SOCIOCOGNITIVE METAPHORM

Kent A. Hill

Thesis submitted to the University of Nottingham

for the degree of Doctor of Philosophy

School of English Studies

September 2006

Abstract

This thesis analyses tense and aspect, in particular the Aspect Hypothesis (Salaberry & Shirai 2002; Bardovi-Harlig 2000; Andersen & Shirai 1996) and introduces an approach to teaching it: sociocognitive metaphorm (SCM). *Sociocognitive* is a combination of sociocultural theory (Lantolf & Appel 1996; Lantolf 2000) and cognitive grammar (Langacker 1987, 1991). These theories are compatible because they share the psycholinguistic position that language and language development are conceptually based. *Metaphorm* is a combination of *metaphor* and *form*. *Metaphor* is central to concept development (i.e., conceptual metaphor). *Form* refers to grammatical structure. Much of temporal relations are expressed metaphorically and hence metaphor also plays an essential role in the tense-aspect conceptualisation, grammaticalisation and acquisition process.

The thesis is divided into four parts: *Developing SCM, SCM Theory, Researching SCM* and *Applying SCM*. *Developing SCM* contains a second language acquisition analysis of the Aspect Hypothesis as well as a diachronic and synchronic grammatical meta-analysis of aspect. *SCM Theory* outlines the process of integrating cognitive grammar with sociocultural theory. Vygotskian (1978, 1986) approaches to learning development, in particular, the zone of proximal development (ZPD), play a prominent role in this part. *Researching SCM* presents quantitative and qualitative results from a holistic (i.e., metaphoric) empirical classroom study designed to illuminate teaching tense-aspect as sociocognitive metaphorm as well as results from a more analytical (i.e., metonymic) follow-up study investigating the sequence and rate of acquisition of perfect aspect and future tense. The holistic study was longitudinal involving eleven different taskplans to teach grammar through metaphor. The follow-up research study analyses a

sequence of instruction based upon conceptualisation processes. The final part, *Applying SCM*, to illustrate the sociocognitive pedagogical approach to teaching grammar as metaphor, includes revised taskplans that were utilised in the empirical research part of this study. The thesis concludes with a summary of the conceptual nature of tense-aspect as well as suggestions for teaching it.

Acknowledgements

Table of Contents

1.0 Introduction

The main goal of this present study is two-fold: (1) to integrate cognitive and sociocultural approaches to language teaching and (2) to establish a relationship between metaphor and the teaching of grammar. Within language, perhaps time is the most metaphorical construct. Certainly temporal relations are difficult to describe without referring metaphorically to the spatial relations of objects. Yet, temporality has become so conventionalised within language and language teaching that it could almost be considered a dead metaphor—or even literal. The study of the expression of tense-aspect, through the periphrasis of auxiliaries and inflections, is also of value because it offers a direct way to investigate the human conceptual system. Thus, this literalisation of the conceptualisation of temporality through the conventionalisation of language is what makes tense-aspect the best candidate when researching teaching grammar as sociocognitive metaphor.

In fact, most second language (L2) textbooks present the different tenses as very literal and do not question the validity of the terms "past," "present" or "future," though to some extent it is recognised that future may not be a "real" tense. (cf. Huddleston & Pullum 2002). Indeed, the fact that L2 materials present tense-aspect as a literal and linear learning process (i.e., mapping morphology to past, present and future) when it is largely a metaphorical or metonymical one (i.e., mapping meaning to form) may prove to be one of the main contributing factors to why L2 learners commonly fail to completely master tense-aspect use.

According to the Aspect Hypothesis, which we look at in great detail in this study, learners often assign aspect according to the semantics of the verb. There is an initial

fundamental distinction between state and activity verbs and then there are further semantic distinctions according to whether each verb entails punctuality, telicity or duration. Taken from either an ego or event perspective, the discourse becomes aspectually bounded by these distinctions, which might best be understood as the true literal representation of temporality. Tense (i.e., past, present and future), as we will see, is often expressed in relation to the metaphors TIME IS SPACE and TIME IS A MOVING OBJECT. Finally, sociocultural temporal adverbial expressions (e.g., Sunday or 2:00 o'clock) may stem from a TIME IS CYCLES metaphor. Temporality, for the most part, then represents the expression of cognitive regularities we view in the environment and experience in our life cycles.

Unfortunately, the mapping of meaning to form found in the Aspect Hypothesis is notably lacking in L2 textbooks. It may be too much of an overstatement to claim that current L2 textbooks present and teach tense-aspect exactly opposite to the way that second language acquisition (SLA) research indicates it is acquired; however, it is not too much to say that, rather than correcting them, current methods of tense-aspect instruction may actually be contributing more to learner overgeneralisations and errors (Tomasello & Herron 1989). Consequently, if research into teaching grammar as metaphor proves to be significant, it also indicates that current L2-teaching methods could benefit from a reanalysis towards this perspective.

Further support for the teaching of grammar as metaphor stems from the modal conception of realis and irrealis (Palmer 2001; Comrie 1985). To a large degree our understanding of past, present and future (i.e., relevance or non-relevance of an event) is a metaphorical extension between comparing and contrasting the conceptions of realis

and irrealis (i.e., past and present are realis and future is irrealis). An analysis of aspect (Comrie 1976; Hooper & Traugott 1993; Heine 1997) also reveals similar conceptual relations in the use of periphrastic expression, though with aspect, because of the internal viewpoint of the event, there are less metaphorical and more metonymical factors involved. Finally, perhaps the main factor contributing to conventionalising (i.e., literalising) time in language is the use of sociocultural temporal adverbial phrases.

In general, temporal relations can be communicated through adverbials alone (Bardovi-Harlig 2000b). Though it does not sound native-like, we can understand:

*Yesterday, I go to the store.

Most native English speakers would take the temporal adverbial as the point of reference and try to overlook the lack of past tense agreement with the verb. This meaning-oriented expression of temporality suggests that L2 learners first learn to communicate socioculturally or lexically and then develop cognitive reconceptualisations of the L2 through analysis of grammatical periphrasis.

However, because many L2 textbooks rely so heavily on temporal adverbials to disambiguate and teach tense-aspect (e.g., *for* and *since* with the durative perfect aspect), there is not sufficient input for reconceptualisation into the L2 to occur, which results in a sociocultural, non-conceptual and literal understanding of L2 temporality. In order for learners to achieve native-like fluency, the introduction of sociocultural temporal adverbials should be kept to later stages of acquisition. In order to achieve fluency, there is first the need for the learner to develop underlying cognitive schematic differences in

temporality, created from an understanding that metaphor acts as a basic cognitive function in the temporal conceptualisation process.

Once a conceptual or cognitive understanding of tense-aspect can be expressed through correct usage of grammatical periphrasis, the learner is then more able to express tense-aspect with adverbials or in each particular sociocultural context. Furthermore, the learner has a greater chance of learning to extend tense-aspect metaphorically to other uses, for instance, to structure discourse and these uses are also very good indications of fluency, communicative competence or complete reconceptualisation of the L1 into the L2. Thus, rather than learning grammatical rules, learners should begin by linking underlying cognitive event schemata to forms and this can be achieved with a metaphorical or metonymical mapping of meaning to form. In this way, these cognitive schemata are similar to the meaning-condensation processes that occur to forms as they are grammaticalised and part of the intent of the research in this thesis is to investigate whether grammaticalisation processes are applicable to learning by individuals. In short, this thesis proposes to teach grammar through *metaphorm* (i.e., a combination of *metaphor* and *form*).

The methodology with which it proposes to do is to take what has normally been considered a sociocultural construct (i.e., the zone of proximal development) and to further enhance its cognitive aspects with what Tomasello (2003) calls *joint-attention frames*. A child's earliest skill of joint attention with her mother correlates highly with earliest skills of language comprehension and production (Tomasello 2003). Pattern-finding or categorisation skills between meaning and form emerge early in human (prelinguistic) development:

4

- the ability to form perceptual and conceptual categories of "similar" objects and events.

- the ability to form sensory-motor schemata from recurrent patterns of perception and action.

- the ability to perform statistically based distributional analyses on various kinds of perceptual and behavioral sequences.

- the ability to create analogies (structure mappings) across two or more complex wholes, based on the similar functional roles of some elements in these different wholes. (Tomasello 2003: 4)

The use of cognitive schemata to exemplify grammatical forms creates a *sociocognitive* approach to language learning (i.e., sociocultural and cognitive) that provides the appropriate interaction between meaning and form for the acquisition of language. Schemata, analogy, and joint-attention frames make teaching grammar a more holistic bi-directional process, which I refer to as *sociocognitive metaphorm* (SCM). The main tenets behind SCM and the research found within this dissertation are as follows:

- The emergence of complex grammar in an L2 learner's output in the form of correct and appropriate usage indicates that near complete reconceptualisation of the L1 has taken place in the L2.

- Reconceptualisation into L2 is best achieved not through rules or language transfer but through the use of underlying main event schemata and the metaphorical processing of these exemplifiers.

- Most, if not all, grammatical forms can be represented metaphorically or metonymically by basing them on the schemata found in grammaticalisation processes.

- Combining grammar with metaphor helps to further explain the relationship between meaning and form and create a more unified theory of semiotics.

- Second language and grammar acquisition is a knowledge-construction process occurring bi-directionally (i.e., from sociocultural-to-cognitive and from cognitive-to-sociocultural).
- Metaphor and metonymy, as cognitive functions interacting with underlying cognitive schemata, connect meaning making to form.

Each of these factors helps to integrate *socio*: i.e., language that is conventionalised through interaction; and *cognitive*: i.e., meaning-making that is mapped to form.

The following fields of language analysis influence SCM and how schemata are used to represent grammatical forms:

- Grammaticalisation processes (Hopper & Traugott 1993; Heine 1993, 1997);
- L1 development (MacWhinney 1999;Tomasello 2003);
- Cross-linguistic typological studies (Goldberg 1995; Croft 2001);
- Corpus analysis (Biber et al. 1999; Carter & McCarthy 1997).

Grammaticalisation processes are especially prominent with schemata representation but also of influence are: L1 development, in terms of determining the sequence and rate of conceptualisation and acquisition of language; cross-linguistic typological studies, especially the L2 when dealing with homogenous groups; and corpus analysis in order to determine how each form is usage-based (Barlow & Kemmer 2000).

The final goal motivating the research in this thesis is to investigate the validity of the main tenets of Processability Theory (Pienemann 1999):

- the sequence of acquisition is unalterable,
- the rate of acquisition is unalterable.

We will look at Processability Theory in much more detail where I will argue that the main problem with the validity of the theory is that the sequence and rate of acquisition is based completely on the level of difficulty of morphological agreement rules. Tomasello (2003), however, finds at least three reasons why morphological complexity is a weak link in the learning process: (1) it is typically expressed in phonologically reduced, unstressed, monosyllabic bits, (2) in some though not all cases, it carries very little concrete semantic weight, for example, the English third-person –s agreement marker, and (3) many grammatical morphemes are plurifunctional in ways that make acquisition of the full range of uses in appropriate contexts extremely difficult.

Alternatively, I will argue that the sequence of acquisition of an L2 involves the interaction of more complex sociocognitive factors, i.e., the sequence of conceptualisation, and that the level of difficulty of morphology does not necessarily represent the level of difficulty in conceptualisation. I will also suggest that, rather than sequence or rate of acquisition, distributional analysis is a better measurement of acquisition when attempting to determine the function of cognition (Tomasello 2003). In distributional analysis, syntactic categories are defined by the occurrence or nonoccurrence of their members in different types of utterances (Croft 2001).

Thus, to achieve these goals as well as attempt to wed theory, research, materials development and teaching, this thesis has been organised into four parts: *Developing SCM, SCM Theory, Applying SCM* and *Researching SCM*. The first part begins with a diachronic analysis of aspect. Then we look at conventional definitions of, and approaches to, teaching aspect (Comrie 1976; Schrampfer Azar 1989). We look at them in order to understand how aspect is currently understood and being taught. We then look

at the Aspect Hypothesis in more detail and how it relates to tense-aspect, grammaticalisation processes and schemata. To briefly familiarise the reader with the principles of the Aspect Hypothesis at this point, Vendler (1967) proposed a four-way classification of the inherent aspectual semantics of verbs: state (e.g., *know*), activity (e.g., *sing*), achievement, which is a punctual event (e.g., *lose something*), and accomplishment, which is a telic event (i.e., it has an inherent endpoint) or activity (e.g., *sing a song*). Bardovi-Harlig (2000) states the Aspect Hypothesis can be broken down into four separate claims stated in terms of grammatical aspect and its relation to lexical aspect:

1. Learners first use (perfective) past marking on achievements and accomplishments, eventually extending use to activities and statives.
2. In languages that encode the perfective/imperfective distinction, imperfective past appears later than perfective past, and imperfect past marking begins with statives, extending next to activities, then to accomplishments, and finally to achievements.
3. In languages that have progressive aspect, progressive marking begins with activities, and then extends to accomplishments and achievements.
4. Progressive markings are not incorrectly overextended to statives.

The research contained in this study hopes to shed further light on these claims. Understanding the Aspect Hypothesis also requires distinguishing between lexical aspect and grammatical aspect. Lexical aspect involves the inherent semantics of the verb, for example, *telicity* or *punctuality*, and grammatical aspect is defined as *current relevance* or *experiential* through the use of the auxiliary and the past participle.

After the diachronic analysis of tense-aspect, we look at an area related to diachronic studies: grammaticalisation (i.e., the changes a grammatical form undergoes as it becomes conventionalised). A synchronic meta-analysis of how aspect is described in most major grammars then follows. In particular, it analyses whether each grammar

includes the Aspect Hypothesis in its analysis of aspect. The meta-analysis of grammars is fairly comprehensive, though nowhere complete: Transformational (Chomsky 1965), Lexical Functional (Bresnan & Kaplan 1982; Bresnan 2001), Descriptive (Quirk et al. 1985; Huddleston & Pullum 2002), Systemic-Functional (Halliday 1994), Corpus-based (Biber et al. 1999), Cognitive (Langacker 1987, 1991), Role and Reference (Van Valin 1993) and Radical Construction (Croft 2001). Transformational and Lexical Functional are looked at somewhat in tandem because Lexical-Functional Grammar is substantially based on Transformational Grammar and also plays a prominent role in Processability Theory. The meta-analysis concludes with suggestions for revising the Aspect Hypothesis.

This meta-analysis is called "synchronic" because each grammar is still currently in use. However, they have developed from each other diachronically in a pattern which if diagrammatically depicted might look something similar to the one found in Figure 1.

Figure 1. Diachronic Sequence of Grammars

Lexical-Functional   Cognitive   Corpus-Based

SLA   Role and Reference   Usage-Based

Construction

Sociocognitive SLA
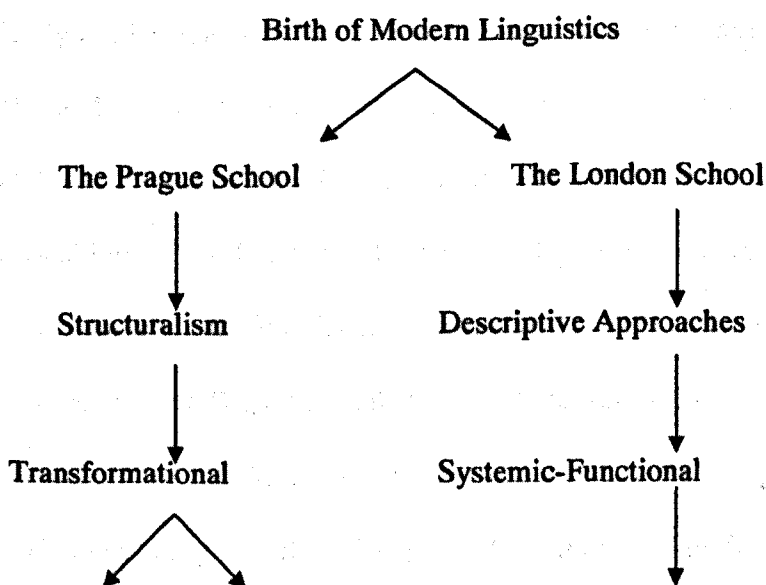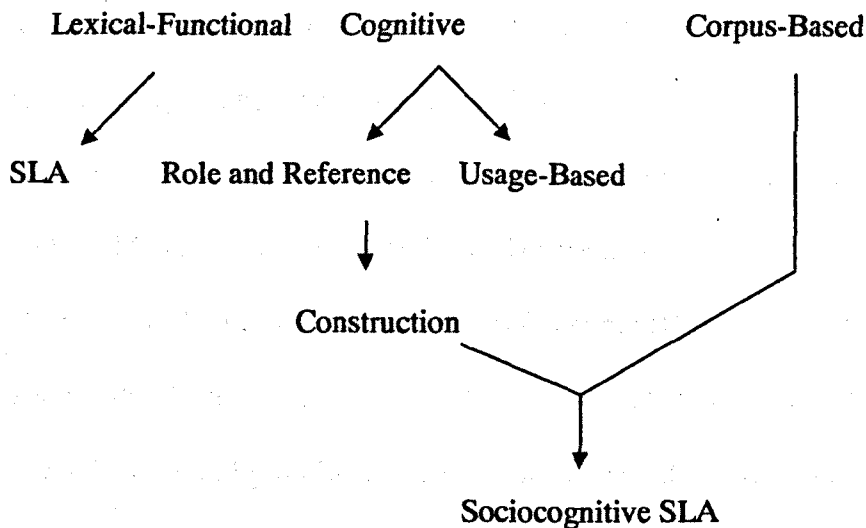
After the meta-analysis, the first part concludes with a look at how tense-aspect is

acquired in L1 and L2 as well as with an analysis of Processability Theory (Pienemann

1999). Processability Theory (Pienemann 1999) is a theory of language acquisition based

on the complexity of morphology. In brief, Bresnan & Kaplan (1982) developed Lexical

Functional Grammar from Transformational Grammar (Chomsky 1965) in an attempt to

create a "psychologically plausible" grammar, which could explain L1 acquisition. The

way Lexical Functional Grammar did this was essentially to do away with the

psychologically implausible Transformational Grammar deep structures and phrase

structure rules and replace them with equally implausible lexical-functional rules (i.e., f-

structures and c-structures). Pinker (1982) then developed a theory of L1 acquisition

based on Lexical Functional Grammar. Pienemann (1999) subsequently applied Pinker's

theory to L2 acquisition, calling it *Processability Theory*. Lexical Functional Grammar

and, hence, Processability Theory hold that ascribing tense-aspect agreement markers to

verbs is an innate ability and therefore the sequence or rate of tense-aspect acquisition is

unalterable. This reasoning, and the subsequent effect it has had on SLA research, is

another important factor contributing to the reason why much of SLA research does not adequately explain how language is acquired.

In an attempt to justify their theories, Transformational Grammar, Lexical Functional Grammar and Processability Theory fabricate rules that do not exist. For instance, according to Lexical Functional Grammar (Bresnan & Kaplan 1982), universal grammar should control acquisition of tense-aspect but Processability Theory rejects universal grammar by stating that acquisition occurs through the development of processing skills (Pienemann 1989). Moreover, as we will see, non-Lexical Functional Grammar/Processability Theory-based SLA research suggests that tense-aspect is acquired in a much different sequence than the morphological one Processability Theory proposes.

Nevertheless, many L2 learners continue to be taught according to the sequence found in Processability Theory. This may be the reason why many L2 learners overgeneralise the first forms to be introduced in the instructional sequence because, though they are not the first forms to be conceptualised, they are the most salient in morphological input. Hence, if Processability Theory were actually based on the correct sequence of acquisition (i.e., the sequence of conceptualisation), there would not be problems with overgeneralisations of forms. As we will see, through correct use of distributional analysis, overgeneralisation does not occur, the conventional understanding of the sequence of acquisition becomes alterable and the "poverty of stimulus" argument becomes a misnomer.

In the second part of this thesis, we look at the various areas of applied linguistics that have contributed to the development of SCM and the process that integrated them

into one coherent theory. The work of the Russian methodologist, Vygotsky (1978, 1986), and his followers, the sociocultural theorists (see, for example, Lantolf 2000), plays a prominent role in the development of the theory. We link his notion of development from spontaneous or everyday concepts to scientific or instruction-based concepts to the higher-level order of schemata found in our analysis of tense-aspect as well as the cognitive understanding of categorization (i.e., basic, sub and super-ordinate level categories; Ungerer & Schmid 1996). We also look at the use of metaphor and its relation to language acquisition. Metaphor, especially conceptual metaphor, has been very influential in cognitive linguistics from its inception (cf. Lakoff & Johnson 1980), but its importance has only recently been recognised in SLA (see Cameron 2003; Cameron & Low 1999a, 1999b, Low 1988). Littlemore (2001) also explored the relationship between conceptual metaphor and *cognitive style*, which involves a more holistic processing dimension (i.e., considering parts together as a whole) rather than analytic (i.e., breaking down the whole into parts). Teaching grammar as metaphor with the use of cognitive schemata can enhance non-spontaneous and hence increase dialogic grammar acquisition.

The third part of the thesis introduces revised versions of the metaphorm taskplans that were used in the empirical longitudinal research study found in the fourth part. The term *taskplan* is intended to mean the pedagogy, the plan made prior to classroom implementation (Seedhouse 2005). *Taskprocess* is the term used for what actually happens in the classroom. Originally, for holistic research purposes, grammar was not introduced with the taskplans but they have subsequently been revised to include a metonymic taskplan, which introduces the target grammar at the same point in time as

the cognitive schemata, thereby possibly enhancing the ability to map meaning to form and increase language acquisition.

By implementing the taskplans found in the third part in the classroom, the longitudinal empirical research in the fourth part of the thesis sets out to illuminate how language acquisition might occur holistically through interaction with underlying cognitive schemata for the grammatical form. The lexico-grammatical distinctions between lexical (i.e., punctual or telic) and grammatical aspect (i.e., current relevance), for example, help to reveal the metaphoric-metonymic relationships between form and meaning. Though interaction with grammatical "rules" rarely leads to reliable production of the form, the results of this initial research into teaching grammar as metaphor indicate that interaction with cognitive schemata can lead to productive use. Two smaller scale follow-up research studies also reveal that the sequence and rate of language acquisition is alterable if they are based on cognitive, rather than morphological, factors. Furthermore, they reveal that basing the sequence of acquisition on conceptual and metonymic factors can reduce overgeneralisation of forms.

Finally, along with summing things up, the conclusion of the thesis contains suggestions for the teaching of tense-aspect.

2.0 Developing SCM

This section reveals that an understanding of tense-aspect varies greatly among linguists and language practitioners. Traditionally, tense has predominated when teaching verbs, and aspect has either been combined with tense or taught secondarily. The reverse, however, is probably closer to actual tense-aspect use and its sequence of acquisition. Indeed, the inherent semantics of the verb may be the most predominant factor of all.

