every woman in the garden
 $\exists \forall y$ [woman(y) \rightarrow in-the-garden(y)]

²¹Cf. Abbott 2001 for discussion of the predominantly 'referential' status of location arguments.

We saw in section 2.2.2 that *there (be)* gives rise to WCO effects if it intervenes between an operator and a bound variable, supporting the idea that it functions as a quantifier binding a variable:

- (118) a. ??Her_i mother knows that there is [a kid]_i smoking behind the woodshed
 b. ?Her_i mother knows that [a kid]_i is smoking behind the woodshed

On the other hand, existential quantifiers have never been seen in natural language. Accordingly, McNally 1998 proposes to analyze *there (be)* as an instantiation predicate:

- (119) There was snow
is-instantiated($\lambda x[\text{snow}(x)]$)
 (McNally 1998)

According to McNally's analysis, *There (be)* is a function taking sets of individuals as arguments (sets of individuals correspond to properties). If only D/NPs that have set denotations can appear as arguments of *there (be)*, certain quantifiers will be ruled out, namely those that cannot be interpreted as sets. Such are *most* and *every*, the quantifiers that are most robustly ruled out in PTCs.²²

It is interesting to note that the semantic predicate '**is instantiated**' corresponding to *there be* under McNally's proposal is tensed: *there be* does not mean potential but actual instantiation, that is, instantiation at a certain (temporal) index. The truth conditions McNally assigns to a PTC are as follows:

- (120) a. 'there be NP' is true iff $[[\text{NP}]]^{M,g} \in [[\text{There be}]]^{M,g}$
 b. $[[\text{NP}]]^{M,g} \in [[\text{There be}]]^{M,g}$ iff $[[\text{NP}]]^{M,g} \neq \emptyset$
 (McNally 1998)

Translating into English, a PTC is uttered truthfully iff in the model (under the variable assignment) under consideration, the 'associate' D/NP is mapped onto a nonempty set containing only individuals.

Trivially, whether a linguistic expression has a value in extralinguistic terms or not depends on the model one is looking at. In traditional terms, to check whether something is the value of a (bound) variable or constant, what is

²²McNally draws on Partee's 1987 'BE' function to shift between generalized quantifier and set type: Only those D/NPs that yield a(n interesting) set interpretation when the BE-function is applied to them can appear in PTCs. Partee's BE-function collects individuals (singletons) into a set:

$$\text{BE} \rightsquigarrow \lambda \mathcal{P}[\lambda x[\{x\} \in \mathcal{P}]]$$

That quantifiers like *most* and *every* cannot be interpreted as simple sets can also be understood without much machinery: The generalized quantifier *every* expresses inclusion of the first (noun) set in the second (VP) set, and it is meaningless if the first set is empty (as any GQ). Interpretation of *most* involves comparison of the cardinality of two sets ($\text{Most}(A,B) \leftrightarrow |A \cap B| > |B - A|$).

needed is at least an index determining a context. We assume that tense plays the crucial role here (cf. section 1.3.2): In particular, the little *t* head is responsible for providing an index for the thingatloc meaning encoded in the VP (cf. section 2.2.1). To repeat, what *t* does in semantic terms is form a predicate from the propositional meaning encoded in the VP by abstracting over superlocations of the location argument coming with the construction. Accordingly, PTCs correspond to the characteristic function of superlocations such that at (one or more of) their sublocations, something falling under the theme argument's restriction is located:

- (121) There was snow in the garden
 $\lambda w \exists p \text{ AT}(x,p,i) \& \text{ snow}(x) \& \text{in-the-garden}(l) \& p=l \& \text{R}(p,w)$

Crucially, while *t* purports to providing an index for the propositional meaning encoded in the VP, it does not 'have it' by itself: *there* is the spellout of *p* and *t* features that are unvalued (cf. section 1.3.2, 'Valuation and Saturation').

t is valued by something that is interpreted as a location (interpretable *p* feature) and that is definite/presuppositional (interpretable *t* feature). There are two basic possibilities: Either *t* gets its value 'from outside', or from within the structure it is itself part of. The first case is illustrated in the following examples:

- (122) a. Jan entered the bar. There was a jukebox standing in the corner.
 b. There is a free table (over there)

In (122-a), *there* appears to refer anaphorically: the understood subject of predication is the bar, aforementioned. In (122-b), *there* appears to refer deictically: the understood subject of predication is the speaker/hearer's 'here and now'. In both cases, the understood subject corresponds to a superlocation of the location argument encoded lower in the structure (*the bar* and a region pointed to by the speaker respectively). It is important that the value of *t* is not determined in the structure it heads: the *t* projection is itself unvalued and in this sense not saturated.

There are two cases in which *there* receives a value internally to the structure that it heads: One is the cipient construction, with the cipient cancelling out (valuing) *t*'s uninterpretable (unvalued) *p* and *t* features:

- (123) Otto erschien ein Geist (vor der Nase)
 Otto-DAT appeared a ghost (in-front-of his nose)

The other case is where *t* is valued by *T*, through a nominative subject checking *T*'s features (cf. section 2.3.5). Here too, *t* receives a value structurally:

- (124) A man was (there) in the garden

In (123), the subject of predication is a whole relating to the location argument as a part. In (124), relations are more complicated, to be discussed to some

extent in chapter 4, section 4.1.1.²³ What is important is that in both (123) and (124), the value of *t* is provided by an expression that is part of the structure that (silent) *there* heads (via head merger in the nominative case, cf. section 2.3.5). Both (123) and (124) are saturated structures in this sense (cf. section 1.3.2).

We have proposed that in both PTCs and the cipient construction, the logical subject of predication is a superlocation of the location argument coming with the construction. This superlocation is definite/presuppositional, corresponding to the speaker hearer's 'here and now' or an aforementioned location (PTC) or to the cipient argument respectively (cf. section 2.2.4 on the referential status of cipients). Being definite, the superlocation carries indices, or, in feature terms, has an interpretable (valued) tense feature. It is the superlocation then that provides an index in our constructions: Given a superlocation, the truth or falsity of the propositional meaning encoded in the VP can be assessed. We get the following truth conditions for PTCs, with *w* being a superlocation of the location argument, which is therefore given with *w* and independent of a variable assignment:

- (125) 'Cipient/there be D/NP (at LOC)' = 1 iff $[[D/NP]]^{w,g} \in [[AT\ p]]^w$
 where
w = 'here and now' or a co(n)textually given (sum)location (PTCs)
w = cipient (DPCs, DOCs)

In words, a PTC is uttered truthfully iff given a superlocation of the location argument coming with the construction, there is something falling under the restriction of the theme argument that is at the location argument.

The superlocation *w* may be supplied from outside (PTC) or from within (DPC, DOC) the structure. It is argued in chapter 4 that it is this difference that the definiteness effects in PTCs stem from: quantifiers such as *most* and *every* require the structure they appear in to be saturated structurally and are therefore ruled out in PTCs but OK in DPCs and DOCs.

To sum up, there is a substantial relation between an existential interpretation of the theme argument being available and the theme argument being located with respect to a coargument, providing an argument for the latter's presence in the constructions under discussion. The existential interpretation of the theme argument is predicted by our analysis: the theme is always located with respect to a co-argument in our constructions, namely the location argument. Further, the semantics of the location argument itself matters crucially: It is location arguments that are definite with respect to the subject of predication that give rise to an existential interpretation of the theme. Further, the location argument's referent is not in the immediate utterance context ('here and now') in PTCs. It is rather 'from here and now'.

²³It appears that both what *a man* and what the location argument refer to are in fact included in a superlocation that (silent) *there* refers to.

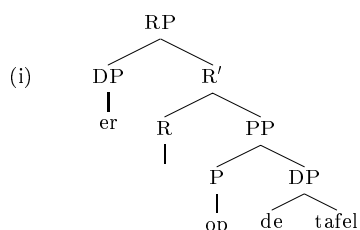
3.2.4 Toward the Predicate Restriction

As a last argument in favor of the hypothesis that there is a location argument projected in the constructions under discussion, we turn to its importance for an understanding of the predicate restriction (to be developed fully in section 3.3.1). Under our proposal, *there* is the expression of a relation between the location argument and *t* (projection). This is the predicate restriction: If there is no location argument, there can be no agreement between it and *t*, hence no *there*.²⁴ On the assumption that cipient arguments correspond to the interpretable counterpart of *there* in terms of features, the presence of a location argument is a necessary condition for cipient arguments to be licensed as well. It is the same thing then that is responsible for the existential interpretation of the theme that is responsible for the predicate restriction, a desirable result since clearly the existential interpretation and the predicate restriction are closely related.

The best known approach to the predicate restriction stems from Carlson, distinguishing between ‘stage level’ and ‘individual level predicates’ (Carlson 1978): SLP are apt to change over time, while ILP are not apt to change but temporally stable. ILP are most robustly ruled out in PTCs, and they do not appear in the cipient construction either as such, as is predicted:

- (126) a. *There was a man intelligent
 b. *Otto was Anna intelligent
 c. *Otto loved Ede Anna

²⁴An earlier proposal that makes the link between *there* and location arguments as frequently expressed by PPs is that of Zwarts 1992. Zwarts argues that the Dutch analogue of *there*, the so-called ‘R-pronoun’ *er* (van Riemsdijk 1978) corresponds to the ‘referential argument’ of locative PPs. According to Zwarts, locative PPs have a structure as in (i), in analogy to the structure of D/NPs and TPs:



Zwarts shows in some detail that the element *er* in Dutch indeed patterns with the ‘referential’ functional elements associated with the other major categories in crucial respects. Carrying the analogy to the interpretive domain, Zwarts proposes that Like D for NPs or T for VPs, *there* plays a determiner-like role for PPs: Informally, like D is often said to ‘provide the referential force’ of D/NPs in ‘picking out’ a referent from the N-set (individuals), *there* provides force for PPs in ‘picking out’ a referent from the PP set (places and paths under Zwarts’ proposal). That *there* has a determiner-like function is suggested already by its morphology, the *th* typically making up part of articles and demonstratives in English. The same goes for *d* in German *da*. In a similar vein like Zwarts, Basilico 1997 proposes that *there* originates as the referential D(eterminer) head of a small clause structure.

The unavailability of ILP in the cipient construction follows immediately if ILPs as such do not project a location argument, as we will assume given independent evidence: ILP are incompatible with overt location arguments and generally hardly modifyable by locative elements:

- (127) a. *Anna loved Otto into pieces
 b. ?Otto knew the answer under the shower

If ILP do not project a location argument, they will not furnish a superlocation either, hence there is no variable (w) that the cipient can bind.

In different argument-structural terms, the SLP/ILP distinction is developed by Kratzer 1995: According to Kratzer, while stage level predicates project an event argument, individual level predicates do not. With some additional assumptions, Kratzer derives the existential interpretation of ‘stage level subjects’ and the universal/generic interpretation of ‘individual level subjects’ respectively. The assumptions are these:

- (128) a. The event argument is the hierarchically most prominent argument
 b. The hierarchically most prominent argument is mapped onto VP-external position
 c. Arguments inside the VP are caught by existential closure, arguments outside the VP are bound by a(n implicit) generic quantifier

If the event argument projects externally and if there is just one external argument, any other argument will project VP-internally hence receive an existential interpretation. In ILP on the other hand with no event argument, the agent/experiencer will be most prominent hence map onto external position and be interpreted as presuppositional.

A straightforward (but not the only conceivable) way of relating the event property to the predicate restriction is to say that *there* is the spellout of the event argument (cf. Felser and Rupp 2001). Without an event argument then, there can be no *there*, similar to what we propose. Indeed most predicates occurring in PTCs and DPCs/DOCs respectively are traditionally classified as eventive (cf. e.g. the examples in section 3.2.2 above).

The account in terms of the (non)projection of an event argument has appeal then in being simple as well as relating the predicate restriction to the availability of an existential reading of different types of (surface) subjects. Further, it relies on a distinction that is rooted in temporal structure: ‘eventive’ predicates have an internal temporal structure different from that of individual level predicates, so the event argument approach makes the link to temporal structure encoding as in turn relating to the tense system. Let us see why this is interesting.

According to standard formulations, events ‘take time’, they are not true at certain times but rather occur within certain temporal intervals. A way of

translating this is to say that events encode change: events would correspond to the von Wrightian (1965) scheme representing a transition from a state p to a state q in time:

(129) pTq

If events encode change hence obey (129), it is clear why they take time: change entails temporal progression. Further, events cannot be true at certain points of time because change involves reference to at least two points in time.²⁵

As was discussed above (section 1.3.2), the fact that certain predicates make reference to two distinct temporal points at the reference time level is reflected at the discourse level: Eventive predicates ‘move’ the reference time to a time where their ‘post state’ holds. Further and making the link to the tense system, eventive predicates occur felicitously in the perfect tenses, unlike individual level predicates (a subset of ‘stative’ predicates):

- (130) Anna: Ich verstehe das nicht. Als ich nach Hause kam, waren alle Kekse aufgegessen.
 Anna: I understand that not. When I to home came were all cookies up-eaten
 Anna: ‘I don’t understand that. When I came home, all cookies were eaten up.
- a. Bisher sind alle Kekse Otto entgangen
 So-far are all cookies Otto-DAT escaped
 ‘So far, all cookies have escaped Otto’
- b. ??Bisher hat Otto Kekse gehasst
 So-far has Otto cookies hated
 ‘So far, Otto has hated cookies’
 (German)

Perfect forms rely on there being two separate temporal indices available at the reference time level (cf. section 1.3.2, ‘tense and time’). In a recent formulation of Musan,

Any perfect construction as a whole denotes a post-state of a truth interval of the embedded VP (Musan 2001:5)

If change entails reference to a second truth interval but individual level predicates are incompatible with change interpretation, we get an idea of why ‘eventive’ predicates occur in perfect tenses happily but individual level predicates

²⁵That interpreting change involves reference to two temporal indices is most obvious with changes from ‘not p’ to ‘p’ (or vice versa). A change from ‘not p’ to ‘p’ (or vice versa) cannot be true at one time without contradiction. Cf. however Kamp 1979. Cf. in particular Galton 1984 for discussion of how the Vendlerian categories translate into a distinction between events (accomplishments and achievements) and states (states, activities (states of change according to Galton)).

do not.²⁶ To repeat, the perfect tenses express a distinction at the reference time level. In the traditional Reichenbachian terms, the perfect encodes dissociation of R and E – looking at E as another temporal interval, this amounts to having two distinguished reference time intervals. Designating R with R₁ and E with R₂, the temporal relations for simple and perfect (anterior/posterior) tenses are shown in the following table (cf. Reichenbach 1947:290ff. ‘x<y’/‘x–y’ reads ‘x precedes y’, ‘x>y’ reads ‘y precedes x’, ‘≈’/‘,’ is the overlap relation):

	R≈S, present	R<S, past	R>S, future
R ₂ ≈R ₁ , simple	R ₂ ,R ₁ ,S	R ₂ ,R ₁ -S	S-R ₂ ,R ₁
R ₂ <R ₁ , anterior	R ₂ -R ₁ ,S	R ₂ -R ₁ -S	S-R ₂ -R ₁ ; S,R ₂ -R ₁ ; R ₂ -S-R ₁
R ₂ >R ₁ , posterior	R ₁ ,S-R ₂	R ₁ -R ₂ -S; R ₁ -R ₂ ,S; R ₁ -S-R ₂	S-R ₁ -R ₂

We saw in section 2.2.1 already that the presupposition triggering adverb *wieder* triggers a presupposition according to which there are two dissociated truth intervals if it occurs with the cipient construction in its c-command domain. To repeat, *wieder* triggers a presupposition taking the form in (131-a) as long as it occurs to the right of the cipient. If *wieder* occurs to the left of the cipient, it triggers (at least) the type of presupposition given in (131-b):

²⁶Typically, the predicates licensing cipients are easily identified as ‘two place unaccusatives’, projecting a theme and a location argument as we argue. The connection between unaccusativity as such and eventhood (understood as bringing about change) is a debated issue. Reinhart 1996 shows that there is no strict correspondence between unaccusativity and eventhood, relying on a diagnostics proposed by Kamp 1979 and Partee 1984: sentences encoding accomplishments and/or achievements (often collapsed into ‘event’) give rise to sequence interpretation in discourse, while sentences encoding activities and/or states do not. Most unaccusative predicates do give rise to sequence interpretation, but there are also some that do not, consider:

- (i) a. The man died and rot away (sequence interpretation)
- b. ??The man rot away and died (odd due to sequence interpretation)
- (ii) a. The apple turned and fell (no sequence interpretation)
- b. The apple fell and turned (equivalent to (a))

If a location argument is added to these unaccusative predicates however, sequence interpretation appears to be forced:

- (iii) a. Otto fell and turned (no sequence interpretation)
- b. Otto fell down the social ladder and turned into a bum (sequence)
- (iv) a. The apple grew into a large fruit and ripened into a sweet delight (sequence interpretation)
- b. ??The apple ripened into a sweet delight and grew into a large fruit (odd due to sequence interpretation)

Another (related) test for eventhood consists in checking ‘completion entailments’: ‘Event’ predicates in simple past exclude that the predicate holds in present tense, while state and/or activity predicates do not:

- (v) a. The apple ripened \nrightarrow The apple is not ripening now
- b. The apple ripened into a sweet delight \rightarrow The apple is not ripening into a sweet delight now

- (131) a. $\exists i$ thingatloc
 b. $\exists i, i''$ thingatloc_{*i'*} & \neg (thingatloc_{*i''*} \rightarrow $i', i'' \in i$)

In section 2.3.4, we saw evidence that DOCs encode two tensed/indexed domains, and we have seen indications that cipient presence correlates with an extra index ‘up and above’ a truth interval that is anchored to the utterance situation (cf. sections 2.2.4, 3.2.3).

