One of the significant features of Role and Reference Grammar is its goal of providing mechanisms necessary for describing linguistic phenomena with scopes that are wider than a single clause, for example, clause linkage. With some exceptions, most syntactic theories have considered clause linkage as a peripheral phenomenon, and, therefore, have paid little attention to it. In contrast, RRG considers clause linkage an essential part of grammar and has treated it as such since inception. Another notable example of RRG’s ambitious endeavors is its incorporation of information structure as encoded in human languages. This aspect of grammar has also been considered peripheral and treated thusly — or ignored completely — by most syntactic theories. One of the reasons for this exclusion is that serious investigation of information structure inherently requires a scope wider than the single clause. Although still at an early developmental stage, RRG can be expected to expand itself in this direction, so that we will be able to understand further HOW Language as a whole is structured as well as WHY in such particular ways.

Van Valin & LaPolla (1997) have accomplished praiseworthy improvement of RRG in this respect. In this paper, I attempt to contribute to this important enterprise. In particular, I am going to discuss problems sometimes arising where multi-clause sentences interact with information structure. It is my intention to
develop further this aspect of grammar by pointing out potential problems and suggesting remedies. I will first summarize information structure as represented in RRG, and then discuss shortcomings associated with the notion of focus structure in complex sentences, as proposed by Van Valin & LaPolla.

Following Lambrecht, RRG divides the information encoded in a sentence into two types: presupposition and assertion. The presupposition is a set of assumptions evoked by the utterance and constitutes the context necessary to understand that utterance. An assertion is a piece of information that the hearer is expected to know, or believe, as a result of hearing the sentence. The assertion generally involves both old and new information. The part of the assertion that is not within the presupposition is called the focus. The focus is the part that is unpredictable or unrecoverable from the context. For example, in

(1) It was Robin who hit you,

Robin is in the focus, whereas the propositional function ‘x hit the addressee’ is in the presupposition. The focus must be an entity or state of affairs which will produce an assertion when added to the presupposition.

Significantly, the presupposition need not be old information. The addressee may create presuppositions in spurts in order to process the utterance. This creation of context is based on what is evoked by the sentence form and other factors. Van Valin & LaPolla provide the following example. If two people see an interesting car drive by, and one says

(2) I once drove a Bentley like that one,

the hearer may not know what type of car she just saw. But by processing the speaker’s utterance, the hearer may create the presupposition that the car just passed by was a Bentley. Sometimes, it is the creation of presuppositions —
rather than the overt assertion or question — that is the speaker’s main communicative intention. For example, there is the familiar-but-apt situation in which a prosecutor queries the defendant

(3)  *What did you do after you stole the money?*
presumably causing the jury to presuppose the defendant actually stole the money.

The syntactic constituent in which focus occurs is called **focus domain**. Focus domains must be phrasal rather than lexical categories. The minimal information unit corresponds to the minimal phrasal category in syntax. Suppose someone asks a friend

(4)a.  *Did you put it in the box?*
And the friend wants to respond that she did not put it IN the box but, rather, ON the box. The presupposition involved in the answer is ‘the speaker put it somewhere’, not that ‘the speaker put it within something’. And the utterance must take the form of the whole PP, for example

(4)b.  *No, on the box,*
rather than

c.  *No, the box.*

There are two focus types: **broad focus** and **narrow focus**. Broad focus includes more than one constituent. It may include all but the topic. For example, answering the question

(5)a.  *What happened to your car?*
one may utter

b.  *My car broke down.*

Here, the presupposition evoked is that the speaker’s car is a topic about which a comment can be made. Thus, the focus is the predicate *broke down.* This
subtype of broad focus is called *predicate focus*. Predicate focus is universally the unmarked focus structure.

The other subtype of broad focus is *sentence focus*. An example of sentence focus is as follows. Suppose someone asks the question

(6)a. *What happened?*

and someone else answers

b. *My car broke down.*

In this case, there is no established topic, and the entire sentence contributes to the assertion. Therefore, the focus domain here is the entire clause.

In a narrow focus structure, the focus domain is limited to a single constituent. For example, if one says

(7)a. *I heard your motorcycle broke down,*

and another person responds

b. *My CAR broke down,*

the propositional function ‘x belonging to the speaker broke down’ is part of the presupposition. The focus is *car*, and the focus domain is the whole NP, *my car*.

The morphosyntactic encoding of focus structure varies from language to language. In addition to intonation, languages typically provide some markings of focus structure. English, for example, provides the construction called ‘It-cleft’, such as

(8) *It was Robin who hit you*

to mark narrow focus. In Japanese, the particle *wa* can be used to mark narrow focus; for example,
(9) a.  *hon wa yomimasu*  ‘I read BOOKS’
as opposed to reading NEWSPAPERS, or
   b.  *hon o kai wa simasu*  ‘I BUY books’
as opposed to READING books.