2.1 Diachronic Analysis of Present Perfect Aspect

Synchronic analysis of a particular form provides rich evidence of how it is used at that particular time. However, diachronic data (i.e., a historical linguistic analysis of a particular form) sheds no less abundant light on why a particular form is used today in a particular way. Additionally, comparing synchronic corpus-based data with diachronic data garners some insight into our knowledge of the grammaticalisation process and language use. Indeed, using only one kind of analysis may leave something lacking, and, as the section on grammaticalisation attempts to make clear, it is often from the underlying cognitive relations between diachronic and synchronic linguistic factors involved in the grammaticalisation process that a better understanding of the form is found.

Ideally, this diachronic analysis would be corpus-based. When I started my doctoral studies five years ago, I believe only complete concordances of Chaucer and other great writers, for example, Shakespeare, were available online. In contrast, there are presently corpora available in Latin, for any period of English, and for most languages, as

well as learner corpora of L2 learners similar to the one compiled for this study. Thus, such a corpus-based diachronic study has become a topic for a doctoral thesis of its own.

To illustrate the usefulness of doing a diachronic analysis, one realisation that quickly begins to crystallise after tracing the historical roots of a grammatical form is that universal grammar is not new to contemporary linguistics. It has been with us and debated about throughout the history of linguistics (see Leibniz 1981), since the time of (and probably before) Socrates. Indeed, Robins (1967: 36) compares universal grammar to Socrates' famous universals and points out that Aristotle was one of the first people to write about aspect. Aristotle noted that verbs have two dimensions: time reference and completion (i.e., perfective) as against non-completion or continuity (i.e., imperfective). Thus, diachronic analyses reveal that at least from the time of Aristotle grammarians have struggled with how to adequately describe aspect and its relation to conceptualisations of temporality.

That the debate about universals in language has continued for millennia, using the same grammatical terminology (e.g., *noun* and *verb*) in itself goes a long way to underscore the existence of universals in language. Unfortunately, though most linguists would agree that there are universals in language, there has been much less concord over the existence of, or need for, universal grammar. Our analysis of aspect even calls into question whether language actually does have universals or grammatical categorisation. Rather than comparing Socrates' universals to universal grammar, it might prove more productive to compare them to cognitive schemata.

2.1.1 Greek

The ancient Greeks apparently inherited the Indo-European conception of three times (and hence, by their theory of meaning, of three tenses). According to Binnick (1991: 7), the Greeks might never have elaborated the notion of tenses (as opposed to times), and their theories of tense might have been quite different, if they had not developed the concept of analogy (i.e., metaphor). However, they then had to confront the problem that the Greek language was too complex for three simple tenses. It had too many tenses: present, aorist (a type of past), and future, but also imperfect, (present) perfect, and past perfect (pluperfect):

Present	*luomen*	"we free, are freeing"
Aorist	*elusamen*	"we freed"
Future	*lusomen*	"we shall free"
Imperfect	*eluomen*	"we freed, were freeing"
Perfect	*lelukamen*	"we have freed"
Pluperfect	*eleukemen*	"we had freed"

The perfect form stems with the Greek letter kappa (*-k*) and a partial reduplication of the root syllable (often its initial consonant plus *e)* thus "I have freed," *le.lu.k'a*. The forms of stems neatly divide the tenses into those with sigmatic stems, those with a kappa/reduplicative stem, and those that use a stem with no consonant at all. By abstracting away all the irregularities of form and complexities of meaning, there is a system of tenses, which is based purely on the forms of the endings and the stems they are added to. The fact that the Greek language, like most languages, was too complex for

three simple tenses reveals that the expression of temporality in language involves much more complex factors than simply past, present and future.

2.1.2 Latin

Our look at Latin also presents a problem to language analysis which perists to the present. We know that Greek influence on the Roman grammarians was pervasive; in methods, concepts, and terminology the Romans innovated little, and Latin grammar followed Greek closely (Binnick 1991: 21). To some extent this is appropriate, for Latin, being an Indo-European language like Greek, has much in common with it. However, there was one quite large difference, which provided no end of trouble when trying to apply Greek grammar to Latin: in Latin the perfect and pluperfect were both expressed with the pluperfect ending:

scripsi: *I have written, I wrote*

The Latin grammarian, Priscian, notes that the Latin perfect is equivalent in meaning to both the Greek aorist and the (present) perfect (cited in Binnick 1991). As Priscian notes, *scripsit* is at once a primary, perfect, "he has written," and a secondary, neutral one, "he wrote" (cf. modern colloquial Latin-based French *ils ont ecrit* "they have written" and "they wrote."). More disastrously, an even more influential grammarian, Varro, had no way in his theory for dealing with the ambiguity of the present perfect (Binnick 1991). Some modern Latin grammars distinguish the two uses as perfect definite and perfect historical, respectively, noting that the latter use corresponds to the Greek aorist. As we will see Japanese is somewhat similar in occasional lack of distinction between past and

17

perfect, which causes significant L1/L2 interference when attempting to teach a language that makes the distinction, for example, English.

Though Varro's grammar could treat the perfect definite, it had no place for the perfect historical. In the Varronian grammar, the perfect represents complete action, and as a past tense would contrast with the pluperfect, which also represents completion. In Priscian's theory, on the other hand, it is possible to have two tenses, which are both past and both complete, since the past is divided into near perfect and distant pluperfect segments. The failure of both Varronian and Priscianic traditions, and, by extension, Latin grammars in general, was in their inability to cope with the apparent incompatibility between the three tenses and the morphology and syntax of the classical verb (Binnick 1991). A thousand years later in the Renaissance, these traditions were applied to the grammars of the modern languages of Western Europe, where they were even less adequate. And even today, though we have separated tense from aspect, we continue to struggle with whether aspectual notions of telicity or punctuality are inherent in the semantics of verbs or are part of the grammatical construction. Certainly, to achieve a system of normatively identical linguistic forms an analysis of temporality in language requires much more context than just the notion of three tenses.

Of note, it may be precisely because of this ambiguity in Latin grammar that we have a verb classification system today for English, which uses auxiliaries rather than simply inflectional endings. Traugott & Hopper (1993) point out that in Late Latin a shift from OV to VO word order occurred, the verb *habere* "to have" was reanalysed in post-verbal (OV) position as a future inflectional marker. As Romance languages developed, a new periphrastic complex perfect construction developed alongside of the future

inflection, replacing the earlier perfect inflection –v-; e.g., *probavi* "I have tried" by

habeo probatum (Hopper & Traugott 1993: 52). This complex perfect, like the future,

arose out of a *habere* construction, but in this case it originated in a construction

consisting of an inflected form of *habere* "to have" and a past participle that agreed with

the object of *habere*. We shall see that agreement with the object is also found in Old

English.

In Late Latin, both the future and the perfect occur in both OV and VO orders.

Hence, the shift to using *have* with the perfect may be due entirely to the change in word

order construction but it also had the result of removing the ambiguity in the tense-aspect

system of Latin. Both the future and the perfect eventually became fixed units. They

differ in that the path from *habere* to the future was via an obligative-future-oriented

sense of the verb, whereas the path from *habere* to the perfect was via the locative-

possessive-existential in transitive contexts of cognitive and sensory states (Hopper &

Traugott 1993).

2.1.3 English

Perfect aspect existed in Old English, but, as it was in the process of being

grammaticalised, it was not used as frequently or as consistently as it was later (Barber

1993: 117). Perfect aspect with transitive verbs was formed by the use of the verb,

habban, "to have" and the past participle of the verb. Originally, sentences like *He had*

broken a nose meant something like *He possessed a broken nose*; and, as with Latin, in

the Old English equivalent of this sentence the word *broken* was sometimes given an

inflection to make it agree with *nose*. Quite possibly, then, perfect aspect emerged with punctual transitive verbs, which are called *achievement* verbs in the Aspect Hypothesis.

In the 16th and 17th centuries, English underwent a reworking of its grammatical description. A start was made with a framework handed down from Latin grammarians based on the notion that Latin grammar was suitable for Old English. That English was compared to Latin grammars in these centuries still has repercussions in language teaching today (e.g., the case system). Taking Barber's (1993: 34) analysis of the King James Bible of the year 1611, we notice the word order sequence of V-S-O in *neither transgressed I...thy commandment*, and similarly V-S order in *therefore came his father out*. Regarding the present perfect aspect, the verb *to come* is formed with the auxiliary *be*, not *have*: *Thy brother is come, this thy sonne was come*, where we would say *has come, had come* (Barber 1993: 34). Brinton (1988) points out that *be* was used with intransitive verbs in an existential sense (e.g., *the man is arrived* meaning *the man exists in an arrived condition*). The existential sense is normally associated with *have*, however, which may be why *be* eventually became grammaticalised with the present participle for progressive aspect which uses *activity* verbs in Vendlerian (1967) terminology and the past for passive which are often *accomplishment* verbs.

It is with the literature of Chaucer that we see the present perfect with the auxiliary *have* begin to take permanent shape (Barber 1993): *Now han ye lost myn herte*. Furthermore, there are no examples of SOV word order, and the predominant pattern is S-V, with just one example of the auxiliary preceding the subject when the clause begins with an adverb. In a passage from Shakespeare's *Cymbaline* several examples of the perfect aspect are formed with *have*, e.g., *if he haue robd these men*. There is, however,

20

one example of the present perfect formed with *be*: *they are come to search the house.*

Perfects with *be* are common with verbs of activity (e.g., *come, enter, run*), and note that

many of these verbs also have an inherent endpoint (i.e., are telic) and therefore can also

be *accomplishment* verbs. Perhaps activity verbs occur more often with *be* in the perfect

because activity verbs normally occur in the progressive. Even with such activity verbs,

however, we also find perfects with *have*, as in *I have gone ("walked") all night* (Barber,

1993: 188). In any case, by the time of Shakespeare, perfect aspect as we know it today,

as well as SVO argument structure, has become well established.

Regarding the resultative form of perfect aspect, it quite possibly grammaticalised

from what Carey (1994) calls the adjectival form: The shift of meaning from *to have the*

book written (i.e., adjectival) to *to have written the book* (i.e., perfect resultative) is then

understandable. The former construction stresses an adjectival state resulting from a

previous action (as expressed by the past participle), and with the latter a previous action

is inherent in the result. Carey (1994) clarifies the distinction between *adjectival* and

perfect:

Adjectival
    i.   The subject is in a *have* relation with the object, which has the property of
           having been V-ed.
    ii.   The subject need not be the agent of the process.

Perfect
    i.   The subject is in a *have* relation with the completed process referred to by the
           past participle.
    ii.   The subject is the agent of the process referred to by the past participle.

According to Carey (1994), the shift from the adjectival to the perfect can perhaps best be described as a process influenced by both metaphor and pragmatics: metaphor acts as a constraining device by insuring the image-schematic structure between target and a reference point; meanwhile, pragmatic forces direct how the two components of the *have* relation shift reference to meanings already in the contextual situation.

After the resultative form, we then see the current relevance and experiential perfect forms emerge. Carey (1996) argues that the difference in the historical frequency patterns between mental state and perception verbs is consistent with the following account of their respective roles in the grammaticalisation process. Mental state verbs (e.g., *know*) play a role early on in the process conventionalising the resultative sense. Perception verbs (e.g., *recognize*), on the other hand, help to bring about the first current relevant uses of the construction. Perception verbs help bring about the first step in the resultative to current relevance shift by increasing the salience of the anterior event in the conceptualisation and starting to widen the semantic distance between the anterior event and the resultant state. However, the experiential resultant states are produced by up-to-the-present lifetime experiences that help first associate up-to-the-present temporality with the construction. As the focus shifts from the final resultant state to the up-to-the-present events that produced it, up-to-the-present adverbials begin to appear with the construction.

In sum, diachronic analysis of grammaticalisation processes can provide helpful clues into possible processes leading up to the complete conceptualisation of perfect aspect (i.e., both lexical and grammatical). These processes can then be recreated and metaphorically depicted with the use of cognitive schemata. Since cognitive development

lays the foundation for linguistic development, activating cognitive schemata built-up prelinguistically facilitates language acquisition (Behrens 2001). Hence, these cognitive schemata are potentially applicable to the L2 classroom. Finally, a diachronic analysis of this kind reveals that during the grammaticalisation process English has used different verbs for auxiliaries (e.g., *be* or *have*) as well as had various word orders. Hence, when teaching modern English forms, we are really teaching a form in its current diachronic and/or sociocultural usage. Indeed, L2 learners' interlanguage forms quite often resemble the auxiliary use or word order constructions of previous times, again revealing similarities between language acquisition, grammaticalisation processes and L1/L2 cross-linguistic analysis.

2.1.4 Slavic Aspect

The study of aspect has been likened to a dark and savage forest full of obstacles, pitfalls, and mazes, which have trapped most of those who have ventured into it (Binnick 1991). One further obstacle with English aspect is the borrowing of the term from Slavic languages. As we noted, Aristotle was aware of the difference between the perfective and the imperfective. Varro, however, is usually understood to have arrived at something like the modern conception of aspect: the Latin imperfect represents an action, which is incomplete (imperfectus), while the perfect represents a completed action (perfectus) (Binnick 1991). Nonetheless, however ancient the concept is, the term, *aspect*, is fairly recent. According to the *Oxford English Dictionary*, it appeared in English for the first

time in 1853. It was borrowed early in the 19th century into the Western grammatical tradition from the study of Slavic grammar.

The term is a loan translation from Slavic. Because aspectual marking in Slavic is overt and fully grammaticalised and forms a relatively simple system (i.e., in Russian there is only an opposition of two aspects, as opposed to the three-way split exemplified by imperfect-pluperfect-aorist in Greek), Slavic aspect is often taken to be the prototypical exemplar of aspectual systems. Although there are superficial similarities between the prototypical exemplar of Slavic aspects, the aspects of ancient Greek, and the expanded tenses of the modern Germanic and Romance languages, there are also important differences. Thus, when the Slavic notion of aspect was borrowed into Western grammatical thought, there began a long debate concerning the universality of aspectual categories (Binnick 1991), of which little could be found—calling into doubt the existence of universals of any kind.

According to Binnick (1991), the study of aspect was doomed to failure as long as scholars failed to recognise that the aspects, like the tenses, form a system. Only in the 20th century, with the advent of structuralism, was this recognised. The theory of oppositions (cf. metaphor and metonymy), which came out of the work of the early structuralists, especially Saussure and the Prague School linguists and, above all, Jakobson, provided a great advance in understanding aspect: i.e., the notion of aktionsarten. In any event, as we have traced the development of perfect aspect from Greek to the present, we have witnessed how Latin, English and Slavic have influenced the shape of its present form.

2.1.5 Aktionsarten

The final important factor in this diachronic analysis of aspect is *Aktionsarten* or "kinds of action." Aktionsarten involves different semantic categories created to base sets of aspect. Aktionsarten include the perfective, with two subspecies: (1) inchoative or ingressive verbs having to do with the moment of entering into a state (e.g., *turn pale*), and (2) resultative verbs (e.g., *kill*), the imperfective or durative, the iteratives, but also intensive verbs indicating the intensity of the action (e.g., *carve* as *to cut strongly*) (Binnick 1991). Aktionsarten can be problematic in this sense if words are thought to belong to different grammatical groups because of their semantics (again calling into question the existence of universals or a system of normatives in language). Comrie (1976) may have tried to avoid this lexico-grammatical problem by labelling Aktionsarten as four different grammatical kinds of perfects (i.e., perfect of result, experiential perfect, perfect of persistent situation and perfect of recent past). However, they are still very similar to what various grammarians have termed aktionsarten: i.e., completive, resultative, states, achievements and accomplishments.

Perhaps rather than attempting to make semantic distinctions more grammatical, it might have been better to point out the lexico-grammatical cline in the relationship between meaning and form. The central point is that Aktionsarten, as it has come to be used, is *not* the same thing as grammatical aspect (i.e., current relevance or experiential). Rather, aktionsarten represent lexical aspect and include the perfective, with two subspecies: (1) inchoative or ingressive verbs having to do with the moment of entering into a state, and (2) resultative verbs, the imperfective or durative, and, iterative.

As we will see in the comparative analysis with Japanese, categorising words according to Aktionsarten can be useful to discover which verbs are used mainly with perfective or imperfective aspect. However, if all the kinds of Aktionsarten are involved with the perfective then it becomes more of a challenge to understand how the inherent semantics of the verb affects the grammatical construction. One method of illuminating this is by looking at how underlying event schemata metonymically link the semantics of verbs to their grammatical constructions. Aktionsarten groups or various kinds of lexical aspect are very closely related to the underlying event schemata involved in the perfective conceptualisation process. In the next section, we look at how Aktionsarten have been reinterpreted into the Aspect Hypothesis.

2.1.6 The Aspect Hypothesis

The two distinctions of aspectual choice have already been mentioned several times: that of inherent lexical aspect (i.e., situation aspect) and grammatical aspect (i.e., viewpoint or discourse aspect). Additionally, within the lexical aspect distinction there is a further four-way division: The Vendlerian Four-Way Classification. The four-way distinction, which is based on temporal properties of the verbs, can be captured in the following way:

1. *States* persist over time without change (e.g., *want*, *desire*, and *possess*), + durative, - dynamic.
2. *Activities* have inherent duration involving a span of time and have no specific end point (e.g., *run*, *walk* and *swim*), + durative, + dynamic.

3. *Achievements* are punctual in that they are reduced to a point (e.g., *recognize someone* or *realize something)* or ingressive viewpoint.

4. *Accomplishments* are telic in that there is an inherent endpoint (e.g., *paint a picture* or *build a house)* or egressive viewpoint.

Three features distinguish the Vendlerian categories: [+/- punctual], [+/- telic] and [+/- dynamic]. The feature [+punctual] distinguishes achievements from all other verbs. The feature [+ telic] distinguishes predicates with endpoints (e.g., *sing a song*) from those without (e.g., *sing*), and so distinguishes achievements and accomplishments from activities and states. The feature [+dynamic] distinguishes dynamic predicates from states (Bardovi-Harlig 2000b). The roots of this classification dates back to Aristotle (1933), and it has been elaborated on since by philosophers such as Dowty (1979) and Mourelatos (1981), who developed the classification schemata further.

2.2 Grammaticalisation

According to Hopper & Traugott (1993), Antoine Meillet coined the term *grammaticalisation.* He was an Indo-Europeanist who had been a student of Saussure. It is only in the course of the recent decades, however, with the development of new paradigms such as cognitive linguistics and grammaticalisation studies that some of the dynamics underlying language structure has come to be rediscovered (Heine 1993: 4). Grammaticalisation is of course related to diachronic analyses of form, but where grammaticalisation differs is that it attempts to also provide the cognitive or conceptual processes involved in the diachronic linguistic process.

Grammar can be described as the conventionalised product of earlier patterns of less-constrained language use (Heine 1997: 5). Often the etymology of the linguistic form is buried in the darkness of history, while the structural characteristics on which these forms were built are still recoverable. In this sense, grammaticalisation is quite similar to the diachronic changes undergone by idioms. The idiomatisation process is a *semantic* fossilisation but the grammaticalisation process is more of a *schematic* one. Basically, grammaticalisation theory begins with the observation that grammatical morphemes develop gradually out of lexical morphemes or combinations of lexical morphemes with lexical or grammatical morphemes (e.g., from lexical to grammatical aspect). The process by which this occurs exhibits a number of characteristics that are regular over independent instances in grammaticalisation (Bybee et al. 1994: 4).

This does not mean that language can be explained satisfactorily with reference to linguistic variables only; also required are extra-linguistic parameters relating to how we perceive the world around us and how we utilise the linguistic resources available to us to conceptualise our experiences and to communicate successfully (Heine 1993: 3). Grammaticalisation studies are not only a means of relating present language states to past situations. By proposing generalisations on past development they also allow us to predict future developments (Heine 1993: 124). Heine (1997) insists that if we fail to reconstruct the motivation for a particular form, as is frequently the case, then we must assume that this is due to our ignorance. Concluding that no motivation exists because it cannot be found runs the risk of turning ignorance into a scientific dogma (Heine 1997: 147).

Grammaticalisation has an interesting way of combining the cognitive with the sociocultural or the intra- with the inter-psychological planes. Successful speaker-hearer interaction depends upon the conceptualisation processes on which communication is built. In addition to dealing with speaker-hearer interaction, the study of the cognitive motivation underlying the development of grammar must be concerned with the strategies used for understanding the world around us. Grammar, Heine (1997) argues, is the result of an interaction between conceptualisation strategies (i.e., cognitive) and communication strategies (i.e., sociocultural). Conceptualisation strategies are employed, for example, to conceive of spatial relations in terms of physical objects and nonspatial relations, such as temporal ones, in their own or spatial terms (e.g., tense-aspect). This strategy may be recruited for communication purposes, for structuring discourse or for pragmatic purposes (e.g., politeness language and the relationship between distancing of body-parts and the distancing of past tense).

There is a definite similarity between Heine's cognitive conceptualisation, communication strategies and, as we will see, Vygotsky's (1978) sociocultural intra-/inter-psychological planes. Both agree on the importance of body-part relations to language; Heine in the sense that body-parts form the cognitive basis for the communicative extension of schemata; and Vygotsky in the sense that gestures form a basis for sociocultural communication. Vygotskian developmental concepts such as inner speech and speaking in one-word sentences or holophrases [i.e., whole-to-(body)-part] may also be considered as predicated expression of these source schemata. Our inner speech is inter-psychologically constructed and therefore remains nearest to underlying cognitive schemata. Finally, grammaticalisation is a creative process. The desire to be

creative or expressive constitutes a major incentive for introducing new grammatical categories, and creative strategies such as metaphor and metonymy play a fundamental role in this process.

2.2.1 Metaphor and Metonymy

Another attractive point about grammaticalisation is that metaphor and metonymy underlie the process (Hopper & Traugott 1993). Metaphorical change involves analogising, holistically specifying one thing in terms of another not present in the context. Metonymic change, on the other hand, involves specifying one meaning in terms of another that is present in the context, even if only covertly. Heine et al. developed a theory of grammaticalisation within a conceptual framework by means of the metonymic-metaphorical model in Figure 2.

