FYI : theory and typology of information packaging
Smit, N.

Citation for published version (APA):

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: http://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.
5

Informational articulations

5.1 Introduction

As we saw in chapter 4, besides the construal of semantic representations, the informational structuring of the knowledge contained in these representations is a central task of the Formulator in Functional Discourse Grammar (FDG). Information packaging (coined by Chafe 1976) constitutes an important part of information structuring. According to Vallduví, it

“...indicates how information conveyed by linguistic means fits into a (hearer’s mental model of the) context or discourse. When communicating a proposition, a Speaker may realize it by means of different sentential structures according to his/her beliefs about the hearer’s knowledge and attentional state with respect to that proposition.” (Vallduví 1992: 2)

Information packaging comprises notions like Topic, Focus, Comment, Background, Theme, Frame, Rheme, etc. It excludes other informational categories, in particular those pertaining to the activation status of mental extensions (Gundel et al. 1993), interpropositional coherence devices (Kehler 2002), and inferences related to contrastiveness (Umbach 2004).

This chapter presents objections to the treatment of information packaging in terms of pragmatic function assignment as is currently done in FDG, and proposes an alternative model that dissociates the evocation of mental extensions from the place and function of those extensions in discourse knowledge. In addition, it offers differential analyses of the two component dimensions of information packaging, addressation and actualization. The proposal fits the FDG objective to
formulate combinatorial primitives (Frames) at each level of Grammar that can be stored in the Fund.

The chapter is structured as follows. Section 5.2 discusses the current approach to Topic and Focus in FDG. Section 5.3 gives a critical assessment of pragmatic function assignment in FDG, and argues that the approach has to be abandoned for the analysis of information packaging categories. An alternative frame-based proposal is presented in section 5.4. Section 5.5 illustrates the working of the proposal on the basis of some examples, before some concluding remarks are made in section 5.6.

5.2 Information packaging in FG and FDG

The proposals regarding the analysis of information structure made in Dik’s first version of Functional Grammar (Dik 1978: 129ff) exerted a profound influence on subsequent accounts. Even though some of his specific ideas have been called into question by later authors (e.g. Mackenzie and Keizer (2004) on the status of Topic in English), and notwithstanding more general concerns formulated in De Vries (1993) and Bolkestein (1998), two basic aspects of Dik’s original view have been retained through thirty years of theory formation, and are embraced in FDG as well (cf. Hengeveld and Mackenzie 2006; Hengeveld and Mackenzie 2008). The first is a strong inclination towards what Vallduví (1992: 44) calls a “binomial informational division of the sentence”. In Dik’s view, Topic and Focus are considered mutually exclusive categories on a single dimension of information packaging. Second, all subsequent accounts follow Dik’s original decision that these categories are best represented formally as Functions assigned to units in the underlying clause structure.

Within the predication as the core unit of analysis, Dik (1978: 130) distinguishes Topic, which signals that the constituent to which it applies “presents the entity ‘about’ which the predication predicates something”, and Focus, which signals “the relatively most important or salient information”. Both are represented as Functions, assigned to Layers in the underlying clause structure. With respect to this particular notational decision, Dik (1978: 29) observes that “they are Functions inasmuch that they can be predicated of constituents only with respect to some wider setting in which they occur”. In other words, Topic and Focus are relational notions assigned on the basis of context, and not inherent statuses of denotations.

In FDG, underlying clause structure is split into two orthogonal systems. The representational level (RL) is concerned with objective, context-independent denotation while the Interpersonal Level (IL) designates the evocation of denotations in the context of a communicative situation. Given this division of labour, Hengeveld and Mackenzie (2006) propose moving all aspects of the message related to information structuring to IL, where Topic and Focus are retained as pragmatic functions. Topic and Focus now attach to the Subacts that evoke what the Communicated Content is about and the most salient information it contains, respectively. Assuming happy discourse (Reinhart 1981) in which interlocutors act according to the Cooperative
Problems with Pragmatic Function Assignment

Principle and observe all four conversational maxims (Grice 1975), consider the contrived mini-discourse given in (1):

(1)  
A:  (What about the dog?)  Who did it bite?  
B:  It bit the postman

Responding cooperatively to A’s question, B provides the identity of the Undergoer in an otherwise presupposed event of which ‘the dog’ is the referent that the statement ‘is about’. In (2), the assignment of pragmatic functions to the interpersonal structure of B’s answer reflects the respective statuses of the evocational Subacts concerned:\footnote{In most analyses in this chapter, RL is included to disambiguate the designations of evocational Subacts. Superscript variables indicate correspondences between IL and RL: they do not have theoretical status, but are merely intended to enhance readability.}

\begin{align*}
\text{IL:} & \quad C_1 \left[ f_1 (+\text{id } T_1) \times_1 (+\text{id } R_1)_{\text{Top}} \times_2 (+\text{id } R_2)_{\text{Foc}} \right] \\
\text{RL:} & \quad \text{pst } e_1 : \left[ - \left[ (f_1 : [-\text{bite-}]) \ (x_1)_A \ (x_2 : [-\text{postman-}])_U \right] - \right]
\end{align*}

The informational status of entities evoked in a given Discourse Act is separate from the activation state of their mental extensions. While there are strong correlations between Topical status and givenness, and between Focal status and newness, this is far from absolute. For instance, a felicitous Discourse Act may evoke only known entities, but in a combination that is informative for the Addressee. The distinction between packaging status and activation state is formally explicit in FDG, where the latter is captured by means of Operators like $[\pm\text{identifiable}]$ that attach to evocational Subacts. The interplay between packaging status, other informational considerations and semantic function (cf. Jasinskaja et al. 2004) determines the expression of ‘the dog’ in B’s answer as a weak pronoun, and ‘the postman’ as a lexical NP with pitch accent, both in their respective dedicated linear positions with respect to the inflected verb.

5.3 Problems with pragmatic function assignment

While it may seem from the analysis in (2) that pragmatic function assignment is a suitable way to model information packaging, I believe that this yields several problems. In what follows, these will be discussed in detail.

5.3.1 Formal objections

Anstey (2006: 72) criticises FDG for being a pseudo-formal framework in that its notation is “inconsistently interpreted as formal in some cases and non-formal elsewhere”. This is due in part to the fact that the basic elements that FDG’s formal apparatus consists of have long remained underspecified in several respects, although recent publications (Hengeveld and Smit 2009; Smit and van Staden 2007) have done much to improve this situation.
Here, I want to single out the role and definition of Functions. According to their definition in chapter 4, Functions ($\varphi$) in FDG operate in predicational configurations of the form $[(\alpha_1) (\alpha_2) \varphi]$ where they specify the quality of the interaction between a relator and its relatum. This definition follows long-standing practice in Functional Grammar. The prototypical predication is the nuclear predication at RL, where qualified relations (Agent, Undergoer, etc.) obtain between one or more arguments and a predicate. While the nuclear predication may be the best documented case, it has been argued that predicational configurations abound in Grammar. For instance, Hengeveld (2004: 375) observes that the head of the Discourse Act in FDG constitutes a predication as well, while Harder (1996) in FG makes a similar argument for the structure of conditionals. In addition, Hengeveld and Mackenzie (2006: 671) argue that a single set of formal principles governs the general structure of Layers at all levels of Grammar. It is therefore reasonable to assume that the nature of Functions at IL is identical to that at RL.