It is transparent sometimes that there is an intimate link between licensing cipients and perfect tense forms. Consider the following examples from French (Schuetze 1997:109fn.17 (citing examples from Boeckx 2000:363 with similar examples from Icelandic):

- (132) Marie a sembl Jean tre fatigue
 Marie has seemed to Jean be tired
 ‘Marie seemed to Jean to be tired’
- (133) ??Marie semble Jean tre fatigue
 Marie seems to Jean be tired
 ‘Marie seems to John to be tired’
- (134) Marie lui semble tre fatigue
 Marie to-him seems be tired
 (French)

In perfect tense, it is fine to have an ‘experiencer dative’ surfacing with the prepositional element with *sembler* (‘seem’). In present tense, the construction is odd. What saves the structure in present tense is cliticizing the ‘experiencer’. If both ‘perfect’ *have* and cipient licensing depend on a reference time distinction and if we assume that this reference time distinction is encoded on the T/t head and needs to be checked, the pattern can be rather straightforwardly accounted for in the terms developed here: *have* can check the reference time distinction by merger. The ‘experiencer’ with the prepositional element cannot: French presumably does not have ‘dative shift’ in the traditional sense (cf. Kayne 1983, but den Dikken 1995). If the ‘experiencer’ corresponds to a pronoun/clitic and may therefore enter an agreement relation with the tense system (cliticization/agreement), it can: In (134) then, the cipient can check the reference time distinction.²⁷

In sum, an approach to the predicate restriction that relies on the projection of an event argument hence ultimately the encoding of temporal structure appears to be altogether on the right track. It appears promising in particular in that it squares in principle with the idea that cipient licensing is intimately connected to the tense system, as argued for here and witnessed again above in the correlation of cipient licensing and felicitous occurrence in perfect forms.

²⁷Cf. Brandt 2000 for an analysis of the cipient construction in terms of a perfect operator licensing cipients as subjects of ‘result states’ (Kratzer 1994).

However, the event argument approach has serious problems both conceptually and empirically. On the conceptual side, it is not clear what events are. Given that events are not true or false but occur, it is hard if at all possible to state identification criteria for events.²⁸ Interpreting eventhood as encoding change is a possible way out, but clearly there is no agreement on what events are. Nor is it at all clear what the relation between the event argument and ‘ordinary’ (object/thing etc.) arguments should be. Further, an approach relying on the projection of an event argument seems to defeat integration of patterns as observed above that reflect the correlation between adverb position and associated semantic scope. Typically on the event argument approach, all adverbs are taken to modify one and the same event variable, so it is not clear how their scopal properties can at all be accounted for on the event approach (but cf. Bennett 1988). For these reasons, an approach relying on the projection of an event argument appears much less attractive.

Empirically, many predicates occurring grammatically in the PTC as well as the DPC are stative, encoding anything but eventhood and/or change. (135-b) for instance hardly even encodes any sense of temporal progression, which would seem to be the least to require of events:

- (135) a. There stood a lamp in the corner
 b. There is no even prime number higher than two in mathematics
 c. Otto stand eine Lampe auf dem Fuss
 Otto-DAT stood a lamp on the foot
 (German)

The examples show that it is not exclusively a distinction pertaining to temporal structure after all that is at the root of the predicate restriction.

Further, an approach relying exclusively on eventhood (interpreted possibly in terms of encoding change) has nothing to say about the fact that DPCs in particular prominently encode comparative/evaluative meanings. As soon as comparison/evaluation is involved, even ILP project the cipient construction, and comparison appears to much improve ILP in PTCs as well, cf. (139).²⁹

- (136) Otto ist mir *(zu) intelligent
 Otto is me-DAT *(too) intelligent
 (German)
- (137) Janos nekem *(tl) intelligens
 John DAT.1Sg *(too) intelligens (Hungarian)

²⁸Cf. the collection of papers in Casati and Varzi 1996, in particular Davidson 1970 [1985] and Kim 1976. Cf. as well Verkuyl 1993 for extensive discussion of problems associated with event variables.

²⁹It might be suggested that the (near) grammaticality of (139-b) is due to the structure being that of a reduced relative. However, (139-a) should then be grammatical as well, cf.:

- (i) A woman clever with her hands will always get a job

- (138) a. *O Yargos mu ine eksipos
The John me-GEN is intelligent
b. O Yargos mu paraine eksipos
The John me-GEN too-is [sic!] smart
(Greek)
- (139) a. *?There is a woman clever with her hands in this garage
b. ?There is a woman more clever with her hands than any male
mechanic in this garage
c. *There are gold nuggets big on the moon
d. There are gold nuggets bigger than pumpkins on the moon
(Bill Philipp p.c.)

In light of these facts, an account of the predicate restriction in terms of eventhood must eventually fail. We would rather want to give centrality on the projection of a location argument as a core licensing factor or PTCs and DOCs/DPCs, given the evidence mounted so far. Projection of a location argument alone does not appear to be sufficient either however as concerns the needed empirical distinction between predicates that do and predicates that do not occur in the cipient construction. For one thing, the nature of the location argument and its relation to the cipient matters, cf. e.g.:

- (140) a. Anna lag ihm in den Armen
Anna lay him in the arms
'Anna lay in his arms'
b. ?*Anna lag ihm auf dem Tisch
?*Anna lay him on the table
'Anna lay on his table'
(German)

It has to be acknowledged as well that something like 'dissociatedness' of reference points appears to play a role, as witnessed by the interaction with perfect forms above and generally desirable in light of the fact that cipient licensing appears to be intimately linked to properties of the tense system – in this respect, the event approach appears to be on the right track.

To sum up, we want the projection of a location argument, its relation to the cipient as well as something like the 'referential dissociatedness' condition to enter the definition of the predicate restriction. To repeat, we propose that apart from the projection of a location argument and its relation to the cipient, it is mandatory that the interpretation of the cipient as a whole meets a scheme of the following form, comprising a dimension and two dissociated truth intervals along that dimension, one 'anchored' to the utterance context (R_{anch}) and one dissociated from it (R_{sit}):

- (141) $-+ \text{-----} + \text{-----} >$ dimension
 $R_{anch} \quad R_{sit}$

We argue in section 3.3.1 that in combination, projection of a location argument (presence of *p*), its relation to the cipient (the relation *R*) and the obedience of the scheme in (141) yields the right set of cases occurring in the cipient construction.

3.2.5 Possession

Lyons 1977:722 writes the following about the linguistic relation between ‘possession’ and ‘being located at’:

Generally speaking, however, a phrase like ‘X’s Y’ means no more than “the Y that is associated with X”; and the kind of association holding between Y and X is frequently one of spatial proximity or attachment. It can be argued that so-called possessive expressions are to be regarded as a subclass of locatives (as they very obviously are, in terms of their grammatical structure, in certain languages). (Lyons 1977: 472)

Freeze 1992 has argued forcefully that crosslinguistically, predications involving ‘existential have’ as in

(142) Otto has a sister

are an instantiation of the “universal locative paradigm consisting of the predicate locative, the existential, and the ‘have predication’ (cf. as well Borshev and Partee 2001). As shown by Freeze as well, it is more of an accident of Germanic that the form *have* is used in predications expressing possession rather than more obviously locative means. More often than not across languages, a copula in combination with some locative morphology (many times ‘melted’ into a special locative copula) is used to express ‘possession’. Yucatec is a language that makes the relation between location and possession transparent, similarly Finnish:

(143) yaan huntul ciimin ti in-paapa
 COP one horse in my-father
 ‘There is a horse in my father / My father has a horse’
 (Yucatec)

(144) Liisa -lla on mies
 Lisa -ADESS COP_{LOC} man
 ‘Lisa has a husband’
 (Finnish)

There is not only a transparent relation between location and possession reflected in the form of natural language utterances expressing these concepts. There also appears to be a close link between acquiring the concept of possession and grasping relations pertaining to location. Miller and Johnson-Laird

1976: 565 write the following about the relation between possession and location in first language acquisition:

Yet the relation between position and possession may be apparent in the early speech of a child. It has long been observed that a young child, still at the stage of one-word utterances, learns to point at objects and apparently name their owner. A child may point at a book and say “Daddy” when the book does in fact belong to Daddy. Greenfield, Smith and Laeufer (1976) have observed that at this stage a child also begins to point at locations and name the objects that customarily belong there.

Acquisition of the concept of possession appears to go along with acknowledging locations as ‘containers’ of objects. The analysis proposed here squares well with these facts: Under our proposal, possession is really including a location that relates to something (not necessarily some thing) located at it.

3.3 Interface Conditions for Cipient Predication

For language to be usable, structures generated in syntax have to be interpretable in extralinguistic terms of sound and meaning. According to Chomsky, the primitives operated in syntax are (bundled) features, sound/meaning associations stored in the lexicon. These features and the relations they entertain are what is interpreted at the interface to the extralinguistic systems of sound (PF interface) and meaning (LF interface). This section seeks to spell out in more detail what the interface conditions for cipient predication are, that is, what has to arrive at the interface to sound and meaning in order for cipient predication to be interpretable.

The first subsection addresses the interface to semantics/pragmatics (LF interface), spelling out in more detail what the cipient construction translates into in terms of meaning. We give more detail to the central case of cipient predication, that encoding change, and make a proposal as to how it can be extended so as to cover comparative/evaluative cipient constructions as well. Further, suggestions are made as to what the special role of body-part denoting PP location complements is, as well as how the novelty condition (cf. section 1.4.1) presents itself from the perspective of what has been discussed, as well as how ‘Oehrle effects’ (cf. section 1.4.3 above) can be accounted for on the basis developed.

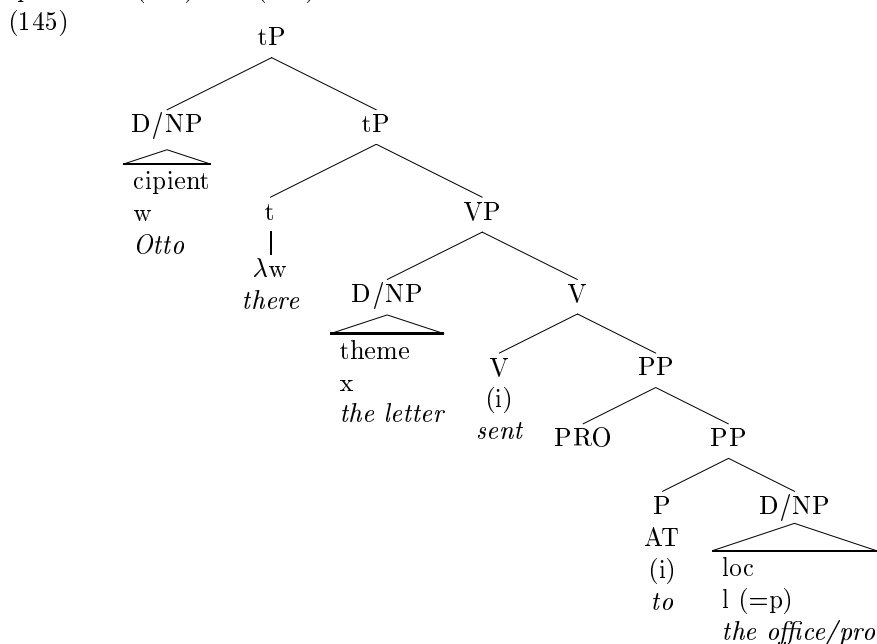
The second subsection addresses the question of how variation as to when and why the cipient construction is licensed in particular languages can be accounted for. Focus is on the sound interface here, interacting with apparently small scale semantic differences between languages and determining parsability eventually.

3.3.1 Meaning

We argue here that apart from projecting a location argument, an essential condition that the cipient construction has to meet is that it encode a truth interval ‘up and above’ or ‘down and below’ a truth interval that is anchored to context (eventually to the utterance context) – this is what the *t* head licensing cipients ‘binds’. We first give more detail to the semantics proposed here, commenting on the nature of the variables employed and how they are interpreted in extralinguistic terms.

More on the variables and their values

The operator-variable structure we propose to be encoded in cipient predication is repeated in (145) and (146):



- (146) $\lambda w [\exists p \text{ AT}(x,p,i) \& p=l \& R(p,w)](\text{Max})$
 (with *l*, *p* and *w* ranging over (sum) locations, *x* ranging over ‘ordinary’ individuals, *i* an index (context)).

The interface is the mapping from syntactic/semantic structures to extralinguistic representations. Extralinguistic representations can be thought of as models, consisting of a universe and a time/index structure (cf. e.g. Kamp and Reyle 1993):

$$M = \langle U, T \rangle$$

At certain times/indices, certain things are in existence and certain states of affairs hold or do not hold. Times correspond to contexts. Supposing that events encode change, we can take the simple view that times ‘prove’ propositional meanings: $\langle i, t \rangle \models p$ (for our cases: thingatloc).

An eventive (=change) predication needs two indices to be evaluable, given that change falls under the von Wrightian scheme ‘pTq’, cf. above 3.2.4. To illustrate and introduce some useful terminology, consider an example again:

(147) Otto came into the room. He buttered a toast. He sat down.

The middle sentence picks up as its temporal reference a time where Otto is in the room (the preceding event’s post state). It is asserted that a toast is buttered in a temporal interval that is ‘anchored’ to that anaphorically picked up temporal reference. It is not asserted however that ‘the toast is buttered’. This is the post state of the buttering event that is only available later, as an anchor for the third sentence. We will call the temporal interval hosting the buttering the ‘anchor interval’ since it is anchored to discourse (eventually to the utterance context). The second interval we call the ‘situative’ interval. The situative interval corresponds to the ‘moved’ reference time (cf. as well above sections 1.3.2 and 3.2.4).

We assume that times (indices) as well as locations are ordered by Linkian (1983) part structures: The types T of times and P of locations have the structure of an algebra, comprising atomic times/locations and sums built from these atomic times/locations, where these sums correspond to group individuals.³⁰ The Time Structure is ordered with respect to (at least) inclusion (‘ \leq ’) as well as precedence (‘ \prec ’). The location structure is ordered with respect to (at least) inclusion (‘ \leq ’).³¹

We assume that individuals can be mapped onto their locations. What the locations of an individual are remains in part vague. Otto’s locational counterpart corresponds to a space somehow associated with Otto, including e.g. his office if he has one. That individual can be mapped onto their locations is evidenced in natural language examples such as the following:³²

(148) I was at Otto’s yesterday

(149) Bei Otto fühlt Anna sich wohl

³⁰Sum individuals can just as much be regarded as sets of individuals, cf. Link 92:433f.

³¹The time structure $T = \langle U_T, \oplus, \leq, \prec \rangle$. The sum operation ‘ \oplus ’ is an idempotent, commutative and associative function from $U_T \times U_T$ to U_T . The location structure $L = \langle U_L, \oplus, \leq \rangle$. As long as sum formation can be translated as set union, we write ‘ \cup ’ instead of ‘ \oplus ’, similarly ‘ \cap ’ for overlap. Cf. Link 1983, Krifka 1998 for definitions of part structures for the modelling of Mass Nouns/Plurals and the spatiotemporal domain respectively.

³²It would seem natural to allow only definite individuals to be locatable, cf. e.g. the following example which is odd unless the PP carries marked stress, indicating that it is interpreted against a presupposed background set:

(i) ?At a dentist’s I do not feel too comfortable.

At Otto feels Anna comfortable
 ‘Anna feels comfortable at Otto’s/in Otto’s vicinity/in a place associated with Otto’
 (German)

Note that the mapping from individuals is marked, the preposition *at* and genitive in (148) and the preposition *bei* (‘at’) in (149) signalling that the expressions they are part of are to be interpreted as locations. We may assume that the cipient marking does just that: signal that the expressions so marked are to be interpreted as locations.

Further, individuals can be mapped onto their times. Taking these times to be the times where the respective individual is ‘in existence’, this option is restricted to individuals that are definite in the sense defined in section 1.3.4. That individuals can be mapped onto their temporal extension is evidenced in natural language in examples such as the following, suggesting further that mapping onto times is restricted to definites:

- (150) a. Jan van Eyck was before Rembrandt
 b. The dinosaur was before the cocker-spaniel
 c. (?)Dinosaurs_{kind} were before cocker-spaniels_{kind}
 d. ??A dinosaur was before a cocker-spaniel
- (151) Kohl war auch die Aera der Wiedervereinigung
 Kohl was as-well the aera of-the reunion
 ‘The reunion fell under Kohl’s regency as well’
 (German)

The cipient and location argument are related by the relation *R* which we require to encode at least inclusion. We turn to the nature of *R* in more detail below in section 3.3.2. The particular semantics of *R* is subject to variation and has consequences for whether the cipient construction is licensed or not. We repeat here cases obviously showing that the relation between the cipient and the location argument should correspond to (at least) inclusion in some relevant sense:

- (152) I sent Otto the letter to his office
- (153) Otto fiel ein Stein auf den Kopf
 Otto fell a stone on the head
 ‘A stone fell on Otto’s head’
 (German)

PTCs are special in this respect, a matter to which we turn presently.

At the interface, the cipient is interpreted among other as a set of times/ indices (=sum time/index): It was argued above (section 2.3.4) that cipients are interpreted as definite/presuppositional, entailing that interpreting them involves checking a presupposition on the part of the speaker. Presuppositions

are part of some context, hence interpreting cipients involves reference to indices determining contexts. The cipient carries times/indices exactly because it is a logical subject of predication. In terms familiar from model-theoretic semantics, we have (cf. section 2.3.5, 3.2.3):

- (154) ‘Cipient/there be D/NP (at LOC)’ = 1 iff $\llbracket \text{D/NP} \rrbracket^{w,g} \in \llbracket \text{AT p} \rrbracket^w$,
 where
 a. w = ‘here and now’ or a contextually given (sum)location (PTC)
 b. w = (prominent part of interpretation of the) cipient (DPCs, DOCs)

In sum, we need to assume at least the following primitives for our cases:

- (155) Primitives:
 ‘ordinary’ individuals (x)
 propositional meanings (thingatloc)
 times/indices (i)
 locations (l, p, w)

It will turn out presently that we want to have as well properties (maybe propositional meanings could be regarded as complex properties) as well as degree scales (cf. Quine 1960, Creswell 1976) in the domain of quantification:

- (156) Further primitives:
 properties
 degree scales (quality spaces, largely innate)

The semantic structure we assume contains at least the following:³³

- (157) algebraic structure in the realm of times and locations, mass terms, persons
 relations between individuals and locations (thingatloc)
 function τ from individuals to times
 function π from individuals to locations
 function from times and propositional meanings to truth/falsity
- (158) Further semantic structure:
 relations between primitives (prominently: part–(integrated) whole)
 function δ from individuals to indices at which certain properties are instantiated to certain degrees
 quality distinctions

Further, we propose that cipient predication has to obey a scheme consisting of a dimension and two dissociated intervals along that dimension:

³³The function π will remain unexpressed since we took cipients to correspond to location variables already.

$$(159) \quad \begin{array}{c} -+ \text{-----} + \text{-----} > \text{ dimension} \\ \mathbf{R}_{anch} \qquad \qquad \mathbf{R}_{sit} \end{array}$$

The scheme in (159) is not as a whole encoded in cipient predication. Rather, it is a frame within which the cipient predication is interpreted beyond the interface to interpretation (LF interface): The first interval \mathbf{R}_{anch} is contextually given (speech time or an anaphorically picked up reference time, cf. sections 1.3.2, 3.2.4). The second interval is determined by the predicate and the tense system as well. It is the second interval \mathbf{R}_{sit} that is related to the i variable by inclusion:

$$(160) \quad i \leq \mathbf{R}_{sit}$$

The i variable corresponds to the time/index proving the thingatloc meaning and it is restricted by the cipient times/indices. The i variable is what the little t head relates to ('binds'), it denotes an extra index 'up and above' a truth interval that is anchored to context (and eventually the utterance situation). It is really the second interval \mathbf{R}_{sit} then that the cipient construction maps onto, while the first interval (\mathbf{R}_{anch}) is there in the form of a presupposition. The essence of cipient predication is just what we have in (154) above. In terms of indices, the cipient predication structure can be written as follows:

$$(161) \quad i \leq \mathbf{R}_{sit} \ \& \ i \leq \tau(w) \ \& \ \langle i, t \rangle \models \text{thingatloc} \\ \text{(where thingatloc} = \exists p \text{ AT}(x, p, i))$$

It is not however that the interval denoted by \mathbf{R}_{anch} does not enter the interpretation of cipient predication. First, we require that the situative interval comprise an interval that is dissociated from the anchor interval:

$$(162) \quad \exists i \leq \mathbf{R}_{sit} \mid i \cap \mathbf{R}_{anch} = \emptyset$$

Next, it is required that the cipient, interpreted as a sum index (= set of indices) reaches into both intervals:

$$(163) \quad \exists i' \leq \mathbf{R}_{anch} \ \& \ \exists i \leq \mathbf{R}_{sit} \mid i \cup i' \leq \text{cipient}$$

The reason is that if someone says

$$(164) \quad \text{I sent Otto-DAT the mail}$$

He or she will believe that Otto is in existence both during relevant part of the sending as well as at a later point where the mail ends up at Otto's (if everything goes well).