Figure 2. The Metonymic-Metaphorical Grammaticalisation Model (cited in Klausenburger 2000)

Motivation by cognition

↓

Problem solving

↓

Creativity

↓

Source -> Target (unidirectional)

↓
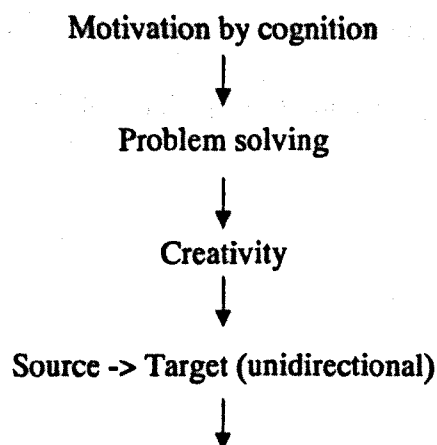
Metaphorical abstraction

↓

Grammaticalisation chain:

PERS> OBJ > ACT > SPACE > TIME > QUALITY

Metaphor + Metonymy

↓

Grammaticalisation

↓

1. Metaphorical leaps (psychological)
2. Metonymic leaps (pragmatic)

↓

Parameters:

1. Metaphor
2. Context
3. Creativity

↓

MACRO-STRUCTURE

MICRO-STRUCTURE

In the meta-analysis of grammars, Role and Reference Grammar (Van Valin 1993) has similarities between the grammaticalisation process presented here and the linking of semantics to syntax. These similarities aid in further integrating cognitive and sociocultural approaches to our understanding of language acquisition. Indeed, they suggest that they may also be related to the process of conceptualisation.

2.2.2 Unidirectionality

Most scholars of grammaticalisation note that the process is a unidirectional one. Hopper & Traugott (1993) define unidirectionality as the basic assumption that there is a relationship between two stages *A* and *B*, such that *A* occurs before *B*, but not vice versa. In general, unidirectionality extends from, for example, concrete to abstract, animate to inanimate or from body-part to spatial orientation. In short, though the grammaticalisation process appears to involve loss of semantic meaning in the grammaticalised reanalysis of meaning, the general unidirectional result is a condensation of meaning (e.g., from lexical to morphological) or from meaning to *more* meaning making. Indeed, the Aspect Hypothesis is a good example of unidirectional extension from schemata to semantics and finally grammar, though Shirai (2004) found that the extension from one aspect to the other three, as predicted by the Aspect Hypothesis, was not unidirectional. In any case, this unidirectionality of conceptualisation—as opposed to complexity of morphology—should be applied to the current SLA context of research and the *form-meaning* connection (Van Patten et al. 2004) should be reversed to the *meaning-form* connection.

Unidirectionality is appealing on the one hand because it suggests a language universal and that metaphor and metonymy underlie the grammaticalisation process. Unidirectionality could then also provide support for suggesting that schemata are the true deep structure of language and that grammaticalisation processes represent transformations. On the other hand, unidirectionality should not be interpreted as being linear (i.e., a non-dynamic system); rather than being linear, unidirectionality may in fact be usage-based. To illustrate, unidirectionality does not result from cognitive strategies

alone but also from discourse production strategies from speaker-hearer meaning negotiation. Hence, it too operates on the inter- and intra-psychological planes. Indeed, distributional analysis can account for the fact that over time certain linguistic properties may simply not be felt to serve communicative purposes any more and can therefore be consciously or unconsciously eliminated (Hopper & Traugott 1993: 207). Thus, communicative purpose can halt, alter or reverse the unidirectional intra-psychological grammaticalisation process. In this way, grammaticalisation represents to a large extent the sociocognitivisation of language.

2.2.3 Grammatical Schemata

That grammar metaphorically expresses tense through spatial relations is commonly accepted. That spatial deictic relations are based on a cognitive understanding of body-parts has not yet been as widely accepted. Heine (1997) claims the human body is very significant for shaping conceptualisation and communication. He argues that the extension from body-part to spatial concept involves four stages:

1. *Stage 1* – a region of the human body: e.g., *It's on his back.*
2. *Stage 2* – a region of an (inanimate) object: e.g., *It's on the back of the car.*
3. *Stage 3* – a region in contact with an object: e.g., *It's against the car.*
4. *Stage 4* – a region detached from the object: e.g., *It's behind the car.*

Initially, it may be that the language concerned makes simultaneous use of both the anthropomorphic (i.e., human) and the zoomorphic (i.e., animal) models. In such a language one might find two expressions for *on*, one derived from *head*, in accordance with the anthropomorphic model, and one derived from the body-part *back* in accordance with the zoomorphic model.

Most attribute structures are metaphorical (e.g., *A is B*) and most possession structures are metonymic (e.g., *A has B*). Heine (1997) argues possession in human conceptualisation is expressed metonymically, and expressions for it are derived from more concrete domains. These domains have to do with basic joint-attention frames relating to what one does (i.e. *action*), where one is (i.e., *location*), by whom one is accompanied (i.e., *accompaniment*), or what exists (i.e., *existence*); and these domains greatly influence how the auxiliary *have* metonymically maps these event schemata for grammatical aspect.

Of interest, Heine (1997) begins with a schema and ends with the resulting grammar. Heine (1993) claims most of the auxiliaries used for the expression of tense-aspect in the languages of the world can be traced back to ten basic event schemata. What is perhaps even more noteworthy is that the same concrete source schemata are always recruited as structural templates for the expression of more abstract meanings. Thus, schemata like *action, location, accompaniment,* or *existence* can be expected to provide the most convenient and the most frequently employed templates for expressions of grammatical categories like perfect/anterior, progressive and comparative. We will need to look further for the schemata for punctuality, telicity and duration.

2.2.4 Tense-Aspect Schemata

What distinguishes the following event schemata from others is that on the basis of cross-linguistic generalisations these analogies have been found to be the main ones responsible for expression of tense-aspect.

a.	*X is at Y*	Location
b.	*X moves to/from Y*	Motion
c.	*X does Y*	Action
d.	*X wants Y*	Volition
e.	*X becomes Y*	Change-of-state
f.	*X is like a Y*	Equation
g.	*X is with Y*	Accompaniment
h.	*X has Y*	Possession
i.	*X stays in a Y manner*	Manner

In brief, it is possible to see grammatical aspect (i.e., current relevance and experiential) and to some extent lexical aspect (i.e., telic) emerge from the grammaticalisation process as follows:

1. *Location->Current Relevance*
2. *Possession->Experience*
3. *Change-of-State->Resultative*

In the grammaticalisation process, the conceptual shift precedes morphosyntactic shift. The following morphosyntactic correspondences can roughly be established: At the first stage, verbs are likely to be referred to as lexemes or full verbs, at the second stage as quasi-auxiliaries, semi-auxiliaries, or catenatives, while the third stage is most strongly

35

associated with the notion of auxiliary, the fourth stage with either auxiliary or affix status, and, lastly, the fifth with that of affixes and inflections (Heine 1993). This sequence may also be related to the sequence of conceptualisation (e.g., perhaps correct use of the inflection indicates complete reconceptualisation in L2). As the results of the research in this study suggest, the grammaticalisation process for present perfect aspect may have also shifted along similar lines as its sequence of conceptualisation, i.e.: (1) resultative perfect (2) accomplishment perfect (3) achievement perfect (4) current relevance perfect (5) experiential perfect and, finally, (6) durative perfect.

2.3 Synchronic Meta-Analysis of Present Perfect Aspect

Let us now turn to what is a more in-depth analysis, the synchronic meta-analysis of present perfect aspect—though it could never be called completely synchronic. Since each grammar is based on principles from previous grammars before them, to some extent a synchronic analysis is not completely abstracted from history and unavoidably remains somewhat diachronic. At the same time, as many of the results from the diachronic study have been published recently, rather than being the "relations between successive synchronies" (Matthews 2001: 15), diachronic results blend in with synchronicity. Nonetheless, it is hoped that the results of this study are of interest, both for the teaching of tense-aspect and for doing meta-analyses.

In previous times, most grammarians were text linguists and wrote grammars based solely on analysis of text. The students who read them were asked to believe, for

instance, that it was the "definitive" explanation of the language. In other words, that there was really only *one* grammar of the English language and, that this grammar could make prescriptions on language use. In the 20th century, there was not much otherwise, although, with the appearance of linguistics and then applied linguistics, it might be said that the number of grammars proliferated and students were no longer told that each grammar represented *the* definitive way language functioned but that each particular grammar was the way one linguist (or group of linguists) interpreted the function of language. Thus, though in actuality various grammars existed in previous times, we may be more comfortable now with grammars that are prefaced with terms such as *transformational, functional* or *corpus-based* and we no longer refer to the "definitive" grammar but to how each contributes to our overall understanding of language. Perhaps in the future we will see each grammar being examined more in regards to whether it agrees with theories of L1 or L2 acquisition or neurolinguistics and brain development (cf. Lexical-Functional Grammar).

In any case, the increase in the types of grammars has subsequently created the need for, and execution of, a new but inevitable linguistic undertaking: a synchronic meta-analysis of existing grammars for a particular linguistic form. Recently, research synthesis has developed into a science of its own right. Norris & Ortega (2000: 425) state that to "enable precise analysis and interpretations of primary research findings, particular focus within research synthesis literature has been given to methods for quantitative meta-analysis."

The fundamental premise of meta-analyses is that all available primary research findings, typically in the form of basic descriptive statistics, provide data for estimating

the overall observed finding about a given treatment or condition across studies sharing a research focus. If we apply this synthetic-research-process principle to grammars and focus on a specific linguistic form within the grammatical linguistic literature, then there may be good reason to believe that such a synthesis process would also produce the best overall understanding of the form. Combining and comparing each grammatical theory gives a potentially more accurate picture of our current understanding of the form. Furthermore, determining which grammar provides the best explanation for the form is also quite a good indication of the best grammar.

Most of the major current English grammars in use today, and how they describe present perfect aspect, are represented in this meta-analysis. Specifically, each grammar is analysed according to whether it makes a distinction between the four Aspect Hypothesis verb types (i.e., state, accomplishment, achievement and activity), lexical aspect (i.e., telicity and punctuality) and grammatical aspect (i.e., current relevance and experiential). Each grammar is also analysed as to whether they sequence these aspectual distinctions and whether they use any diagrams or visual representation, which can be developed to support the use of cognitive schemata. The sequence of grammars in the meta-analysis reflects the diachronic influence of each: we begin with Transformational-Generative because it has been the most influential to modern linguistics and then proceed to Lexical-Functional because it is directly descended from Transformational-Generative. We then switch focus to Descriptive, Systemic-Functional, and Corpus-Based grammars before ending with Cognitive, Role and Reference, and Radical Construction Grammar.

The final, and possibly most important, purpose of doing a synchronic linguistic analysis of present perfect aspect is to develop a better pedagogical syllabus for teaching it, making use of not just one but all grammars. Apart from the efforts of a few cognitive-oriented practitioners (e.g., Lindstromberg & Boers 2005; Holme 2004), pedagogical grammars thus far have presented a too literal or linear conception of tense-aspect, focused mostly on conventionalised texts of language when, in order for students to reduce reliance on L1 transfer and construct form, it is necessary for teachers to present the conceptual foundation of tense-aspect through its underlying schemata. Prior to the meta-analysis and suggesting a different syllabus for teaching tense-aspect, more background is necessary by providing conventional definitions and approaches to teaching it.

2.3.1 General Definition of Tense-Aspect

In *A First Dictionary of Linguistics and Phonetics*, Crystal (1985) defines a verb rather conventionally as:

> A term used in the grammatical classification of words, to refer to a class traditionally defined as "doing" or "action" words (a description which has been criticized in linguistics, largely on the grounds that many verbs do not "act" in any obvious sense, e.g. *seem, be*). The formal definition of a verb refers to an element, which can display morphological contrasts of tense, aspect, voice, mood, person and number. Functionally, it is the element, which, singly or in combination with other verbs (i.e. "verb phrase"), is used as the minimal predicate of a sentence, co-occurring with a subject, e.g. *be/came*. (374)

He then differentiates a verb phrase from a verb:

> The term verb phrase is used in two senses. Traditionally, it refers to a
> group of verbs which together have the same syntactic function as a single
> verb, e.g. *is coming, may be coming,* and *get up to.* In such phrases (verbal
> groups, verbal clusters), one verb is the main verb (the lexical verb) and
> the others are subordinate to it (auxiliary verbs). A verb followed by a
> non-verbal particle (similar in form to a preposition or adverb) is generally
> referred to as a phrasal verb.

The remainder of the definitions for tense-aspect rely on Comrie (1976). As Comrie
(1976: 11) points out, different linguists quite often use the same terms to mean quite
different things, resulting in much confusion. Therefore, it is important from the outset to
be very clear how each term is intended.

2.3.1.1 Tense Definition

Though not all languages distinguish three tenses, or distinguish tense at all, the most
common tenses found in languages are present, past, and future. A situation described in
the present tense is located temporally as simultaneous with or around the moment of
speaking (e.g. *John is singing*); whereas one described in the past is located prior to the
moment of speaking (e.g. *John sang, John was singing*); finally, one described in the
future is located subsequent to the moment of speaking (e.g. *John will sing, John will be
singing*) (Comrie 1976: 2).

2.3.1.2 Aspect Definition

Tense is used to locate a situation temporally. Aspect is quite different from this. The difference between *he was reading* and *he read*, is not one of tense, since both cases are absolute past tense. In general, the definition of aspect takes the formulation that "aspects are different ways of viewing the internal temporal constituency of the situation" (Holt cited in Comrie 1976: 3). That is, whether an event is complete (i.e., perfective) or incomplete (i.e., imperfective).

2.3.1.3 Perfect Aspect

When the totality of the situation referred to is without reference to its internal temporal constituency (i.e., the whole situation is presented as a single un-analysable whole, with beginning, middle, and end rolled into one) and no attempt is made to divide the situation up into the various individual phases that make up the action of entry then verbal forms with this function are said to have *perfective* meaning, and where the language in question has special verbal forms to indicate this, it has *perfective aspect* (Comrie, 1976: 3). Additionally, Comrie (1976: 56 – 61) separates perfect aspect into four different types:

2.3.1.3.1 Perfect of Result

In the perfect of result, a present state is referred to as being the result of some past situation: this is one of the clearest manifestations of the present relevance of a past

situation. Thus, one of the possible differences between *John has arrived* and *John arrived* is that the former indicates persistence of the result of John's arrival, that is, that he is still here, whereas the second does not. The past event is bounded with the current focal point of consciousness. However, the activity no longer holds. In other words, by imbuing the past event with present relevance, an accomplishment or achievement perfect becomes resultative and attains a current relevance meaning.

2.3.1.3.2 Experiential Perfect

The experiential perfect indicates that a given situation has held at least once during some time in the past leading up to the present. A useful illustrative example in English is the distinction between *be* and *go* in sentences like *Bill has been to America* and *Bill has gone to America*, since English here makes an overt distinction between the experiential perfect and the perfect of result. *Bill has gone to America* is perfect of result, and implies that Bill is now in America, or is on his way there, this being the present result of his past action of going to America. In *Bill has been to America*, on the other hand, there is no such implication; this sentence says that on a least one occasion (though possibly on more than one) Bill did in fact go to America. Indeed, given a more cognitive analysis (i.e., relying on the possession schema for the auxiliary), in the case of *been* one might say that Bill possesses the experience of going to America. In the examples of the experiential given so far, the time being referred to (which must have held at least once) has included the whole of time up to the present; thus *Bill has been to America* places no restriction on when Bill went to America, other than that it was sometime before the present.

It is possible to restrict the period of time by specifying an earlier limit, in addition to the necessary later limit of the present moment, as in *Bill has been to America since the war*, which says that Bill has been to America at least once in the period between the war (i.e., the earlier limit) and the present moment (i.e., later limit). That is, there is a cause-and-effect relationship between the war and Bill's being in America, which creates the boundedness of the grammatical aspect schema. Finally, contrary to conventional grammar teaching, it may be that the durative prepositions *since* and *for* do not occur with all types of perfect but, as should be more commonly understood to disambiguate each perfect aspect type, with mainly the experiential perfect and the next perfect, the perfect of persistent situation (i.e., the durative).

2.3.1.3.3 Perfect of Persistent Situation

Another use of the English perfect is to describe a situation that started in the past but continues or persists into the present, for example: *We've lived here for ten years*. Many other languages use the present tense in this case and we can see that the choice of persistent situation is closely tied to the inherent semantics of the verb choice (i.e., state or telic). As we will see, the durative form is the last to emerge in L1 acquisition.

2.3.1.3.4 Perfect of Recent Past

In many languages, the perfect may be used when the present relevance to which the past situation is referred is simply one of temporal closeness. In other words, the past situation

is very recent. In English, the general constraint against combining the perfect with a specification of time does not hold when the time specification is the adverb *recently* or one of its close synonyms: *I have recently learned that the match is postponed, Bill has just (this minute) arrived.* The perfect does not in general necessarily imply that the past situation is recent, since present relevance does not necessarily imply recentness. However, while present relevance does not imply recentness, recentness may be a sufficient condition for present resultative. Or perhaps, by using the notion of recent past in relation to a punctual event, we can see more clearly how present perfect aspect represents an intermediary conceptual domain between, but still related to, present and past tense. In this sense, as we will see, it is very similar to the future use of *going to*.

2.3.1.4 Four Perfects or Lexical Aspect?

Brinton (1988) points out that the interaction of the perfect with aktionsart or lexical aspect leads to a rejection of the idea that there are different types of perfects. In actuality, she shows that it is possible to conflate the four recognised types of perfects into two (i.e., resultative and experiential). In summation, by simply dividing aspect into two categories (i.e., current relevance and experiential), avoiding the semantic categories for telic and punctual verbs, which should be added to the understanding of resultative, as well as relying on durative (i.e., *for* and *since*) and recent past adverbials (*just*, *already*, and *recently*), Comrie's analysis avoids the issue of the lexico-grammatical relationship between the semantics of verbs and perfect aspect (i.e., the Aspect Hypothesis). It is possible to make a similar conclusion of the analysis of the pedagogical grammar

(Schrampfer Azar 1989) to which we look next. Prior to doing so, however, we look at

how Comrie disambiguates the terms perfect and perfective.

2.3.1.5 The Difference Between Perfect and Perfective

The terms *perfect* and *perfective* are used in very different senses from one another.

Perfective contrasts with *imperfective*, and denotes a situation viewed in its entirety (e.g.,

punctuality or telicity). By contrast, the term, perfect, refers to a past situation, which has

present relevance, for example, the present result of a past event (e.g., *He has broken his

nose*). Perhaps the distinction could be better disambiguated by saying that perfective has

an inherent completive meaning, whereas perfect has a current relevance meaning. Or

better yet, perfective refers to lexical aspect, whereas perfect refers more to grammatical

aspect and the grammaticalisation process it underwent.

Comrie (1976: 12) states that this terminological distinction (i.e., perfect and

perfective) stems from Slavonic languages (i.e., the prototypical aspectual form), where

both of these oppositions, perfective/imperfective and perfect/nonperfect, are

grammaticalised. In many recent works by English-speaking linguists, however, there has

been an unfortunate tendency to use the term *perfective* for what is actually meant by

perfect. This tendency is particularly unfortunate when it leads to conceptual confusion,

such as the view that Slavist perfective is the same as perfect in English.

We will look at the indeterminacy of grammatical categories (as opposed to

misapplication of them) during the meta-analysis of grammars as well as point out the

similarity in confusion between the terms, *state* and *stative*. Finally, that the perfective

meaning of aspect is rarely explicitly distinguished from perfect in pedagogical grammars

is also disappointing because it is one of the first forms to emerge in the Aspect

Hypothesis. By contrast, the durative perfect (i.e., *for* and *since*) can be found in most

grammars, yet it is the last to emerge in L1 acquisition (Slobin 1994). This inverted

method of instruction can result in overgeneralisation of forms (e.g., the durative).

2.3.2 Conventional Grammar

We begin this review of grammars where we hope to end it: in a pedagogical context.

Many practitioners will already be familiar with the use of timelines to structure tense-

aspect. Timeline diagrams have become deeply rooted in pedagogy and in most

practitioners' minds. Thus, they serve as an appropriate point of departure for the

different approaches and theories in this meta-analysis of grammars as well as provide an

appropriate contrast for the introduction of cognitive schemata to teaching grammar.

Pedagogical grammars (cf. Ellis & Gaies 1999, Swan & Walter 2001, inter alia) are

intended for learners of English. Surveys of pedagogical grammars, as opposed to meta-

analyses, have been done before and therefore one is not necessary here. Pedagogical

grammars are typically based on the author's own linguistic theories and unless

specifically stated have no relation to the reference grammars in this meta-analysis. For

instance, Schrampfer Azar (personal communication) found Quirk et al. (1985) too

arcane for her students' purposes and Chomsky (1965) not pedagogically pragmatic.

Unless the writer is a linguist or researcher, pedagogical grammars also often have no

relation to research into language acquisition, though this is changing, see, for example, corpus-based pedagogical grammars (e.g., Carter, Hughes & McCarthy 2000).

Pedagogical grammars usually have their own syllabuses and consequently theories of grammar are not always explicitly stated. They are also quite often designed in a workbook format through which the learner works individually. In most cases, the learner is given a short explanation or description of a grammatical form and then must complete a series of exercises designed so that she will be able to learn the form. Thus, all grammatical knowledge construction occurs between the individual and the materials. That said, should teachers choose to adopt the textbook in their classrooms, they could either teach directly from the text as students work through it or develop their own lesson plans to accompany it.

Schrampfer Azar's (1989) use of timelines (henceforth referred to as the timeline approach) to represent tense-aspect exemplifies the standard with conventional approaches to teaching grammar. By "conventional" what is meant is the same meaning as that found in the term "conventional language." This is an agreed upon use of language manifested by a sociocultural group. Schrampfer Azar (personal communication) was not the first to use the linearity of timelines to represent tense-aspect. Additionally, without some other way to depict tense-aspect, it can be difficult to avoid using timelines when teaching it. The difficulty that arises with using them, however, is that, although tense may be adequately represented spatially on a timeline, it is not possible to say the same about the complexity of aspect, especially lexical aspect. Thus, the use of timelines succeeds in showing how the system of tense-aspect is abstractly organised but it does not reveal how the inherent temporal qualities of the verbs motivate tense-aspect choice.

In order to represent tense-aspect more conceptually and less abstractly (i.e., beyond two dimensions), I suggest replacing the linear metaphor of the timeline with the idea that tense-aspect can best be represented through the use of cognitive schemata.

2.3.2.1 Timeline Approach Methodology

Schrampfer Azar (1989) represents time on x-y axis two-dimensional charts depicting "now" as the intersection of x and y, and tense-aspect's relation to now, the moment of speaking, by the use of a directional arrow. These are her methodological suggestions about the use of such charts:

> A chart is a concise visual presentation of the structures to be learned in one
> section of the chapter. Presentation techniques often depend upon the content
> of the chart, the level of the class, and the students' learning styles. Not all
> students react to the charts in the same way. Some students need the security
> of thoroughly understanding a chart before trying to use the structure. Others
> like to experiment more freely with using new structures; they refer to the
> charts only incidentally, if at all (Schrampfer Azar, 1993: xii).