The syntax of function assignment in predicational configurations can be summarized in three rules. First, there is one and only one relator (Predicate) slot in the predication, while all other slots are occupied by relata (Arguments) carrying a function that specifies the quality of their relation to the relator. Second, the relation between relatum and relator can only be of a single quality, since multiple relations between relator and relatum (or a single relation with multiple qualities) lead to ambiguity (cf. Fillmore 2003: 151). Third, a relator cannot enter into the same qualitative relationship with multiple relata, again because this would yield an uninterpretable designation (cf. the Argument Uniqueness Constraint proposed in Bohnemeyer 2003). This is summarized in (3):

(3) In predicational configurations
    a. there is one and only one relator slot, which carries no Function;
    b. there are one or more relata, all of which carry one and only one Function;
    c. the same Function cannot be assigned to more than one relatum.

The above syntax has generally been adhered to in the context of semantic analysis at RL, in which all arguments traditionally carry one Function and no Function ever occurs twice in a single predication. However, in the assignment of Topic and Focus it appears that virtually every conceivable situation other than the one discussed in (2) constitutes a violation of one or more of the above rules, which makes information packaging by means of function assignment highly problematic. I will now discuss four examples where the intended packaging structure is incompatible with the syntax of function assignment given in (3).

First to consider are cases that can be characterized as Identificational focus on predicates. An example is given in (4):

(4) A: Did the butcher chop the meat?
    B: Chop it? He shredded it

In B’s response in (4), nothing but the denotation of the predicate SHRED is
informative: everything else is presupposed, including the representational frame in which the predicate is to be inserted. Nevertheless, three evocational Subacts are performed; two referential Subacts that re-evoke the accessible discourse referents ‘butcher’ and ‘meat’, and one ascriptive Subact that evokes the Focal denotation shred. The corresponding interpersonal and representational structures are given in (5):

(5) IL: $C_1 \mid \left[ f_1 (-id T_1)_{\text{Foc}} \times_1 (+id R_1)_{\text{Top}} \times_2 (+id R_2) \right]$

RL: $\text{pst} e_1 : \left[ \left( f_1 : [-\text{shred} -] \right) (x_1)_A (x_2)_U \right]$ —

The representation of IL in (5) satisfies the syntax for function assignment, since the head of $C_1$ contains two units that have been assigned one unique Function (Focus to $T_1$ and Topic to $R_1$), and one ($R_2$) with no function at all. However, this would make $R_2$ ‘the meat’ the relator in this configuration, which is difficult to reconcile conceptually, because it seems that neither the non-retrievability of shred nor the topicality of ‘butcher’ are assigned by ‘meat’.

Another violation occurs in cases where we have multiple evocational Subacts that are unmarked for their packaging function. Consider (6), where both the ascriptive Subact $T_1$ evoking the main predicate, and the referential Subact $R_3$ evoking the Beneficiary referent ‘butcher’ are not assigned an informational function:

(6) A: What did the poulterer sell the butcher?
B: He sold him some eggs

Here, the referent ‘some eggs’ is the informative part of the assertion and is evoked by means of a Subact with Focus function; ‘poulterer’ is the Topic, and is evoked by means of a Subact with that function. This leaves two Subacts with no informational function; that evoking sell, and that evoking ‘butcher’. This violates (3a) because only one Subact (the one that serves as the relator) must be without a function, as (7) illustrates:

(7) IL: $C_1 \mid \left[ f_1 (+id T_1) \times_1 (+id R_2)_{\text{Top}} \times_2 (+id R_2)_{\text{Foc}} \times_3 (+id R_3) ??? \right]$

RL: $\text{pst} e_1 : \left[ \left( f_1 : [-\text{sell} -] \right) (x_1)_A (x_2 : [-\text{some eggs} -])_U (x_3)_{\text{Ben}} \right]$ —

Cases where Topic and Focus must be assigned to the same evocational Subact pose yet another problem. A case in point are new Topics which, according to Dik (1997a: 316) “combine properties from the dimensions of topicality and focality”. Hengeveld and Mackenzie (2008) propose to abandon NewTop as a separate function, and replace it by a combination of Top and Foc functions assigned to a single evocational Subact. However, such multiple function assignment to a single unit violates (3b) as it yields an ambiguous (and thereby uninterpretable) configuration. Consider (8):

(8) (Suddenly,) in came the butcher
Next, there are cases whose interpretation requires that the scope of a single function is ‘spread’ over multiple evocational Subacts. Consider (9):

(9) A: what about the butcher?
    B: he insulted the customer

In the context of A’s question, B’s reply aims to instantiate an apparent gap in $P_A$ by supplying a non-retrievable entry for the address identified by ‘the butcher’, i.e. the past event of him insulting the customer. In the example at hand, a single actualization instruction relates THE BUTCHER and HE INSULTED THE CUSTOMER. However, the formal algorithm offers no possibility of spreading a single function in this way:

(10) IL: $C_1 \left[ f_1 (\text{id } T_1)^{x_1} (\text{id } R_1)_{\text{TopFoc}} \right]$

    RL: $p_{st} \text{e}_1 : \left[ \left( f_1 : \left[ \text{come } \text{in} \right] (x_1 : \left[ \text{butcher} \right]) \right) \right]

In the interpersonal structure in (10), Focus is assigned to $T_1$ and $R_2$. As will be clear, this analysis violates the syntax of function assignment proposed in (3c). In conjunction with this case, consider (11):

(11) A: What about the butcher; he insulted anyone lately?
    B: He insulted a customer yesterday

This example illustrates multiple Focus assignment. Many languages allow for the evocation of multiple Focal elements in a single assertion. An expression like B’s answer in (11) instantiates two open slots in the Addressee’s presupposition; one concerning the identity of the insultee, the other the temporal specification of the event. Irrespective of additional inferences regarding contrastiveness, set membership, list-readings etc. that such statements may carry (cf. Umbach 2004), the fact that a customer and yesterday are both focal in their own right is generally undisputed. However, since the two evocational Subacts in (11B), represented in (12) as $R_1$ and $R_3$, mark two independent Focal relations, its interpersonal structure violates (3c).