In sum, there are two time/index intervals \mathbf{R}_{anch} and \mathbf{R}_{sit} . The values of both these intervals are determined by the tense system and the utterance context/discourse. The second interval \mathbf{R}_{sit} is connected to the cipient structure in that the interval denoted by i as present in the structure and bound by the t head is comprised in it. i does not overlap with \mathbf{R}_{anch} . The cipient indices

(determining certain contexts, those where the cipient referent is ‘in existence’) overlap with both the anchor interval (R_{anch}) and the situative interval (R_{sit}). The cipient indices restrict the possible values of the i variable ($i \leq \tau(w)$).

Change

The core cases of cipient predication encode change, change occurring over time (cf. the von Wrightian scheme ‘pTq’, see section 3.2.4). For the cases of cipient predication encoding change, we propose that the dimension depicted in (159) is supplied by time, an ordered set of indices. The intervals correspond to temporal intervals (sum times) at which certain things do or do not hold. There are two intervals: R_{anch} and R_{sit} . The obvious candidate for the anchor interval in the domain of tense is the interval locating the actual occurrence of the event encoded in the predication – it is the temporal reference picked up from discourse that locates the eventuality encoded in cipient predication (cf. above), anchoring it to discourse/context (eventually the utterance context). R_{sit} corresponds to the interval that the temporal reference is ‘moved to’ in case one is dealing with a predicate encoding change (cf. sections 1.3.2, 3.2.4). The two intervals may be very close, as illustrated in an example repeated from above:

- (165) Otto entkam ein Huhn (aus dem Stall)
 Otto-DAT escaped a chicken (from the shed)
 ‘A chicken escaped from Otto’s shed’
 (German)

In (165) there is an interval hosting a chicken-escape, and another one up and above that interval in which the chicken in question is no longer at Otto’s shed. The two intervals are dissociated (nonoverlapping), making the simplifying assumption that when the chicken is no longer in the shed, the escape from the shed is over. While the interval hosting the event and the interval hosting its post state are dissociated, the cipient argument covers both intervals. Under normal circumstances, Otto will be in existence both during the escape and after completion of the escape. Similarly, if one says

- (166) Anna sent Otto a letter

Otto should be in existence both during the actual sending (the event) as well as when the letter is (potentially) ‘at’ Otto. The cipient thus reaches into both the ‘anchor interval’ and the ‘situative interval’. Reminding us that both R_{anch} and R_{sit} are pronominal in nature, we have (167):³⁴

³⁴For perspicuity, we take the cipient to cover both the anchor and the situative interval in the formula. More precisely, we have (163).

- (167) The cipient construction is truthfully uttered iff
 $\exists i \text{ AT}(x,p,i) \ \& \ p \leq w \ \& \ i \leq R_{sit} \ \& \ R_{sit} \cup R_{anch} \leq \tau(w) \ \& \ i \cap R_{anchor} = \emptyset \ \& \ \neg \exists i' \leq R_{anch} \text{ AT}(x,p,i')$

In the domain of temporal structure then, the cipient is mapped onto a temporal interval (the temporal extension of the cipient), and that interval has to comprise two intervals such that ‘theme at loc’ hold only at (part of) the latter. The cipient ‘bridges’ the anchor interval and the situative interval.

To illustrate, let us consider some cases. Reusing an example from section 2.2.4, while the thingatloc meaning is only cipient-given, the cipient itself covers both the anchor interval (the speaker/hearer’s here and now) and the situative interval (a woman having appeared):

- (168) Otto erschien eine Frau
 Otto-DAT appeared a woman
 ‘To Otto appeared a woman’
 (German)

The second interval comprises the thingatloc meaning, it is what we have argued to be in the *c*-command domain of the cipient argument in the context of temporal presupposition triggering adverbs like *wieder*. (cf. sections 2.2.1, 2.2.3, 3.2.1).

Taking up a pair of examples from above (cf. section 3.2.2), the criterion of having two dissociated temporal reference (=truth) intervals captures the contrasts noted for Hebrew and French respectively:

- (169) a. Gil ganav le-Rina me-ha-tik
 Gil stole to-Rina from-the-bag
 ‘Gil stole (something) from Rina’s bag (p. 17f)
 b. *Gil pitpet le-Rina biglal/lema’an ha-hofa’a
 Gil chatted to-Rina because/for the-performance
 ‘Gil chatted because of/for the benefit of Rina’s performance’
 (Hebrew)
- (170) a. *sney xadarim hexilu le-Rina et ha-rahitim
 two rooms contained to-Rina Acc the-furniture
 ‘Two rooms contained Rina’s furniture’; Two of Rina’s rooms
 contained the furniture’
 (s in sney will umgekehrten accent circonflex)
 b. ha-rahitim tafsu le-Rina sney xadarim
 the-furniture caught to-Rina two rooms
 ‘The furniture took up two of Rina’s rooms’
 (Hebrew)
- (171) a. *Les armoires lui contenaient trois bôîtes
 the closets to-him contained three boxes
 ‘The closets contained three of his boxes’

- b. Les bôites lui prenaient trois armoires
 the boxes to-him took three closets
 ‘The boxes took-up three of his closets’
 (French)
- (172) a. *Los closets le contenieron tres cajas
 The closets to-him contained three boxes
 ‘The closets contained three of his boxes’
- b. Las cajas le llenaron tres closets
 the boxes to-him filled three closets
 ‘The boxes filled up three of his closets’
 (Spanish)

As the reader may verify (see the tests mentioned in section 3.2.4), the scheme in (141) taken as a licensing condition for cipients accounts for the contrast: The ungrammatical predicates do not, but the grammatical ones do involve predicates encoding change (*contain* vs. *take up*, *contain* vs. *fill (up)*). As was discussed in footnote 26 (section 3.2.4), predicates expressing temporal progression (everything but Vendlerian states) do give rise to sequence interpretation in so far as they comprise a location argument, hence involve reference to two dissociated reference time intervals:

- (173) a. The man died and rot away (sequence interpretation)
 b. ??The man rot away and died (odd due to sequence interpretation)
- (174) a. Otto fell and turned (no sequence interpretation)
 b. Otto fell down the social ladder and turned into a bum (sequence)

In sum, predicates encoding change supply two dissociated intervals both (in part) comprised in the cipient interval. It is only in (a subinterval (i) of) the situative interval that the thingatloc meaning holds, while its complement holds in the anchor interval.

Conceived of in this way, change gives the clue to why cipients are interpreted as ‘affected’ (cf. sections 1.4.2, 1.4.3 above): Something that is not the case ‘at’ the cipient in the anchor interval is the case ‘at’ the cipient in the situative interval.

Comparison/Evaluation

Let us turn now to constructions involving comparison/evaluation and see how they can be accommodated to the proposal. Comparative/evaluative constructions can be mapped onto the scheme given above under the assumption that time is not the sole dimension in the domain, but e.g. scales encoding degrees to which certain properties are instantiated by certain individuals as well: The dimension is supplied by the property that is compared (entailing that the property is gradable). The anchor interval R_{anch} corresponds to to a standard of comparison. The situative interval R_{sit} hosts the actual value asserted to

hold of the theme argument. Typical semantic representations of comparative constructions are exemplified in the following examples (cf. Stechow 1984, Klein 1991):

- (175) a. Sue is tall
 tall(s,sue)
 ‘Sue is tall to a standard degree’
 b. Sue is seven feet tall
 tall(7feet,sue)
 ‘Sue is tall to degree d=7feet’
 c. Sue is too tall
 tall(sue,d) & d > s
 ‘Sue is tall to degree d and d is above the speaker’s relevant tallness standard’

Translating into the thingatloc format, what we get in the case of comparative/evaluative constructions looks roughly as follows (cf. below for refinements):

- (176) AT(Sue,d_{tallness}, i)
 Sue is at tallnessdegree d at an index

Concerning the cipient, we assume that it is mapped onto a scale corresponding to the degrees to which the property in question is (potentially) instantiated. As in the temporal case, the cipient interval comprises both the anchor (the standard) and the situative interval (the actual degree to which the property in question is instantiated).³⁵ That it is generally possible to map individuals onto scales pertaining to gradable properties is suggested by the fact that such scales appear to be what certain predicates select semantically. Interestingly in German, arguments that are interpreted as degree scales typically bear dative case marking:³⁶

- (177) Otto genügt Anna (was Schönheit angeht)
 Otto is-sufficient-for Anna-DAT (as far as beauty is concerned)
 (German)
 (178) Otto ähnelt Anna (in punkto Faulheit)
 Otto resembles Anna-DAT as far as laziness is concerned
 (German)

The sentence in (177) says that Otto is ‘in the range’ of whatever counts as sufficient beauty for Anna. (178) says that Otto is in the vicinity of Anna on

³⁵To the extent that the analysis proposed is on the right track, it provides another argument for the definiteness/presuppositional of the cipient argument: If the cipient is not definite/presuppositional, it is hard to see as to how the standard of comparison that is a property of the cipient referent can be recovered.

³⁶Cf. Moltmann’s 1997:chapter 3 discussion of ‘part structure sensitive semantic selection’.

a scale encoding degrees of laziness.

Note that there being a scale and some index on that scale at which the theme argument falls under a certain property to a certain degree is not enough to license cipient predication. Nor is it generally enough for the degree to correspond to some ‘extraordinary’ value:

- (179) a. *Sue ist mir gross
 Sue is me-DAT tall
 ‘Sue is tall for my standard’
 b. *Sue ist mir sehr/ausserordentlich gross
 Sue is me very/extraordinarily tall
 ‘Sue is very/extraordinarily tall for my standards’
 (German)

In analogy to the temporal case, what we find is that (part of) the situative interval has to be dissociated from the anchor interval. Loosely speaking, the situative interval has to be ‘up and above’ or ‘down and below’ the standard. Typically in the realm of structures encoding comparison, this dissociation of intervals is signalled by a degree particle, often homomorphic to what we take to be the prototypical signaller of the presence of the location argument in cipient predication, the preposition *zu* (*too*):

- (180) a. Sue ist mir zu gross
 Sue is me-DAT too tall
 ‘Sue is too tall for my standards’
 b. Sue ist mir nicht gross genug
 Sue is me-DAT not tall enough
 ‘Sue is not tall enough for my standards’
 (German)

- (181) Janos nekem *(tl) intelligens
 John DAT.1Sg *(too) intelligens
 (Hungarian)

- (182) a. *O Yargos mu ine eksipos
 The John me-GEN is intelligent
 b. O Yargos mu paraine eksipos
 The John me-GEN too-is [sic!] smart (Greek)

Assuming that the value of the variable corresponding to the standard of comparison is determined with the cipient argument and translating into the standard semantic representation, we get:

- (183) Sue is Otto-DAT too tall
 tall(d, Sue) & d > s_{Otto}

What we get parallels the temporal case (change), only that R_{anch} corresponds now to the cipient’s standard of instantiation of the property in question, while

R_{sit} hosts the actual degree to which the property is instantiated by the theme argument:

$$(184) \quad \begin{array}{c} \text{---} + \text{---} + \text{---} > \text{ degrees of P-instantiation} \\ R_{anch} \quad R_{sit} \\ \text{with } R_{anch} \text{ an interval denoting the cipient's standard to which the} \\ \text{property in question is instantiated, } R_{sit} \geq i \mid \exists d \text{ AT}(x,d,i) \end{array}$$

As in the temporal case, for cipient predication to be felicitous in comparative constructions, there has to be an interval ‘up and above’ (or down and below) the standard coming with the cipient argument. We have an alphabetic variant of the temporal case above, with d corresponding to the degree to which the theme instantiates the property in question, R_{anch} and R_{sit} both intervals corresponding to indices at which the property in question is (potentially) instantiated, R_{anch} corresponding to the cipient’s standard and R_{sit} hosting the actual degree of instantiation that is ‘up and above’ (‘down and below’) that standard (the value of the i variable). Baking the semantic contribution the adjective makes into the AT relation and designating the function mapping cipients onto indices at which certain properties are instantiated to certain degrees with ‘ δ ’, we have:

$$(185) \quad \begin{array}{l} \text{The cipient construction is truthfully uttered iff} \\ \exists i \text{ AT}_P(x,d,i) \ \& \ d \leq w \ \& \ i \leq R_{sit} \ \& \ R_{sit} \cup R_{anch} \leq \delta(w) \ \& \ i \cap R_{anch} \\ = \emptyset \ \& \ \neg \exists i' \leq R_{anch} \text{ AT}(x,d,i') \end{array}$$

Applying this to an example and putting it into prose, the sentence *Anna is Otto too tall* is truthfully uttered iff there is an interval comprising the degree to which Anna is tall that is dissociated from an interval comprising the degrees of tallness that correspond to Otto’s relevant standard with respect to the property and type of thing in question.

While comparison does not appear to have anything to do with change hence the encoding of dissociated temporal intervals, it is interesting to look at how perfect forms as depending on there being two dissociated intervals at the reference time level interact with comparative constructions of the above type.

- (186) a. Der Mount Everest ist nicht mehr hoch
The Mount Everest is not anylonger high
b. Der Mount Everest ist Otto nicht mehr hoch genug
The Mount Everest is Otto-DAT not anymore high enough
(German)

The example in (186-a) has a queer reading according to which Mount Everest is not high anymore, in an essential sense: the element *anymore* triggers a presupposition according to which what is negated used to be the case before, in this case, Mount Everest being high. The example in (186-b) means that for Otto’s standards regarding climbing challenge, Mount Everest is not high

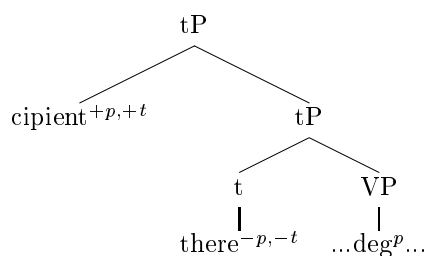
anymore – what has changed is not a property of Mount Everest, but rather Otto's standard.

Clearly, the presupposition triggering adverb here operates on the cipient's standard as dissociated from the situative interval. We see again the presence of two dissociated intervals as argued to condition the availability of the cipient construction.³⁷

We can now account for the fact that individual level predicates, as such ruled out in the cipient construction, do license it under certain circumstances: In the most obvious cases, a degree particle signals a degree argument fulfilling a role analogous to that of the location argument in the case of change above:

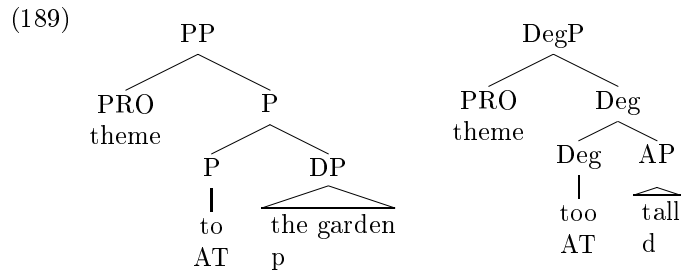
- (187) Piet is me ?*(te) intelligent
 Peter is me (too) intelligent
 'According to my standard, Peter is too intelligent'
 (Dutch)
- (188) a. *Peter ist mir intelligent
 Peter is me-DAT intelligent
 'According to my standard, Peter is intelligent'
 b. Peter ist mir nicht intelligent genug
 Peter is me-DAT not intelligent enough
 'According to my standard, Peter is not intelligent enough'
 c. Peter ist mir zu intelligent
 Peter is me too intelligent
 'According to my standard, Peter is too intelligent'
 (German)

In comparative constructions then, the location argument that we argue to be the core ingredient to the cipient construction corresponds to a degree to which a certain property is instantiated. It 'comes from' the phrase hosting the degree element:



Drawing on a recent analysis of comparative adjectival phrases in Dutch by Corver 1997, it appears that VPs comprising PP locations and APs comprising degree phrases can be analyzed along analogous lines syntactically as well (cf. section 3.1.2 for Stowell's small clause analysis of PTCs):

³⁷Thanks to Øystein Nilsen for pointing this pattern out to me.



In sum, constructions involving comparison – in particular, an actual location on a scale that is dissociated from an anchor interval – are analyzable along analogous lines to PP location constructions encoding change, as soon as one allows the dimension to correspond to degrees of instantiation of certain properties.

Comparison involving dissociation gives the clue to the ‘ethical’ interpretation often felt to be associated with cipients: ethical judgments involve a standard with respect to which something is located.

PTCs

PTCs often involve stative predicates, and they clearly do not need to encode any kind of comparison. The question arises as to how PTCs can obey the scheme in (159) then, there being nothing that could supply a dimension along which two dissociated intervals are located. We argue that PTCs obey the scheme in (159) in a trivial way in that their structure does not comprise the link to an ‘anchor interval’ as provided by the cipient in the cipient construction (chapter 4). If there is no link to an anchor interval encoded in PTCs, trivially the situative interval cannot overlap with the anchor interval.