The purpose of timelines, then, is in many ways similar to that of cognitive schemata, namely, to schematically introduce tense-aspect organisation to learners.

2.3.2.2 Timeline Approach Rules

Each of Schrampfer Azar's charts comes accompanied with an explanatory rule and sample, invented sentences. These are her suggestions about students understanding the rules:

The role of terminology: The students need to understand the terminology, but don't require or expect detailed definitions of terms, either in class discussion or on tests. Terminology is just a tool, a useful label for the moment, so that you and the students can talk to each other about English grammar. (Schrampfer Azar, 1993: xiii)

By this statement, she implies that terminology or grammatical "rules" are just tools. If the learner is able to infer aspect use without them then they can be discarded.

These are the timelines, rules and sample sentences for the present perfect:
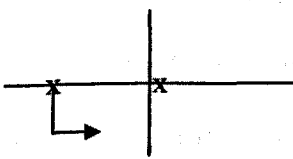
The present perfect expresses the idea that something happened (or never happened) *before now, at an unspecified time in the the past*. The exact time it happened is not important.

(a) They **have moved** into a new apartment.
(b) **Have** you ever **visited** Mexico?

If there is a specific mention of time, the simple past is used:

I saw that movie last night.
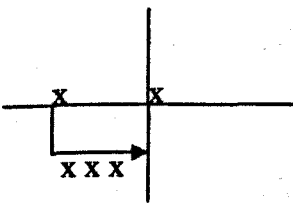
The present perfect also expresses the *repetition of an activity before now*. The exact time of each repetition is not important.

(a) We **have had** four tests so far this semester.
(b) I **have met** many people since I came here in June.
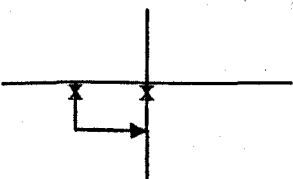
The present perfect also, when used with **for** or **since**, expresses a situation that *began in the past and continues to the present*.
In the examples, notice the difference between **since** and **for**:
        since + *a particular time*
        for + *a duration of time*

49

(a) I **have been** here *since seven o'clock.*
(b) I **have known** him *for many years.*

Note that this timeline analysis makes no distinction between state and activity verbs or lexical (i.e., accomplishments and achievements) and grammatical aspect (i.e., current relevance and experiential). It is similar to Comrie's (1976) analysis in that it is largely dependent on the use of temporal adverbials to disambiguate the experiential perfect from the durative (i.e., with *for* and *since*).

Generally, if there is no definite past temporal adverbial, Schrampfer Azar suggests using the present perfect, if there is, then the simple past. Repetition of an activity also happens within a temporal adverbial framework. Unfortunately, this analysis only diagrams the structure of temporality in the language and does not provide any underlying cognitive schematic connection to encourage reconceptualisation on the part of the learner. For example, rather than "now" as the intersection between the x-y axes, the diagrams could have pointed out that conceptions of time extend from cognitive conceptions of space or body-parts (i.e., *ahead = future* and *behind = past*).

Furthermore, this linguistic analysis makes no reference to what corpus analysis of the present perfect has revealed about usage; namely, that the present perfect very frequently occurs with modal verbs (Biber et al. 1999). Additionally, my corpus analysis of the British National Corpus (BNC) indicates that perfect aspect occurs more frequently with these modals than with *for* or *since*. This high rate of perfect occurrence with modals is due to the fact that modals can combine with aspect but not with tense.

Though Schrampfer Azar provides charts, rules and sample sentences, students may still find it difficult to acquire a conceptual understanding of lexical and grammatical

50

aspect. Learners may be able to comprehend the pedagogically simplified rules of timelines, but because of the conceptual complexity of aspect they may not have clear conceptions of resultative, accomplishment or achievement perfect. Instead, they will rely either on the salience of each form in input or fixed temporal adverbial expressions. In either case, the learner ends up either over or undergeneralising perfect aspect use.

2.3.3 Transformational Grammar

This analysis of transformational grammar is based mostly on the work of Broderick (1975), Radford (1988; 1997), Huddleston (1976) and Chomsky (1957). As Robins (1967) pointed out, Chomsky, the creator of Transformational Grammar, is the greatest linguist of the 20th century and, along with his contributions to linguistics, this has had serious repercussions for SLA. Now that it is the twenty-*first* century, however, other theories are replacing Transformational Grammar (see, for example, Tomasello 2003; Elman et al. 2001; Gethin 1999; Langacker 1987; Lakoff and Johnson 1980).

Transformational Grammar only touches on aspect with phrase structure constituent analysis. Apart from Huddleston's (1976) brief explanation of the semantics of aspect, it does little to explain how this little amount of grammar can be used to function for such a complex temporal relation. Broderick (1975) simplifies or updates the phrase structure rules as follows:

1) S → NP + AUX + VP

2) VP →   V + (NP)
            be + ADJ
                NP

3) AUX → TNS + (M) + (PERF) + (PROG)

4) TNS → -prs
          -pst

5) M → {can, may, will, shall, should, must...}

6) PERF → have-en

Phrase structure rules indicate that *have* and the inflectional suffix *–en* are always

immediate constituents of PERF (Broderick, 1975: 78).

7)
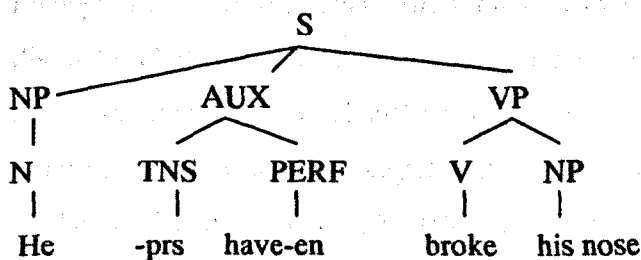
2.3.3.1 Fabrication of Rules

The main objective of this section is reveal that deep structure rules are psychologically

implausible. Broderick explains how Chomsky attempted to overcome the discontinuous

elements of the auxiliary (i.e., to show that tense attaches to the first AUX stem of V, to

show that *–en* is functionally tied to *have* and to show that *–ing* is similarly tied to *be*).

However, in actuality these rules place these suffixes in positions they do not in fact

occupy in English sentences (i.e., before the verb). Broderick's justification for this simplification is that readers "will see later that a truly adequate account of English syntax will often require us to analyse constituent structure in a seemingly contradictory manner" (1975: 78). Until then, readers must simply learn to live with an apparent contradiction: Transformational Grammar consistently positions the inflectional suffixes –pst, -prs, *-en*, and *–ing* in front of the stems they in fact follow in sentences.

I contacted Dr. Broderick and asked him whether he thought the Affix Movement rule (which moves tense from the AUX to the verb) was inherent in the grammar of the language or was fabricated to suit Transformational Grammar constituent structure. To which he replied:

> I was indeed alluding to the fact that one cannot understand why Chomsky's PS rules put the AUX suffixes before their stems without being aware of the distinction between deep and surface structure and the role of transformations. The AUX suffixes are diagrammed in deep structure (by the phrase structure rules) in a way that shows their meaningful relationships: *have-en, be-ing*. Then the AFFIX MOVEMENT transformation places them where they appear in surface structure (the diagrams that explain the grammatical structure of sentences as spoken or written). I agree with you that the whole approach is artificial and counter intuitive.

In conclusion, distinctions such as "deep" and "surface" structure are clear indications of the psychological implausibility of Transformmational Grammar and serve no other purpose. They should be considered counter-intuitive to language analysis and, therefore, rejected.

2.3.3.2 X-Bar Theory

We now look at Huddleston's (1976: 58) semantic analysis of the function of present

perfect aspect in Transformational Grammar:

Classification

Finiteness	Tense	Mood	Perfect Aspect	Progressive Aspect	Voice
Finite	Pres	N/Mod	Perfect	N/Prog	Active

This analysis is useful in that it classifies all of the verbs according to whether they have

complex verb forms: finiteness, tense, mood, perfect aspect, progressive aspect or voice.

In this way, we see the interdependent relationships between auxiliaries, modals and

aspect or voice. Unfortunately, however, Huddleston's semantic analysis adds nothing

new to the conventional one:

> Semantically the difference between "saw" and "has seen" can be described
> in terms of the notion "current relevance": in both cases the seeing is in past
> time, but with "has seen" the seeing also has relevance to the present time.
> Consider, for example, the difference between *John broke his leg* and *John
> has broken his leg*. The first simply reports a past event, whereas in the
> second we are concerned with the past event of leg-breaking and also with its
> current effects—the sentence would typically be used while John is still
> incapacitated. With this form, therefore, there is both a past time component
> and a present time component: the past component is associated with the
> action/state itself and is syntactically expressed by the selection of perfect
> aspect, the present component is associated with the effects, consequences or
> whatever, and is syntactically expressed by the selection of the present tense.

Finally, another point worth making is that there is not any aspect node in the

Broderick (1975) tree diagram or in Transformational Grammar. Should it not have

another branch node in the tree diagram next to AUX for complete or incomplete aspect? Should this aspect not also be further divided between lexical and grammatical aspect? Radford (1988, citing Jackendoff) argues that, in X-bar syntax, V and its complements together form a V-bar constituent, and V-bar can be expanded by the addition of appropriate specifiers (which he takes to be the aspectual auxiliaries *have/be*) into a V-double-bar constituent:

John may [*be reading a book*]

Which might have a structure along the lines of:

```
                      V"
                    /    \
                   /      \
                ASP        V'
                 |        /  \
                 |       /    \
                be      V      NP
                        |     /  \
                        |    /    \
                     reading  a book
```
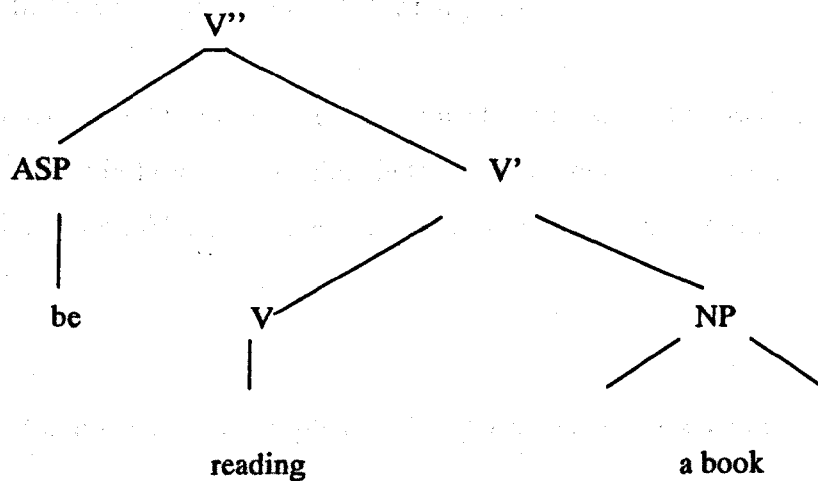
In short, aspect is not sufficiently analysed in Transformational Grammar. It does not even touch upon lexical aspect though Transformational Grammar semantic categories (e.g., +/- durative) do somewhat delineate the semantics of aspect.

2.2.3.4 Invented Sentences

Another difficulty with Transformational Grammar is that the example sentences are invented to illustrate a grammatical abstraction (i.e., as the author sees it—not as it actually may be). Cook (2001) points out how invented sentences can be used pedagogically to illustrate a specific point however, if they are used to defend a grammatical rule of your own making, then they represent a kind of analytical manipulation. Broderick (1975) provides many such sentences:

> Ordinarily, the presence of *have –en* means that the event the sentence describes has *duration*. Compare these sentences:
> > a. John lives in Florida.
> > b. John has lived in Florida for ten years.

> In *a*, John may have moved to Florida yesterday; we have no way of knowing. In *b*, John began living in Florida some time in the past, has continued living there, and still lives there. All this is communicated by the presence of *have – en*.

In fact, this is not true. *Have -en* does not imply duration, *for ten years* does. At one time, grammaticality judgment sentences might have been a step forward in linguistics, especially alongside the use of example sentences that are not grammatically correct and marked with an asterisk ("*"); however, with the development of corpus linguistics, authentic examples from corpus analysis are revealing how forms are usage-based and grammaticality judgements are no longer necessary. Transformational Grammar suffers from not adapting to advances in linguistic awareness and from stemming from Skinnerian (1957) behaviourism. In the next section, we look at how Lexical-Functional

grammar attempts to overcome the shortcomings of Transformational Grammar, but, inevitably, fails.

2.3.5 Lexical-Functional Grammar

This analysis of Lexical Functional Grammar is based on Bresnan & Kaplan (1982), Bresnan (2001) and Dalrymple (2001). According to Bresnan (2001), the term "lexical" refers to the fundamental fact that words, or lexical elements, are as important as syntactic elements in expressing grammatical information, and the term "functional" refers to the fact that this grammatical information is not identified with particular structural forms of expression, but is viewed as a system of abstract relations between expressions and eventualities. However, at the outset, it should be stated that, although Lexical Functional Grammar claims to be "lexical," it does little to improve on Transformational Grammar's categorical analysis of the semantics of aspect.

In fact, though typologically-based, rather than providing a new analysis of language, Lexical Functional Grammar seems more intent on replacing Transformational Grammar's deep structures and phrase structures with just as fabricated c-structures and f-structures. It is highly doubtful whether these Lexical Functional Grammar structures are any more psychologically plausible than the Transformational Grammar ones they replace. Additionally, Bresnan (2001: 34 - 35) only takes a passing look at the resultative semantics of aspect as the adjectival. It was not until turning to Dalrymple (2001) that a Lexical Functional Grammar analysis of aspect could be determined.

2.3.5.1 C-Structures and F-Structures

Bresnan & Kaplan (1982) state that, when attributing psychological reality to a grammar, they require evidence that the grammar corresponds to the speaker's internal description of that domain. In Lexical Functional Grammar, the transformational derivation of Transformational Grammar is replaced with a single level of phrase structure representing the surface form of a language: the constituent structure (c-structure). In this way, the surface form is not affected by syntactic transformations. Instead, it is affected by correlating the grammatical functions that are assigned to lexical predicate argument structures with the grammatical functions that are syntactically associated with c-structure forms: i.e., functional structures (f-structures). F-structures represent grammatical relations in an invariant universal format that is independent of language-particular differences in surface form. The f-structures are semantically interpreted, while the c-structures are phonologically interpreted.

In Lexical Functional Grammar, a single predicate argument structure may have several alternative lexical assignments of grammatical functions, governed by universal principles of function-argument association. Lexical Functional Grammar grammatical relations are not reducible to canonical phrase structure configurations as in Transformational Grammar. The phrase structure categories are reducible to functional primitives, and the relation between structural configurations and grammatical functions is many-to-many, varying across language types and even within languages (i.e. are nonconfigurational).

He has broken his nose.

```
                   IP                          | VFORM    FINITE                    |
          _____/_____                   | VARG     VFORM      PASTPART        |
        NP                  I'                  |
        |                  /\                   |
        N               I     VP               | PRED     'BREAK' (SUBJ)             |
        |               |     |                 | TENSE    PRES                      |
        He             has    V'               | ASPECT   PERFECT +                 |
                             /\                 | SUBJECT  PRED 'HE'                 |
                            V   NP              |
                            |   |
                         broken his nose
```
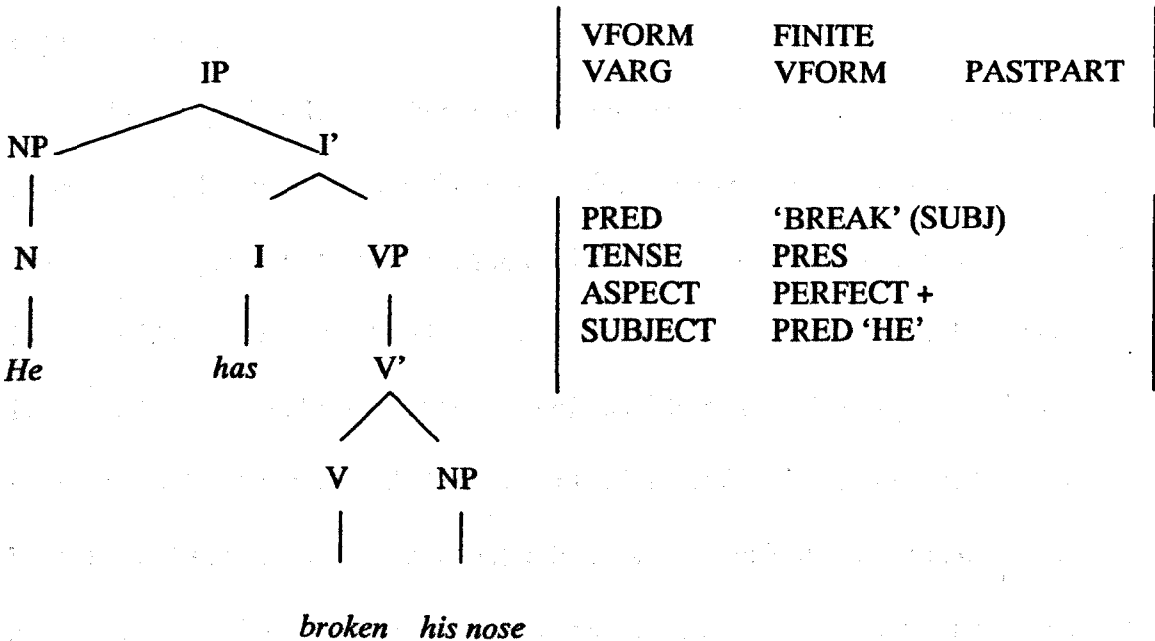
In this analysis, the f-structure, ASPECT, is intended to represent the complex description of sentential aspect (Dalrymple 2001). Lexical Functional Grammar does mention that argument structure may contain semantic, even aspectual, information and that PRED encodes the relation between semantic roles and syntactic functions. Other than that, however, it refers the reader to Dowty (1991) if any further analysis is required.

Thus, apart from introducing semantics into grammar with the use of f-structures and making grammar a little more functional or typologically based through the use of c-structures, Lexical Functional Grammar never makes clear just how it is any more psychologically plausible than Transformational Grammar. No language or grammatical rules have ever been found in the brain and it is doubtful whether c- and f-structures can be found there either. Further compounding plausibility, Lexical Functional Grammar presents an algebraic formalism for representing an f-description. Certainly, language is

based not on mathematics but usage and this is another case of fabricating an abstraction to justify its use.

In my opinion, Lexical Functional Grammar would have been much more successful by disregarding Transformational Grammar and starting afresh with its own analysis. Surely, a grammar claiming to explain the relationship between semantics and form should explain the relation between lexical and grammatical aspect. Lexical Functional Grammar also uses the criteria of "well-formedness" as a grammatical judgment but the criteria should be whether the form is functional or usage-based. In brief, Lexical Functional Grammar certainly does make its best attempt to correct the implausibility of Transformational Grammar while remaining within its parameters. Nonetheless, as we will see, Role and Reference Grammar (Van Valin 1993) uses the same basic principles to describe tense-aspect but in a much more convincing way.

Finally, Lexical Functional Grammar calls f-structures "schemata;" however these schemata are based on linguistic rather than cognitive criteria. Hence, they appear more like rules than any underlying schemata. I would like to suggest that Lexical Functional Grammar replace these linguistic structures with cognitive schemata and thereby create a true relationship between meaning and form. Indeed, to a large degree, these very reasons that make Lexical Functional Grammar and Processability Theory psychologically implausible, and hence not able to lead to language acquisition, are exactly what makes SCM a much more cognitively plausible theory.

2.3.5 Descriptive Grammar

We now look at descriptive approaches to grammar (Quirk et al. 1972, 1985; Huddleston & Pullum 2002). Perhaps a good place to start with Descriptive Grammar is, as we saw in the introduction to the meta-analysis, with the idea of the definitive grammar, which in a sense also entails prescriptive grammars. As Quirk et al. (1985) point out, their primary concern is to *describe* the grammar of English and thereby create the definitive description of it. They also admit to occasionally referring to prescriptive grammar, and its set of regulations that are based on what is evaluated as correct or incorrect in the standard varieties of a language. Both definitive and prescriptive grammars were criticised in the introduction to this meta-analysis and it was pointed out that most contemporary grammars try to avoid prescription. However, because the Quirk et al. (1985) grammar attempts to stick with the tradition of past grammars, perhaps to some extent it also inherits their faults.

Huddleston & Pullum (2002), on the other hand, who state they might never have attempted their grammar if Quirk et al (1985) had not pointed the way, say their aim is to describe not prescribe. The manner in which they do so is to use evidence from several sources: their own intuitions as native speakers of the language; the reactions of other native speakers they consult when they are in doubt; data from computer corpora, and data presented in dictionaries and other scholarly work on grammar. Perhaps in future editions, they might also begin consulting non-native speakers of the language.

Bloor & Bloor (1995) note that the Quirk et al. (1985) Descriptive Grammar is the outcome of a major computer-stored research project, the Survey of English Usage, which set up the London-Lund corpus. The analysis found in Bloor & Bloor (1995) is a

Systemic-Functional approach to language and, if Hallidayan Systemic-Functional approaches to grammar might be considered a reaction to Transformational Grammar, then choosing to stick with "traditional and widely-understood terms" to describe grammar might place Descriptive Grammar in a somewhat antithetical diachronic position in relation to the new terminology found in Systemic-Functional Grammar, although there are still elements of Systemic-Functional Grammar in Descriptive Grammar. Prior to looking at the Descriptive Grammar analysis of aspect, we take a quick look at the new grammatical points descriptive approaches to grammar bring to this meta-analysis: indeterminacy and correspondences.

2.3.5.1 Indeterminacy and Correspondences

Another advantage of Descriptive Grammar is that it openly admits what other grammars might try to avoid, i.e., the problem of indeterminacy of grammatical categories. Examples of indeterminacy include words that can appear as more than one word class (e.g., *play* as a noun and verb, *that* as a demonstrative and conjunction and *round* can be a noun, verb, adjective, adverb and preposition). Indeterminacy in grammar once again points to the relationship between meaning and form in context as well as the need for the use of metaphor in the description of grammar. For example, since *play* is prototypically an activity, when it is used as a noun there is a metonymic meaning between the activity and an object. Thus, theories of grammaticalisation can help to resolve this indeterminacy through the use of metonymical grammatical shifts in constructions for different contexts and tense-aspect use also functions along these lines.