(12) IL: $C_1 \left[ f_1 (\text{id } T_1)^{x_1} (\text{id } R_1)_{\text{Top}}^{x_2} (\text{id } R_2)_{\text{Foc}}^{t_1} (\text{id } R_3)_{\text{Foc}} \right]$

    RL: $e_1 : \left[ \left( f_1 : \left[ \text{insult} \right] (x_1)_A (x_2 : \left[ \text{customer} \right])_{\text{U}} \right) \right]$

    $\left( t_1 : \left[ \text{yesterday} \right] \right) (e_1)_{\varnothing}$

The violation in (12) aside, another problem arises if we compare it to (10). That is, it turns out that the current use of the formalism cannot distinguish ‘spread’ assignment of a single Focus function to multiple evocational Subacts from the assignment of multiple Focus functions in a single Communicated Content. The
formal problems discussed so far in my view provide sufficient reason to reject an analysis of information packaging in terms of pragmatic function assignment.

5.3.2 Functions and frames

In addition to the formal objections discussed in the previous section, pragmatic function assignment is problematic for another reason. That is, functions in FDG are not assigned during Formulation in the same way as in FG. They enter the Formulator as part of frames instead (García Velasco and Hengeveld 2002). Therefore, assigning packaging functions to evocational Subacts presupposes the existence of evocational frames, lexically predetermined configurational primitives that govern the possible combinations of evocational Subacts in a Communicated Content.

While I will argue in section 5.4 that we certainly need frames to deal with variation in information packaging, I believe that the concept of evocational frames is problematic, because the Fund cannot reasonably be argued to contain an exhaustive list of all possible combinations of evocational Subacts that users of a language may need at some point in time to achieve their communicative intention. This inventory would be practically infinite, since the required amount of evocation varies strongly, and depends on a multitude of extralinguistic factors (communicative intention, interlocutors involved, personal communication styles, physical and discourse context, et cetera). Also, invoking evocational frames would essentially mean that the Fund, i.e. the Grammar, places constraints on the communicative potential of a language, an assumption that goes against essential functionalist principles such as non-aprioricity (Haspelmath 2007). Therefore, rather than postulating evocational frames, the type and number of Subacts needed must be considered a consequence of contextual and representational choices, and should not be constrained by the availability of a priori defined combinatorial primitives.

As is also pointed out by Hengeveld and Smit (2009) and Butler (2007), the performance of evocational Subacts constitutes the final stage of Formulation, and is ‘consequential’ in the sense that the head of C simply accommodates whatever Subacts of evocation the Speaker requires. Because the performance of evocational Subacts is not a matter of substantiating pre-existing slots in a frame, the option of qualifying relations between them in my view does not apply at all.

5.3.3 Notional objections

Another set of problems concerns the notional implications of modelling information packaging in terms of function assignment. These problems are twofold, and pertain to the status of topicality and focality as relations within Grammar on the one hand, and the mutual independence of information packaging and evocational structure on the other.

Packaging relations inside Grammar? To start with the former, Lambrecht (1994) presents a comprehensive theory for the analysis of sentential information structure, in which Topic and Focus are captured as relations. In Lambrecht’s view, Topic
conveys a pragmatic relation of relevance holding between a referent and an assertion, while Focus conveys a relation of non-retrievability between (parts of) what is asserted and what is presupposed. The relational definition of these informational categories enables Lambrecht to make a clear distinction between Topic and Focus as informational relations on the one hand, and non-relational activation state that interacts with it on the other.

However, the relations identified by Lambrecht are not part of Grammar: they hold between propositions in discourse knowledge, i.e. in the Contextual Component. What is part of Grammar are the exponents by means of which these relations are established in the course of verbal interaction. Through the successful identification of these exponents in the interpersonal structure of the message, a pragmatically competent language user is able to infer the intended relations that the Speaker wants him to construe in his discourse knowledge.

There are two types of assertions which show clearly that topicality and focality do not obtain inside Grammar, but only their (non-relational) exponents do. These are all-Focus Acts and elliptical Acts. Regarding the former, consider the current treatment of expressions like the one in (13), where the entire Communicated Content of an Act is non-retrievable in the context of presupposed knowledge, and thereby informational.

\[(13) \quad \text{(Have you heard?) The butcher died!} \]

The assignment of Foc to $C_1$ in (13) must be taken to establish a focality relation between $C_1$ and $F_1$, seen that functions qualify the interaction between equipollent units. But this makes no sense, because the domain of focality is that of Communicated Content to which the units outside $C_1$ do not belong at all. Moreover, (13) does not capture the informational structure that intuitively underlies the assertion. What an utterance like (13) aims at is the construal of a previously irretrievable relation between the Communicated Content of $A_1$ in its entirety, and other discourse knowledge. Since this other discourse knowledge is not part of $A_1$ but is located in the contextual component, it follows that focality cannot obtain within $A_1$, but must be construed in the Contextual Component. Modelling focality as a relation within the discourse Act is not viable.

---

2The notion of exponence originates in Halliday (1961), where it refers to the relation between linguistic categories at various levels in Grammar that contribute to a single category of substance. I use it here to designate the counterparts within Grammar of the propositional relata in discourse knowledge between which pragmatic relations obtain.

3Dik’s characterization of functions merely states that functions operate “in some wider setting” (Dik 1978: 129), and does not specify what that setting should be. This may be taken to mean that pragmatic functions can operate across the boundaries of the Layer – and in fact, the Level – in which they are assigned. However, I consider this a highly undesirable course of action, as such an ad hoc interpretation would considerably weaken the formal consistency of FDG.
The relevance of focality as a relation in the Communicative Content is challenged furthermore by the existence of elliptic single-constituent answers, as exemplified by B’s reply in (14).

(14) A: Who did the butcher insult?
    B: A customer

(15) IL: $C_1|^{x_2(-\text{id} R_1)_{\text{Foc}}}$
    RL: $\text{pst e}_1 : \{ -((f_1)(x_1)_A (x_2: -\text{customer})_U) - \}$

In (14), only the referent that enriches A’s presupposition the butcher insulted $x$ is evoked. But as can be seen in (15), Focus assignment again would result in the marking of a relation that does not obtain in Grammar: in fact, since the contents of $C_1$ consist of a single Subact only, a relation cannot be modelled at all. The relation of non-retrievability between the referent ‘a customer’ and A’s presupposition obtains in the contextual component and not at IL in Grammar.

**Information and evocation**

Turning now to the relationship between information structuring and evocation, it should be noted that by modelling information packaging by means of functions assigned to evocational Subacts, FDG makes the former dependent on the latter. I believe that this is misguided, for reasons mentioned above. Instead, information packaging should be dissociated from evocation and be modelled in its own right.