We have seen first indications already that PTCs are not linked up to the utterance context: As could be seen in section 3.2.3, the location argument in PTCs does not have a referent in the immediate utterance context, although it is often a demonstrative, an expression that is typically taken to refer directly. If PTCs do not encode the link to the utterance context, it is clear that the (nonfronted) location argument’s referent cannot be in the utterance context (cf. above discussion in sections 3.2.4, 3.2.3).

A perspective on Novelty

It was noted in section 1.4.1 that PTCs are subject to a novelty condition, taking typically the form in (190):

- (190) The use of ‘There be’ is felicitous in context C only if the NP α serving as its argument carries the condition that any discourse referent it licenses be novel.

We do not intend to get into the many problems associated with notions such as discourse novelty, an eventually vague notion. Note however that something like a novelty condition is already built into our proposal: We require of the anchor interval that it be the case that the thingatloc meaning asserted to hold in the situative interval does not hold there (we repeat the relevant part of the truth definitions for cipient predication from above):

$$(191) \quad \exists i \text{ AT}(x,p,i) \ \& \ i \leq R_{sit} \ \& \ \neg \exists i' \text{ AT}(x,p,i') \ \& \ i' \leq R_{anch}$$

Counterexamples come to mind readily enough, consider e.g.:

$$(192) \quad \text{There is a man in Eric's office. He is threatening him(=Eric) with a gun.}$$

As the requirement stands, there should be no man in Eric's office. However, Eric is a man as well, hence the requirement is violated. An ad hoc repair strategy consists in stating an extra condition that the referent of the variable x must be different from any individual the existence of which is established in the anchor interval:

$$(193) \quad \exists i \text{ AT}(x,p,i) \ \& \ i \leq R_{sit} \ \& \ \neg \exists i' \text{ AT}(x,p,i') \ \& \ i' \leq R_{anch} \ \& \ x \neq y \ \& \ \tau(y) \leq R_{anch}$$

A perspective on 'Oehrle effects'

It was noted in section 1.4.3 that certain types of arguments do not make good cipients, an effect discovered by Oehrle 1976:

$$(194) \quad \begin{array}{l} \text{a. We sent a man to the moon} \\ \text{b. ??We sent the moon a man} \end{array}$$

We propose that in effect, the cipient marking ('dative') signals that the referent of the expression carrying it is to be interpreted as a location at the interface, additional conditions being that this location be tensed and have (interesting) part structure. Using the notation introduced in section 1.3.3 and with w corresponding to the cipient variable, we have:

$$(195) \quad \text{cipient marking} \leftrightarrow [+p,+t](w)$$

Under this view, 'Oehrle effects' receive a straightforward explanation: Entities in the domain that cannot be interpreted as locations and/or do not have an interesting part structure as require be able to saturate the cipient predicate will make bad cipients. To illustrate, a construction analagous modulo choice of lexical items to (194-b) in German becomes acceptable as soon as a location argument is added that entertains a clear part relation with the cipient argument:

- (196) a. ??Otto stach dem Mond eine Flagge
 Otto pricked the moon a flag
 b. Otto stach dem Mond eine Flagge in den Nordpol
 Otto pricked the moon a flag into the north-pole
 ‘Otto pricked a flag into the moon’s north pole’
 (German)

Similarly the following example:

- (197) Wir haben der Kirche einen Hahn ??(auf die Kirchturmspitze)
 We have the church a x onto the churchtower top
 {gegeben, montiert}
 {given, mounted}
 ‘We put a rooster onto the churchtower top’
 (German)

From this perspective, it is not animacy that matters for an expression being able to occur as a cipient argument (as is standardly assumed). What matters is that the expression have an interesting part structure. This appears to yield the right results for classical counterexamples to the claim that cipients (‘beneficiaries’) have to be ‘animate’ as well:

- (198) a. Otto gave the chair an extra leg
 b. Anna gave the book a new title
- (199) a. Otto schraubte dem Stuhl ein extra Bein an (den Sitz)
 Otto screwed the chair an extra leg at (the seat)
 ‘Otto mounted an extra leg to the chair’s seat’
 b. Anna gab dem Buch einen neuen Titel (auf den Umschlag)
 Anna gave the book a new title (onto the cover)
 ‘Anna put a new title onto the book’s cover’
 (German)

Further examples illustrating the importance of the cipient’s furnishing part structure and being related in ‘the right way’ to the location argument (cf. below) are the following:

- (200) a. Dem Aufsatz fehlt ein Beispiel am Anfang
 The paper-DAT lacks an example at-the beginning
 b. ??Dem Aufsatz fehlt ein Beispiel am Institut
 The paper-DAT lacks an example at-the institute
 (German)
- (201) a. ??Der Badewanne fehlt Wasser
 The bathtub-DAT lacks water
 b. ?Dem Teppich fehlt ein Stück (in der Mitte)
 ?The carpet-DAT lacks a piece (in the middle)

- c. Dem Wohnzimmer fehlt ein Teppich (an der Wand)
 The living room-DAT lacks a carpet (on the wall)
 (German)

Examples illustrating with what looks like locative inverted structures are the following:

- (202) a. Im Haus liegt Teppichboden im Wohnzimmer
 In-the house lies carpet in-the living room
 ‘There lies a carpet in the living room’
 b. ??In der Badewanne ist Wasser in der Mitte
 In the bathtub is water in the middle
 (German)

In spite of their being semantic in nature, we would expect relevant differences pertaining to the relation between the cipient and the location argument to vary across languages: It is not least a cultural matter what is to be considered as an ‘interesting part structure’. In our setup, the locus of these differences is the relation *R*, to which we turn now.

3.3.2 *R*, sound, variation

This section addresses the question of how variation between languages as concerns the availability and frequency of the cipient construction can be accounted for. The major factors we were able to isolate are the nature of the relation *R*, and – unsurprisingly – marking possibilities made available by particular languages. The latter in particular interact with phonological/phonetic properties of the cipient argument, restricted by (case) licensing conditions imposed and bearing on parsability. Considerations of use determine that to the extent that the cipient construction meaning is not recoverable from form, this eventually leads to its disappearance from particular languages, with English the paradigm example. As far as marking differences are concerned, it is rewarding to compare English, Dutch and German. The three languages are close cousins but vary dramatically with respect to marking, with German almost unambiguously marking cipients with morphological dative case that is absent in both Dutch and English.³⁸

R and Marking

We argue that a core factor in licensing cipients is the projection of a location argument. The variable *w* is related to the location variable (*p*,*l*) by a relation

³⁸ *Almost unambiguously* because there are some exceptions as respects dative marking and cipienthood in German. These are very few however, consisting of at most a handful of predicates that have dative marking on an argument that behaves structurally as if it were a location argument (i.e., a complement of *V*). The cases cited in Steinbach and Vogel 1998 are constituted by the predicates *aussetzen* (‘expose to’), *unterziehen*, *unterwerfen* (‘subject to’), *ausliefern* (‘extradite’), *entziehen* (‘take away’) and *zuführen* (‘to bring to’).

R that minimally encodes inclusion of p (or l) in w. The w variable ‘comes free’ with the location variable which need not even be overtly realized, so this is a relatively weak condition at surface. The restrictions on the expression binding the w variable (interpretation as tensed location with (interesting) part structure) adds restrictiveness: ‘Part-structure-sensitive semantic selection’ appears to be a highly marked option (Moltmann 1997:chapter 3). The requirement that the cipient construction be interpreted eventually in terms of a scheme comprising two dissociated intervals on a dimension adds further restrictiveness, but the semantic conditions imposed on cipient predication are still general enough to let a big range of predicates in. Given this liberty, it is expected that some marking is required for the speaker/hearer to be able to recover the meaning associated with cipient predication.

The way in which the relation R is instantiated may vary. The least that appears to be required is that it encode inclusion of p (or l) in w. The inclusion relation may however take more specific forms with consequences for whether the cipient construction is licensed or not. A look at some English and Dutch examples illustrates the point:

- (203) a. Anna gave Otto a blow in the face
 b. ?Anna shot him a bullet right between the eyes
 c. Anna sent Otto a letter to his office
 d. *Anna shot Otto a bullet in his brandnew car
- (204) a. Anna heeft Otto een spijker in de voet geslagen
 Anna has Otto a nail in the foot hit
 ‘Anna hit a nail into Otto’s oot’
 b. ?Anna heeft Otto een briefje op/naar zijn huisadres gestuurd
 Anna has Otto a letter on/to his homeaddress sent
 ‘Anna sent Otto a letter to his homeaddress’
 c. *?Anna heeft Otto een spijker in de muur geslagen
 Anna has Otto a nail in the wall hit
 ‘Anna hit a nail into Otto’s wall/hit a nail in the wall for Otto’
 (Dutch)

As can be seen, there are privileged cipient–location relations. In particular, a body–bodypart relation appears to make the cipient construction most easily available. ‘Typical’ locations such as the cipient’s home(address) or his or her office similarly license the cipient construction to some extent in English (where focus is needed, cf. above section 1.4.3) and Dutch.³⁹

³⁹Similar patterns hold in French, consider:

- (i) a. Jean m’a enforc un clou dans le pied
 Jean me-DAT-has forced a nail in the foot
 ‘Jean forced a nail into my foot’
 b. ?*Jean m’a enforc un clou dans le chaise
 John me-DAT-has forced a nail into the chair

In German, it does not seem to matter to that extent what the relation between the cipient and the location is, if a plausible semantic relation can be discerned at all. This is illustrated by the following examples that are completely analogous from the perspective of structure:

- (205) a. Otto hat Anna den Aufsatz vor die Füße geschmissen
 Otto has Anna the article in-front-of the feet thrown
 ‘Anna threw the article down in front of Otto’s feet’
 b. Otto hat Anna den Aufsatz auf den Schreibtisch gelegt
 Otto has Anna the article onto the desk laid
 ‘Otto laid the article on Anna’s desk / Otto laid the article on the desk for Anna’
 c. Otto hat Anna den Aufsatz ins Büro geschickt
 Otto has Anna the article into-the office sent
 ‘Otto sent the article to Anna’s office (address)’
 d. Otto hat Anna den Aufsatz ins Englische übersetzt
 Otto has Anna the article into-the English translated
 ‘Anna translated the article into English for Otto’
 (German)

German appears to constitute a ‘worst case’ as respects the unrestrictedness of the relation between the cipient and the location argument, down to just loose (spatio)temporal or more abstract inclusion, cf. above (205-d), cf.:

- (206) a. Otto hat Beethoven Blumen {aufs Grab, ??aufs Klavier}
 Otto has Beethoven flowers {onto-the grave, onto-the piano}
 gelegt
 laid
 b. Otto hat Dylan Blumen {??aufs Grab, in die Gitarre}
 Otto has Dylan flowers {onto-the grave, into the guitar}
 gesteckt
 put
 (German)

In the realm of DPCs, almost absent in today’s English, body parts again appear to be privileged as respects providing licensing force for the cipient construction:⁴⁰

- (207) a. Anna sass ihm auf dem Schoss
 Anna sat him-DAT on the lap

⁴⁰Jean forced a nail into my chair’
 (French)

⁴⁰Gabi Danon informs me that in Hebrew, where cipients seem to be largely productive as in German, the construction is easiest to get if the location can be interpreted as a body-part of the cipient. That body parts behave exceptionally is acknowledged e.g. in the theory of anaphora where they furnish a category of their own.

- ‘Anna sat on his lap’
- b. ?Anna sass ihm auf der Kühlerhaube
Anna sat him-DAT on the car’s front
‘Anna sat on his car’s front’
- c. *Anna sass ihm im Sessel
Anna sat him-DAT in-the armchair
‘Anna sat in his armchair’
(German)
- (208) a. ?Anna wierp zich Otto in de armen
Anna threw herself Otto in the arms
‘Anna threw herself into Otto’s arms’
- b. *?Anna wierp zich Otto op het bureau
Anna threw herself Otto on the desk
‘Anna threw herself onto Otto’s desk’
(Dutch)

In Old English which still had dative marking, analogous constructions were available, where the example repeated from section 1.4.2 again features a body part location:

- (209) ...ende him felleon tearas of tham eagum
...and him fell tears from his eyes
‘and tears fell from his eyes’
(Old English)

It is obvious that ontological distinctions pertaining to the relation between the cipient and the location argument matter for the availability of the construction.

A similar result is arrived at by Payne and Barshi 1999 in their crosslinguistic study of ‘external possessor constructions’. Payne and Barshi (section 3.4) arrive at the following hierarchy marking the relative prominence of particular relations between the ‘external possessor’ (cipient) and the ‘possessee’ (theme):

- (210) body-part > part-whole > other inalienable > alienable+proximate > alienable+distal > non-possessable

In essential analogy, a hierarchy indicating the relative privilege and associated licensing force of the relation R relating the cipient and the location argument could look as follows:

- (211) body – bodypart ... —> ... individual – ‘possessed location’ ... —> ...individual – (typically) associated location ... —> individual – (accidental) location

It is unsurprising that German should constitute a ‘worst case’ in comparison to Dutch and English, given that cipients are (almost) unambiguously marked

here with morphological dative case (cf. above fn 38). The cipient construction meaning may be recoverable already from this in German. In English or Dutch, an ontologically prominent relation with the location argument appears to be called for to license the construction.

A location clearly denoting a (body) part of the cipient is however not enough generally to license the cipient construction. In German, there are cases of the cipient construction with stative verbs, while in Dutch (Vendlerian) ‘activity’ verbs appear to be called for:⁴¹

- (212) a. Sie lag mir in den Armen
 She lay me-DAT in the arms
 ‘She lay in my arms’
 (German)
- (213) a. ?Zij wierp zich mij in de armen
 She threw SE me in the arms
 ‘She threw herself into my arms’
 b. *Zij lag me in de armen
 She lay me in the arms
 ‘She lay in my arms’
 (Dutch)

The ungrammaticality of examples as in (213-b) might be blamed on there being nothing furnishing a dimension in the structure, leaving one at a loss explaining the grammaticality of (212-a) however. One may speculate that with variation, a body-bodypart relation might itself furnish a dimension, given that bodies are generally oriented. Things are more complicated though, given that examples such as the following are grammatical albeit apparently stative in Dutch:

- (214) Zij zat me in de haren
 She sat me in the hair
 ‘She was annoying me’
 (Dutch)

The example in (214) is an idiom however that is interpreted as an ‘activity’. In sum, it appears that the lexical verb has a part in furnishing an index as well, cf. section 2.1.

⁴¹Similarly in French, we have:

- (i) a. Jacques m’a marché sur le pied
 Jacques me-DAT-has stepped onto the foot
 ‘Jacques stepped onto my foot’
 b. *Jacques m’est assis sur le pied
 Jacques me-DAT-is sat on the foot
 ‘Jacques sat on my foot’
 (French)

We leave it at this, noting that different instantiations of the R relation are one source of variation between languages, correlating with unambiguity of cipient marking. We expect variation to be stronger in the comparative cases instantiating cipient predication, given that it is a cultural/social matter largely what counts as a ‘standard’ and what is ‘outside’ that standard.

Marking, heaviness, parsing

A major factor of variation concerning the availability of the cipient construction consists in conditions imposed at the PF interface. To start, there is a clear tendency that the phonetically ‘lighter’ the cipient argument is, the more easily it is licensed. Further, person distinctions play an important role, first person singular pronouns being most easily available in the cipient construction (then second, then third person). That first person singular is particularly easily recoverable is well known and unsurprising (cf. discussion in the ‘pro drop’ literature). Cf. the following English examples:

- (215) a. Could you please print me (out) the paper?
 b. ?Could I please print you/?him (?out) the paper?
 c. ?Could you please print Otto (?out) the paper?
 d. ??Could you please print the boss (?out) the paper?
 e. ?*Could you please print the guy that’s gonna show up any minute now (out) the papers?