Rather than rely on categories, rules or formulas, descriptive approaches to grammar are aided by *correspondences* between one structure and another (cf. constructions in Radical Construction Grammar). Quirk et al. (1985) use demonstrable correspondences as an informal way of showing similarities and contrasts between structures. According to Quirk et al. (1985), correspondences are important in explaining the relation between grammatical choice and meaning, and also in providing criteria for classification. A systematic correspondence may be broadly defined as a relation or mapping between two structures *A* and *B*, such that if the same lexical content occurs in *A* and in *B*, there is a constant meaning relation between the two structures. An example of a correspondence is that *SVOO* clauses can be converted into *SVOA* by the substitution of a prepositional phrase following the direct object for the indirect object preceding it:

She sent Jim a card. -> She sent a card to Jim.

In one sense, perhaps correspondences might best be described as the cline between semantics and grammar. Since many grammars attempt to remove semantics from their analysis, at least Descriptive Grammar attempts to combat indeterminacy of categories and descriptive inadequacy (i.e., the result of abstracting language away from context) by creating correspondences between grammatical choice and meaning. Contrastively, Huddleston & Pullum (2002) overcome indeterminacy by concluding that the multiplication of categories for a single word with a single meaning makes no sense. They claim each word belongs to the same category in all of its occurrences. As we will see, Radical Construction Grammar (Croft 2001) takes indeterminacy a step further and does away with categories all together (and, therefore, to some extent abstraction).

2.3.5.2 Dynamic/Stative vs. Count/Non-Count

We now turn to the analysis of verbs in Descriptive Grammar. Descriptive Grammar introduces verbs by making the largely semantic, as well as cognitive, distinction between state and dynamic or activity verbs. Quirk et al. (1985) draw a parallel between state and dynamic verbs and non-count and count nouns. They do so along these broad lines: non-count nouns can be characterised naturally as stative and plural count nouns as dynamic. Perhaps more than anything this is a conceptual parallel linking nouns and verbs. In this way, the definiteness/indefiniteness and mass/count rules of agreement for nominals are mapped onto the dynamic and stative forms of verbs. If the conception for tense developed spatiotemporally from body-parts (i.e., *ahead* and *behind*), perhaps aspect extends more from the concept of bounded and unboundedness with count and non-count nouns. As will be suggested later, these conceptions represent spatiotemporal joint-attention dialogical frames between speaker and hearer.

2.3.5.3 Simple and Complex Verb Phrases

Along the lines of Transformational Grammar, Descriptive Grammar distinguishes simple and complex verb phrases. The finite verb phrase is simple when it consists of only one word, which may be tense or mood. A verb phrase is complex when it consists of two or more words. There are four basic types of construction in a complex verb phrase:

Type A (Modal)
Type B (Perfective)
Type C (Progressive)

Type D (Passive)

Later in the Cognitive Grammar analysis, we see that Langacker (1987) also introduces this simple/complex distinction but does not separate passive from aspect.

2.3.5.4 Referential Levels

Descriptive Grammar makes use of timelines to depict the different tenses. However, the interpretation of past, present and future is on a *referential* level. By referential level, what is meant is that Descriptive Grammar relates a view of time to language and more precisely, to the meaning of verbs, by a reformulation of the threefold distinction such that *present* is defined to include rather than exclude the *past* and *future*. Something is defined as *present* if it has existence at the present moment, allowing for the possibility that its existence may also stretch into the past and future (e.g., present tense for future tense use). In this understanding of *present*, due to the overlap between tenses, tense cannot then be adequately expressed on a simple timeline. Thus, rather than linear, this stretching or blending description of tense approaches the reference of tense in the sense of mapping different temporal domains. Indeed, perhaps tense is best thought not as linear, but as separate domains (i.e., inter-dependent conceptions) within a higher-level temporal structure. In this way, one tense does not begin where another ends. Instead, they have the natural ability to map onto each other to form various organisations of tense-aspect.

Huddleston & Pullum (2002) do not use timelines. Instead they divide time into four categories:

Tr – the time referred to

To – the time of orientation

Ts – the time of the situation

Td – deictic time

Regarding aspect, Huddleston & Pullum (2002) label it as a secondary tense. Because the perfect auxiliary *have* in combination with the past participle places the event in past time, they analyse *have* as a tense auxiliary. This analysis, like most of the grammars in this meta-analysis, focuses on the grammatical aspect of perfect aspect. Systemic-Functional Grammar also argues for making aspect into tense but, as we will see, because they are conceptualised differently, SCM maintains that aspect should remain just that.

2.3.5.5 Situation Types

Rather than explicitly refer to it as lexical aspect or the Aspect Hypothesis, Quirk at al. (1985: 192) choose to keep aspect strictly grammatical and call these lexical distinctions between state and dynamic verbs "situation types." Additionally, though they do not actually allow for a lexical aspect category, they do once again state that it is unfortunate that the terminology used in discussing the verb phrase often confuses distinctions of grammatical form with distinctions of meaning. The three types of grammatical aspect (i.e., current relevance, experiential and durative) found in Quirk et al. (1985), which are intended to contrast with the simple past, are:

(a) State leading up to the present
That house has been empty for ages.

(b) Indefinite event in a period leading up to the present

Have you ever been to Florence?

(c) Habit in a period leading up to the present

Terry has sung in the choir since he was a boy.

The eleven kinds of situation types (or semantic distinctions) they list are: 1) quality (e.g., *be tall*), 2) state (e.g., *be angry*), 3) stance (e.g., *live*), 4) goings-on (e.g., *rain*), 5) activities (e.g., *drink*), 6) processes (e.g., *grow up*), 7) accomplishments (e.g., *write a letter*), 8) momentary events (e.g., *sneeze*), 9) momentary acts (e.g., *fire a gun*), 10) transitional events (e.g., *arrive*) and 11) transitional acts (e.g., *begin something*). Perhaps the reason Descriptive Grammar prefers "situation types" to lexical aspect is because it preferred not to reference other works. Had they used the term "lexical aspect," then references to it would have been necessary.

As does Comrie (1976), Huddleston & Pullum (2002) distinguish four major uses of the present perfect: the resultative, the experiential, the durative and the perfect of recent past. Following Brinton (1988), however, they should also have clarified that there are really only two perfects here and that the other two are actually adverbial distinctions. The experiential perfect is a further step in the grammaticalisation process from the current relevance aspect and the durative aspect represents the adverbial completion of the perfect conceptualisation process. Huddleston & Pullum (2002) also call lexical aspect "situations." Additionally, they reinterpret the Aspect Hypothesis to include *occurrences*:

States [static]   Occurrences [dynamic]

                    Processes [durative]   Achievements [punctual]

Activities [atelic]   Accomplishments [telic]
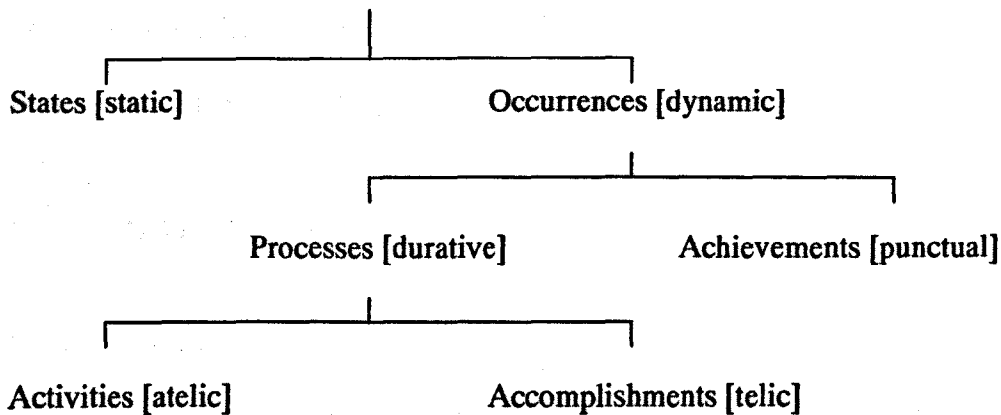
This reinterpretation is preferable because it places *activities* under *occurrences* and

activities are then subsequently placed much lower on the Aspect Hypothesis hierarchy.

This also helps to disambiguate the differences between *states* and *occurrences*.

Huddleston & Pullum (2002) are also the first to disambiguate how *activities* and

accomplishments differ:

She's writing a note.   [telic: accomplishment]
She's writing notes.   [atelic: activity]

Unfortunately, what they are describing here but not stating explicitly is that the

count/non-count noun and the dynamic/state verb distinction previously pointed out alter

the argument structure and the interpretation of the verb.

2.3.5.6 Perfectives and Modal Verbs

Descriptive Grammar also makes mention of the co-occurrence of perfectives and modal

verbs. Quirk et al. (1985) state the perfective and progressive aspects are normally

excluded when the modals express *ability* or *permission*, but *obligation* can only be expressed with the perfective or progressive when combined with *should* or *ought to*.

She should have left him.

In such cases, these modals often imply non-fulfillment of obligation.

In conclusion, of the grammars we have analysed thus far, Descriptive Grammar is the first to integrate the Aspect Hypothesis. Because the state and dynamic distinction was used to introduce verbs (i.e., a lexical aspect distinction), Descriptive Grammar is also more intuitively in line with how SLA suggests tense-aspect is acquired. Furthermore, Huddleston & Pullum (2002) often make reference to *metaphorical* uses of tenses (i.e., the historic present in narrative and present tense in hot news commentaries). They also call the non-past use of *should* idiomatic and therefore Descriptive Grammar uses metaphor to describe the function of grammar. It could also be suggested that metaphor influences the structure of the *should* plus present-perfect-aspect construction.

2.3.6 Systemic-Functional Grammar

This analysis is based on the work of Halliday (1994) and Matthiessen & Bateman (1991). Halliday's Systemic-Functional Grammar is perhaps the most widely known alternative to Transformational Grammar. Transformational Grammar predates Systemic-Functional Grammar by approximately a decade. Therefore, by inference, perhaps the Hallidayan social-semiotic approach to grammar is in part an antithetical reaction to Chomsky's

ahistorical and acultural stricter syntactic approach. Though, of course, the debate between language as an abstract system and as language-in-use predates both grammars.

Systemic Functional Grammar has been more widely accepted in the UK and Australia. This is because Halliday was a leading figure in the London School of linguistics and was a pupil of Firth (1964). UK-originated grammar, especially in recent years, also seems to incorporate more analysis of spoken data in context as opposed to the US's predominantly sentence-level analysis. Furthermore, since Halliday's approach is based on social interaction, his grammar is more suitable for language teaching and in fact he has done much to promote Systemic Functional Grammar within education.

One pedagogical criticism of Systemic Functional Grammar (McCarthy 2001: doctoral tutorial) is the amount of new categories one must learn to understand it (e.g., *mode*, *tenor* and *field*). Schrampfer Azar (1989) commented that students must know terminology but are not required to explicitly state them. However, even *knowing* the terms in Systemic Functional Grammar would present a challenge to most learners. In the timeline approach, rules have been simplified to be more pedagogically appropriate, with the effect of oversimplifying aspect's temporal function. Contrastively, in Systemic Functional Grammar the meta-terminology is too abstract to make the explanation accessible to learners. Hence, some balance between the two must be found. For example, rather than invent new terminology for a grammar, one solution is to use previously used terms, thereby possibly embodying anew a diachronic meaning. As we saw with Descriptive Grammar, this is what they chose to do and used correspondences to explain indeterminacies caused by abstraction. That said, because language is constantly

changing and grammaticalising, a new grammar could theoretically be the source of much new language.

Though it uses much grammar-specific terminology, of the grammars we analyse Systemic Functional Grammar also seems to be one of the most diachronic. Concurring with the grammaticalisation analysis of the experiential perfect aspect, it points out how the present perfect auxiliary retains some of its possessive aspect (1994: 207): "Here the basic notion is that of 'have (possession) + do'." Three other factors are of interest in an Systemic Functional Grammar analysis of aspect: (1) the parallel between the verbal group and the nominal group; (2) that temporal expressions are closely related to spatial ones; and (3) that aspect can be separated from tense. Each are now looked at in turn.

2.3.6.1 Verbal Parallelism with the Nominal

> The verbal group begins with the Finite, which is the verbal equivalent of the Deictic, relating the process to the "speaker-now;" the Finite does so by tense or modality whereas the Deictic does so by person or proximity, but each of these provides the orientation of the group. The verbal group ends with the Event, which is the verbal equivalent of the Thing; the former expresses a process, which may be event, act of consciousness or relation, whereas the latter expresses an entity of some kind, but both represent the core of the lexical meaning (Halliday 1994: 197).

The linguistic similarity between a noun group (i.e., count/non-count) and a verb group (i.e., perfective/imperfective) and its spatiotemporal deictic relationships has already been noted with Descriptive Grammar. In the analysis of Cognitive Grammar, Langacker (1987) also makes this distinction, although along different lines. We will return to this

distinction in the results section of the meta-analysis where it might also assist further in our understanding of the Aspect Hypothesis.

2.3.6.2 Temporal/Spatial Expression Parallels

Another similarity between verbal groups and noun groups is that they express deictic relations: noun groups express spatial deictic relations, whereas tense-aspect expresses temporal deictic ones. Systemic Functional Grammar's most significant parallels between the two are the following: (i) both incorporate the notions of extent and location, not only extent and location in space but also extent and location in time; (ii) in both time and space, extent is measurable in standard units (e.g., minutes and hours or meters and kilometres); (iii) in both time and space, both extent and location may be either definite or indefinite; (iv) in both spatial and temporal location, the location may be either absolute, or relative to the "here-&-now," and, if relative, may be either near or remote; (v) in both spatial and temporal location there is a distinction between rest and motion, and, within motion, between motion towards and motion away from.

Though Halliday is a text linguist and prefers not to delve into the unobservable workings of the mind, this analysis does begin to explore the underlying temporal metaphors for tense-aspect (i.e., TIME IS SPACE and TIME IS MOTION) and to show the metaphorical and metonymical grammatical extension of them (i.e., from spatial to temporal deixis). Perhaps this analysis also reveals why many cognitive linguists find Systemic Functional Grammar to be closely related to Cognitive Grammar. However, Systemic Functional Grammar continues to make the analysis of text primary and one of

the main contentions of this thesis is that for L2 acquisition to occur there must also be a psycholinguistic relation to the language.

Matthiessen and Bateman (1991) construe time by three other Hallidayan terms: experientially, interpersonally and textually. Experiential resources represent temporal locations (e.g., *tomorrow, next year*) and temporal extents (e.g., the durative, *for two hours*). These temporal adverbials I later term sociocultural interpretations of time. The interpersonal metafunction is an interpersonal alternative to (primary) tense – modality, involving more temporal adverbials, for example, recent past, *still, yet* and *already* (i.e., perfect of recent past). Textual time is concerned with conjunctive relations that develop and organise a text (e.g., *then, subsequently* and *previously*). As Hopper (1979) points out one of the main functions of tense is to structure discourse through the backgrounding and foregrounding of events.

2.3.6.3 Aspect Separated From Tense

Halliday (1994: 198) presents an interesting alternative to the notion of aspect:

> Consider the verbal group *has been eating*. This actually makes three separate
> tense choices: (1) present, expressed by the –*s* in *has* (i.e., by the fact that the
> first verb is in the present form); (2) past, expressed by the verb *have* plus the
> –*en* in *been* (i.e., plus the fact that the next verb is in the past/passive
> participle form V-*en*); (3) present, expressed by the verb *be* plus the –*ing* in
> *eating* (i.e., plus the fact that the next verb is in the present/active participle
> form V-*ing*)

In naming the "tenses" within this Systemic Functional Grammar framework, it is best to

work backwards, beginning with the outermost and using the preposition *in* to express the

serial modification. Hence, the tense *was going to have been working* is *present in past in*

future in past. Indeed, as far back as 1887, Madvig (cited in Binnick 1991: 61) was

referring to verbal groups in this manner (i.e., present perfect is *past in present*). The

difficulty with doing so is that aspect is expressed only in terms of tense. Lacking is at

least the internal viewpoint of aspect within the event as well as the relation to the lexical

semantics of perfective completion (i.e., boundedness related to count/no-count nouns).

Thus, though there is some diachronic evidence for subcategorising aspect to a secondary

tense (i.e., that a relative past might also be considered secondary), since we have noted

at least two different perfects (i.e., lexical and grammatical), Systemic Functional

Grammar should not do away with the notion of aspect at least for perfect aspect

(Matthiessen & Bateman, 1991: 118). Progressive aspect might be a different matter.

2.3.6.4 Grammatical Metaphor

Systemic Functional Grammar is probably the first to explicitly incorporate metaphor

into the grammar. In particular, Systemic Functional Grammar notes the transfer from the

concrete to the abstract sense or from the material to the mental sense. Similar to

grammaticalisation processes, Systemic Functional Grammar's theory of grammatical

metaphor relies on the functions of metaphor and metonymy as forms of lexical variation.

However, in contrast to grammaticalisation processes, it also incorporates synecdoche to

develop three general logical-semantic relations of elaborating, extending and enhancing.

In Systemic Functional Grammar, metaphor derives from the intensive type (i.e., the copular *is*) or relational process; metonymy derives from the circumstantial type (i.e., *is at*); and synecdoche derives from the possessive type (i.e., *has*), in the sense that a whole "possesses" its parts (e.g., experiential perfect).

Additionally, Systemic Functional Grammar claims that nominalisation is the single most powerful resource for creating grammatical metaphor: processes (congruently worded as verbs) and properties (congruently worded as adjectives) are reworded metaphorically as nouns. Downing & Locke (1992) divide nominalised grammatical metaphors into five categories:

Process realised as Thing
Attribute realised as Thing
Circumstance realised as Thing
Process and circumstance as part of the Thing
Dependent situation as Thing

Although there are similarities here between the schemata found in tense-aspect (Heine 1997), to what degree nominalisation is the most powerful source for creating grammatical metaphor is uncertain. For example, many other linguists (see Lindstromberg 1997; Low 1988) argue that phrasal verbs and prepositions are the most metaphorical or idiomaticsed kinds of grammatical relations. We also look at how modals and the past tense are used metaphorically. Thus, rather than simply using nominals for grammatical metaphor (which is actually more of a metonymic function), Systemic Functional Grammar could have developed a more conceptual approach to grammatical metaphor by including its development with phrasal verbs, prepositions, modals, tense-

aspect as well as comparative and superlative forms. In sum, grammatical metaphor in Systemic Functional Grammar is most likely the result of a text-based analysis of metaphor when one based on conceptual factors would have been more productive.

2.3.7 Corpus-Based Grammar

Results from corpus analysis have provided many new and valuable ways of looking at language (see McCarthy 2001, 1998; Carter & McCarthy 1997; Aston & Burnard 1998; Biber et al. 1999). Since its inception, corpus analysis has made great strides into the realm of applied linguistics. Presently, all major learners' dictionaries for English are produced from corpora and at least two complete grammars [i.e. *Collins Cobuild* (1990) and Biber et al.'s (1999) *Longman Grammar of Spoken and Written English* (LGSWE)] are completely corpus-based. The majority of the analysis in this section is based primarily on Biber et al.'s grammar, which has extensive corpus-based data on present perfect aspect, and to a lesser extent on the *Collins Cobuild* grammar, which has only a short description of it. The three new ways *LGSWE* presents present perfect aspect are: (1) contrasting the past perfect with the present perfect, (2) using frequency charts, and (3) introducing the use of modal verbs with the present perfect.

2.3.7.1 Contrasting the Present Perfect with the Past Perfect

Biber et al. (1999: 460) state that in general the present perfect is used to refer to a situation that began sometime in the past and continues up to the present (i.e. current

relevance). Compared to the present perfect, past perfect aspect has a straightforward function to refer to a time that is earlier than a specified past time. For many readers this may appear too linear, therefore McCarthy (2001: doctoral tutorial; verbatim record) suggests a more non-linear function for the past perfect:

> What about "He arrived before I had finished making the dinner"? Isn't a better explanation that past perfect is a "backgrounding form" which labels an event as background in relation to some fore-grounded event ("he arrived")? So we could equally say, "He had arrived before I finished making the dinner," which would refer to the same temporal sequence of events but with different foreground/background encoding.

In this analysis, the function of past perfect is not as straightforward or linear. With its function of foreground/background encoding in relation to another past tense clause we can see, as Bardovi-Harlig (2000a, 2000b) points, a good reason why the pluperfect emerges after the present perfect: The past perfect seems to occur more often with another clause and acts as background. The functions of background and foreground are looked at much more closely when we look at the Discourse Hypothesis.

2.3.7.2 Frequency Charts

Thus far in our meta-analysis, we have seen timelines, tree diagrams and schemata as visual depiction of grammatical structures. Now we must contend with frequency charts in *LGSWE*. Frequency is one of the most common descriptive measurements in corpus-based grammars (and the most important for usage-based approaches to language; Barlow & Kemmer 2000). This fact, however, also makes it the most receptive to

criticism. When considering grammatical forms there are many other measurements involved besides frequency. Thus, only using frequency charts as a measurement results in ranking of forms, which consequently loses effect. In order for frequency to become maximally effective, it must be used in conjunction with the distributional analysis of forms. Chart 1 shows an example of a frequency chart.

Chart 1. Frequency of simple, perfect, and progressive aspect across registers (Biber et al.1999)
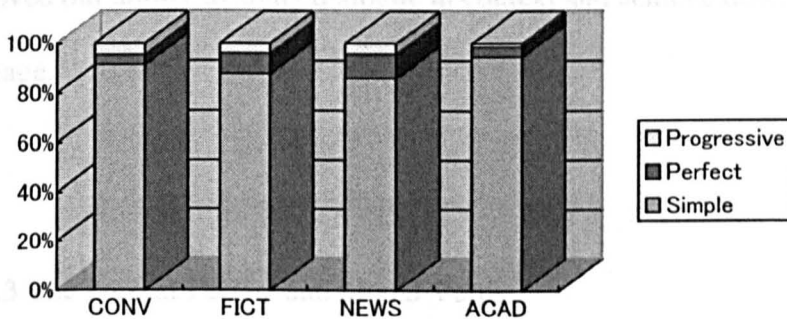
In *LGSWE*, the frequency charts are divided into four areas: academic prose, conversation, news and fiction, each representing an area of the corpus. Criticisms aside, frequency charts could be very useful in conjunction with tense-aspect and the Aspect Hypothesis. For example, it would be of interest to know the frequency of use of state, activity, accomplishment and achievement verbs. However, apart from one SLA investigation (Housen 2002a), to my knowledge no such analysis exists. The learner corpus compiled in the research for this thesis is analysed for evidence of lexical aspect use and some data of interest emerges. Regarding distributional analysis, Bardovi-Harlig (2000a) states that the present perfect emerges before the past perfect and this pattern

may concur with corpus-analysis because the present perfect is more frequent than the past perfect. Hence, another rich source of data could be the use of corpus analysis to confirm research-related findings.