Especially for Topical referents, the dependence of information packaging on evocation is problematic. Topical status has a strong correlation with givenness of the corresponding denotatum (Chafe 1976; Gundel et al. 1993) and is typically governed by special pragmatic presupposition of consciousness (Lambrecht 2001a: 475). As a result, Topical referents are prime candidates for suppression in many languages. But, how can an informational status be assigned to a non-evoked participant, if it is dependent on evocation? The point is that a statement with a non-evoked Topic may behave differently syntactically from one with no Topic at all. Consider the examples from Kinyarwanda in (16):

(16) a. (what about the guests?)
    (aba-shyitsi) ba-ra-riürimbir-a mu gisagára
    CL2-guest CL2-PRS-sing-IMPF in village
    ‘they are singing in the village’

    b. (what’s that sound?)
    ha-ra-riürimbir-a aba-shyitsi mu gisagára
    CL16-PRS-sing-IMPF CL2-guest in village
    ‘there are guests singing in the village’

    (Rwanda, Niger-Kongo. Lambrecht 2001b: 643)

In (16a), where the Topic is omitted, the Subject is cross-referenced on the verb *riürimbir*, ‘sing’ by means of a [+human] classifier. In (16b), where there is no relation
of aboutness between ‘the guests’ and the event of SINGING IN THE VILLAGE, a
[–human] classifier is used. If we make the Topical status of shyitsi ‘guests’ in (16a)
dependent on evocation, there is no way that we can account for the different choice
of prefix in (16a) and (16b).

5.4 Frame-based information packaging

The previous section has made clear that an alternative account of information
packaging in FDG is needed. It has been argued that information packaging
cannot rely on functions as its formal primitives, and the new model should offer
satisfactory solutions to the formal and notional problems listed earlier. In view
of the apparent cross-linguistic relevance of certain oppositions in information
packaging, in particular that between categorical and non-categorical Acts, it is
furthermore desirable that the new approach can account for these in a principled
fashion, thus enhancing FDG’s typological adequacy. Related to this, the new
model should be able to account for apparent constraints on information packaging
straightforwardly, such as the widespread prohibition on multiple Topics in a single
Act.

This section starts out with discussing a seemingly unrelated issue: the status
of the Verb Phrase (VP) in FDG, which is currently treated as a Layer at the
Structural level with no counterpart at RL or IL. Then, we will turn to the question
of how information packaging can be modelled instead. Besides functions, the
inventory of formal primitives in FDG offers Layers and Operators as means to
do this. The idea is introduced that the categories belonging to the packaging
dimension of addressation (Topic and Comment) are best modelled by means
of Layers. Focus, by contrast, is more suitably modelled as an Operator. The
possible combinations of addressation Layers and focus positions can be captured
in an elegant fashion by a limited number of packaging frames, to be thought of
as informational articulations (Vallduví 1992) or modes of message management
(Hannay 1991).

5.4.1 Descriptive problems: VP

It seems that many languages make use of syntactic and prosodic constituents for
which neither a representational nor an interpersonal motivation can be given in the
current architecture of FDG. In particular, the Verb Phrase (VP) is relevant here.
As is well-documented for a large number of languages, VP figures in a considerable
number of syntactic phenomena, illustrated for English in (17):

(17) The butcher [insulted a customer],
    a. ... and [so did], the poûlterer
    b. ... and the poûlterer [Ø], too
    c. [insult a customer]; would be
        [the last thing], the butcher would do
d. [insult a customer]; he did once; 
   [insult a customer]; he will do again

e. [what the butcher did]; was [insult a customer];

f. what did the butcher do? – [insult a customer];

As these examples show, insult the customer may be anaphorically referred to (17a) and constitutes a gap bound by too (17b), both of which clearly show that there must be a corresponding unit at one of the underlying levels of representation. Furthermore, it figures as a constituent in word order permutations – (17c), (17d) – and clefting strategies (17e). Finally, as shown in (17f), the constituent in isolation is a well-formed reply to certain kinds of questions.

FG has persistently argued that the phenomena in (17) are in fact epiphenomena, triggered by some other cause than a corresponding unit in underlying clause structure.⁴ In view of the representational/extensionalist semantics that FG is founded on, this is no surprise: the structural unit VP indeed does not seem to coincide with a semantic unit with a uniform extension and clear ontological properties. Nevertheless, it seems rather dissatisfying to do away with the order permutations and other constructions illustrated in (17) as mere side-effects. Two cases, (17a) and (17b), are particularly salient in this respect because they show unequivocally that the combination of predicate and undergoer argument can license a gap and serve as an antecedent for anaphora.

In my view, this must be taken to mean that the elements in VP constitute a single unit at some underlying level in Grammar. Since the semantics of FDG are similar to those used by FG, RL is not a likely candidate to accommodate such a Layer. But what if the unit motivating VP is not semantic in nature, but interpersonal? In that case, the fact that IL and RL are orthogonal in FDG enables us to invoke a functional correlate of VP at IL. I will return to this idea below, and argue that VP corresponds to a new informational unit at that level.

5.4.2 The locus of information packaging

Information packaging seems to be a somewhat hybrid concept in relation to the architecture of FDG. On the one hand, it is unmistakably interpersonal in the sense that language users calibrate their Acts to their assumptions about the interlocutor’s state of discourse knowledge. On the other, it is representational in the sense that information packaging targets the denotation rather than the evocation of the Act. This can be seen in cases like (15), where a non-evoked Topic exerts an influence on the structure of the expression.

My proposal retains C as the locus of information packaging in Grammar. In the characterization of Hengeveld and Mackenzie (2006: 672), C “contains everything the Speaker wishes to evoke in his or her communication with the Addressee”. This

⁴By consequence, the burden of proof falls upon FG to show that phenomena typically explained with reference to VP in other theories can be given an alternative explanation. This is done quite convincingly in Mackenzie (1983), who shows that FG does not need VP to account for certain Subject-Object asymmetries.
should be made somewhat more precise, since language users do not just evoke things, but perform evocations with the purpose of manipulating the interlocutor’s discourse knowledge. In other words, \( C \) contains an informationally structured representation of everything the Speaker wishes to evoke in his or her communication with the Addressee, as is reflected in (18):

\[
(18) \quad A_1 : [(F_i) \ (P_i)_S \ (P_i)_A \ (C_i) : \text{[informationally structured evocation]}]_2
\]

To apply a packaging structure to the Communicated Content of a DECLarative Act in my view is not an option available to the Speaker, but a necessary choice. Because a DECLarative Act conveys a representational structure, packaging necessarily has to be applied to its Communicated Content so that it can take effect in the Addressee’s discourse knowledge. From this it follows that there can be no such thing as a ‘pragmatically neutral’ statement, a term which frequently occurs in the literature. Rather, as is also pointed out by Lambrecht (1994: 15ff), languages use expression strategies that are specialized to a greater or lesser extent for the expression of a particular mode of packaging. However, absence of specific structural markedness does not entail absence of information packaging; instead, I take it to mean that a number of distinct packaging structures is neutralized in the expression. In terms of the etic/emic distinction discussed by De Vries (1993), the model of information packaging that I propose is therefore emic, and reflects notional categories that do not necessarily have an etic correlate in surface structure (although they can obviously be identified on the basis of context).

5.4.3 Layers for addressation

I argued in section 5.3.3 that addressation cannot not be made dependent on evocational Subacts because it targets the representational structure of the assertion as a whole and not just the part that is evoked. Therefore, we need to capture it by means of dedicated primitives, and it appears that Layers are a better candidate for this than Operators for two reasons.