Two dimensions need to be distinguished: For one thing, case licensing may work differently in languages. English has an adjacency requirement or D/NPs that need to be structurally case marked. Following ideas of Neeleman and Reinhart 1997, it seems plausible that the adjacency requirement in English is due to the fact that case licensing is in terms of phonological phrases in English. In a nutshell, phonetically ‘heavy’ D/NPs will force closing of phonological phrases, while pronouns will not (cf. *ibid* as well as Truckenbrodt 1999). Light D/NPs, in particular pronouns, will then happily appear as cipients in not disturbing the phonological locality requirements the theme has to meet in order to be case licensed ‘across’ the cipient. In German and Dutch on the other hand, case licensing may be a matter of syntax and independent of phonological domains. In German then, the phonological ‘size’ of the cipient expression does not matter:⁴²

⁴² The central assumptions that Neeleman and Reinhart make are the following:

- (i) In OV languages (Dutch, German), case licensing is syntactic (in terms of minimal m-command)
 (ii) In VO languages (English), case licensing is prosodic (PF-matter in terms of head)

ENGLISH CASE CHECKING:

- V may enter into a checking relation with a constituent C iff
 a. V precedes C

- (216) a. Könntest Du mir den Artikel ausdrucken?
 Could you me-DAT the article out-print?
 b. Könntest Du Otto den Artikel ausdrucken?
 Could you Otto-DAT the article out-print?
 c. Könntest Du dem Boss den Artikel ausdrucken?
 Could you the boss-DAT the article out-print?
 d. Könntest Du dem Typen der gleich kommt den Artikel
 ausdrucken?
 Could you the guy-DAT that soon comes the article
 out-print?
 (German)

In Dutch, the cipient construction becomes harder to parse with increasing ‘heaviness’ of the cipient and additional material intervening in between the cipient and the theme, especially in productive cases. Speakers have trouble parsing sentences like the following:

- (217) ?De regering wees de vreemdeling (na lange
 The government ‘showed’ the stranger after long
 onderhandelingen) het land toe/uit
 negotiations the land to/out
 ‘After long negotiations, the government gave the stranger the land/

b. V and C are contained in the same PhP

DUTCH/GERMAN CASE CHECKING:

V may enter into a checking configuration with a constituent C iff

- a. V follows C
 b. V and C m-command each other

The underlying intuition is that theta roles must be assigned ‘as soon as possible’. Parsing is from left to right, so in VO languages there is a requirement that the arguments thematically licensed by the verb follow it closely. Neeleman and Reinhart write:

In both languages, the verb tries to check its features in its prosodic domain. In VO languages it can always do so, and therefore it must. In OV languages, the verb’s prosodic domain contains no material other than the verb, and therefore the system must resort to checking in syntactic domains. The possibility of scrambling is a consequence.
 (N&R p.14)

An account in terms of case checking in phonological domains can presumably be extended to account for the ‘latinate’ restriction holding in DOCs in English:

- (iii) a. I doNAted a million to the museum
 b. *I doNAted the museum a million

Plausibly, something in the special prosodic structure of latinate verbs (sound pattern: - ’) forces closing of the phonological phrase after the verb, leaving D/NPs that follow outside the relevant checking domain.

kicked the stranger out of the country'
(Dutch)

Plausibly in Dutch, the cipient argument that is not part of the verb's grid but licensed by predication is mistaken for a theme, forcing later reanalysis (cf. Pritchett 1992). In German, the cipient cannot be mistaken for a theme since it is marked with morphological case, and there is no parsing trouble in German. Considerations of use predict that structures the meaning of which cannot be immediately recovered from the string to be parsed will eventually disappear from the language. English is the paradigm case in point, the DOC losing productivity and the DPC being only instantiated in today's English by the predicate *escape* (the meaning of which is changing to 'forget' apparently). Dutch appears to be approaching the English situation. To repeat a pattern from section 2.3.5 (cf. fn 86), most Dutch speakers now can only interpret a structure comprising the predicate *bevallen* ('piacere', 'appeal to') with the first D/NP argument corresponding to the theme:

- (218) a. The mistake escaped *Mary_{cipient}*
b. **Mary_{cipient}* escaped the mistake

Speakers of Dutch have less trouble parsing analogous constructions with the first argument corresponding to the cipient if the overall form is in perfect tense. The cases in question take *be* in perfect tense, ruling out that the first argument corresponds to an agent (a form of *hebben* ('have') would then be required):

- (219) a. Jan is een kip ontglipt
Jan is a chicken escaped
'a chicken escaped Jan'
b. ?Jan ontglipte een kip
Jan escaped a chicken
(Dutch)

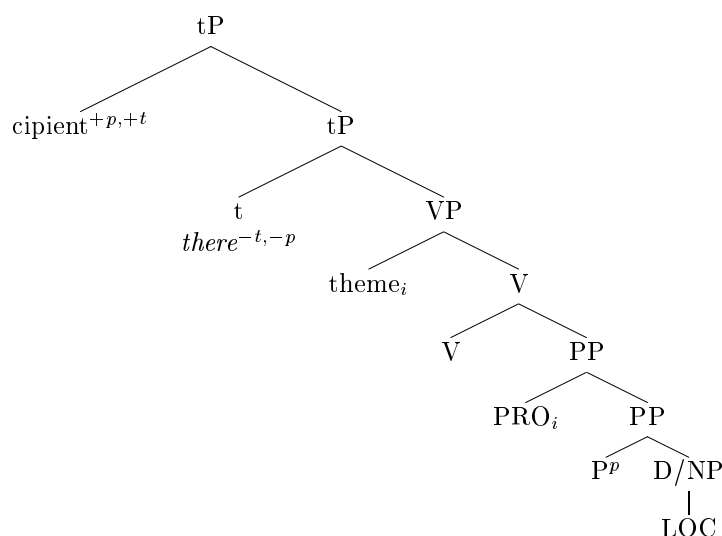
In English, perfect forms always select auxiliary *have*, so in English auxiliary selection cannot help disambiguation in the case of (unaccusative) DPCs. Constant parsing trouble is expected to bear on syntax eventually, forbidding certain types of argument expressions to figure as subjects (check EPP). In subject-initial languages, it is mandatory that the subject expression can be interpreted as such on the basis of its marking, there being no other clues (the verb) as to how it is to be interpreted. In English, only nominative subjects are allowed as subjects, receiving the default agent/theme interpretation. Cipients cannot appear as first D/NPs, with one exception: passive DOCs. Passive DOCs however do select auxiliary *be*, so interpreting the cipient in first position as an agent is again precluded by the form of the auxiliary immediately following:

(220) Otto was given a book

In sum, we suggest that what eventually forbids cipient subjects in languages like English is that the pertaining structures cannot be straightforwardly interpreted. Considerations of use predict their avoidance and eventually their disappearance. Taking the feature perspective, this may have led to tying together nominative case and EPP in English, the exception being passive DOCs where however the verbal morphology may help disambiguate. It is mandatory to interpret the subject in the right way since the subject is what is talked about after all.

3.4 Cipient locations

According to our proposal, cipients correspond to superlocations of the location argument projected in the VP in the constructions under discussion from the perspective of interpretation: There is a particular agreement relation between the cipient (valued p and t features), the element *there* (spellout of unvalued p and t features) and the location argument (section 3.1):



If the cipient argument is interpreted as a tensed location, its thematic role is particularly ‘bleak’ and it is expected that there should be such an amazing range of interpretations available for cipient arguments (cf. e.g. sections 1.4.2, 1.4.3, 2.3.3).⁴³ We assume that individuals can be mapped onto their locations,

⁴³To repeat, features are what is interpreted at the interface (cf. section 1.3.2). Reuland 2001 formulates the following general expectation as concerns the correlation between feature equipment and interpretation:

- (i) The fewer features there are on an element, the freer we expect the interpretation of

so most things will be able to occur as cipients (cf. the above discussion of ‘Oehrle effects’, section 3.3.1). The particular interpretation of an expression as occurring as a cipient may then be due not to grammatically relevant features, but rather to the lexical content of the expression in question. The following give some examples from German, with ‘traditional’ theta-roles associated with the cipient argument indicated in brackets:

- (221) a. Anna sent **Otto** the letter (goal)
 b. Anna opened **Otto** a beer (benefactive)
 c. Anna denied **Otto** her services (malefactive)
 d. Anna showed **Otto** the way (experiencer)
 e. ?Anna opened **Otto** the eyes ([German] experiencer, possessor (?))
- (222) a. Das Huhn ist Otto weggelaufen (possessor (?))
 The chicken is Otto-DAT away-run
 ‘Otto’s chicken ran away/The chicken ran away on Otto’
 b. Das Huhn ist der Hühnerfarm entkommen (source)
 The chicken is the chicken-farm escaped
 ‘The chicken escaped the chicken-farm’
 c. Das Huhn ist Otto erschienen (experiencer)
 The chicken is Otto appeared
 ‘The chicken appeared to Otto’
 d. Das Huhn ist Otto zugelaufen (goal)
 The chicken is Otto to-run
 ‘The chicken came to live at Otto’s’
 e. Das Huhn ist Otto weggestorben (malefactive/emotional)
 The chicken is Otto away-died
 ‘The chicken died on Otto’
 (German)

If cipients are indeed interpreted as locations and if this is reflected in their feature makeup, we expect to find evidence that cipients lack features associated with ‘standard’ arguments (subjects and direct objects respectively), i.e., we expect to find evidence that they are ‘defective’ with respect to the traditional phi-feature equipment (person, number, gender).

The following subsection presents direct evidence in favor of cipient’s being ‘defective’ with respect to traditional phi-features. We then turn to an account of the ‘binding illness’ associated with cipients in terms of their feature makeup.

3.4.1 Location features

To start with the obviously absent, many languages (including e.g. (most of) Germanic, Russian, Finnish, Greek, Romance) lack positive surface reflexes of anything like locative agreement. If cipient arguments belong to the domain

that element to be.

of locations, it is unsurprising that they generally do not enter the agreement systems of these languages.⁴⁴

We saw above in section 2.3.1 already that if cipients interfere with agreement between T(ense) and nominative D/NPs, the agreement they trigger is 3rd person singular – this is expected if cipients correspond to locations: Locations are always third person, and space is like the mass domain in that countability does not matter here. If a language does not have a particular verbal form to express location agreement, it is expected that the ‘default’ agreement that comes closest will be triggered. In languages not featuring particular locative agreement forms (cf. (223)), agreement is most often ‘default’ (3rd sg.) in the case of PTCs across languages, examples repeated from above (section 2.3.1):

- (223) ku- ki- lisa ku- na li- holo
 17- 7- well 17SA- with 5- tortoise
 ‘there is a tortoise at the well’
 (SA = subject agreement, numbers = noun classifiers (where 17 ≈ to/at), FV = final vowel)

In Ndendeule as well as other Bantu languages like Swahili (Ngonyani 1996) and Chichewa (Bresnan 1994), the cipient argument in (the analogues of) DPCs and DOCs may trigger agreement as well:⁴⁵

- (224) hokolo a- li- sa- pel -a sa- chokolo hi- tabu
 grandpa 1SA- PST- 2OA- give -FV 2- grandchildren 8- book

⁴⁴Those dialects of English where the cipient may become subject and agree in passivized DOCs are the exception. Note however that this option developed only at the transition from Old English to Middle English, which is also the stage where English seems to have lost the productive use of DPCs (cf. section 1.4.2 above). In Old English, the direct object (theme) became subject in passive and agreed, as is still the case in some dialects of English today.

⁴⁵It seems that person ‘overwrites’ everything else though with respect to agreement marking. Thus with humans noun class is often 1 or 2 as reserved for persons and is expressed quite independently it seems of grammatical function (cf. Meinhof 1932). Consider the following examples from Swahili (Ngonyani 1996: 191):

- (i) a. mwalimu a-na wageni
 1-teacher 1SA-with 2-guest
 ‘the teacher has guests’
 b. nyumba-ni pa-na wageni
 9-house-LOC 16SA-with 2-guests
 ‘the home has guests/there are guests at home’ (16 ≈ ‘to/at’)

The case is possibly opposite in Chichewa (from Bresnan 1994:77):

- (ii) A- nthu - mbiri a- na- li k- vt -r -a m- tsogoleri w-
 2- person 2- many 2SA- REC.PST- be 15- vote -APPL -FV 1- leader 1 -ASC
 tspano
 now
 ‘Many people were voting for the new leader’

'grandpa gave the grandchildren books'
(Ndendeule (Bantu), Ngonyani 1996:197f)

A quite dramatic case illustrating the connection between feature presence and 'dative' marking is discussed by Nichols 1998. In Kashmiri, an Indian language, there is a strict correlation between prominence on a person hierarchy (first > second > third person) and prominence in grammatical function (subject > direct object (acc) > oblique (dative)): A D/NP A relatively more prominent on the person hierarchy than an NP B must also carry a GF more prominent than that of B.

As a consequence of this tying of hierarchies, a sentence where the subject is e.g. third person but the direct object is e.g. first person is ruled out. A sentence involving a violation of the person hierarchy can be rescued, however, if the offending object is marked with dative case instead of accusative:

- (225) a. chu -s -ath parIna:v -a:n
 be -1sg.Nom -2sg.Acc. teach -pres.part
 'I (NOM) teach You (ACC)'
- b. chu -h -an parIna:v -a:n
 be -2sg.Nom -3sg.Acc. teach -pres.part
 'You (NOM) teach him (ACC)'
- c. chuh -h -am parIna:v -a:n
 be -2sg.Nom -1sg.Dat. teach -pres.part
 'You (NOM) teach me (DAT)
 (Kashmiri)

Nichols proposes that dative marking renders the features of an NP 'invisible' or 'inaccessible' for the computational system. In the case at hand, dative marking can be said to effectively 'overwrite' the person features of the respective argument that violate the person constraint and to 'rescue' the construction by 'hiding' the offending features. Suppose that (226) holds:

- (226) Cipient marking shields off 'standard' phi features (person, number, gender) of the cipient D/NP with a location feature (realized as 3rd singular in e.g. Germanic)

It was pointed out above that cipients and the element *there* share their distribution to a large extent, suggesting that the licensing conditions for cipient arguments and the element *there* respectively are analogous in essence. As a rule and across languages, a cipient argument appears to be licensed with predicates occurring in the PTC. Supportive of the symmetry between cipients and the element *there*, among other a locative proform after all, cipients and the element *there* seem to be very close if not the same from the perspective of feature makeup. The element *there* is usually assumed to bear just a gender feature, but to lack person and number features.⁴⁶ To repeat an illustrative

⁴⁶Cf. Chomsky 1995.

case, we have in Italian the following pattern, where the element *ci* ('there') is ambiguous between a 'locative expletive' and a cipient:

- (227) a. Spedise una lettera a noi
Sent-3rd-sg a letter to us
b. Ci spedise una lettera
{to-us, ?there} sent-3rd-sg a letter
c. *? Ci spedice a noi
{to-us, there} sent-3rd-sg to us
(Italian)

In German again, the vicinity of cipient arguments and the element *da* ('there') shows in examples like the following (cf. as well section 1.4.4):

- (228) a. Da ist bekannt (geworden) dass Kinder Liebe brauchen
There is known (become) that children love need
b. Da ist einem Mann bekannt (geworden) dass Kinder
There is a man-DAT known (become) that children
Liebe brauchen
love need
c. Einem Mann ist da bekannt (geworden) dass Kinder
A man-DAT is there known become that children
Liebe brauchen
love need
(German)

It does not seem to matter from a purely syntactic (feature checking) perspective whether the element *da* analogous to *there* or a cipient appears sentence initially, in what is customly assumed the specifier of T(ense) but as we have argued is really the projection of a lower 'little t' head. This is expected if cipients and the analogues of *there* share a common feature structure. Note as well that there is no problem with a cipient and the element *da* appearing in the same structure (section 3.1).⁴⁷

⁴⁷The 'feature harmony' between cipients and the analogues of *there* shows further in the possibility of picking up a cipient antecedent with anaphoric *da* in German – a standard assumption is that anaphors agree in features with their antecedents:

- (i) Otto schickte der Firma einen Drohbrief aber Anna schickte da
Otto sent the company-DAT a letter-of-threat but Anna sent there
Blumen hin.
flowers hither
(German)

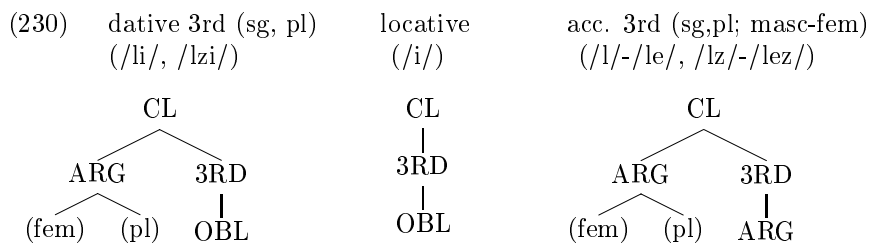
That the element *there* in turn agrees in features with locations is strongly suggested by the fact that it can serve as a proform for locative PPs as well as be coordinated with PPs denoting locations:

- (ii) [There] and [in Chomsky 1995], it is argued that ...

The special status of cipient arguments in terms of feature makeup is supported by the general makeup of agreement paradigms in (dialects of) Italian. Manzini 2001 provides evidence that the dative clitic *ie* is number and gender neutral, that is, not marked for these categories.⁴⁸ Thus the following example is at least three ways ambiguous with respect to the interpretation of *ie* which may be interpreted as third person singular masculine or feminine or as third person plural. Clearly, feature expression entails feature marking, while feature marking does not entail feature expression. Still, the systematic underspecification of cipients strongly suggests that they are indeed deficient with respect to the pertaining features:

- (229) El *ie* da kost
 He him/her/them gives this
 (Italian (*Andràz*))

In further support of the special status of cipients in terms of feature-makeup, Bonet 1995 arrives at the conclusion that in Romance, the features of the locative clitic *ie* form a proper subset of the features pertaining to the dative clitics *li* (sg) and *li* (pl). The feature schemes Bonet gives for locative clitics and dative clitics respectively are the following (following Bonet, we give the forms in phonological transcription). For comparison, the feature structure of accusative clitics is given as well.⁴⁹



Further evidence that cipient arguments are impoverished with respect to the features number and person comes from the following patterns. In Spanish, plural marking on the clitic doubling the lower location argument is optional, suggesting that plural interpretation does not matter for the cipient.⁵⁰

- (231) Le(s) dio un libro a los chicos
 Cl-(PL) gave a book to the children
 (Spanish)

⁴⁸Note the surface similarity between the dative clitic *ie* with the locative proform *y* in French and Spanish.

⁴⁹The structures cited correspond to the pronominal clitics of Catalan. While there is dialectal variation, Bonet remarks that most Romance languages have the same or fewer structures.

⁵⁰Manzini 2001 shows that in dialects of Italian, 'dative' arguments (covering our cipients) are systematically unmarked with respect to number and person.

If *there* lacks person and number features, it is expected that it cannot refer to a plural antecedent (Kayne 2001):

- (232) a. I went to New York last year. This year I'll go there again
 b. ?*I went to New York and Sidney last year. This year, I'll go there again.
- (233) Ich fuhr nach New York ?*(und Sidney) letztes Jahr. Dieses Jahr
 I went to New York and Sidney last year. This year
 fahre ich da wieder hin
 go I there again hither
 (German)

In French, the element *y* ('there') cannot strand quantifiers depending on number marking, even if it refers to a plural individual (Kayne 2000):

- (234) a. Jean lui repond
 John him(person) answers
 b. Jean y repond
 John there(letter) answers
 c. Jean leurs repond à tous
 John them answers to all
 d. *Jean y repond à tous
 John there answers to all
 (French)

From a minimalist perspective, there are two main conclusions to be drawn: For one thing, the shared features of (dative) cipients and locative elements makes them candidates for entering agreement relations among themselves, while preventing them from entering (or disturbing) agreement relations that 'ordinary' ((nominative) subject and direct object) arguments entertain. Second and taking into account that the features entering syntactic derivations are what is to be eventually interpreted at the interface, shared features imply shared interpretation. The seeming defectiveness (absence) of features important for distinctions among 'ordinary' individuals (number, person) argue in favor of the idea that cipient arguments are interpreted differently from arguments referring to ordinary objects. We argue that locations may well have part structure, but that they are not equipped with 'count' (number) information, which may seem surprising at first sight. At second sight and from a theoretical perspective however, there is no clash between having part structure but missing number information. Part structure is just a property primarily of domains where count information is absent, in particular the mass domain.⁵¹ Further

⁵¹While mass terms have arbitrary proper parts, this is not so for count terms. Cf. Quine 1960, Link 1983, Krifka 1998 for discussion. At the same time, it is clear that integrated wholes are not defined by a finite (countable) list of their parts. Cf. Moltmann 1997 for discussion.

and from a more empirical perspective, there are (to my knowledge) no visible number distinctions among locations in languages with location agreement (as e.g. Bantu), while there are among things/persons. That count information may be scarcely accessible semantically as well on cipients and/or locations is suggested by patterns such as the following from German:⁵²

- (235) a. Wir_i haben die Kinder_j zusammen_{i/j}/zu dritt_{i/j} weggebracht
 We have the kids together/to three away-brought
 We brought the kids away together
- b. Wir_i haben den Kindern_j zusammen_{i/j}/zu dritt_{i/*?j} die
 We have the kids together/to three the
 Eisenbahn geschenkt
 railway given-as-present
 ‘We gave-as-present the railway to the kids together/as a group
 of three kids
 (German)

While both the elements *zusammen* ‘to-whole/in (its/their) wholeness’ and *to three* ‘in threehood’ can modify (group denoting) agents and themes, number-information dependent *to three* appears odd with cipients (cf. for discussion of secondary predication below).