Corpus-based example sentences for reference grammars are also more appropriate and less abstract than invented sentences. They are authentic, usage-based and have a social context rather than contextless invented grammaticality judgments. Although, for pedagogical purposes, both invented and corpus-based example sentences serve a purpose. In these ways, then, we can see how Corpus-based Grammars have improved our ability to study dialogue in context and achieve descriptive adequacy of language.

2.3.7.3 The Present Perfect and Modal Verbs

It is with Corpus-based Grammar that we first encounter the abundant use of past tense modal verbs with the present perfect aspect. Though modals cannot combine with past tense, they can combine with marked aspect and voice. Combinations of modal verbs with marked aspect or voice include:

- Perfect aspect with modal verbs is most common in fiction and news.
- The permission/possibility modals *might* and *may* and the obligation/necessity modals *must* and *should* are the most common modal verbs with perfect.
- In all registers, three modals with present/future time connotations—*can, will,* and *shall* rarely occur with the present perfect aspect; the two comparable modals with past time connotations—*could* and *would*—do occur with present perfect aspect.

In conversation, the use of the perfect with modals accounts for the surprisingly frequent

use of *must* marking logical necessity:

*There **must have been** about four hundred at the most. (CONV)*
*If they say she's made a payment, she **must have made** a payment. (CONV)*

The modals of possibility *might* and *may* are also common with the perfect expressing a

certain degree of doubt about past events or situations.

*Also he **may have had** quite a job finding it. (FICT)*

Following Descriptive Grammar, the question this data raises is whether this relationship

between modality and aspect may represent another idiomatic form of perfect aspect (i.e.,

bounded irreality)? The combination of modality with aspect seems to allow for a

reinterpretation of the internal viewpoint of a situation or event. This reinterpretation

creates an extension of the aspectual boundedness of the event. Much more analysis of

corpus-based data in context is necessary. Additionally, to reveal underlying typological

principles, corpus-based analysis can benefit from being more crosslinguistic.

2.3.8 Cognitive Grammar

Some cognitive approaches to grammar (e.g., Lexical Functional Grammar), as one

generation removed from behaviorism, remain Chomskian-based and derived from a

Skinnerian (1957) belief that mental processes are unobservable and from Cartesian

separation of mind and body. Nonetheless, this still removes cognitive approaches to

grammar one generation away from the stimulus-response methodology of behaviorism and Bloomfieldian (1933) theories, which, Chomsky himself rejected.

The second generation of the cognitive revolution sees further improvement and shifts its focus of investigation from Transformational Grammar and idealised states of learning to Cognitive Grammar (Langacker 1987, 1991; Goldberg 1995) and actual psychological analysis of speech and thought. In fact, Langacker along with others, mainly Lakoff (Lakoff & Johnson 1980), reject the mechanistic conception of Transformational Grammar (Langacker 1987: 5). This results in a cognitive approach to grammar that is conceptually very compatible with sociocultural approaches to language learning (Lantolf 2000), and the combination of the two represents an approach to L2 teaching (i.e., SCM).

Transformational Grammar separated form and meaning and Lexical Functional Grammar attempted to find a way to combine them again, although it did not succeed in doing so. According to Ungerer and Schmid (1996), there is one thing that cognitive approaches to linguistics have managed to do: they have managed to bridge the gap between formal syntax and morphology on the one hand and semantic aspects of grammar on the other by relating them both to a common conceptual basis. Langacker (1987) also stresses the role of meaning in Cognitive Grammar:

> The most fundamental issue in linguistic theory is the nature of meaning
> and how to deal with it. I take it as self-evident that meaning is a cognitive
> phenomenon and must eventually be analysed as such. Cognitive grammar
> therefore equates meaning with conceptualisation.

Exactly how Cognitive Grammar equates meaning with conceptualisation is as follows:

1) Semantic structure is not universal; it is language-specific to a considerable degree. Further, semantic structure is based on conventional imagery and is characterised relative to knowledge structures.

2) Grammar does not constitute an autonomous formal level of representation. Instead, grammar is symbolic in nature, consisting in the conventional symbolisation of semantic structure.

3) There is no meaningful distinction between grammar and lexicon. Morphology and syntax form a continuum of symbolic structures, which differ along various parameters but can be divided into separate components only arbitrarily.

Finally, Cognitive Grammar considers discrete categorisation of parts of speech to be cognitively unrealistic, and emphasises instead a prototype model. It also rejects the distinction between literal and figurative language and it holds that imagery and metaphor are *not* peripheral aspects of our mental life, but are in large measure constitutive of it (i.e., the method to bridge meaning and form).

2.3.8.1 Convention not Transformation

Langacker (1987: 26) reiterates the psychological implausibility of deep structure transformations by saying they are "intrinsically suspicious." Langacker argues that these constructs imply that things are not really what they appear to be: that surface structure conceals a more fundamental level of grammatical organisation, "deep structure," which transformations distort systematically and often drastically. In this manner, Transformational Grammar takes abstraction beyond any reasonable means. Langacker then raises the question of whether comparable insights might also be achieved in a

model that does not rely on such non-reality-based tenuous constructs. Cognitive

Grammar, for one, claims that grammatical structure is almost entirely non-abstract:

things really are what they appear to be, although we need to know how to interpret how

the form has grammaticalised from underlying cognitive schemata. In this way, there is

no distortion or concealing with underlying cognitive schemata; grammaticalisation

extends unidirectionally from them.

2.3.8.2 Figurative Language

Cognitive Grammar regards figurative language to be of prime concern, and assumes no

clear distinction between literal and figurative language, between idioms and

conventional expressions of a non-idiomatic sort, or between lexical and grammatical

structure (Langacker 1987: 38). Instead, figurative language and idiomatisation are

accommodated as an integral facet of linguistic organisation, one that can be expected to

interact with grammatical processes (i.e., metaphor and metonymy). In fact, many idioms

share the same grammatical argument structure (e.g., verb and object). Thus, grammar

(like lexicon) embodies conventional imagery. By this, Cognitive Grammar maintains

that sociocognition structures a scene in a particular tense-aspect way for purposes of

linguistic expression, emphasising certain facets of it at the expense of others, viewing it

from a certain perspective, or construing it in terms of a certain metaphor and this

emerges and is reflected in dialogue and grammar.

2.3.8.3 Rules

Cognitive Grammar rejects grammatical rules as "fallacies" (Langacker 1987: 50).
Moreover, the ability to predict exactly to which forms a rule applies is not seen as an
overriding concern. Instead, Cognitive Grammar stresses the importance of factors such
as schemata, which make it unreasonable to expect rule applicability to be predictable in
absolute terms. A second factor militating against absolute predictability in rule
application is the importance of conventional usage, which, as with any sociocultural
system, is inherently variable and unpredictable (i.e., non-scientific). Speakers have the
conceptual freedom to construe a given situation in many different ways according to
their addressee and consequently it cannot be predicted in absolute terms which particular
usage might be chosen and conventionalised.

The next section provides a Cognitive Grammar analysis of the present perfect
aspect. Cognitive Grammar is the first to formally introduce schemata into the analysis of
tense-aspect. The only problem one might find with Cognitive Grammar's use of them,
however, is that the use remains a relatively literal diagrammatical representation of the
linguistic form, whereas with grammaticalisation theories the schemata are
metaphorically mapped from physical objects (e.g., body-parts) to the form. In actuality,
it can often be somewhat difficult in Cognitive Grammar to elicit how the schematic
maps to our understanding of the form. Figure 3 shows how Cognitive Grammar
schematises the present perfective.

Figure 3. Present Perfective Schema (Langacker 1987: 261)
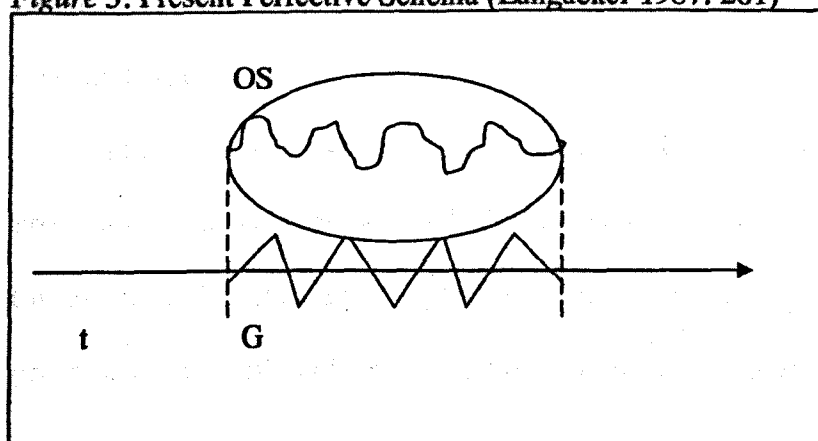
OS – Objective Scene (the general locus of viewing attention.), t – time, G – the speech event

Though Cognitive Grammar does not mention Lexical Aspect, it does refer to

sequentiality (i.e., perfective or completion) and it does cover the other two main points

regarding aspect: (1) current relevance (i.e., the resultative), and (2) the auxiliary (i.e.,

experience or possession).

2.3.8.4 Conceived Time vs. Processing Time

Perhaps the distinction between conceived time and processing time is as close as

Cognitive Grammar comes to the Aspect Hypothesis. Cognitive Grammar is the first

grammar to look at the conceptual changes the verb undergoes to become a participle.

The past participle represents the reconceptualisation of the verb as perfective or

completed. This is why the past participle, as opposed to other forms of verbs, is used

mainly as an adjective (e.g., *I have a broken nose*). This may also stem from adjectival to

participial grammaticalisation process. Additionally, that some verbs do not change form

from the past to the past participle also implies something about the stative range of

reconceptualising some verbs as perfective. Irregular participles may also fall into certain aspectual types.

The base for stative construal, according to Langacker (1987: 221), is a procedural predication such as *break*, which designates a continuous series of states distributed through time. The stative participle, however, designates only the final state in the overall process. The evolution of a situation through time is thus a prominent facet of the participle's meaning. The contrast between perfective (i.e., state) and progressive (i.e., activity) aspect is dependent upon the respective difference between summary and sequential scanning. In scanning sequentially (e.g., in narratives) through the complex scene, the conceptualiser (C; i.e., Cognitive Grammar's term for the functioning of an individual language user similar to a reconceptualiser from L1 to L2) activates only a single component at a particular moment of processing time (cf. count nouns). Summary scanning, on the other hand, relaxes this restriction, and with the passage of processing time the components are accessed cumulatively and simultaneously (cf. mass nouns). C activates the successive phases of the process as a simultaneously available whole, thereby creating a stative domain.

Tomasello (2003) found that children initially use both activity (i.e., dynamic) and state (i.e., cognitively constant) verbs. However, the progressive aspect, because it involves activity or scanning (which involves a large area of the brain), may be easier to conceptualise, and in fact L2 students rarely have long-term difficulty acquiring the progressive aspect. Perfective or stative, by contrast, stemming from our ability to view events as being bounded, is much more dependent upon holistic conceptualisation of

events (i.e., punctuality and telicity). Therefore, because it represents completion of schematic conceptualisation, it is usually later to develop and more difficult to acquire.

2.3.8.5 Perfectives as Count Nouns

As we saw in Systemic-Functional Grammar and Descriptive Grammar, Cognitive Grammar also points out the conceptual similarity between the perfective/imperfective aspect distinction for verbs and the elemental count/mass distinction for nouns. However, in contrast to Descriptive Grammar, Cognitive Grammar prefers to compare perfective with count nouns and imperfective with mass nouns. In the case of mass nouns, homogeneity is the source of *unbounded* expansibility and contractibility. Any portion of a mass entity, no matter how large or small, constitutes an instance of the category. Imperfective, also known as scanning, processes manifest indefinite expansibility and contractibility in their temporal profiling. This flexibility in the temporal profile proves crucial for understanding how imperfectives function grammatically and interact with other predications. In brief, Cognitive Grammar says their expansibility/contractibility/dynamaticity ensures that the temporal profile can always be made to coincide precisely with the time of speaking (e.g., *He is reading*).

This is not the case with perfectives because count nouns further contrast with mass nouns in being *bounded* within the scope of predication. Boundedness, similar to summary scanning, implies the possibility of exhausting one instance of a category and initiating another, with the result that count nouns are replicable (i.e., they pluralise) whereas masses are expanded rather than replicated. Mapping this onto the Cognitive

Grammar temporal domain, a perfective process is bounded and replicable (e.g., *He read a book*), while an imperfective process is unbounded and nonreplicable (e.g., *He reads books*). This conceptual ability to contrast bounding of objects and events is what motivates terms such as perfective and imperfective and the emergence of grammar.

Thus, because imperfective does not have a termination point, Cognitive Grammar equates it with unboundedness and mass nouns, whereas perfective, because it is replicable, is equated with boundedness and count nouns. Descriptive Grammar, on the other hand, equates stative or perfective verbs with noncount nouns and dynamic verbs with count nouns. My initial interpretation of both analyses was that stative verbs equate with boundedness and mass nouns and dynamic verbs equate with unboundedness and count nouns (i.e., iterative). However, this may conflate the understanding of boundedness and duration. Thus, I have altered my interpretation to agree with Cognitive Grammar. States and activities both entail duration but a state is bounded (i.e., count) and an activity is unbounded (i.e., mass). We will see more clearly how this is the case in the results section of the meta-analysis as well as why this count/mass factor of boundedness, not just because it points out a contradiction between Descriptive Grammar and Cognitive Grammar, is probably the most useful discovery about aspect in this meta-analysis.

2.3.8.6 The Basic Epistemic Model

Cognitive Grammar's basic epistemic model is appealing because it bases tense on the realis-irrealis distinction (i.e., realis portrays situations as actualised, as having occurred

or actually occurring; irrealis portrays situations as purely within the realm of thought, knowable only through imagination; Palmer 2001: 1) Hence, the realis-irrealis distinction is a basic epistemic function and not just a part of modality. This distinction can help learners to begin to conceptualise temporal functions in terms of domains rather than timelines. The essential notion of the basic epistemic model is that C accepts certain situations as being real, whereas others are not. Collectively, the situations accorded that status constitute C's conception of known reality.

Known reality is neither simple nor static, but an ever-evolving entity whose evolution continuously augments the complexity of the structure already defined by its previous history. The leading edge of this expanding temporal structure is termed immediate reality. All areas outside of this region are known as irreality. What is important to bear in mind is that a situation does not belong to reality or irreality on the basis of how the world has actually evolved, but depends instead on whether the C knows and accepts it as being part of the evolutionary sequence. Thus, time does not follow a straight line into the past. It is continually being reshaped by the present. Perhaps the past is evolving just as quickly as the future. The locus of a speech event is immediate reality, and from that vantage point the speaker and hearer conceptualise an expression's meaning. In this sense, all temporal expressions are unobservable cognitive functions. In the case of modal verbs, the contrast pertains to speaker knowledge: the zero option indicates that the speaker accepts the designated process as part of known reality, whereas a modal specifically places it in the realm of irreality.

Indeed, perhaps past tense uses of modals are used more for idiomatic or irreality uses than reference to any past event. The modal occurring with the present perfect aspect

then creates a pragmatic bounded irreality (e.g., obligation), which is not possible with the past tense. The other opposition is based on an abstract notion of proximity, so instead of "present" vs. "past" with perfect aspect one can speak more generally of a proximal/distal boundedness in the epistemic sphere. This deictic relation concurs with the relevance/non-relevance present perfect meaning in that something that is more distant is quite often of less relevance. Proximal would be ego or event spatiotemporal relevance.

2.3.8.7 The Auxiliary

In Cognitive Grammar, the auxiliary specifies tense and modality with the auxiliary acting as the grounding predication. The initial verb in the sequence—*be, have,* or the content verb if it stands alone—contributes its profile to the clause as a whole and can thus be characterised as the grounding structure within the clausal head, the grounded verb. This "grounded structure" as we will see in the perfect construction is equivalent to the experiential or possession type of perfect.

2.3.8.8 The Perfect Construction

Cognitive Grammar states that, of the auxiliary elements in the English clausal head, the perfect construction is the most difficult to describe semantically. According to Cognitive Grammar, both *have* and the perfect participial morpheme gain values that are not related to their other senses in this construction. However, Cognitive Grammar does not mention

the inherent lexical qualities of verbs found in the Aspect Hypothesis. Nevertheless, it does find that the present perfect construction proves susceptible to revealing characterisation. Of particular note is current relevance:

His nose has been broken seven times.

The two facets of this meaning—spatial reference point and potential relevance—are strikingly similar to how *have* is characterised as an auxiliary verb (i.e., possession). Cognitive Grammar suggests that the auxiliary arises from this sense (or a similar one) via the well-worn path of semantic extension leading from the spatial to the temporal domain. Thus, a spatial reference point becomes a reference point in time, and potential relevance comes to be construed temporally as current relevance, which concurs with the analysis of the grammaticalisation process (Carey 1994, 1996).

Cognitive Grammar refers to the present perfect construction as schematised expressions. They represent a speaker's thorough mastery of the minimal locutionary patterns *Ved, be Ved, Ving, be Ving,* and *have Ved.* These schemata should not be thought of as separate, unrelated entities, they constitute a highly structured assembly, in which the successive combination of simpler units gives rise to schemata of progressively greater complexity, and the same units function simultaneously as components of multiple higher-level schemata, which show a great deal of overlap. Returning momentarily to timelines, if we are to accept how they organise tense-aspect, then the responsibility would fall on the timeline approach to clearly illustrate how each of the timelines can function simultaneously as components of these multiple higher-level schemata.

2.3.8.9 The Four Perfects

Cognitive Grammar also has four perfects, but they are not semantic distinctions. Rather they include the complex verb phrases such as the passive. The auxiliary is not analysed as a grammatical constituent: tense and modality create a grounding predication, whereas the content verb and the remaining auxiliary elements constitute the clausal head, whose organisation is summarised as:

(have (PERF4(be1(-ing (be2 (PERF3 (V))))))))

In this formula, *V* represents the content verb, and *PERF* is the past or perfect participial morpheme. The *be1* and *be2* indicate that different senses of *be* are involved in the progressive and passive constructions, and the *PERF* has different senses in the passive and perfect constructions. There may be sub-schemata that specify different patterns of phonological integration, of which temporal sequencing is only one type; therefore the varied manifestations of the participial morpheme (i.e., *V-ed* or *V-en*) are unproblematic. The auxiliary elements of the clausal head occur in pairs: *have* with *PERF4*; *be1* with *-ing*; and *be2* with *PERF3*. Each pair represents two successive levels in the formation of a complex clausal head from its autonomous core (*V*). The affixal/inflectional member in each case combines with a verb and derives an atemporal relation, which is suitable as a noun modifier but cannot per se be used as clausal head. The associated schematic verb (*have* or *be*) is then available to impose its own processual profile on the atemporal relation, creating another verb at a higher level of conceptual organisation.

In an effort to sum up this analysis, the combination of complex verb forms attempt to illustrate the higher-level conceptual organisation of the four perfects but, without also revealing the underlying lexical aspect cognitive schemata (i.e., telicity, punctuality and durative), the result of this analysis is that it is somewhat uninterpretably abstract and hence comes quite close to resembling rules or formulas. Additionally, though the passive voice is also termed perfect, there is a different cause-and-effect argument structure between the passive and perfect constructions and this needs to be made clear. Indeed, perfect and passive aspect may occur more frequently with different types of verbs found in the Aspect Hypothesis. Additionally, occurrence of complex verb forms may also be disambiguated with the help of Aspect Hypothesis. For example, *have been –ing* may occur more with accomplishment or activity verbs. In this sense, rather than sequence of tenses (e.g., present in past), we may have sequences in lexical aspect (e.g., accomplishment in activity). Hence, this Cognitive Grammar analysis of aspect may have profited significantly from a more schematic inclusion of the Aspect Hypothesis.

2.3.9 Role and Reference Grammar

For three reasons, we now take a brief look at Role and Reference Grammar (Van Valin 1993). First, in direct contrast to Lexical Functional Grammar, it explains the relationship between semantics and syntax without recourse to terms such as c-structures and f-structures. Second, it makes explicit reference to the Aspect Hypothesis and outlines the relationship between it and argument structure. Lastly, Role and Reference Grammar has

an obvious influence on the final grammar we look at, i.e., Radical Construction Grammar (Croft 2001). The general schema of a Role and Reference Grammar projection grammar representation is given in Figure 4.

Figure 4. Role and Reference Grammar Representation (Van Valin 1993)

```
                          SENTENCE
                             |
                          CLAUSE
                             |
                           CORE
                          /  |  \
              ARG        ARG      NUCLEUS
                                     |
                                   PRED

XP   XP   XP          (XP)          V          PP/Adv
                                     |
                                 NUCLEUS – Aspect
                                     |
                             NUCLEUS/CORE – Directionals
                                     |
                                 CORE – Modality
                                     |
                                 CORE – Negation
                                     |
                                CLAUSE – Tense
                                     |
                            CLAUSE – Illocutionary Force
                                     |
                                 SENTENCE
```
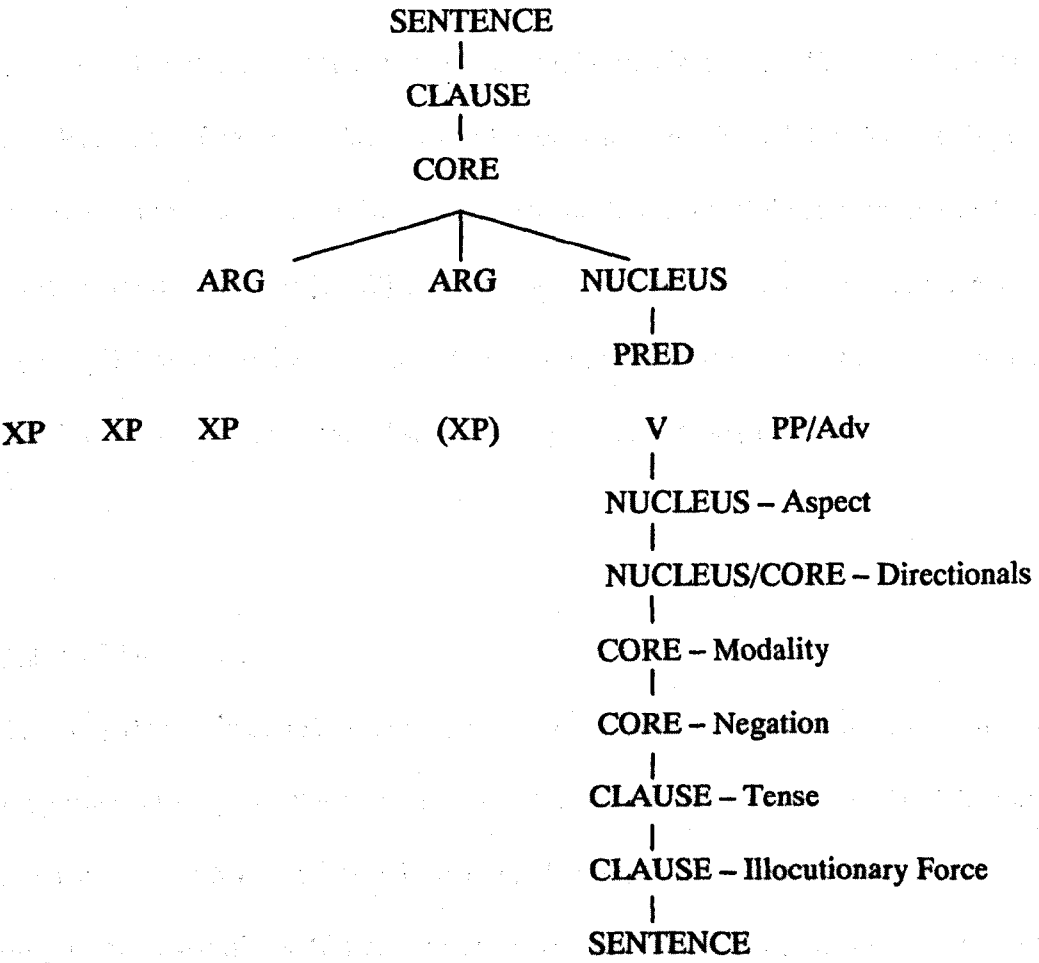
Of interest in this representation is that aspect occurs in the nucleus of the argument structure whereas tense occurs in the clause. Additionally, it is possible to draw parallels between this representation of grammar and the earlier metonymic-metaphorical representation of the grammaticalisation process in Section 2.2.1. Furthermore, as we will see when we look at joint-attention frames, the four levels of representation in Role

and Reference Grammar (i.e., nucleus, core, clause and sentence) are approximately equivalent to the four levels of joint attention (i.e., prototype, spatiotemporal, cause-and-effect and social roles).