First, Hengeveld and Mackenzie (2008) point to the actional rather than symbolic nature of various units at IL: Moves, Acts and Subacts all designate actions performed by the Speaker. The model of discourse knowledge management outlined in chapter 3 makes clear that the packaging instructions belonging to addressation are actional by definition: they instruct the Addressee to perform particular manipulations on his discourse knowledge. Second, a wide array of publications has observed systematic differences in encoding between categorical Acts that provide information about an address in discourse knowledge and non-categorical or thetic Acts that do not, but instead just posit new information without construing.

---

5Incidentally, limiting the domain of information packaging to the head of \( C \) also yields correct predictions regarding the impossibility of marking units outside this slot as either Topic or Focus. For instance, neither Topic nor Focus can be assigned to Discourse Act modifiers like \textit{frankly}, or C-modifiers like German \textit{bekanntermassen}. 
relevance.\(^6\) Note that the terminology used to describe this distinction draws on the concept of predication (cf. Cornish 2004). A categorical Act constitutes a psychological predication (pragmatic predication) in which the information is predicated of the psychological Subject (the topic identifying the address in discourse knowledge). In a thetic Act, such predication is absent.

If we represent the categories involved in addressation by means of Layers operating in the head of C, this provides an excellent way to model the actional nature of these categories as well as the predicational relation that their denotational correlates may engage in. As the interpersonal correlate of the instruction to allocate an address, I will invoke a **Topic Layer** (Top). The head of Top may – but need not – be instantiated by a Subact of Reference that evokes the denotation of the address.

As the complement of Top, the literature provides two potential candidates: Comment and Focus. Lambrecht (1994) argues in favour of the latter. He points out that the thetic-categorical distinction should be captured in terms of the size of the Focus domain, and that the absence or presence of a relevance predication is a mere side-effect. In his approach, a thetic Act is characterized by the fact that Focus encompasses the entire contents of the assertion. A similar view seems to underly Van Valin (2005: 81), who argues that “VPs, to the extent that they exist in languages, are the grammaticalization of Focus structure”.

Although it is doubtlessly the case that the complement of Topic is typically focal in that its denotation or the relation thereof with the Topic is non-retrievable, I believe that there are three reasons why postulating a Focus Layer as the complement of Topic is an oversimplification of the facts. First, such an account rules out the possibility that Topic and Focus coincide on a single referent. But in many languages such conflation is perfectly possible, as (19) shows:

(19) (because turtle knew that he had not called them himself;)
\[
\begin{array}{ll}
\text{itol } nî & \text{andrúpí } ŋgwē nî. \\
\text{Ito } 3\text{SG.SPEC} & \text{brother call(3) FOCS} \\
\text{‘his brother Hare called (them).’}
\end{array}
\]

(Ma’di, Nilo-Saharan. Blackings and Fabb 2003: 676/45)

In this example, the clause-final \(nî\) is a pronominal Focus marker bound to the adjoined Subject NP ‘his brother Hare’, which is the Topic of this and the subsequent clause. If Focus is the complement of Topic, they would be mutually exclusive and examples like this one could not be satisfactorily accounted for. Second, it must be noted that the Focus domain may also be smaller than the entire complement of Topic, as is the case in Narrow Focus constructions. An example of this we have seen in (6), where some EGGS constitutes the actualization of A’s presupposition THE POULTERER SOLD THE BUTCHER X. However, having Focus as the complement

\(^6\)Cf. Lambrecht (2001b); Lambrecht and Polinsky (1997); Matras and Sasse (1995); Sasse (1987) for extensive discussion of the thetic-categorical opposition in a large number of genetically unrelated languages.
of Topic would mean in this case that part of the Communicated Content (sold the butcher) would not be packaged at all, and would hence be uninterpretable. Finally, if Focus were indeed the complement of Topic, all non-categorical statements would become informationally identical; that is, they would all consist of a Focus Layer only. Yet, there seem to be two broad classes of non-categorical statements that are identical in some, but distinct in other respects. I will return to this observation in section 5.4.5.

For the three reasons mentioned above, I propose a Comment Layer (Cm) as the complement of Topic that conveys the instruction to assess its contents against the knowledge that is already present at the address where the assertion is allocated. Both Layers conform to Hengeveld and Mackenzie’s generalized Layered structure and command an Operator position. This position is needed to accommodate Focus, as will be seen in the next section.

5.4.4 Focus as Operator

The previous section gave three arguments why Focus is not a suitable complement for Top. However, a fourth objection can be raised against this analysis: by its very nature, Focus cannot have Layer status at all. Instead, it will be argued here that Focus should be modelled as an Operator that can be attached to various units in the informationally structured Communicated Content.

The reason that Focus cannot be modelled as a Layer has to do with the nature of the packaging relation in which it is involved. I argued in chapter 3 that actualization is momentaneous in that the non-retrievability that characterises the relation dissolves the moment the instruction is imparted. This is different for the relevance relation between an address and its entries, which is stable, and extends over the entire duration of the communicative exchange. Now, if Focus is an actional notion that reflects the instruction to establish a particular non-retrievable relationship between pieces of knowledge, it will be clear that this can be done only once. Although the knowledge involved can be referred back to afterwards, the formerly irretrievable relation cannot be ‘re-established’. To illustrate this, consider (20):\footnote{The alternative reading of (20), which can be paraphrased as ‘he insulted the customer, and he insulted the poulterer as well’, is ruled out by the bracketing.}

(20) a. He [insulted the customer],
   b. and the poulterer [∅]; too

(21) IL\textsuperscript{a}: \[C_1 \left[ \left( \text{Top}_1 : \left[ (\text{butcher} + \text{id} \text{R}_1) \right] \right) \left( \text{Foc}_1 : \left[ (\text{insult} + \text{id} \text{T}_1) \left( \text{customer} + \text{id} \text{R}_2 \right) \right] \right) \right] \]
   IL\textsuperscript{b}: \[C_2 \left[ \left( \text{Top}_2 : \left[ (\text{poulterer} + \text{id} \text{R}_3) \right] \right) \left( \text{Foc}_1 \right) \right] \]

While the gap is indeed bound by the knowledge evoked as T\textsubscript{1} and R\textsubscript{2}, in IL\textsuperscript{b} this is no longer Focus, and can therefore not be referred to. By contrast, the evaluation instruction reflected by Cm can be re-issued. consider the following:
(22) a. The butcher sells veal chops.
b. He does so every Monday

(23) ILa: $C_1 \left[ \left( \text{Top}_1 : \left[ (\text{id } R_1) \right] \right) \left( \text{Cm}_1 \left[ \left( \text{id } T_1 \right) (\text{+id } R_2) \right] \right) \right]$

ILb: $C_2 \left[ \left( \text{Top}_1 : \left[ (\text{id } R_3) \right] \right) \left( \text{Cm}_1 \left[ (\text{ev mon. (foc } R_4)) \right] \right) \right]$

By uttering the second part of (23), the Speaker invites the Addressee to reassess the information supplied in the first part, and augment it with the habitual temporal specification every Monday. In other words, the same packaging instruction Cm$_1$ is issued twice.