RRG distinguishes the **actual focus domain** from the **potential focus domain**.
The actual focus domain is the actual focus part of the sentence, as just exemplified.
The potential focus domain is the syntactic domain in which the focus elements may occur. In English, the potential focus domain is anywhere in the clause, and the actual focus domain is primarily signaled by intonation: for example,

(10) a.  *ROBIN hit you,*
   b.  *Robin HIT you,*
or
   c.  *Robin hit YOU.*

Recognition of the potential focus domain is important for understanding various syntactic phenomena; for example, the restriction on the location where interrogative pronouns can appear.

Although English has a malleable focus structure — called the ‘Dyirbal’ of focus structure by Van Valin & LaPolla — many languages have more limited potential focus domains. Van Valin & LaPolla contend that French, Italian, and Mandarin Chinese restrict the potential focus domain for non-*WH*-words to post-verbal position within the clause, with *WH*-words the only focused elements allowed to appear in pre-verbal position. They also report that in Sesotho languages of southern Africa, all focus elements must appear in post-verbal position within the clause, including *WH*-words.
Three diagnostics are commonly used to determine the potential focus domain. One asks whether the given constituent can be the focus of a *yes-no* question as a single constituent response. As mentioned earlier, *No, on the box* can be felicitously uttered as a response to *Did you put it in the box?* This shows that the PP *on the box* is the focus domain.

The second type of diagnostics considers whether the given constituent can be replaced with a *WH*-word in the corresponding interrogative sentence. In the case of

(11)a. *Robin hit you,*

all constituents are within the focus domain because they can be replaced with an appropriate *WH*-word:

(11)b. *Who hit you?*

   c. *What did Robin do to you?*,

or

   d. *Who did Robin hit?*

And the third type of diagnostics involves the distribution of focus-sensitive elements, for example, the focus marker in Lakhota.

Given those general characteristics of focus structure in RRG, we can now turn our attention to focus structure in complex sentences. Van Valin & LaPolla argue that adverbial clauses, sentential subjects, and definite restrictive relative clauses are virtually always presupposed and, therefore, outside the potential focus domain. Van Valin proposes the principle that states:
(12) A subordinate clause may be within the potential focus domain if it is a direct daughter of, or a direct daughter of a direct daughter of, the clause node which is modified by the illocutionary force operator.

Consider the sentence

(13)a. *John told Mary that he will arrive at the party late.*

As shown in Figure 1, the subordinate *that*-clause in this sentence is a direct daughter of Clause\(_1\) and thus inside the illocutionary force operator of declaration, whose scope is Clause\(_1\). Therefore, responding to the question

(13)b. *Did John tell Mary that he will arrive at the party late?*,

one can simply say

(13)c. *No, early.*

Consider, next, the sentence with an adverbial clause

(14)a. *John saw Mary after he arrived at the party.*

The structure of this sentence is represented in Figure 2. The adverbial clause as a whole is a constituent of the main clause and can be replaced with a *WH*-word,

(14)b. *When did John see Mary?*
However, each constituent within the adverbial clause by itself is not in the potential focus domain. Therefore, it is impossible to respond to

(14)c.  *Did John see Mary after he arrived?*

with

d.  *No, he left.*

In this case, one must use the full subordinate clause

e.  *No, after he left.*

Van Valin’s principle explains well the constraints on focus elements in English. However, this principle is hardly universal. In Japanese, focus elements can appear virtually anywhere in a sentence, including in adverbial clauses, relative clauses, and in the left-detached position. Consider the sentence

(15)  *Dare to atta ato de saihu ga nai no ni kizuita no?*

‘After you met whom did you realize your purse was gone?’

This is an example of the so-called *WH*-island constraints. In English, this type of construction is possible only as an echo-question, which does not require *WH*-preposing. In Japanese, by contrast, the sentence can be uttered in a non-echo context when the speaker knows that the hearer lost her purse on a certain day, and that she met with some people on that day.

Several years ago, I discussed the sentence:

(16)a.  *Dono kyoozyu ga suisen sita hito ga saiyoo saremasita ka?*

Literal translation of this sentence into English is impossible, but

b.  *A person that which professor recommended was hired?*

illustrates the construction schematically. The presupposition of this sentence is
that some candidate was hired, and each candidate was recommended by an individual professor. One may think that the English equivalent of (16a) would be *Which professor recommended the person who was hired?* But this is not the case. The primary communicative function of (16a) is to request the identification of the successful candidate, equivalent to *Who was hired?* However, there are many ways to identify the person; for example, by her name, by her current affiliation, by her university from which she received her degree, and so forth. The questioner may not even remember all candidates’ names. So, in addition to the identification of the successful candidate, this question requests to do so in a specific way — by the name of the professor who recommended the candidate. Identifying the candidate at this level of specificity may create the implicature that the selection process potentially involved the influence of each recommending professor.