Further, many speakers of German dislike cipients binding reciprocals as relying on semantic number information, i.e., coindexing with cipients is considered ungrammatical:

- (236) a. Sie_i haben ihnen_j einander_{i/÷j} gezeigt
 They have them each-other shown
 ‘They showed them to each other’
 (German)

In sum, it is prominently number that appears to be defective or absent on cipients, and this might explain their ‘binding illness’.

3.4.2 Binding Illness

In this section, we argue that the ‘binding illness’ associated with cipient arguments stems from their interpretation as locations as reflected in feature makeup: Cipients do not make available certain features – number in particular – that would however be necessary to make them appropriate antecedents for syntactically dependent anaphora.

The core cases we want to explain in these terms involve SE-binding/ identification, obligatory control and secondary predication, examples given in (237) to (239):

⁵²Although person distinctions play little role in the following, we expect them to matter as well. Distinctions pertaining to person are not expected to be encoded on locations since locations can only be third person.

- (237) ?*Otto zeigte ihnen_i sich_i
 Otto showed them_i SE_i
 Otto showed them to themselves
 (German, Dutch)
- (238) J._i promised Mary [PRO_i to shave himself_i /*herself_i]
- (239) *Otto gave Anna_i the steak hungry_i

Sich binding

We discussed patterns involving the anaphoric element *sich* (Dutch *zich*, Romance *se*) in section 2.3.5 already. It was argued there for Dutch that the element *zich* cannot be bound ‘across’ the cipient because the position relevant for its interpretation is spelled out with merger of the cipient, seeking to explain in the same terms why ‘A processes’ (chain formation involving a theta and a case position) are typically blocked ‘across’ cipients.

Following Reuland 2001, we assumed that *sich* (*zich* etc.) needs to form a chain with a syntactic antecedent:

- (240) Chain
 (α , β forms a Chain if (a) β 's features have been (deleted by and) recovered from α and (b) (α , β meets standard conditions on chains such as uniformity, c-command, and locality
 (Reuland 2001)

Reinhart and Reuland 1993 argue that Dutch *zich* needs to enter a syntactic chain because it lacks features necessary for interpretation: *zich* is only marked for 3rd person, further phi features that are necessary for interpretation being ‘inherited’ from its syntactic antecedent.⁵³ As stated already in section 2.3.5, we assume that if there is a c-commanding D/NP structurally present that could in principle serve as an antecedent of (the analogue) of *zich*, chain formation is forced:

- (241) If *zich/sich* can enter a chain with a syntactically expressed antecedent in principle, it must.

Further, we assume that with respect to the just mentioned licensing conditions, German *sich* is subject to the same conditions as Dutch *zich*, that is, it has to form a chain with a syntactic antecedent.

⁵³The exact mechanism responsible for equipping *zich* with phi features is not relevant for our purposes. Reuland 2001 discusses as well patterns involving the icelandic counterpart of *zich*, *seg*, that do not appear to involve a syntactic antecedent at all but are still grammatical, posing a problem for this view.

The pattern that we want to explain is exemplified in (242):

- (242) a. Otto zeigte ihnen_i sich selbst_i
 Otto showed them_i SE self
 ‘Otto showed them to themselves’
 b. %Otto zeigte ihnen einander
 Otto showed them each-other
 c. *?Otto zeigte ihnen_i sich_i
 Otto showed them_i SE_i
 (German)

Surprisingly, the cipient cannot serve as an antecedent for *sich* in German, while it may bind the element *sich selbst* and for some speakers the element *einander* (‘each other’) as well.⁵⁴ So far, this contrast lacks explanation.⁵⁵

⁵⁴Binding of *einander* appears to be odd for some speakers as well (cf. the above remarks), although to a lesser extent than binding of *sich*.

⁵⁵To the extent that we are right in that cipients are grammatical and logical subjects, it cannot be that the inability of cipients of binding *sich* is due to the latter’s ‘subject orientation’. Maling 1990 presents data from Icelandic where cipients occur exactly as antecedents of ‘subject oriented’ anaphora (cf. section 2.2, fn 24). Reinhart and Siloni 2002 state conditions under which *sich* may appear and how it is ‘bound’. In Reinhart and Siloni’s system, *sich* marks a lexical reflexivization operation of the following form:

- (i) $R_E: P(x_E, y_I) \rightarrow P_R(y_E)$
 with *y* internal on the left, external on the right
 where $P_R(y) \leftrightarrow P(y, y)$

The rule identifies the two arguments of a transitive (causative) predicate and makes the remaining argument project external. An example would be

- (ii) Jan wast zich
 Jan washes SE
 ‘Jan washes’
 (Dutch)

Omitting unnecessary detail, the impossibility of binding *sich* could be attributed to the following:

- (iii) The cipient does not count as an external argument, and/or the theme does not count as an internal argument at base
 (iv) The cipient is not [+m] (interpreted as mentally capable) as needed for binding of *sich*

Regarding (iii), we have been arguing all along that cipients are external arguments and that the argument corresponding to *sich* (the theme) is internal (‘external’ meaning ‘external to the lexical predicate’). Regarding (iv), we argue that the cipient needn’t be [+m] (cf. e.g. section 3.3.1). Examples with a [-m] argument ‘binding’ *sich* in German are easily found. For instance:

- (v) a. Die Wohnung macht einen guten Eindruck
 The apartment makes a good impression
 b. Die Wohnung macht sich
 The apartment makes SE

From a structural perspective, there is no reason why the cipient should not be able to bind *sich*: It c-commands *zich*, and the cipient is furthermore a syntactic subject according to our analysis – if *zich* had to cliticize for example to the tense domain, there would be nothing preventing it from doing so and being interpreted there.

We make the following assumptions, motivated in part below:

- (243) a. The cipient bears a p feature, corresponding to (default) 3rd person singular
 b. The element *sich* bears just 3rd person but needs a number feature to be interpretable
 c. The element *sich selbst* bears 3rd person and a default number feature (singular)

The assumption in (243-a) is what we have been seeking to motivate above. The assumptions in (243-b) and (243-c) will be made responsible for the contrast in (242): *sich/zich* needs to inherit number from a syntactic antecedent, but *sich selbst* needn't (we may assume that *sich selbst* has to enter chain formation as well, cf. Reinhart and Reuland 1993, Reuland 2001).⁵⁶

(meaning: 'the apartment presents itself as attractive')
 (German)

- (vi) Der Kreis schliesst sich
 The circle closes SE
 'the circle closes itself'
 (German)
- (vii) Dieses Problem präsentiert sich nun anders
 This problem presents SE now differently
 'This problem presents itself differently now'
 (German)

That [+/-m] nor internal/external might not be the right distinction for the cases at hand is further suggested by the fact that cipients may be expressed as *sich*, which should be illegal in Reinhart and Siloni's system (on the assumption argued here that the cipient is external at base):

- (viii) a. Otto gefällt Anna
 Otto-NOM appeals-to Anna-DAT
 b. Otto gefällt sich
 Otto-NOM appeals-to SE
 'Otto is pleased by himself'
 (German, same with predicates under (103) in section 1.4.2)

⁵⁶There is evidence however that the identity requirement between *sich selbst* and its antecedent is looser than that between *sich* and its antecedent:

- (i) a. Otto sah sich selbst auf der Bühne
 Otto saw himself on the stage
 b. Otto sah sich auf der Bühne
 Otto saw SE on the stage

The following sentences and associated interpretations exemplify the general pattern motivating in part the assumptions in (243-b) and (243-c) respectively:

- (244) a. Sie sahen sich selbst (?*jeweils) im Spiegel
 b. Sie sahen sich jeweils im Spiegel
 (German)
- (245) a. Sich selbst zu hassen ist schrecklich
 b. Sich zu hassen ist schrecklich
 (German)

The example in (244-a) has a plural subject binding *sich selbst*. The only interpretation available is that the group referred to by the subject sees the group as a whole in the mirror, as shown by the ungrammaticality of the distributive (dependent on plural semantically) element *jeweils*: *sich selbst* can only be interpreted as a group individual, i.e., it is singular semantically. Apart from that same interpretation, (244-b) allows an interpretation according to which single members of the group referred to by *sie* see themselves in the mirror: it may distribute over elements of the group, i.e., receive an interpretation that is semantically plural. (245-a) and (245-b) are examples that do not comprise a syntactically expressed antecedent (which may still be present structurally, say as a PRO element). (245-a) only allows an interpretation according to which the individual that hates hates that same individual, that is, it has a singular reflexive interpretation only. (245-b) in contrast allows as well an interpretation according to which members of the (group) individual that hates hate each other: it has a reciprocal interpretation which entails that it is semantically plural.

What the patterns show is that *sich selbst* is interpreted as a singular individual. *Sich* on the other hand is ambiguous between referring to a singular individual or to a set of individuals, that is, it is ambiguous between singular and plural.

Let us stipulate that number information is necessary to interpret a D/NP at the interface. The element *sich selbst* is singular, hence bears the necessary number information. *Sich* in contrast may be singular or plural, i.e., its number information is not determined offhand.

If the cipient does not have a number feature, *sich* will not be able to inherit that information from it and reach the interface uninterpretable as a consequence. The structure is ruled out, quod erat demonstrandum. *Sich selbst* on the other hand has a number feature (singular) and is interpretable independently of whether that information is present on the cipient or not. The same goes for *einander* which is a reciprocal hence semantically plural.

(German)

While (i-a) has an interpretation according to which Otto saw an actor playing Otto, (i-b) does not. The referent of *sich* in (i-b) has to be strictly Otto.

Control

Syntactic chain formation (or its equivalent) has been argued to underly O(bligatory) C(ontrol) as well (Martin 1996, O'Neill 1997, Manzini and Roussou 1998, Hornstein 1999).⁵⁷ Alternatively, sentences with PRO subjects can be analyzed as predicates (Williams 1980). The simplest assumption is that the value of PRO is determined by the first *c*-commanding D/NP (Rosenbaum 1967), and this assumption yields the right results for the core cases:

- (246) a. Otto wanted [PRO_{Otto} to do the dishes]
 b. Otto wanted Anna [PRO_{Anna} to do the dishes]

That obligatory PRO is dependent on the features of a syntactic antecedent for interpretation is a natural assumption, given that PRO has no marked features at all. A look at the data shows that PRO is like *sich* in being ambiguous between singular and plural:

- (247) a. They decided [PRO to leave together]
 b. They decided [PRO to help each other]
 c. They decided [PRO to go shopping]

If PRO is like *sich* in requiring a number feature from its antecedent, we can account for the fact that cipients do not control obligatory PRO (cf. discussion in Larson 1991):

- (248) a. J._{*i*} {promised, guaranteed} M. [PRO_{*i*} to shave himself_{*i*} /*herself_{*i*}]
 b. John_{*i*} {promised, guaranteed} Mary_{*j*} [PRO_{*i*} to shave her_{*j*} /*him_{*i*}]

Analogously to the *sich* case, we propose that the cipient cannot control obligatory PRO because it does not make available the needed number feature.

There are however a number of apparent counterexamples to the generalization that cipients cannot control PRO:

- (249) Otto {ordered, advised} Anna_{*i*} [PRO_{*i*} to go shopping]

At closer look, examples as in (249) do not provide counterevidence to the generalization that cipients do not control obligatory PRO. First, the empty categories in (249) show mixed properties as concerns their status of being optionally or obligatorily controlled elements. Unlike obligatorily controlled PRO, the empty categories in (249) allow split antecedents, a characteristic of optionally controlled PRO:

- (250) Anna_{*i*} advised Otto_{*j*} [PRO_{*i+j*} to go on vacation together]

⁵⁷Martin 1996 argues in particular that obligatory PRO is impoverished with respect to feature content which is why it needs to enter a syntactic relation with an antecedent.

- (251) Otto_i riet Anna_j-DAT [PRO_{i+j} gemeinsam zu verschwinden]
 Otto_i advised Anna_j [PRO_{i+j} together to leave]
 'Otto advised Anna to leave together'

Further, obligatorily controlled PRO does not allow arbitrary reference, but optionally controlled PRO does. The supposed counterexamples again pattern with optionally controlled PRO, unlike the *promise* case:

- (252) a. Es ist anzuraten, [PRO einen Regenmantel mitzunehmen]
 It is to-advise [PRO a raincoat to-withbring]
 'It is advisable to bring a raincoat'
 b. ?*Es ist zu versprechen, [PRO einen Teppich zu kaufen]
 It is to promise [PRO a carpet to buy]
 'It has to be promised to buy a carpet'
 (German)

It seems plausible that unlike obligatory PRO, optional PRO does not depend strictly on features present on a syntactic antecedent.⁵⁸

Second, there is a difference in interpretation between the empty categories in (248) and (249): The empty category in (248) is interpreted as an entity that is 'responsible' for the action encoded in the infinitive, while the ones in (249) are 'irresponsible' of the action encoded in the infinitive (Farkas 1988). A way of interpreting this is that the PRO in (248) stands in for a 'full individual' (a person aware of her actions), while the PROs in (249) do not. It is expected that locations cannot control empty categories that are interpreted as 'full individuals' in this sense.

Along these lines, we account for cases of 'control switch' as well. 'Control switch' designates the fact that if the modality of the infinitival changes, the choice of controller changes also:

- (253) a. Anna promised Otto_i [PRO_i to be taken care of]
 b. Anna promised Otto_i [PRO_i to be allowed to take care of the kids]

On Farkas' account, there are two events involved in actions like 'promising' - one is the verbal act itself, the other what is promised. The controller and the controllee have to match w.r.t. a feature encoding 'being responsible for

⁵⁸Evidence for the strict interpretive dependency of obligatory PRO comes from 'strict' vs. 'sloppy' identity readings in ellipsis constructions. While 'strict' identity is possible with e.g. anaphora, this is not so with EC/PRO, allowing sloppy identity only. This may be taken to indicate that anaphora do have some reference of their own which allows them to pick their reference non-locally, contrary to obligatory PRO:

- (i) Little Suzie expected herself to get a medal and her brother did so, too (o.k.: expect Suzie to get a medal)
 (ii) Little Suzie expected PRO to get a medal and her brother did so, too (NOT: expect Suzie to get a medal)

the outcome of the action'. In (248), the 'promiser' and the 'shaver' are both [+ responsible] for the outcome of the respective event, which is why they must corefer. In (253) on the other hand, it is the 'promisee' coreferring with the empty category of the embedded clause: Undergoing the action rather than instigating it, the empty category is coindexed with the matrix 'affected argument', so that both match in being [- responsible].

In sum, on the analysis according to which cipients do not bear a number feature can account for the fact that cipients do not control obligatorily controlled PRO.

Secondary Predication

Secondary predication has been argued to be analyzable as obligatory control as well, the predicate here corresponding not to an infinitive but an AP (with certain yet largely unknown properties). Alternatively, one may assume that secondary predicates attach anywhere and take the closest subject (cf. the tradition of Williams 1980).

An apparent problem for a theory of secondary predication in terms of control is again that cipients can control certain secondary predicates (cf. below). As seen already in the case of obligatory vs. optional PRO above, it has to be acknowledged presumably that there are different types of PRO involved in secondary predication.

Under the simplest assumptions, secondary predicates can be generated anywhere in the structure, the reference of the understood subject being determined by the closest c-commanding D/NP. Again there is no structural reason why cipients should not be able to control PRO:⁵⁹

(254) a. *Mary gave Otto_i a sandwich hungry_i

⁵⁹An apparent counterexample to the generalization that cipients do not control secondary predicates is the following, brought forward by Maling 1998:

- (i) Otto gefiel Anna_i (nur) betrunken_i
 Otto appealed-to Anna (only) drunk
 'Anna liked Otto only when drunk'
 (German)

However, *betrunken* ('drunk' shows again properties of being nonobligatorily controlled, e.g. arbitrary reference. Cf.:

- (ii) ?Betrunken ist Autofahren super
 Drunk is cardriving great
 'Driving drunk is great'
 (German)
- (iii) *Muede ist Autofahren gefaehrlich
 Tired is cardriving dangerous
 'Being tired while driving is dangerous'
 (German)

- b. *Otto_i escaped Anna_i tired_i

The case can be made stronger for English maybe, where cipients occur as subjects in passives.⁶⁰ It is hard to see how a purely structural account could explain the difference in the following pair:

- (255) a. ??Max_i was given an exercise unprepared_i
 b. Max_i was given to Lucie unprepared_i (for marriage)

If secondary predicates host obligatorily controlled PRO subjects, we immediately account for the fact that cipients cannot host secondary predicates: cipients cannot control secondary predicates since they do not make available the features (number) necessary to interpret the PRO element.

Looking more closely, there are some exceptions to the generalization that the shifted arguments may not act as subjects of secondary predicates. These exceptions are telling and support the idea that cipients are particular as concerns their features bearing on binding (or saturation). The exceptions concern secondary predicates that correspond to adjectival passive constructions structurally. We have argued above that the predicate licensing the shifted argument is just the type of adjectival passive construction (cf. DOCs) and hence we expect that the shifted arguments agree in the relevant respects with this type of secondary predicate. Evidence is found in German, where constructions such as the following are possible (although hard to parse):

- (256) a. ?Unserem Helden trat das Haus seines Vaters
 Our hero-DAT stepped the house of-his father-GEN
 {versprochen, in Aussicht gestellt} die Welt gleich viel
 {promised, in outlook put} the world immediately much
 freundlicher gegenüber
 more friendly opposite
 'Being promised his father's house, the world immediately appeared much more friendly to our hero'
 b. *?Unser Held schmiedete das Haus seines Vaters
 Our hero blacksmithed the house of-his father-GEN
 {versprochen, in Aussicht gestellt} sofort grosse Pläne
 {promised, in view put} immediately big plans
 (German)

A similar effect occurs with prenominal adjectival constructions, again involving adjectival passives. While not perfect, prenominal adjectival passives are felt to be much better with (dative-marked) cipients than with (nominative or accusative marked) themes:

- (257) a. ?Anna gab [dem ein grosses Erbe in Aussicht gestellten
 Anna gave the a big inheritance in outlook put

⁶⁰Thanks to Tanya Reinhart for pointing this out to me.