Role and Reference Grammar differs from other varieties of generative grammar by employing a richer system of lexical representation, i.e., one that is considerably more complex than the arbitrary list of thematic relations in Lexical Functional Grammar. Role and Reference Grammar claims to be the only theory in which the Aspect Hypothesis motivates the assignment of thematic relations to a verb. Role and Reference Grammar starts from the Vendler (1967) classification of verbs into states, achievements, accomplishments and activities and to capture these distinctions it utilises a modified version of the representational scheme proposed in Dowty (1979).

2.3.9.1 Macroroles

The way that Role and Reference Grammar explains the relationship of the Aspect Hypothesis to argument structure is with the use of the term *macroroles*. The number of macroroles that a verb takes is largely predictable from its logical structure. There are only three possibilities. If a verb has two or more arguments in its logical structure then the unmarked situation is for it to take two macroroles. If a verb has only a single argument in its logical structure then the unmarked situation is for it to have only one macrorole. Verbs with no arguments have no macroroles. The nature of the macroroles is also a function of the verb's logical structure. If a verb takes two, then they must be actor and undergoer. For verbs that have a single macrorole, the default choice follows directly

from the logical structure of the verb. In this sense, if the verb has an activity predicate in

its logical structure, i.e., it is an activity or accomplishment verb, then the macrorole will

be actor; otherwise, it will be undergoer. Logical structures are related to

correspondences in Descriptive Grammar and constructions in Radical Construction

Grammar.

2.3.9.2 Linking Semantics to Syntax

The various components in a description of grammatical structure in Role and Reference

Grammar (i.e., clause structure, lexical representation and semantic roles, syntactic

functions, focus structure) are linked together as in Figure 5.

Figure 5. The Link Between Semantics and Syntax (Van Valin 1993)

SYNTACTIC FUNCTIONS Direct Core Arguments   Oblique Core Arguments

SEMANTIC MACROROLES Actor   Undergoer

Transitivity
Intransitive

THEMATIC RELATIONS   Agent Effector Experiencer Locative Theme Patient

1. State Verbs
    A. Locational
    B. Non-locational
        1. State
        2. Perception
        3. Cognition
        4. Possession

96
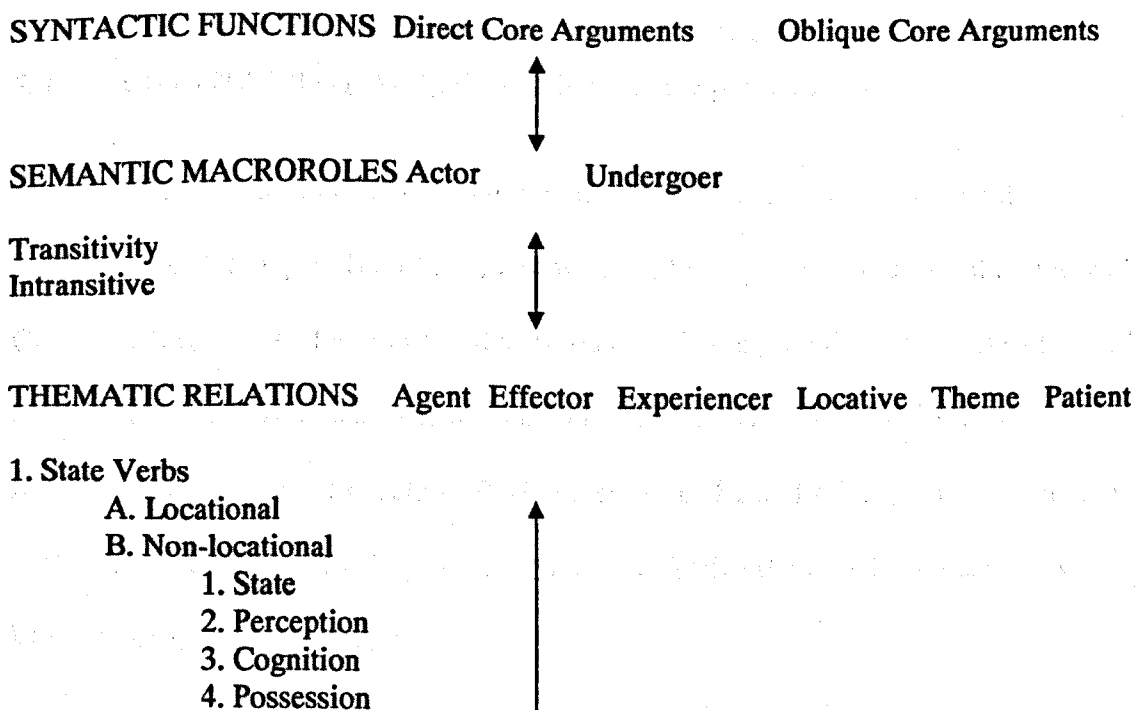
2. Activity Verbs
    A. Uncontrolled
    B. Controlled

LOGICAL STRUCTURE in Argument Positions

VERB CLASS	LOGICAL STRUCTURE
STATE	predicate
ACHIEVEMENT	become predicate
ACTIVITY	do predicate
ACCOMPLISHMENT	cause activity predicate

The linking procedure in Role and Reference Grammar from semantics to syntax is summarised as follows:

1. Determine the semantic roles of the arguments, based on their position in the decomposed semantic structure.

2. Determine actor and undergoer assignments.

3. Assign actor and undergoer to specific morphosyntactic statuses (this is language specific).

4. Assign the remaining core arguments their appropriate case markers/prepositions.

5. If there is an NP that is [+WH], then assign it to the pre-core slot.

In sum, Role and Reference Grammar provides the lexico-grammatical explanation of the Aspect Hypothesis that we were hoping to find in Lexical Functional Grammar. It reveals that grammatical analysis must begin with the semantics of the verbs and then determine how semantic roles help to determine the cause-and-effect relationships of argument structure. Basing theories of L1 and L2 acquisition on a theory such as this would most likely prove much more effective than has been the case with Lexical Functional Grammar.

2.3.10 Radical Construction Grammar

The final grammar in the meta-analysis is Radical Construction Grammar. It is based on Croft (2000; 2001) as well as peripherally on Goldberg (1995). Radical Construction Grammar is a theory of syntax, that is, a theory characterising the grammatical structures represented in the mind of the speaker. As such, it is broadly comparable to the successive versions of generative grammar, such as Transformational Grammar and Lexical Functional Grammar. However, Radical Construction Grammar is also Cognitive Grammar-based and achieves even more in describing tense-aspect functions than any of the previous grammars.

Radical Construction Grammar was developed in order to account for the diversity of the syntactic facts of a single language as well as the syntactic diversity of the world's languages. Radical Construction Grammar holds that universals of language are found in the patterned variation of constructions and the careful analysis of variation in distribution patterns reveals generalisations about grammatical structure (though not parts of speech) and behavior in specific languages that are ultimately identical to the cross-linguistic patterns revealed by typological research.

By *construction*, Radical Construction Grammar means internal syntactic structure as a metonymic mapping of part-whole structure: the syntactic structure of constructions consists only of their elements and the roles that they fulfill in the construction. Radical Construction Grammar also conforms to Cognitive Grammar's content requirement: The only structures permitted in the grammar of a language (or universal grammar) are (1) phonological, semantic or symbolic structures that actually

occur in linguistic expressions; (2) schemata for such structures; and (3) categorising relationships involving the elements in (1) and (2).

Radical Construction Grammar is a *semantic map* model, in which distributional patterns of language are mapped onto a *conceptual space*, much of whose structure is hypothesised to be universal. As has been pointed out, distributional analysis is the basic method of empirical grammatical analysis (i.e., language-in-use and language-in-context). It is used to identify the basic grammatical units out of which complex syntactic structures or constructions are built. Radical Construction Grammar claims the application of the distributional method reveals problems that can only be resolved by using constructions rather than categories as the basic units of grammatical representation.

If the reader recalls the indeterminacy of terms in the Descriptive Grammar analysis, in Radical Construction Grammar, constructions, not categories and relations, are the basic, primitive units of syntactic representation. Radical Construction Grammar refers to parts of speech as a fundamental problem and stresses that distributional analysis is the basic method for determining what categories exist in a language. Distributional analysis was supposed to reveal parts of speech. It was also assumed that it would reveal grammatical categories that act as the primitive atomic elements that syntactic categories use to describe grammars (cf. Lexical Functional Grammar). However, distributional analysis revealed nothing of the kind (i.e., syntactic categories are abstractions not found in language-in-use). Instead, distributional analysis revealed a myriad of classes and gave no method for deciding between parts of speech and minor syntactic categories. Additionally, the systematic application of distributional analysis did not provide a small number of parts of speech with sharp boundaries. Radical Construction Grammar claims

these findings suggests that the categories which distributional analysis defines are not only not the traditional parts of speech, but that they are not the sort of atomic primitives that are the building blocks of models of syntactic representation for particular languages.

2.3.10.1 Typological Prototypes

In place of categories, Radical Construction Grammar divides the relevant roles in constructions into less abstract semantic classes or *typological prototypes*: *objects* (i.e., referring), *properties* (i.e., attributive), and *actions* (i.e., predicating). Typological prototypes are only a small subset of the semantic classes of words used in human languages. They are defined in terms of four semantic properties. The first is *relationality*, that is, whether a definition of a concept inherently requires reference to another concept. The second property is *stativity*—i.e., whether the concept represents a state or a process. The third property is *transitoriness*—i.e., whether the concept represents a transitory state or process or an inherent or permanent state of the entity in question. The fourth and final property is *gradability*—i.e., whether the entity is gradable along scalar dimensions. Tense-aspect may involve all four semantic properties. Viewing tense as metaphor involves relationality. We have already noted the state/process lexical aspect distinction of stativity. TIME IS SPACE and TIME IS A MOVING OBJECT can represent permanent and transitory states respectively. Finally, the bounded and unboundedness of aspect is a property of gradability. Additionally, all of these semantic properties may also be applied to underlying cognitive schemata.

2.3.10.2 Conceptual Space

Radical Construction Grammar uses the term *conceptual spaces* for different functions that are expressed by language. Conceptual space is *multi*dimensional, that is, there are many different, semantic, pragmatic, and discourse-function dimensions that define any region of conceptual space. It is the area containing joint-attention frames as well as cognitive schemata. The universals of language are found in the conceptual structure and in the mapping of conceptual function onto grammatical form. A number of universals are proposed in typological theory, and are adopted by Radical Construction Grammar:

- Conceptual space represents a universal structure of conceptual knowledge for communication in human beings.
- Language-specific and construction-specific grammatical categories should map onto connected regions of conceptual space.
- Diachronic changes in the distribution of a construction should follow connected paths in conceptual space.
- Constructions encoding a function should code that function in at least as many morphemes in typologically unmarked points in conceptual space as in typologically marked points in conceptual space.
- Constructions expressing the behavioral potential of a category should be found in at least the typologically unmarked points in conceptual space.
- The constructions encoding the typologically unmarked points in conceptual space should have at least as high a token frequency in discourse as those encoding the typologically marked points in conceptual space.
- The conceptual space provides the internal structure of grammatical categories; the boundaries of grammatical categories are defined language-specifically, and may be fuzzy.

2.3.10.3 Tense-Aspect Analysis

Many of the previous grammars failed to make any mention of lexical aspect. However, Radical Construction Grammar has stated it considers lexical aspect as the "inherent aspect" of predicate types or situation types a misnomer. Instead, Radical Construction Grammar argues that in fact the relationship between the aspectual interpretation of a lexical predicate and the lexical predicate itself is indirect, and the result of (mostly conventional) construals of the lexical predicate in the tense-aspect constructions of the language. Rather than inherent semantics, Radical Construction Grammar argues that there are eighteen distinct aspectual types required for describing the aspectual behavior of verbs in English (and, presumably, other languages).

This number is much greater than the four lexical aspectual types proposed in the Aspect Hypothesis. However, Radical Construction Grammar states that the aspectual types are based on a systematic analysis of them in terms of the sequence of phases and the different possible profilings on an aspectual contour (i.e., directed/undirected and reversible/irreversible). The foundation of the system is the analysis of phases. There are seven types of phases, out of which the eighteen aspectual types are formed.

Table 1. Classification of basic aspectual types of verbs (predicates) (Croft 2001)

profiled contour preceding (result) state:	type of (result) state:		
	point	interval	history
none (state profiled)	*point state*	*transitory state*	*inherent state (original/acquired)*
achievement	*cyclic achievement*	*reversible (directed) achievement*	*irreversible (directed) achievement*
accomplishment	*cyclic accomplishment*	*reversible (directed) accomplishment*	*irreversible(directed) accomplishment*
runup achievement	*cyclic runup achievement*	*reversible (directed) runup achievement*	*irreversible (directed) runup achievement*
profiled contour preceding process:	type of process:		
	undirected	directed	
none (process profiled)	*undirected activity*	*directed activity*	

2.3.10.4 Lexical Aspect

The result state of an achievement can be any of the three types of states. *Open* is an example of a transitory result state. An achievement ending in a transitory result state is called a *reversible* (directed) achievement, reversible because the result state is transitory. An achievement may also end in an inherent result state. Many verbs of destruction are examples of achievements with inherent result states, e.g., *break, shatter,* and *die.* These are *irreversible* (directed) achievements. Note Radical Construction Grammar's use of *inherent* with the state, however, the inherentness must relate more to the construction than semantics. The following figure illustrates Radical Construction Grammar's schematic for achievement aspect (∇ = ordinate, qualitative states and changes and t = time).

Figure 6. Achievement Aspect in Radical Construction Grammar (Croft 2001)
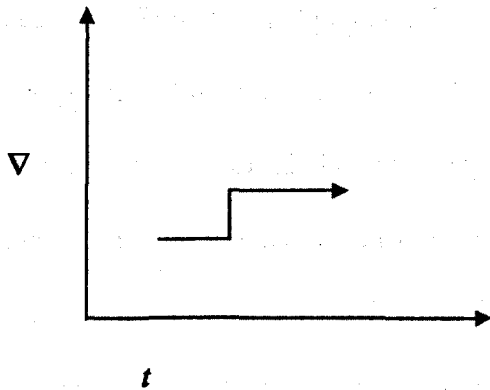
The vertical line in the arrow represents the punctual event. Accomplishments differ from achievements in that they are durative as well as involving a change from one state to another. Please refer to Figure 7 for the durative representation of accomplishment aspect.

Figure 7. Accomplishment Aspect in Radical Construction Grammar (Croft 2001)
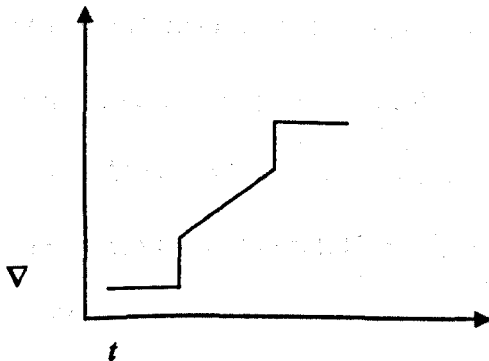
Unfortunately, Radical Construction Grammar prefers to use two-dimensional schematics. Writing is of course unavoidably two-dimensional but, had Radical Construction Grammar attempted to depict the multidimensionality of conceptual space somewhat more, it might have generated a better schematic of aspect. It may also have then been possible to illustrate how tense-aspect combines into higher-level schemata.

The phases of an accomplishment are profiled at least in the English past tense as: the inception of the directed process, the directed process itself and the completion of the directed process. Runup achievements, like (ordinary) achievements and accomplishments, are divided into three types. An irreversible (directed) runup achievement has an inherent result state, as in *be dying*. A reversible (directed) runup achievement has a transitory result state, as in *be falling asleep*. A cyclic runup achievement would be an interpretation of *flash* in *The lighthouse is flashing*, namely the one that describes a single relatively slow rotation of the lighthouse when the observer is fairly close to the lighthouse.

2.3.10.5 Grammatical Aspect

Radical Construction Grammar makes the intriguing distinction that rather than simple the current relevance interpretation of the present perfect is a consequence of describing the *subject* in the state of the situation having taken place rather than the occurrence of the event relevant to the subject. Hence, the event represents current meaning making to the subject (i.e., somewhat adjectival). The existential reading of the present perfect also follows from this interpretation. The existential reading is an assertion that the present is such that the event occurred on at least one occasion in the past.

In conclusion, Radical Construction Grammar further delineates the Aspect Hypothesis with the terms, directed/undirected, reversible/irreversible and cyclic. Dowty (1976) also used similar terms (i.e., intentional/non-intentional). Additionally, Radical Construction Grammar does not make recourse to the perfect of recent past or temporal

adverbials in its analysis of perfect aspect. Radical Construction Grammar does not explicitly distinguish between lexical and grammatical aspect. The reason may be that it considers the conventional use of the term, inherent semantics, as a misnomer. To some extent, this bears out. We have seen that activity verbs with singular count noun objects become accomplishments. Hence, assignment of the verb may depend more on the construction, though it would have helped the Radical Construction Grammar analysis to provide constructions such as these, revealing exactly how the construction binds meaning and form.

2.3.11 Results of the Synchronic Meta-Analysis

We must now synthesise our findings from each analysis of grammars to achieve the results of the meta-analysis. Each grammar has been grouped into the following chart: 1) The use of a diagram or schematic 2) mention of grammatical aspect, 3) mention of lexical aspect and mention of Aspect Hypothesis. Table 2 shows how each grammar fares in these categories.

Table 2. Results of the Synchronic Meta-Analysis

	Diagrams or Schematics	Grammatical Aspect	Lexical Aspect	The AH
1) Conventional	X	X		
2) Transformational Grammar	X	X		
3) Lexical Functional Grammar	X	X		
4) Systemic-Functional		X		
5) Descriptive	X	X	X	X
6) Corpus-based	X	X		
7) Role and Reference	X	X	X	X
8) Cognitive	X	X		
9) Radical Construction	X	X	X	X

Radical Construction Grammar is shown to have mentioned lexical aspect although not its conventional meaning. Grammatical aspect could also have been further categorised as to whether the grammar depended on temporal adverbials to describe it or not (e.g., *for* and *since*). The most suitable grammars for the SCM pedagogical approach in this thesis are Descriptive, Role and Reference, and Radical Construction as well as Cognitive Grammar because of its use of schematics. Many of the other grammars nevertheless have specific qualities useful to SCM. Perhaps more effective than trying to synthesise the grammars, it might be better to show which features from each could contribute to what is hoped would be a more descriptively adequate sociocognitive dialogic grammar:

1) the relationship between meaning and form;
2) the use of metaphor and metonymy;
3) the use schemata;
4) the use of cross-linguistic typological prototypes
5) usage in the sociocultural context.

If there were more consistency between grammars, then the synthesisation process would probably have been much easier. Theoretically, we might have been able to achieve some form of descriptive adequacy by combining them (i.e., universals within grammars), however, because none of the grammars take into account the social nature of interaction in a sense each grammar represents it own abstract system. I do hope that this meta-analysis helped to somewhat further disambiguate both tense-aspect and the Aspect Hypothesis as well as determine which grammars offer the better analyses of form. We now return to how perfect aspect is best described as a form of boundedness and then to SCM schemata for tense-aspect.

2.3.11.1 Count/Mass Verbs and Argument Structure

If tense is best described using spatial terms (e.g., *the future is ahead* and *the past is behind*), then perhaps perfect and imperfect aspect are best described as the boundedness and unboundedness of temporal viewpoint. Imperfect, stemming from dynamic or activity verbs and the attributive *be*, is unbounded between the past, present and future. Although when there is a scheduled future time, imperfect becomes bounded with the future. Perfect, on the other hand, stemming from state verbs representing a cognitive constant in relation to the possessive *have* is bounded between the present and the past.

Although somewhat contradictory, Descriptive Grammar, Systemic Functional Grammar and Cognitive Grammar all mentioned how this tense-aspect relationship is related to the mass/count noun distinction. However, apart from Descriptive Grammar, none of them went on to specifically mention how this relationship affects argument

structure. Dowty (1979) explains it quite well. Accomplishment verbs, which are activity verbs that take direct objects, continue to behave like unbounded mass activities if an indefinite plural direct object or a mass-noun direct object is substituted for the definite or indefinite singular one:

1) *John ate the bag of popcorn in an hour.*
2) **John ate popcorn in an hour.*
1) *John built that house in a month.*
2) **John built houses in a month.*

Thus, mass nouns remove the telic boundedness from the accomplishment and it becomes an unbounded durative activity that can become bounded by a temporal adverbial (e.g., *John ate popcorn for an hour*). This infinite expansibility/contractibility (i.e., unboundedness) is probably the reason why Cognitive Grammar links mass nouns to imperfective. Thus, unboundedness, dynamaticity and duration are equivalent. This difficulty extends to achievement verbs as well. Achievements with singular objects cannot be durative but if they are mass or plural it is possible:

1) **John discovered the buried treasure in his backyard for six weeks.*
2) *John discovered fleas on his dog/crabgrass in his yard for six weeks.*

We might want to re-term 2) as a mass achievement or an activity achievement bounded by temporal adverbials. Typical achievements and accomplishments are bounded (i.e., count) without the use of temporal adverbials. Thus, the use of mass or count noun direct

objects helps to disambiguate the mass/count distinction between imperfect and perfect aspect.