Similarly, the previous example

(17)a.  *Dare to atto ato de saihu ga nai no ni kizuita no?*

‘After you met whom did you realize your purse was gone?’ is virtually equivalent to

b.  *When did you realize your purse was gone?*

But, again, there are many ways to specify time. This question requests to specify the time in terms of the person whom the hearer met on that particular day. By relating the losing-purse and meeting-persons events, this question may implicate that one of the persons may have stolen the purse.
I have not yet investigated how commonly languages permit this type of questioning. However, as Pesetsky speculates, this phenomenon may be related to whether or not the language permits $WH$-elements in situ. Because the communicative function of such questioning is reasonable and convenient, I am certain that other languages also permit $WH$-elements to occur in various subordinate clauses. That is, in some languages, constituents within a subordinate clauses by themselves can be the potential focus domain. I, therefore, suggest that languages should be typologized according to Van Valin’s constraint on the potential focus domain in complex sentences, AND that the relationship between this constraint and $WH$-in situ should be further investigated.

Finally, we should consider the relationship between presupposition and adverbial clauses. Van Valin & LaPolla claim that the information encoded by an adverbial clause is always presupposed. It is crucial here to distinguish presupposition and old information. As mentioned earlier with

$$(18) \quad \textit{What did you do after you stole the money?},$$

an adverbial clause may not convey old information. Van Valin & LaPolla contend that an adverbial clause can evoke new information, but such information should nevertheless be taken as the presupposition necessary for interpreting the utterance.

One may consider that encoding new information by an adverbial clause is a marked case. However, Chafe reports that adverbial clauses encode new information more frequently than old information. When both main and adverbial clauses occur within the same intonation or punctuation unit, only one of them is likely to express new information, and it is the adverbial clause that typically does so. Furthermore, such an adverbial clause usually occurs after the
main clause. When two clauses are in separate intonation or punctuation units, the adverbial clause almost always expresses new information. The main clause does so too, but less frequently than does the adverbial clause.

Let us examine sentence (19). To provide the context, the sentence immediately preceding it is also presented in parentheses.

(19) (Lewes’s and Eliot’s statements reveal an awareness of the limits of mimesis and offer another criterion for the truth of representation: reference.)

*Something represents something else “truly” when it successfully refers to it.*

Here, the first sentence makes familiar the idea of ‘truth of representation’. The second sentence, consisting of main and adverbial clauses, restates this old information in the main clause. It then moves on to add new information, having to do with successful referring, in the adverbial clause. This type of sentence poses a serious challenge to the hypothesis that new information encoded in an adverbial clause is nonetheless presupposed. Such an hypothesis is plausible in the case of *What did you do after you stole the money?* because there is a salient focus element, *what*, in the main clause. However, in (19), there is no focus in the main clause. Therefore, if the adverbial clause in (19) actually encodes the presupposition, the sentence must be considered focusLESS.

Let us take another example, this time from spoken English. After narrating several events that have taken place in her life, the speaker says:

(20) but ... there were a few incidents that happened with me just because I was a foreigner.
Here, again, the main clause encodes old information, and the adverbial clause new information. And it is difficult to consider that the adverbial clause provides the presupposition necessary for processing the main clause.

I contend that a direct association of adverbial clause with presupposition is oversimplification. In some utterances, it is the content of the adverbial clause that is the focus of attention. I am, however, uncertain whether the focus here differs from the kind of focus we discussed earlier. In any case, recognition of some adverbial clauses as the potential focus domain can render motivation for them to become the main clause. To illustrate, there is the concessive noni clause in Japanese.

(21)  *denwa site kureru to omotta noni, site kurenakatta*

‘Although I expected she’d call me, she didn’t.’

Unlike (21), where *noni* serves as a clause connective, it can also appear in sentence final position.

(22)a. *denwa site kureru to omotta noni.*

(22a) is not perceived as a sentence fragment, such as

b. Although I expected you’d call me ...

but, rather, it should be translated as

c. You should have called me.

I speculate that this development of *noni* from a concessive connective to a modality marker was motivated by its potential serve as a focus domain marker in complex sentences. Details of such speculation must be worked out, and more data must be examined from this perspective.
In summary, today we have considered two issues regarding the notion of the focus domain in RRG. First, the constraint on the potential focus domain as proposed by Van Valin is not universal. Languages should be typologized with respect to this constraint. Second, a direct mapping of adverbial clauses onto the presupposition is empirically untenable. More detailed study of the nature and types of focus is needed.

References