- Otto] einen Kuss
 Otto-DAT a kiss
 ‘Anna gave Otto who was promised a big inheritance a kiss’
- b. *Anna kuesste den ein grosses Erbe in Aussicht gestellten
 Anna kissed the a big inheritance in outlook put
 Otto
 Otto-ACC
 ‘Anna kissed Otto who was promised a big inheritance’
 (German)

It is expected that the cipient may act as a subject saturating adjectival passive secondary predicates: Cipients are just the type of argument that is asked for by these predicates. The fact that cipients do not act as controllers (more generally: saturators) of ‘standard’ predicates finds a natural explanation if they are themselves ‘nonstandard’. In particular, locations cannot saturate predicates asking for ‘ordinary’ individuals, as illustrated in the following pattern concluding this section:

- (258) a. *Under the bridge is wet
 b. ?Under the bridge is a wet place
 c. *I slept [under the bridge]_i wet_i

3.4.3 Principle B, (Lack of) Intervention Effects

Cipients are ‘ill binders’ with respect to certain categories, which we attribute to their feature poverty (lacking number). In this section, we review evidence showing that cipients obviate certain effects that would be expected if they carried the ordinary phi-features (person, number, gender) like (ordinary) subjects and/or direct objects respectively.

Principle B obviations

It has been noted that principle B effects often appear to be obviated in the cipient construction. Thus in Icelandic, cipients may bind pronouns on the theme in DOCs as well as DECAs (as discussed by Everaert 1990, the element *sjlfur* here is not a reflexive marker but an empathic element), and a similar pattern obtains in Italian (as in the Icelandic case, *loro stessi* is an empathic pronoun, not an anaphor), as well as German:

- (259) Honum_i finnst ?hann_i/hann_i sjlfur (vera) skrytinn
 Him-DAT finds he-NOM (be) strange
 ‘He finds himself strange’
 (Icelandic)
- (260) Maríu fannst hún vera gáfuth
 Mary-DAT thought she-NOM be gifted

‘Mary thought she was gifted’
(Icelandic, Taraldsen 1996)

- (261) Ad alcuni_i piacciono/interessano solo loro_i stessi
To some please/interest only they Emph-selves
‘Some people are only interested in themselves’
(Italian, Everaert 1990)

- (262) a. ?Anna hat Otto_i ihm_i (selbst) zugewiesen
Anna has Otto_i him_i (self) assigned
‘Anna assigned Otto to himself’
b. ?Otto gefiel (nur) er (selbst)
Otto-DAT pleased (only) he (self)
‘Only he himself pleased Otto’
(German)

Principle B says that pronouns must be ‘far enough away’ from D/NPs they are interpreted as coreferent with. If cipients are interpreted as locations, theme argument pronouns are not coreferent in the strict sense with their cipient antecedents. Cipient locations are not the same entity as the cipient referent. One may blame the obviation of principle B effects on cipients being interpreted as locations then as well.

Lack of Intervention Effects

Finally, we find that cipients do not give rise to ‘intervention effects’ in coreference relations, i.e., binding ‘across’ a cipient is not generally disturbed. Starting with PTCs, Chomsky 1981:215 notes that the element *there* in English does not disturb what was then considered binding of anaphora (Principle A):

- (263) a. The friends_i expected there to be presents for themselves_i at the post office
b. The friends_i expected there to be presents for each other_i at the post office

Although the element *there* appears in between the antecedent and the dependent (but cf. fn 61) and hence should count as a closer and hence obligatory binder for the anaphor from the point of view of structure (cf. section 1.3.2), it does not disturb coreference.

Similar patterns obtain with cipients, as the contrasts between cipients and ‘ordinary’ arguments with respect to intervention effects show – cipients do not appear to disturb coreference/binding relations ‘across’ them.⁶¹

⁶¹The dependents in the examples are mostly logophors (falling outside principles A and B of Reinhart and Reuland’s binding theory). Intervention effects are however acknowledged for logophors as well, cf. *ibid.*

- (264) a. Die Brüder_i dachten dem Vater hätten die Geschenke
 The brothers_i thought the father-DAT had the presents
 fuer sie selbst_i misfallen
 for them selves_i displeased
- b. Die Brüder_i dachten dem Vater hätten die Geschenke
 The brothers_i thought the father-DAT had the presents
 fuer einandert_i misfallen
 for each other_i displeased
 (German)
- (265) a. Die Brüder_i dachten dem Vater seien die Geschenke
 The brothers_i thought the father-DAT be the presents
 fuer sie selbst_i gegeben worden
 for them selves_i given AUX
- b. Die Brüder_i dachten dem Vater seien die Geschenke
 The brothers_i thought the father-DAT be the presents
 fuer einander_i gegeben worden
 for each other_i given AUX
 (German)

As is the case with the element *there*, coreference between the matrix subject and the embedded theme is possible in the face of a structurally closer virtual antecedent. Plausibly, it is the cipient's feature poverty preventing it from counting as a possible antecedent and hence allowing a less local binding/coreference relation. Note that this type of binding/coreference is not available with intervening nominative (subject) or accusative (object) D/NPs, even if these bear an 'experiencer' role as in (266-a):

- (266) a. *?Die Brüder_i dachten den Vater haetten die Geschenke
 The brothers_i thought the father-ACC had the presents
 fuer sie selbst_i gestoert
 for them selves_i disturbed
- b. *Die Brüder_i dachten der Vater-NOM haette die Geschenke
 The brothers_i thought the father had the presents
 fuer einander_i gekauft
 for each other_i bought
 (German)

The lack of intervention effects can be understood on the basis of the hypothesis that cipients are interpreted as locations: they do not qualify as antecedents due to their feature makeup, lacking in particular number information as we argue.

3.5 Chapter Summary

We argued in section 3.1 that cipients, the element *there* and the location argument entertain a doubling element–clitic–doubled element type of relation. *There* is locative agreement (the expression of AGREE but not checking) between the location argument and *t* (cf. Freeze 1992): The cipient checks/values the unvalued *t* and *p* features on *t*. Section 3.2 presented evidence that there is always a location argument projected in the cipient construction, as is mandatory under the analysis proposed (semantically, the cipient corresponds to a superlocation of the location argument, syntactically it ‘doubles’ it). It was argued in sections 3.2.3 and 3.2.4 that the location argument and its referential properties are at the root of the existential interpretation of the theme argument in the cipient construction as well as the predicate restriction: The location argument is definite with respect to the subject of predication but its referent is not in the immediate utterance context. The event argument approach to the predicate restriction was argued to not be able eventually to determine the right set of constructions occurring in the cipient construction (there being many predicates that are not eventive occurring in PTCs, DPCs and DOCs).

Incorporating the insight from the event approach that dissociatedness of reference time (=truth intervals) is crucial for cipient predication, we proposed in section 3.3.1 that apart from projecting a location argument, what is crucial for cipient predication is that it be interpreted in terms of a scheme along a dimension: what we called the situative interval (R_{sit}) has to comprise an index at which *thingatloc* holds that does not overlap with an anchor interval comprising contextually given indices (at which the complement of *thingatloc* holds). Spelling this out, we analyzed the core ‘change’ cases of cipient predication and argued that the analysis extends straightforwardly to ‘comparative/evaluative’ constructions as licensing the cipient construction as well. With respect to variation, we argued that the relation *R* relating the cipient to the location argument may vary, relations with different ontological prominence being a factor in licensing the construction. At the sound interface, marking in its interaction with heaviness and licensing conditions at PF were isolated as major factors determining the cipient construction availability, with a view to parsing.

Section 3.4.2 argued that the ‘binding misbehavior’ (*sich* binding/identification, control, secondary predication) follows from cipients being interpreted as locations. Location interpretation as signalled by marking was proposed to shield off the usual phi features associated with cipients, making them unfit as antecedents for in particular syntactic dependents.

To the progress made on the problems noted to be associated with the cipient construction in section 1.4.4, we can add the following:

- **The theta problem** solution gained meaningfulness through spelling out the licensing conditions for cipients: Cipients are licensed as location

subjects by predication, a function from indices determining contexts as associated with the cipient and the propositional thingatloc meaning as holding at one of these indices to truth or falsity.

- **The position problem and the case problem:** We gave content to what it means to be licensed by *t*: *t* is engaged with a dissociation of truth intervals at the reference time level, as are perfect forms the availability of which was seen to correlate strongly with cipient licensing. The structural case property of cipients reflects a relation with *t*(ense) that enables interpretation of the thingatloc meaning, holding at an interval ‘bound’ by the cipient via *t*.
- **The possession problem:** The possessive interpretation associated with the cipient construction is a consequence of cipients being super-locations of the location argument: Cipients include the theme argument via their relation to the location argument. ‘Possession’ as expressed in cipient predication is indirect and inessential.
- **The scope problem:** We saw more evidence for a semantic/pragmatic explanation of the fact that themes (under normal circumstances) do not take scope over cipients. If the analysis of the comparative cases is on the right track, then cipient interpretation involves a standard that has to be given with the cipient (hence cipients must be presuppositional). The definiteness and scope effects in PTCs yet lack an explanation, cf. the following chapter.

Chapter 4

Definiteness Effects and Ends

This chapter develops a perspective on the definiteness and scope facts associated with PTCs on the basis of the discussion so far. What Milsark 1977 has called ‘strong’ (\approx quantified) D/NPs are ruled out in PTCs, and ‘weak’ (\approx non-quantified) D/NPs are confined to a narrowest scope interpretation:¹

- (1) a. *There are most children in the garden
b. Most children are in the garden
- (2) a. There must be a ghost in the house (only: must $>$ \exists)
b. A ghost must be in the house (both: must $>$ \exists , $\exists >$ must)

We propose that the definiteness effects are due to the fact that PTCs lack subject expressions in their structure: Expressions functioning as syntactic and logical subjects may achieve the anchoring of propositional contents as encoded in natural language to the utterance context, sentences with subjects leaving syntax as saturated structures in the relevant sense. PTCs are argued to be saturated only beyond the interface, by their own tokens. For this reason, quantifiers such as *most* and *every* are excluded in PTCs, and ‘weak’ D/NPs must take narrow scope.

4.1 Temporal anchoring

In order for a predication to be assessable, a context is needed. Using Frege’s picture, the ‘Urteilsstrich’ (the judgment/horizontal line, cf. section 1.3.2) corresponds to a function that takes a speaker and an utterance context and maps it onto a function from a reference context and a proposition to the true

¹Cf. for concise discussion of previous proposals from the literature Bende Farkas and Kamp 2001, McNally 1998.

or the false – it ‘anchors’ a proposition to its utterance context, corresponding to prosaic: ‘I the speaker assert that ...’, true when its argument is true and false otherwise. In Minimalism, the C/T domain is standardly regarded as the locus of the encoding of force as well as temporal reference of natural language utterances (cf. Rizzi 1997, Cinque 1998, Chomsky 2000). In the domain of tense specifically, a generally made assumption is (3):

- (3) Natural language utterances must be temporally anchored
(Eng 1987)

Under the approach taken here, temporal anchoring corresponds to establishing a link to the utterance context: The tense system establishes a link between the propositional meanings encoded in natural language utterances and the speaker’s ‘here and now’ (cf. section 1.3.2, ‘tense and time’).

We have seen a case where a D/NP argument determines the temporal interpretation of a natural language utterance completely. The case falls under predication as defined here, involving an individual level predicate (sections 1.3.4, 2.3.5). If an individual level predication is encoded in the past tense (the predicate is asserted to hold of the subject before but not at speech time), there is a strong tendency to interpret the subject as having ceased (or changed in essential ways, cf. Carlson 1978, Kratzer 1988/95):

- (4) Otto was French
invited interpretation: Otto is dead

We argued that cipients similarly determine the temporal interpretation of the thingatloc meaning encoded in the VP of our constructions (cf. section 3.3.1). Both individual level subjects and cipients are syntactic and logical subjects: They are external arguments bearing structural case, entering a relation with the tense system. Further, they both carry a presupposition of definite empirical fact on the part of the speaker, hence establish a link to the utterance context (definiteness/presuppositionality, cf. sections 1.3.4, 2.2.4, 2.3.5).

The discussion here suggests that this might be what structural case achieves: It helps temporally anchoring propositional meanings as encoded in natural language utterances by ‘hooking’ them to individuals. Clearly, having information as to when (and where) particular propositional meanings hold falls under the “...interpretive requirements that are externally imposed by our systems of thought [...]” (Chomsky 2000:13, cf. discussion in section 1.3.2). If D/NPs can be interpreted in terms of times/indices (cf. section 3.3.1), it would be rather strange if the grammar did not make use of this in order to facilitate interpretation: The times at which a propositional meaning holds are included in the times at which the syntactic and logical subject is ‘in existence’. If definite individuals reach into the utterance context, they may just as well take care of temporally anchoring propositional meanings, saturating the structures they are part of in a complete sense.

4.1.1 PTCs

There is syntactic evidence that in PTCs, the usual AGREE relation between the verb-tense complex and a ‘subject’ D/NP argument is disturbed. There is evidence from the realm of interpretation that PTCs are ‘poorer’ from in particular the perspective of force and temporal structure encoding than ‘usual’ sentences. Under interpretability, this means that certain features and the relations they enter that are present in ‘usual sentences’ are absent in PTCs, hence cannot be interpreted (expressed at PF/LF).

Structure

We noted in section 2.3.1 that in many languages, agreement in PTCs is disturbed, surfacing as 3rd singular ‘default’ agreement. In Bantu, PTCs show location agreement:

- (5) a. There’s-SG rats-PL all over
 b. Il y’a-SG deux cheveux-PL dans le jardin
 It there-has two horses in the garden
- (6) ku- ki- lisa ku- na li- holo
 17- 7- well 17SA- with 5- tortoise
 ‘at the well there is a tortoise’
 (Ndendeule, Bantu. SA = subject agreement, numbers = noun classifiers, FV = ‘final vowel’)

There is reason as well to believe that the case on the ‘associate D/NP’ in PTCs is not the usual structural case, nominative in English (cf. Belletti 1988):

- (7) a. ?There was only me-ACC in the garden
 b. *There was only I-NOM in the garden

Structural nominative case and agreement are standardly taken to be the reflex of an AGREE relation that a nominal enters with T(ense), with ensuing checking/valuation of unvalued features (cf. section 1.3.2). If we do not find this reflex, we conjecture that the pertaining relation is absent as well, at least disturbed. If it is absent or disturbed, it cannot be interpreted in the usual fashion.

The C/T domain is taken to be the locus of force and tense encoding (cf. above). Arguing that *there* is lower structurally than T(ense), we presented evidence that PTCs are funny in this respect (section 2.3.4), :

- (8) a. ?*There fortunately came a fireman
 b. A fireman fortunately came

In PTCs, adverbs pertaining to force encoding behave in special ways, in particular, they cannot appear in between *there* and the verb form. Supporting that there is something wrong with force encoding in PTCs, non-bridge verbs

(essentially: speech act verbs entailing force encoding on their complements) seem to disallow PTCs as complements in the absence of a complementizer:²

- (9) a. Otto thought there was beer in the fridge
 b. ??Otto murmured there was beer in the fridge

In sum, there is evidence that in PTCs the structure pertaining to temporal reference as well as force encoding is defective or absent.

Interpretation

We observed in section 3.2.3 that in PTCs, the logical subject of predication (a superlocation of the location argument projected) is determined from outside the structure making up the PTC. It corresponds to ‘here and now’ or a contextually given sumlocation:

- (10) a. There are some tables over there
 b. Jan entered a bar. There was a jukebox standing in the corner.

Under our analysis, the *w* variable is not saturated structurally. PTCs correspond to the cipient predicate (in operator variable and feature structure terms respectively):

- (11) a. $\lambda w [\exists p AT(x,p,i) \& p=l \& R(p,w)]$
 b. $[t -p, -t [(vP) [VP [PP P]]]]$

If PTCs are about ‘here and now’, it is unsurprising that they appear to lack expression of a subject: ‘here and now’ plausibly need not be signalled.

- (12) a. Irene e arrivata
 Irene is arrived
 ‘Irene arrived somewhere’
 b. LOC e arrivata Irene
 LOC is arrived Irene
 ‘Irene arrived here/at this place’
 (Italian, Pinto 1997)

²We may note as well that PTCs substituted for propositional variables are somewhat odd, indicating that they do not qualify as fully fledged propositions (cf. (i)).

- (i) The following proposition is true:
 a. Men have livers
 b. Jack Myers was in central park at 8pm on June 1973
 c. ??There {is, was} a man in the garden

In donkey contexts, PTCs seem to require an adverb of quantification in the scope, indicating that they are defective as respects their quantificational ‘temporal’ force:

- (ii) a. If a cat falls from a roof, it (usually) miaows
 b. If there is a cat falling from a roof, it ??(usually) miaows

Evidence that PTCs are defective with respect to establishing a ‘speech time’ (utterance context) reference time connection in particular comes from embedded Speech act predicates:

- (13) a. Otto said that a hen was walking in the garden
 b. Otto said that there was a hen walking in the garden

In the usual case, embedding a speech act verb gives rise to ambiguity with respect to the understood reference time: This can be the actual speech time or a reference time different from (but possibly overlapping with) it. We have the following two readings:

[a] ‘Simultaneous Past’ Reading: The situation encoded in the embedded sentence held at during the ‘embedded speech’ (a unicorn was walking during Otto’s speech)

[b] ‘Distant Past’ Reading: The situation encoded in the embedded sentence held at a time prior to the ‘embedded speech’ (a unicorn was walking at some time prior to Otto’s speech)

Example (13-a) makes both readings easily available, but (13-b) only furnishes the ‘simultaneous past’ reading.³ More overtly, it is funny to have a perfect tense, entailing presence of a truth interval dissociated from the temporal anchor, cf. above sections 1.3.2, 3.2.4, with embedded speech act PTC predicates.⁴

- (14) a. Ede said that a hen had been walking in the garden the day before
 b. ?Ede said that there was a hen walking in the garden the day before
 c. ??Ede said that there had been a hen walking in the garden

What is missing in PTCs is a relation between the utterance context and the reference context.

At the same time, PTCs involve awareness and are ‘about’ speech time more than other sentences. Unlike a ‘normal’ sentence in present tense, a PTC is felt to be uttered truthfully only if the situation it depicts holds at least while the *there*-sentence token is uttered. Consider:

- (15) a. I am reading the paper
 b. There is a woman reading the paper

While (15-a) is not understood to provide information about utterance time (and is strictly speaking contradictory under that interpretation), for (15-b) to be judged true the situation it depicts has to hold more strictly during utterance time. Similar pairs are given in the following examples:

³An elaborate enough context seems to help though make the distant past reading available to some extent in the PTC case.