Another point concerns the objection raised in section 5.3 that information packaging should not be made dependent on evocational structure. While this is certainly true for addressation, one exponent of which may be left unevoked on account of the accompanying presupposition of consciousness that Topics typically involve (cf. Lambrecht 2001a: 475), this is different for Focus. Focus, which marks a pragmatic relation of non-retrievability, is crucially dependent on the expression of its exponent: how else can the non-retrievable relation be construed successfully?

For these reasons, I propose to model Focus as an Operator that applies either to individual evocational Subacts, or to one of the Layers involved in addressation that I defined in the preceding section. This way, we can distinguish between constructions with a new Topic (Focus on the Topic Layer), wide Focus (Focus on the Comment Layer), and narrow Focus (Focus on an evocational Subact within the Comment). Whether a Focus Operator can be assigned only once per Communicated Content, or to multiple units, is still considered a matter of typological preference. A generalized representation of the informationally structured Communicated Content is given in (24):

\[
\begin{align*}
C_i : \left[ (s_n \left[ \left( (\pi \text{Top})_{\text{rel}} (\pi \text{Cm}) \right) \right] (C_i)_{\emptyset} \right] : \left[ (s_n)_{\emptyset} \right] : \ldots
\end{align*}
\]

Restrictor = Predication

$s_n = \text{Predicative Layer}$

Note that in comparison to (23), the structure of (24) is slightly different: it portrays C$_i$ as an endocentric Layer, which is necessary to account for the occurrence of C-modifiers.\(^8\) This means that the predicating element in the Head of C$_i$ must have Layer status. In the next section, it will be argued that this is the slot in which information packaging frames can be inserted.\(^9\)

\[^8\]See section 4.2.2.3; Smit and van Staden (2007) for details. Simply put, all Layers that allow for instantiation of their designation by means of more than a Head must be endocentric.

\[^9\]As a precursor to Centering Theory, Grosz and Sidner (1986) propose a computational model of discourse structure that revolves around the interplay of intentional and attentional structure, which are highly similar to my dimensions of topicality and focality. They note (p. 180) that the former must be parasitic on the latter. A similar conception of the relation between topicality and focality is also found in the generative paradigm (cf. for instance Drubig 2003).
5.4.5 Packaging frames

It was shown in the previous sections that we need dedicated Layers in the head of C to capture both exponents of addressation: a Top-Layer to capture the allocation instruction, and a Cm-Layer to capture the instruction to evaluate. In addition, a Focus Operator (foc) is needed that can attach to whatever constitutes the actualization of the assertion, be it one of the addressation Layers or, in the case of narrow Focus constructions, an evocational Subact.

Different combinations of Top and Cm are needed to capture the basic distinction between categorical and thetic statements. I propose that these combinations are stored in the Fund as Frames, configurational primitives. For the representation of such primitives as exocentric Layers of the type $n$, the argumentation in Smit and van Staden (2007: 160) is followed. The informational Frames will henceforth be referred to as informational articulations, a term coined by Vallduví (1992). They can be understood as the formal implementation of the Speaker’s modes of message management (Hannay 1991: 146) at the Interpersonal Level.\(^\text{10}\) If we take into account the interaction between Topic and Comment, as well as the occurrence of a Focus operator, five basic frames can be postulated.\(^\text{11}\)

\[(25)\]
\[
\begin{align*}
a. \quad & \text{n} \left[ (\text{foc} \text{ Top}_i) \right] & \text{Address-central Thetic} \\
b. \quad & \text{n} \left[ (\text{foc} \text{ Cm}_i) \right] & \text{Entry-central Thetic} \\
c. \quad & \text{n} \left[ (\text{Top}_i) (\text{foc} \text{ Cm}_i) \right] & \text{Entry-central Categorical} \\
d. \quad & \text{n} \left[ (\text{foc} \text{ Top}_i) (\text{Cm}_i) \right] & \text{Address-central Categorical} \\
e. \quad & \text{n} \left[ [\ldots (\text{foc} \text{ T}_i / \text{foc} \text{ R}_i) \ldots] \right] & \text{Identificational}
\end{align*}
\]

Incidentally, note how these Frames do justice to the similarities between Address-central and Entry-central Thetic assertions that are observed in the literature (cf. the distinction between entity-central and event-central thetic assertions discussed in Sasse 1987: 526), without obscuring their differences. While an Entry-central Thetic assertion posits information in discourse knowledge without

\(^{10}\)While very similar in spirit, Hannay’s modes of message management are different from the classification proposed here in two important respects. First of all, the modes of message management (MMM) are characterized in terms of their (canonical) rhetorical function, rather than in terms of the way in which their usage affects the interlocutors’ discourse knowledge organization. Furthermore, MMM are defined in morphosyntactic terms: their respective definitions rely on the interplay between the function of the referent in P1 and the referents in other positions.

\(^{11}\)With regard to the postulation of separate Frames for the the Address-central and Entry-central Categorical articulations, it should be pointed out that the status of Operators in Frames has yet to be settled in FDG. In a recent proposal, Hengeveld and Smit (2009: 124) suggest that the instantiation of Operators can be partly restricted by cues from lower Levels, which implies that it is the Operator slot rather than its specific instantiation that is specified in the Fund. Nevertheless, the apparent restrictions on simultaneous instantiation of multiple Focus operators that many languages exhibit, still need to be accounted for somewhere. Since FDG does not allow for the formulation of additional rules in the Grammar to take care of such restrictions, the postulation of additional Frames is the only option.
instructing the Addressee what to relate it to, an Address-central Thetic assertion construes an address without supplying information to assess there. This may explain why they exhibit similar morphosyntactic properties in some languages, and are expressed differently in others. In an approach like the Focus structures proposed in Lambrecht (1994) that tries to identify packaging configurations entirely in terms of focality, this distinction cannot be made.

In addition to the five core articulations in (25), individual languages may require the definition of more complex frames as well, such as frames for multiple Topic statements (attested in Ostyak, cf. Nikolaeva 2001), multiple Comments, et cetera. Nevertheless, even though data from individual languages may give rise to the definition of such additional frames, it should be noted that their numbers will be limited, and that they can be listed exhaustively with relative ease. In that respect, informational frames do not suffer the unboundedness problem that would present itself with evocational frames, as was noted on page 91, because unlike these, the constraints on possible informational frames are related to cognition and/or processing (such as the one new idea constraint proposed by Chafe 1994), and thus far more restrictive than possible constraints on evocational frames.

The issue of configurationality It was remarked earlier that the Categorical articulation is predicational, such that the Comment is the predicate that assigns Relevance to its argument, the Topic. This is in line with the architecture of discourse knowledge organization proposed in chapter 3, whereby the Comment is an attribute of the Topic. Just like the semantic predicate walk can be characterized as an ‘Actor-attribute’ of its argument, a Comment can be said to be a ‘relevance-attribute’ of its Topic. The relation between Topic and Comment resembles that between a semantic argument and predicate in another sense as well: like the semantic predicate’s ability to denote is dependent on the presence of its argument, so is the ‘evaluability’ of a Comment dependent on it being assigned to a location in discourse knowledge.

There is some evidence to support this analysis. For one, the fact that relevance cross-linguistically shows a strong tendency to be marked on the Topic rather than the Comment indeed suggests a dependency of Topic on Comment, on a par with case-marking to reflect semantic relations. In the same vein, the use of a non-human classifier in Rwanda (16) to signal theticity is in a sense reminiscent of a valency reduction operation. However, systematic research of such phenomena is lacking, and a number of alternative analyses are available that are attractive in their own right. Mackenzie (pc) suggests that Topic and Comment engage in an equipollent relationship, whereby neither Layer is predicated of the other. Yet another option is to assume that Topic and Comment are both arguments in a transitive predication containing an abstract pragmatic predicate, and that expressions such as as for and regarding in English are to be analysed as overt instantiations of that predicate. An analysis along these lines has been proposed for the semantic relation condition in Harder (1996), which has notorious ties to topicality (Haiman 1978).

At present, I see no compelling arguments beyond my own aesthetic preference to choose either one of these three analyses: in fact it may be the case that the
nature of their interaction is subject to cross-linguistic variation. I will therefore maintain that Topic and Comment are indeed in a predicational relationship in which the former is an argument of the latter. In flagrant violation of my own comments regarding the widespread lack of notational consistency in FDG, I will however not mark this relation overtly in subsequent representations.

5.5 Some examples

In this last section, some examples will be analysed using the frame-based model of information packaging. In addition, each of the problematic cases discussed in section 5.3 will be revisited.

5.5.1 Address-central Thetic

The Address-central Thetic articulation consists of a Topic Layer only, to which a Focus Operator is attached. It instructs the Addressee to construe a new address that can serve as a context set in subsequent discourse. As it is a thetic articulation, no relevance is predicated. An example is given in (26).

(26) (end of discourse segment)

\[
\begin{array}{llll}
\text{n-omok-ye} & \text{ha-tu} & \text{hocy-komo.} \\
3\text{-come-DPP(NCOLL) INTS-EVD big-COLL} & \\
\text{‘(there) came the chief.’}
\end{array}
\]

(Hixkaryana, Southern Carib. Derbyshire 1965: 16/19)

The Address-central Thetic articulation solves the formal problem illustrated by (8) above, where it was argued that simultaneous assignment of a Topic and a Focus function to a single Layer results in an ill-formed structure. As can be seen in (27), no such problem occurs when the referent that evokes the new discourse address is embedded in a Topic Layer with a Focus operator:

(27) IL: $n_{\text{i}} \left[ (\text{FOC Top}_1 (\text{chief R}_1 \text{ come} (T_1))) \right]$

Note that the ascriptive Subact ‘come’ is modelled in (27) as part of the Topic Layer. This is because COME in this context is not intended as information about ‘the chief’; the use of a predication that denotes appearance on the scene is merely instrumental to the successful construal of this new address in discourse knowledge. Since information packaging and representational structure are independent of one another, there are no a priori restrictions as to the kind of semantic structure that fulfills this auxiliary role. While the use of semantically bleached predications (Cornish 2004: 219) as in (26) is common, the minimal requirement seems to be that the Topical discourse referent itself is evoked, for instance by means of an isolated Noun Phrase as in (28):
Another typical denotation of the propositional content of an Address-central Thetic articulation is that of a locative/existential construction, in which the Topical discourse referent is localized in the spatiotemporal domain of the discourse context, as illustrated in (29).

(29) (end of discourse segment)
Qillarsuaq-kku-t=guuq ningaa-qar-mi-pu-t.
Q.-ASSOC-PL=RPT son_in_law-VR-EXCL-IND-3SG
‘among Qillarsuaq’s folk, there was a son-in-law.’

(Greenlandic Inuktittut, Eskimo. Bittner 2007a: 2/1)

Also, a full-blown semantic predication may be used as illustrated in (30). It is important to note that, while the action is predicated as a property of the new Topic ‘the pups’, pragmatically there is no construal of relevance between the two. The propositional content THE CHILDREN FINDING X is merely used as a vehicle to introduce the Topic, and is not part of its context set. The context supports this analysis, as neither the children nor the event described in this statement play any further role in the subsequent development of the story.

(30) (Paakujuk’s mother gave birth in an abandoned coal barrel)
piaraq-i miiraq-t nassaari-pa-it.
baby-3SG>3PL child-ERG(PL) find-IND-3PL>3PL
‘The pups were found by the children.’

(Greenlandic Inuktittut, Eskimo. Bittner 2007b: 2/1)

5.5.2 Entry-central Thetic

The Entry-central Thetic articulation is the counterpart of the Adddress-central Thetic articulation. It consists of a Comment Layer only, to which a Focus Operator is attached. The instruction that this articulation conveys is to locate a non-identified address in the discourse knowledge organization, and store the propositional content of the message as the sole entry to that address. An example is given in (31).
By invoking a Comment Layer to represent Entry-central Thetic articulations, the problem that such assertions posed to pragmatic function assignment (illustrated in (13) above) does not occur. Focus is not assigned outside the scope of C, but occupies the operator position on the Comment Layer. This is shown in (32).

(32) IL: \[ \text{\$u \left[ \text{foc Cm}_1 \right] \left[ \text{\(-id R_1\)} \left[ \text{\(-id R_2\)} \left( \text{\(T_1\)} \right) \right] \right] } \]

There can be numerous communicative reasons for employing an Entry-central Thetic articulation. Their typical function appears to be ‘scene-setting’: an event is introduced in its entirety, which then serves as the background against which discourse unfolds. Often, participants first evoked in an Entry-central Thetic articulation are construed as Topics in subsequent discourse. (31) is an illustration of this: there, the referents ‘hyena’ and ‘rabbit’ are introduced as part of a transitive predication that is asserted in isolation. The predication serves both as the background of the first part of the narrative, and to introduce the referents, both of which are to serve as Topics later on in the story. Also, Entry-central Thetic articulations are often found at points in a discourse where the ongoing addressation of propositional contents to an address is interrupted, after which another address is taken up. This gives Entry-central Thetic articulations a strong sense of unexpectedness, due to which they haven often been classified as out-of-the-blue statements.