⁴Thanks to Karen Zagana for pointing this out to me.

- (16) a. {Otto, someone} is working in that skyscraper
 b. There is {?Otto, someone} working in that skyscraper
- (17) a. People are hanging around in Central Park
 b. There are people hanging around in Central Park

The ‘normal’ sentences are fine without the situation they depict strictly holding while they are uttered. PTCs more require that the depicted situation holds while they are uttered.

Suppose that the reference time is in essence the speech time (the real or fictitious time of speech, cf. section 1.3.2, ‘tense and time’) as determining the context of evaluation in PTCs. Speech time – ‘here and now’ – is not encoded, so PTCs are not saturated structures. Assuming that all sentences require saturation (cf. 1.3.2), suppose that PTCs saturate themselves. Their token binds w :

- (18) $\lambda w [\exists p AT(x,p,i) \& p=l \& R(p,w)]$ (/PTC token/)

It follows that PTCs are only saturated after spellout, that is, they are saturated only beyond the interface, as sketched in the following figure:

$$\begin{array}{rcl} \lambda w [p(w)] & & [\text{syntax (CS) output}] \\ \hline \lambda w [p(w)] \tau(/there\ be\ \dots/) & & [\text{spellout}] \\ p(\tau(/there\ be\ \dots/)) & & [\text{the token saturates RT}] \end{array}$$

PTCs are an instance of features being valued in (rather: beyond) the mapping process to extralinguistic representations (cf. section 1.3.2). Elements that depend structurally on saturation (an index for evaluation) are ruled out from PTCs. Such are the quantifiers *most* and *every*, most robustly ruled out in PTCs across languages (cf. McNally 1998).

Implementation

To implement the above idea technically, an option is to say that quantifiers like *most* and *every* only have denotations as generalized quantifiers (sets of sets). A generalized quantifier needs a nonempty first set to be nonvacuous hence requires a context to be interpretable.⁵

⁵To repeat, quantifiers like *most* and *every* cannot be interpreted as simple sets: the generalized quantifier *every* expresses inclusion of the first (noun) set in the second (VP) set, and it is meaningless if the first set is empty (as any GQ). Interpretation of *most* involves comparison of the cardinality of two sets ($\text{Most}(A,B) \leftrightarrow |A \cap B| > |B - A|$). In her analysis (cf. above 3.2.3, McNally draws on Partee’s 1987 ‘BE’-function to shift between generalized quantifier and set type: Only those D/NPs that yield a(n interesting) set interpretation when the BE-function is applied to them can appear in PTCs. Partee’s BE-function collects individuals (singletons) into a set:

$$BE \rightsquigarrow \lambda \mathcal{P} [\lambda x [\{x\} \in \mathcal{P}]]$$

We may then postulate that generalized quantifiers have to QR. PTCs not corresponding to propositions but to predicates, QR is undefined for them (in fact, any quantificational mechanism).

Alternatively, one may consider restricting lambda abstraction to begin with (cf. section 2.1). For lambda abstraction to be meaningful, a domain (and range) is needed. Assuming that the domain is fixed strictly with fixing temporal reference, it is reasonable to forbid lambda abstraction below the tense level. Building on Dobrovie-Sorin's proposal mentioned in section 3.2.3, we may define:⁶

- (19) Argument variables may be bound:
- a. by lambda abstraction (above the functional (vP) level)
 - b. by existential closure (below the functional level, iff they are located with respect to a co-argument)

D/NPs with denotations of generalized quantifier type only will then be interpretable from the vP level upwards only, where they can take the lambda abstract as an argument. They cannot be interpreted within the vP/VP for reasons of typing.⁷

With respect to wide scope for indefinite D/NPs, we may either assume that it is achieved via QR, the same reasoning applying. Alternatively, we may restrict choice functions as proposed to be responsible for indefinite wide scope by Reinhart 1997 to the functional level (choice functions specify a particular individual in a set, they are functions from sets to individuals).

In sum, we propose that the expressions that are ruled out in PTCs are those that require anchoring to the utterance context to be interpretable. This anchoring to the utterance context is absent in PTCs.

Further questions

Definiteness effects with 'standard' (morphological) definites are much less severe than with (generalized) quantifiers. 'Standard' definites are interpretable

⁶Under Dobrovie-Sorin's proposal, binding variables via lambda-abstraction is unrestricted: it is defined for all predicates and argument variables (that are not already bound). Binding by existential closure on the other hand is only defined for arguments that are located with respect to a co-argument (cf. McNally 1998 for a similar proposal).

⁷We saw independent evidence that quantifiers like *most* and *every* cannot compose in the lexical (vP/VP) domain in section 2.2.3 – quantifiers such as *most* and *every* cannot participate in word formation:

- (i) a. Alles-in-den-Schatten-Steller
All-in-the-shadow-stander
- b. ?*Jeden-in-den-Schatten-Steller
?*Everybody-into-the-shadow-stander
- c. ?*Die-meisten-in-den-Schatten-Steller
?*the-most-into-the-shadow-stander

as individuals (e type). Usually however, (morphological) definites are presuppositional, hence carry indices. Not having them enter a relation with the tense system might violate a friendly economy condition, more like a Gricean Maxime:

(20) facilitate interpretation

If hooking propositional meanings to individuals helps interpretation/parsing, not doing so although it is an option is sinning.⁸

There are two types of definiteness effects then: Certain D/NPs must enter a relation with the tense system (quantifiers like *most* and *every*), others may and should preferably ('standard' (morphological) definites).

As was noted, the location arguments in PTCs easily take scope over the theme. Given the above discussion (cf. sections 2.2.2, 3.2.3), it seems this should be treated semantic/pragmatically and not in syntax (via QR). Cf. Zimmermann 2001 for a worked out compositional analysis without QR.

⁸Musan 1995 presents evidence that D/NPs in the scope of *there be* do not have a temporally independent (=presuppositional, cf. section 2.3.5) interpretation generally:

- (i) a. There was a student of Chomsky's in the pub yesterday
- b. A student of Chomsky's was in the pub yesterday
- (ii) a. There were many professors poor in the seventies
- b. Many professors were poor in the seventies

The 'associate' D/NPs in the (a) examples do not refer independently temporally of the predicate, while the 'raised' D/NPs in the (b) examples do: The referents of the 'associate' D/NPs have to fall under their restriction at reference time, while the 'raised' D/NPs do not have to. This shows that the 'raised' D/NPs carry additional presuppositions (indices). Similarly in DPCs/DLCs and DOCs and POCs respectively:

- (iii) a. Einem Studenten von Chomsky erschien die Lösung (independent)
- A student-DAT of Chomsky appeared the solution
- b. Die Lösung erschien bei einem Studenten von Chomsky (dependent)
- The solution appeared at a student of Chomsky
- (German)
- (iv) a. Otto hat (mal) einem Lehrer von Chomsky ein Zimmer vermietet
- Otto has (once) a teacher of Chomsky a room rent
- b. ??Otto hat (mal) ein Zimmer an einen Lehrer von Chomsky vermietet
- Otto has (once) a room to a teacher of Chomsky rent
- (German)

The cipients in the (a) examples do, the location arguments in the (b) examples do not have a temporally independent interpretation: The referent of *a student of Chomsky* has to be a student of Chomsky at the time the solution appears in (iii-b) but not in (iii-a). Similarly (iv-b) is funny in the real world if the time in question is say 1985 where Harris was still alive but not Chomsky's actual teacher anymore.

4.1.2 DOCs and DPCs

In DPCs and DOCs, definiteness effects are obviated: Quantifiers like *most* and *every* may appear as themes (although the result is not particularly natural in most cases). Similarly locative inversion obviates definiteness effects:⁹

- (21) a. ?Einem Autor erschien jeder Leser (only: $\exists > \forall$)
 An author-DAT appeared every reader
 b. (?)Einem Kind war jede Suppe zu heiss (only: $\exists > \forall$)
 A child-DAT was every soup too hot
 (German)
- (22) Otto gave a student every piece of cake
- (23) a. ?*Da erscheinen die meisten Klatschartikel in der
 There appear the most gossip-articles in the
 Bild-Zeitung
 Bild-newspaper
 b. In der Bild-Zeitung erscheinen die meisten Klatschartikel
 In the Bild-newspaper appear the most gossip-articles
 (German)

In DOCs and DPCs as well as locative inverted PTCs, the cipient and/or fronted location can temporally anchor the propositional thingatloc meaning hence quantifiers like *most* and *every* may appear as themes.¹⁰

⁹Cf. as well section 1.4.1, fn 34.

¹⁰It would seem that taking the underlying mechanism to be QR would destroy the argument from Antecedent Contained Deletion in section 3.2.1. A road to explore here would be again the option of vP adjunction and subsequent t/v merger as employed in section 2.3.5. This seems promising in light of the fact that in German, quantifiers like *most* and *every* are more natural in DOCs (projecting vP) than DPCs (lacking vP on our account). As is predicted under our analysis, adjectival as opposed to verbal passive DOCs form a minimal pair in this respect:

- (i) a. ?Otto waren die meisten Artikel zugeschickt
 Otto were the most articles to-sent
 b. Otto waren die meisten Artikel zugeschickt worden
 Otto were the most articles to-sent become
 'Otto was sent most articles'
 (German)

Further, a solution along these lines may be a good basis of explanation for the fact that *do so*-support / VP-deletion is bad in DPCs, but not in fully blown DOCs (section 2.1.2):

- (ii) a. Anna sent Ede flowers and Ede did so, too
 b. ?*Anna escaped Otto and Ede did so, too

Assuming that (something like) QR is involved in the formation of the relevant LF operator-variable structure, vP may serve as an escape hatch in fully blown DOCs, but not in adjectival passive ones or DPCs (where vP is not projected).

The alternative is to follow the line suggested above and investigate whether quantifiers can be interpreted in situ but are only licensed in temporally saturated environments.

Chapter 5

Concluding Summary

To briefly summarize, this study sought to show that three constructions share a common Cipient Predication structure: Double Object Constructions (DOCs), Dative Percipient ('Experiencer') Constructions (DPCs) and Presentational ('Existential') *There* Constructions (PTCs).

Cipients were argued to be licensed by a category 'little t' pertaining to the tense system. t purports to encoding a 'split' at the reference time level: there is an index 'up and above' or 'down and below' the time/index for which the actual assertion is made (the traditional 'event/situation time') in Cipient Predication. At this index, a propositional 'thingatloc' meaning holds. The cipient relates to the thingatloc meaning in a double way: It is a superlocation of the location argument that makes part of the thingatloc meaning and it narrows down the possible values of the index variable. We have:

- (1) 'Cipient/there be D/NP (at LOC)' = 1 iff $[[D/NP]]^{w.g} \in [[AT\ p]]^w$
where
w = 'here and now' or a co(n)textually given (sum)location (PTCs)
w = cipient (DPCs, DOCs)

In prose, a PTC is uttered truthfully iff given a superlocation of the location argument coming with the construction, there is something falling under the restriction of the theme argument that is at the location argument.

The special properties of cipients were argued to be due to two factors: Cipients are logical and grammatical subjects, and they are interpreted as (individual sum) locations. In PTCs, there is no cipient (nor other) subject structurally encoded. We proposed that this is behind the ‘definiteness effects’ associated with PTCs: PTCs remain unsaturated structures syntactic/semantically, but certain D/NPs (*most/ every NP*) can only be interpreted in saturated structures.

Concerning the basic conditions for the cipient predication construction, we argued for the following:

- A The lexical predicate (VP) comprises a theme and a location argument
- B The cipient relates to the location as a whole to a part (‘inclusion’)
- C The cipient shares indices with the propositional thingatloc meaning and its complement

To the extent that the analysis is on the right track, it suggests that cipients can be used as a test for the ‘depths’ of argument structure, in particular, the presence of a(n invisible) location argument. We argued that the ‘binding illness’ of cipients is a reflex of cipients themselves being interpreted as locations: Cipients lack number information which is however needed to bind certain (empty) categories.

Further, cipient presence reflects properties of the tense system. Like T(ense) plays a crucial role for overt expression of ‘standard’ subjects, it was argued that t(ense) licenses the overt expression of cipient subjects. In a slogan:

- (2) finite tense \rightarrow NOM subject
 DAT subject \rightarrow R-split tense

Predication was presented as a structural/performative licensing mechanism for argument expressions. We argued that cipient predication can be defined as a function from a time/index and a further decomposable propositional thingatloc meaning to truth or falsity.¹

The connection between the tense system, predication and argument structure merits further research. What we saw tells us that it should be investigated in relation to the tense system: It was suggested that entering a relation with the tense system, definite/presuppositional D/NPs restrict the possible temporal/indexical values of propositional meanings and thus help meeting “requirements externally imposed by our systems of thought [...]” (Chomsky 2000:13). The blocking and definiteness effects observed in the Cipient Predication structure were argued to be a reflex of this.

¹Cf. for the proposal that predication corresponds to a one place function that is structurally realized Heycock 1991.

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Samenvatting

Het gaat er in dit proefschrift om te tonen dat drie constructies op een abstract syntactisch/semantisch niveau van beschrijving ‘hetzelfde’ zijn, namelijk Dubbel Object, Datief Experiencer en Presentationele/Existentiele constructies:

- (1) Marie gaf JAN een kus (Dubbel Object)
- (2) Jan is MARIE opgevallen (Datief Experiencer)
- (3) Er {was, verscheen} een man op de TV (Presentationeel/Existentieel)

De uniformiteit van de genoemde constructies wordt beargumenteerd aan de hand van een enkele analyse die op alle drie de constructies van toepassing is. Volgens die analyse delen (1) tot (3) een bepaalde predikatie-structuur: De Cipient (vergelijk ‘recipient’, ‘percipient’, traditioneel ‘goal/experiencer’, in hoofdletters in (1) en (2)) is gelicenseerd als extern argument van een predikaat dat een propositionele betekenis bevat. Deze propositionele betekenis is in de verbale projectie (VP) gecodeerd en correspondeert met iets dat op een bepaalde plek is gelokaliseerd (‘een ding op een locatie’). Een conditie voor Cipient Predikatie is dus dat de VP een thema en een locatie argument bevat (zie vooral sectie 3.2).

Het predikaat wordt echter door een temporeel hoofd gevormd: Naast het traditionele T(ense)/INFL(ection) hoofd is er een tweede hoofd ‘kleine t’ lager in de zinsstructuur die een onderscheid op het niveau van Referentie Tijd codeert (secties 2.2 en 2.3). Om precies te zijn, ‘bindt’ dit tweede temporele hoofd een tijd/index die niet overlapt met de tijd waarvoor de eigenlijke assertie wordt gemaakt (de traditionele situatie/gebeurtenis-tijd, zie vooral secties 1.3.2, 3.2.4). Het is deze index waar de propositionele betekenis (‘een ding op een locatie’) van toepassing op is. Een tweede conditie voor Cipient Predikatie is dus dat de structuur in het geheel twee disjunkte temporele indices op het niveau van Referentie Tijd codeert.

‘Kleine t’ vormt een predikaat dat uit de (characteristieke functie van) superlocaties van het (VP) locatie argument bestaat. De cipient, die zelf als locatie wordt geïnterpreteerd, verzadigt (satureert) dit predikaat. We hebben (met g een variable assignment):

- (4) ‘Cipient/there be D/NP (at LOC)’ = 1 iff $\llbracket \text{D/NP} \rrbracket^{w,g} \in \llbracket \text{AT p} \rrbracket^w$
 met $w = \text{cipient (DPCs, DOCs)}$

De Cipient Predikatie structuur is dus waar dan en slechts dan als er iets is dat onder de restrictie van het thema-argument valt en op de locatie is die door het VP locatie argument wordt gedenoteerd, gegeven een superlocatie (w) van het VP locatie argument (p). Een derde conditie voor Cipient Predikatie is dus de interpreteerbaarheid van de cipient als superlocatie van het VP locatie argument (sectie 3.3).

In presentatieve/existentiele zinnen is er geen cipient (noch ander subject), en het predikaat blijft structureel ongesatureerd. In Presentatieve Constructies is w echter ‘hier en nu’ of een locatie die co(n)textueel is gegeven (‘daar en dan’). Er wordt beweerd dat de structurele ongesatureerdheid van Presentatieve/Existentiele constructies de reden voor ‘definietheds-effecten’ is: bepaalde D/NPs (kwantoren zoals *most* en *every*) kunnen alleen maar in gesatureerde structuren worden geïnterpreteerd (hoofdstuk 4).

Volgens die analyse wordt de cipient als locatie geïnterpreteerd (een superlocatie van het VP locatie argument). We stellen dat dit de reden is waarom cipients bepaalde (lege) categoriën niet kunnen binden (bv. ‘zich’ in het Nederlands, zie vooral sectie 3.4): Locaties dragen geen getalsinformatie, maar dat is wel wat bepaalde anaforen op hun antecedenten nodig hebben.

Een verder voorstel is dat cipients als grammaticale en logische subjecten de predikatiestructuur contextueel verankeren (‘complete’ (Fregeaanse) saturatie). Voortbouwend op recente ideeën van Chomsky (1999), wordt gesteld dat dit de reden is waarom bepaalde operaties (A(rgument)-verplaatsing van het thema argument) over cipients heen geblokkeerd zijn: De grammatica moet structuren die geïnterpreteerd kunnen worden verwijderen, en het aanbouwen (mergen) van de cipient maakt interpretatie van het predikaat mogelijk. Als de cipient wordt gemerged, gaat (onder meer) het thema-argument de syntactische structuur uit en kan daarom niet over die cipient heen verplaatsen (sectie 2.3.5).

Cipient Predikatie is een poging tot unificatie van drie constructies die tot dusver los van elkaar werden gezien – in die zin is dit boek een stap in de richting van uniformiteit en eenvoudigheid. Verder maakt cipient predikatie een link tussen argument structuur, predikatie en eigenschappen van het tijdssysteem van natuurlijke talen. In die zin biedt dit boek een deels originele kijk op wat ‘het interface’ wordt genoemd.

Curriculum vitae

Patrick Matthias Brandt was born in Hagen (Germany) on May 14th, 1971. He went to school there (*Theodor-Heuss-Gymnasium*) and did his civil service (*Hospital zum Heiligen Geist*, Hagen-Haspe). In Göttingen, he studied German and English Philology and History of Art (1991–1998, M.A.). He joined the Utrecht Institute of Linguistics (UiL-OTS) as a beursaal in 1998. He carried out the research there that resulted in this dissertation.