(33) (the kettle began to boil, while Otter sat opposite of it)
\[
\text{\textit{joxo culi}} \quad \text{\textit{xu\textit{n}-\textit{ku-n\textit{nee}}} \quad \text{\textit{g\textit{ai}.}}
\]
\[\text{pot through dive-PST-3SG crow}\]
\[\text{‘[Mr.] Crow dove into the kettle.’}\]

(Udihe, Tungus. Nikolaeva and Tolskaya 2001: 899)

A third use of Entry-central Thetic articulations is more difficult to give a uniform interpretation. It is probably best described as the verbal counterpart of the ‘long shot’ used in filming, where an event is presented not so much from the perspective of one of its participants, but rather from an external viewpoint. The reasons to do so can be manifold, but include manipulation of the time line of a story, separation between the ‘thread’ of the story and background events, dramatic and emphatic effects, et cetera (see also Moody 1991).
5.5.3 Entry-central Categorical

Entry-central Categorical articulations form a predicational configuration of a Topic and a Comment Layer, whereby the latter is predicated of the former. A Focus Operator is attached to the Comment, signalling to the Addressee that the propositional content of the Comment is to be filed as new information in the context set identified by the Topic. The purpose of Entry-central Categorical assertions is to expand the Addressee’s state of knowledge of a mutually agreed Topic in ongoing discourse. It is generally considered the default way of information packaging. An example is given in (34). Frequently, the Topical referent of an Entry-central Categorical assertion is not evoked, as in (35).

(34) (The brother saw that Thunder had turned the snuff into fish)
\[ \text{diha di-ňha-pidana.} \]
\[ \text{3SGNF 3SGNF-eat-RPR} \]
\[ \text{‘He ate.’} \]

(Tariana, Maipuran. Aikhenvald 2003: 640/13)

(35) (Thereupon, Mousedeer took a cloth)
\[ \text{sa’} \emptyset \text{am-tuan} \]
\[ \text{SEQ NEUT-wrap_in_cloth} \]
b. \[ \emptyset \text{m-ň-kkos kasu’} \]
\[ \text{NEUT-LV-tie foot} \]
\[ \text{‘...and wrapped (him). (He) tied (his) feet, ...’} \]

(Begak, Malayo-Polynesian. Goudswaard 2005: 411/41-2)

It was pointed out under (16) above that examples like (35) present a problem for pragmatic function assignment, because a function obviously cannot be assigned to a non-existing unit. The Frame-based approach solves this problem, because the non-evoked Topic can be represented as a Topic Layer of which the Head is not instantiated by a Subact of Reference. Also, the Comment Layer offers a solution for the problem that pragmatic function assignment cannot distinguish between assignment of a single Focus function spread across multiple evocational Subacts, and multiple simultaneous Focus relation. Both are illustrated in (36).

(36) \[ \text{IL}^a: \quad s_n[[\text{Top}_1[[\emptyset]]] \text{ (Foc Cm}_1[[\text{him} \text{ wrap}_1 \text{ (id R}_1) \text{ (id T}_1)]]] \]
\[ \text{IL}^b: \quad s_n[[\text{Top}_1[[\emptyset]]] \text{ (Foc Cm}_2[[\text{feet} \text{ tie}_1 \text{ (id R}_2) \text{ (id T}_2)]]] \]

5.5.4 Address-central Categorical

Address-central Categorical articulations are also predicational configurations consisting of a Topic and Comment Layer. They differ from Entry-central Categorical articulations in that the Focus Operator is not attached to the Comment, but to the Topic. As such, these articulations convey an instruction to the Addressee to
identify a new address in the discourse knowledge organization and, in the same discourse act, file the propositional content as information relevant to the identifier of the address. A typical example of such a construction is given in (37).

(37) (no context)

\[ \text{jâka jia-ha da banda, banda-nda-ma-nja.} \]

\[ \text{if EXIST-3PL(ACC) ART cattle cattle-3PL(GEN)-EMP-3PL(DAT)} \]

\[ \text{‘As for the cattle, it is ours.’} \]

(Kambera, Malayo-Polynesian. Klamer 1998: 156/34)

In the frame-based approach, the representation of such Address-central Categorical assertions corresponds to (38):

(38) IL: \[ s_n \left[ \left( \text{POC Top}_1 \left[ \left( \text{cattle} \text{−id R}_1 \right) \right] \right) \left( \text{Cm}_1 \left[ \left( \text{we} \text{+id R}_2 \right \left( \text{cattle} \text{+id R}_3 \right) \right] \right) \right] \]

5.5.5 Identificational Focus

The Identificational articulation does not make reference to the addressee dimension: whether and in what configuration a Topic and Comment Layer are construed in the Communicated Content is not relevant. Instead, the defining characteristic of this articulation is that a Focus Operator is attached to a Subact of evocation, whether Ascriptive or Referential. The use of this articulation is straightforward: it aims at the manipulation of a specific piece of presupposed information, with the intention to change it or its relation to the rest of the presupposition, or instantiate an empty slot. A canonical example is given in (39).

(39) (nowadays, they only hunt with guns)

\[ \text{goweri na denke beká t’á zo ṭek’ó ṭakehdee.} \]

\[ 3:{\text{before long person:PL spear instr only caribou 3PL:kill:PL:HAV:IMP}} \]

\[ \text{‘Long ago, people killed caribou only with spears.’} \]

(Slave, Nuclear Na-Dene. Rice 1989: 1337/2)

In (39), the only piece of the assertion that is non-retrievable and therefore informative is the denotation of the instrument, spears. The rest of the propositional content, including the instrumental role of the Focal element, is considered to be presupposed because it has been asserted in the preceding context. If information packaging in this example were taken care of by pragmatic function assignment, two evocational Subacts would be left without a function: the ascriptive Subact ‘kill’ and the referential Subact ‘caribou’. This would violate the restriction that each predicational configuration can only have one predicate, as was pointed out in (6) above. However, if we model the predicationality of the Head of C by means of a Topic and Comment Layer, this problems disappears. A Focus operator can then be employed to reflect the fact that the denotation of ‘spears’ is the only new information:
As regards Identificational Focus on predicates, we have seen in (4) that the pragmatic function assignment approach leads to a cumbersome analysis for certain cases of narrow predicate Focus. In the framing approach, the use of a Focus Operator on the appropriate evocational Subact circumvents this problem. An example is given in (41).

(41) (I did not inject the medicine;)

\[ \text{má mvü ērōä mvü rá} \]

1SG drink medicine drink-FOC AFF

‘I drank the medicine’

(Ma’di, Central Sudanic. Blackings and Fabb 2003: 597/319)

Here, the only informative part of the assertion is the denotation of \textit{mvü}, DRINK. Focus assignment to the corresponding Subact of evocation would leave ‘medicine’ as the only candidate to assume the configurational status of Predicate, which is counter-intuitive. Assigning Focus as an Operator instead gets rid of this problem; at the same time, the aboutness relation between the Speaker and the remainder of the assertion can be modelled by invoking a Topic and a Comment Layer:

Adding a Focus Operator to the \textit{T}_1 instructs the Addressee to update an extant entry under the appropriate discourse address (identified by ‘I’) with the information that the relational property involved is \textit{drink}.

5.6 Conclusion

This chapter has argued against the classical approach to information structure as pragmatic function assignment in Functional Discourse Grammar. It has shown that an alternative model, in which the complementary categories Topic and Comment are portrayed as Layers within the head of the Communicated Content, and orthogonal Focus as an Operator attaching to either informational or evocational units, is more adequate descriptively, notionally, and in terms of formalization.