Additionally, although many of the grammars relied on temporal adverbials to explain tense-aspect, none of them explained how accomplishments and achievements change to durative when occurring with either definite or indefinite objects. Descriptive Grammar pointed out how the different verbs can be extended with adverbials; however, more analysis of this sort needs to be found in grammars. It would enhance our understanding of the relationship between verb semantics, count/non-count direct objects, adverbials and argument structure.

2.3.11.2 Aspect Hypothesis Revisions

The Aspect Hypothesis claims that learners first acquire grammatical tense-aspect according to the inherent semantics of the verb, specifically learners strongly associate past tense and perfective aspect forms with punctual and telic verbs, imperfective aspect forms with atelic verbs and progressive aspect forms with activity verbs (Shirai 2004). Although Radical Construction Grammar alters the understanding of "inherent semantics," this has come to be the conventional understanding of the Aspect Hypothesis. The Aspect Hypothesis has also been revised several times. Descriptive Grammar added *occurrences*. Mourelatos (1981) revised it to include events and made both accomplishments and achievements stemming from activities (i.e., dynamic) and Robison (1995) added another category (i.e., punctual states).

SCM revisions to the Aspect Hypothesis may be closer to the way Vendler originally intended it. According to Vendler (1967), activities and accomplishments were most closely related (i.e., + dynamic) and states and achievements went together (i.e., - dynamic). I would like to suggest that an achievement such as *painting a picture* or *building a house*, though dynamic, once completed or accomplished, has become an egressive telic perfective and is used the most often with present perfect aspect, and hence once realised belongs more to the resultant state category, although this may be more of an analysis of the verbal construction rather than the inherent semantics of the verb.

The Aspect Hypothesis predicts that perfective will first emerge with achievements and accomplishments and then extend to activities and states but research shows (Housen 2002b) it extends to states before activities, suggesting a closer relationship between state, achievement and accomplishment verbs. A way to investigate this further is to determine whether there is a relationship between the Aspect Hypothesis and the sequence of auxiliaries (i.e., perfect, progressive and passive). Initial corpus analysis of the BNC suggests passive may occur most frequently with accomplishments and achievements and activity verbs may be common with the *have been –ing* form.

Another necessary revision to the Aspect Hypothesis is schemata. Vendler (1967) used the term *schemata* to distinguish the four categories in the Aspect Hypothesis but he did not provide any visual representations for them. Thus, the following diagrams are the suggested SCM schemata for the Aspect Hypothesis:

X = dynamic   + = durative   [= ingressive telic   ] = egressive telic   - = punctual

Schema 1. STATES

+++++++++++   + = durative
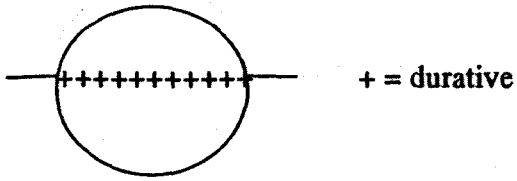
Example State Verbs: *want, like, love, have*

/+++/
I love.

Schema 2. ACCOMPLISHMENTS

XXXX[+++++   [= completed
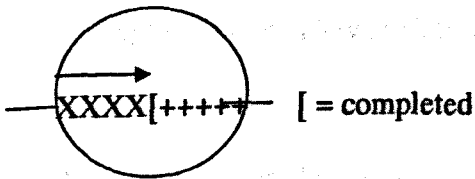
Example Verbs: *paint a picture, write a novel, build a house*

/XX[++/
I have built a house.

Schema 3. ACHIEVEMENTS

+++++]+++   ] = change of state
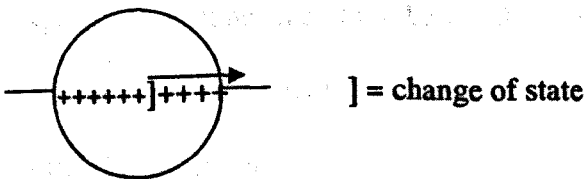
Example Verbs: *find something, recognise someone*

/++]++/
I have found love.

Schema 4. ACTIVITIES
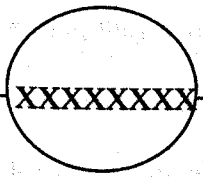
X = dynamic

Example Activity Example Activity Verbs: *walk, run, swim, push*

/XXX/
I am walking.

These schemata are intended to represent the basic-level cognitive category of

conceptualisation. They are based on the Aspect Hypothesis and theories of

grammaticalisation. Although they are only two-dimensional, because the circles or

domains have the ability to map onto each other, they attempt to illustrate the

multidimensionality of conceptual space. In this way, they are designed to be able to be

combined into multiple higher-level schemata (i.e., the super-ordinate category level) to

structure discourse. Then, when schemata are introduced into the classroom, it may be

possible for students to make a unidirectional association between them, the non-

spontaneous concept and the L2 input. Finally, through a metonymical process of

mapping the schemata to meaning and form, it may be possible to alter the sequence or

rate of acquisition.

2.3.11.3 Sociocognitive Tense-Aspect

No grammatical rules or symbols have ever been observed in the brain. They are a strictly

external sociocultural phenomenon and grammatical rules represent a further abstraction

away from symbols. Although cognitive schemata have not been located in the brain either, they offer a less abstract way of understanding how the conceptual aspects of grammar are organised in cognition. In addition to schemata for lexical aspect, schemata for grammatical aspect and tense are also necessary. With lexical aspect, we see the perfect grammaticalisation process extend from the present tense to perfect states, perfect accomplishments, perfect achievements, perfect activities, and, finally, perfect current relevance.

1) Lexical Aspect Schemata

present -> state -> accomp ->achieve ->activity ->current
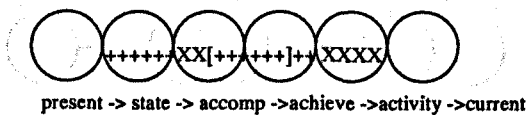
2) Grammatical Aspect Schemata

Grammatical aspect, or the auxiliary *have* with the past participle, has the unique ability to extend on lexical aspect and describe the subject in the state of the situation having taken place. The grammaticalisation process then extends from the grammatical aspect form of current meaning making to the experiential and then the durative form. Finally, when the present perfect occurs with a modal, the bounded irreality form occurs.

current->experiential->durative->modal-bounded irreality

3) Perfect/Imperfect Schemata

perfect   imperfect   ingressive   egressive
                                    continuative

114
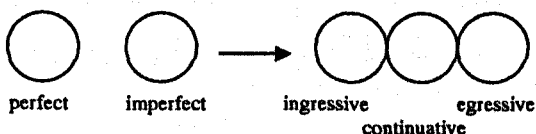
Additionally, we see the distinction between perfect and imperfect aspect (i.e., count and non-count). Imperfect is by nature continuative and perfective can be viewed either from an ingressive or egressive perspective. Within these aspectual distinctions, there would be further phases, such as iterativity, directedness and reversibility.

4) Tense Schemata

The following diagrams illustrate how aspect (in the form of present perfect for past and *going to* for future) acts as an intermediary between present and/or past and future tense. The realis-irrealis distinction separates present and past from future.

present   perfect aspect   realis-irrealis   tense (past, present, future)
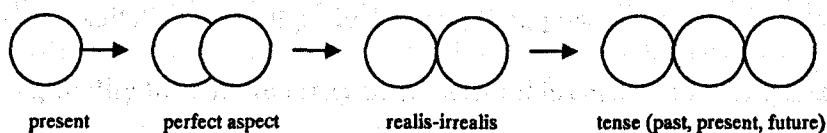
As the schemata suggest, time is best represented not as something linear on a timeline but as components of higher-level schemata. Furthermore, rather than explain the text-based relations of grammar, these schemata reveal the underlying cognitive relationship between typological prototypes (i.e., objects, properties and actions) and how they are used in social interaction to express temporal relations through the emergence of tense-aspect grammar. In this way, the higher-level representation of tense-aspect can then be used metaphorically to shape the relations in discourse.

115

2.4 L1 Acquisition of Tense-Aspect

This analysis of tense-aspect acquisition in L1 relies heavily on Tomasello (2003).

English-speaking children learn their first verbs—typically in the months preceding their

second birthdays—for changes of state, activities, and states, with no discernible

developmental advantage for any of these. The prototypical situation in the case of

change of state verbs is a transformation defined in terms of relatively abstract relational

elements. Thus, early-acquired verbs such as *get, find, stop, break,* and *fall-down* indicate

a class of conceptual situations whose commonality is some pattern of spatiotemporal-

causal relations (i.e., achievement verbs) and these are often the most frequent verbs used

with resultative present perfect aspect (i.e., punctuality). One of the first conceptions of

temporality for children may be to detect this cause-and-effect change in constancy. The

prototypical situation for state verbs is something being in a constant state for some

discernible length of time, often indicated in English in predicate adjective constructions

such as *She's nice/little/red.* The prototypical activity for activity verbs, in contrast,

involves concrete and perceptible types of sensory-motor action. Thus, early-acquired

verbs such as *run, smile, jump* and *see* are not defined by abstract-spatiotemporal-causal

relations, but rather by the characteristic actions involved, defined in terms of specific

objects and body parts.

In other words, perhaps the four types of Aspect Hypothesis verbs can be further

delineated by their cause-and-effect relationships. Activity verbs simply show effect (e.g.,

he is running) and state verbs only illustrate cause (e.g., *I know*). Accomplishments

reveal a telic cause-and-effect relationship between the subject and the object (e.g., *he*

built a house), whereas achievements reveal a punctual cause-and-effect relationship with

116

a subject that can also be an object (e.g., *the vase broke*). Thus, transitive

accomplishments and achievements may occur more commonly with the passive voice.

2.4.1 Aspect Before Tense

To ground their clauses in current meaning-making joint-attention frames, speakers must

locate the symbolised state or event in time. Weist (1986) proposed four stages in

children's ability to linguistically indicate the temporal ordering of events using tense

marking in an adult-like manner:

- age 1;6: to talk about events in the here and now only.
- age 1;6 to 3;0: to talk about the past and future.
- age 3;0 to 4;6: to begin to talk about past and future relative to a referent time other than now (typically indexed with adverbs such as *when*).
- age 4;6 and older: to talk about past and future relative to a reference time other than now using adult-like tensing system (typically verb morphology).

The problem with this neat account is that tense interacts in complex ways with aspect,

and it does this differently in different languages. The best-known hypothesis about

children's ability to indicate temporal relations in their early language is the Aspect

Before Tense Hypothesis. Following the Aspect Hypothesis, most researchers have noted

that children tend to use past tense most often with change of state verbs (i.e., telic or

punctual) and present tense (or present progressive) most often with activity verbs (i.e.,

atelic). In fact, Tomasello (2003) states children at this age think that the past-tense

marker actually indicates that an event is bounded (i.e., telic) and completed (i.e.,

perfective), rather than one that occurred in the "past" (i.e., independent of telicity and perfectiveness).

One major reason children display this pattern is that it is the pattern they hear in the language around them. Li and Shirai (2000) note the distributional bias in adult speech to children—i.e., the use of telics and perfectives with past tense and the use of atelics and imperfectives with present tense—is the result of grammaticalisation. In many languages, past tense and/or perfective markers derive from words indicating completive and resultative aspect, whereas imperfective, habitual (such as the English present tense), and stative marking quite often derive from progressive aspect.

2.4.2 The Difficulty with Future

After perfective, children comprehend grammatically encoded references to the past equally well whether it was immediate past or the remote past. However, they comprehend grammatically encoded references to the immediate future much better than references to the remote future. Children have difficulty conceptualising the future as prediction (i.e., non-irrealis). Children first use irrealis modal terms like *maybe, probably*, and *might* in connection with future intentions (and some ongoing events). They do not use these terms to express uncertainty with respect to future events until considerably later in development, after 3 years of age in most cases. And so, the major difficulty in learning future tense reference for many children—certainly those learning English—is the intimate relation between futurity and other forms of irrealis and modality. Indeed, it

quite probably is possible to express the future without ever having reference to the

certainty of *will* (e.g., *I may go shopping tomorrow*).

Perhaps this is an indication that the grammaticalisation process for the future

tense (as well as the conceptualisation process) extended from the present tense to *going*

to and then *will*. If this is the case, then *going to* for future reference may share the same

current meaning-making construal as grammatical aspect (i.e., telic, punctual or

resultative rather than occurring in the "future").

2.4.3 The Difficulty with Perfect

Weist (1986) argues that because of perfect's dual reference to past and present, mastery

of the English present perfect also requires some coordination of a remote reference time

and current time. It is thus a relatively late acquisition for British English-speaking

children, and even later for American English-speaking children—perhaps as late as 4 or

5 years of age, depending on the criterion of mastery. In this sense, the acquisition of the

present perfect is a very good indication of L1 fluency, of the ability to structure

discourse analogically, or put another way, of complete conceptualisation in L1. Of

interest, perfect aspect is used in Scottish English-speaking communities much more

frequently than in other English-speaking communities, perhaps with a clearer contrast to

the simple past tense. The Scottish English-speaking children seem to acquire productive

control over this form well before their British and American counterparts.

Finally, the vast majority of past-tense verbs that children hear in English

utterances (i.e., perfective) are irregular, by some estimates by a margin of 3 to 1 over

regulars. What this means is that children at the beginning have little evidence for the regular pattern, but as they learn more verbs the evidence for the pattern becomes clearer and clearer through distributional analysis. This fact suggests that since most initial verbs are irregular and achievements are used most often initially in the past tense that what are called "irregular" verbs are actually not irregular (except morphologically) but punctual transitive verbs.

2.5 L2 Acquisition of Tense-Aspect

Pennycook (2001: 144) states that mainstream SLA research has contributed some useful insights into ways in which grammatical items are acquired, but it has had virtually nothing to say about learners as people, or contexts of learning. Pennycook expands on his argument by claiming that contradictions within SLA are not hard to find, for example, Chomskian-based SLA theories confounding the results of L2 acquisition research. Lantolf (1995: 716) suggests that SLA "presents a lopsided and uncritical view of both itself and the scientific tradition from which it arises." This may be attributable to SLA's somewhat misguided belief that language research should be interpreted "scientifically" when in reality most SLA approaches lag far behind current scientific methodology for studying complex adaptive systems (Cook 2000). Additionally, if language is a sociological usage-based function, then applying rigorous scientific constraints upon it might prove to be counter-productive. In short, though contradiction is

found not only within SLA, there is still a need for reconciliation between theories, research and teaching, which is one of the objectives of SCM.

Within this context, we look at the work of SLA researchers into tense-aspect (Bardovi-Harlig 2000a, 2000b; Anderson & Shirai 1996; and Salaberry & Shirai 2002). Perhaps Bardovi-Harlig, among SLA researchers, has conducted the most research into tense-aspect and its emergence in L2 learners. Her work contributes many factors to our current understanding of present perfect aspect: 1) Meaning-oriented studies of temporality, 2) the emergence of verbal morphology, 3) the Aspect Hypothesis and 4) the discoursal role of tense-aspect (i.e., the Discourse Hypothesis). She also cautions that to fully understand how an interrelated subsystem of form-meaning associations such as tense-aspect develops in a linguistic system researchers must consider the development of the entire system (Bardovi-Harlig 2000b: 257). Along with the above-mentioned factors, we also look at how the following affect the development of the entire system: emergence and morphosyntactic complexity, overgeneralisation and undergeneralisation of the emerging form, analysis of learners' interlanguage, and contexts of learning.

2.5.1 Meaning-Oriented Studies of Temporality

A meaning-oriented, or sociocultural, approach highlights the interplay of the pragmatic (i.e., in a functional sense), lexical, and morphological devices that learners use. In the earliest stage of temporal expression without any reconceptualisation having taken place, there is no systematic use of tense-aspect morphology. Without tense-aspect morphology, learners typically establish temporal reference in the following ways: scaffolded

discourse and implicit reference by contrasting events and following chronological order in narration (Bardovi-Harlig 2000b).

In the second stage of temporal development, the learner remains dependent on temporal adverbials and lexical expressions and the use of lexical devices to mark temporal expression is the defining characteristic of the stage (cf. *Yesterday I go shopping*). The use of adverbials is not restricted only to the pre-morphological lexical stage, however; lexical devices continue to be used well into the morphological reconceptualisation stage, although as reconceptualisation occurs they exhibit both a decrease in frequency of occurrence relative to the number of inflected verbs and a reduction in functional load as the use of past tense stabilises. As I have already argued, without the introduction of tense-aspect schemata, the learner is dependent on these sociocultural temporal adverbial expressions of time. The use of tense-aspect cognitive schemata hopes to circumvent this dependency and functional load through earlier emergence of verbal tense-aspect morphology.

2.5.2 The Emergence of Verbal Morphology

After meaning-oriented approaches, tense-aspect verbal morphology begins to emerge. Bardovi-Harlig (2000b: 126) relies on the Reichenbachian (1947) approach for her analysis of tense-aspect.

> If we take "E" to represent event time, "S" to represent speech time, and "R" to represent reference time, then tense-aspect forms that encode the expression of past share the semantic feature of E before S, or event time

before speech time. Tense-aspect forms that share the feature of E before S include the simple past (R, E precede S), the past progressive, which differs from the simple past by grammatical aspect but not by tense and thus shows the same configuration of event, reference, and speech time (i.e., R, E precede S), the present perfect (E precedes S, R), and the pluperfect (E precedes R which precedes S). The acquisition of a target like tense-aspect system by learners of English entails the acquisition of both the morphology (i.e., past – *ed*, past progressive **was/were** + **V-ing**, present perfect *have* + *V-en*, and pluperfect *had* + *V-en*) and its semantic and pragmatic features. In addition, learners must come to distinguish the meaning and use of each of the tense-aspect forms from those of their semantically close neighbors.

That Bardovi-Harlig bases her analysis on this existing framework of event time (E), speech time (S) and reference time (R) might also be considered a criticism of her work. Similar to timelines, Matthiessen & Bateman (1991) found Reichenbach's analysis to miss two fundamental generalisations about the tense system: 1) the tense system allows for more complex selections than those the Reichenbach analysis allows, and 2) tense selections do not represent composites of the three-time configurations (S, R, E). Klein (1994) also has a problem with the Reichenbachian analysis of tense simply because R is too unspecified. Without a precise interpretation, he argues, R cannot discriminate between present perfect and simple past.

The three times are, however, easily represented on a timeline, and, because of the three times (S, R, E), the axis is no longer necessary:

He has broken his nose.

E   S, R
Present Perfect

123
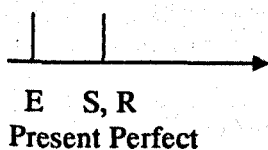
Obviously, this analysis does nothing to explain the Aspect Hypothesis. Finally, this analysis is unfavourable because it predates the field of SLA.

2.5.3 The Aspect Hypothesis

Over reliance on the Aspect Hypothesis could reduce the validity of any tense-aspect theory. Nonetheless, considering that awareness of lexical semantics for tense-aspect dates back as far as Aktionsarten, any explanation of tense-aspect that neglected the Aspect Hypothesis would not be adequate. Using the Vendlerian categories, Bardovi-Harlig (2000b) states the predictions about the Aspect Hypothesis are: perfective will occur with events, imperfective with states, and progressive with activities. It is not until the morphology begins to (unidirectionally) spread that the system exhibits potentially native-like contrasts between events, states and activities. Various other hypotheses and theories have been postulated about the acquisition of the Aspect Hypothesis. Two of the more attractive ones come from Anderson & Shirai (1996):

Prototype Theory

According to the theory of prototype category, there are good members (i.e., prototypes) and marginal members of a category, the goodness being gradient and determined by the commonality with the central members of the category (cf. typological prototypes). Learners should, for example, be able to determine prototypical activities from states. Once a prototype was determined it would exemplify all others in the category.

124

The Distributional Bias Hypothesis

This is a distributional analytical hypothesis which states that if both X and Y can occur in the same environments A and B, but a bias in the distribution of X and Y makes it appear that X only occurs in environment A and Y only occurs in environment B, when you acquire X and Y, restrict X to environment A and Y to environment B (e.g., perfect aspect with accomplishments and progressive with activities). Thus, the learner learns correct usage for each prototypical form. This is related to but perhaps opposite to the theory of correspondences in Descriptive Grammar (i.e., mapping between two structures A and B, such that if the same lexical content occurs in A and in B, there is a constant meaning relation between the two structures).

2.5.4 The Role of Discourse

Narrative discourse is comprised of two fundamental features: the foreground and the background. The foreground relates events belonging to the skeletal structure of the discourse and consists of clauses, which move time forward (Bardovi-Harlig 2000b). The temporal point of reference of any one event in the foreground is understood as following that of the event preceding it. So important is the concept of sequentiality that foreground clauses may be defined by the interpretation of their order (Labov 1972). In contrast to the single function of the foreground, which is to carry the storyline, the background has many individual functions, which together serve the purpose of supporting the foreground. Although events reported in foreground clauses are understood to be sequential, background events are often out of sequence with respect to the foreground and to other

125

background events. The background does not itself narrate main events, but provides supportive material, which elaborates on or evaluates the events in the foreground (Hopper 1979).

Put into an aspectual context, perhaps the past perfect aspect in subordinate clauses developed almost specifically for use with background out-of-sequence events. Additionally, present perfect aspect use in main clauses functions in discourse as a transitional marker from foreground to background; however, when it occurs in relative clauses it has the more traditional out-of-sequence background function.

Translating the Aspect Hypothesis and the Discourse Hypothesis (i.e., that learners use emerging verbal morphology to distinguish foreground from background in narratives) into predictions concerning the distribution of tense-aspect morphology in interlanguage based on acquisition evidence, Bardovi-Harlig (2000b) finds that the Aspect Hypothesis predicts that telic (i.e., goal-oriented) verbs will carry simple past morphology and the Discourse Hypothesis predicts that the verbs in the foreground (i.e., the main storyline) will also carry simple past morphology. Hence, when telic verbs (i.e., accomplishments) occur in the foreground, the two hypotheses cannot be distinguished. The use of the simple past in these predicates can be interpreted as support for either hypothesis. This suggests, then, that with the Aspect Hypothesis the conceptualisation process begins with accomplishments and with the Discourse Hypothesis it begins with foreground.

Likewise, the hypotheses cannot be distinguished when atelic verbs (states and activities) occur in the background, again suggesting that these represent the opposite end of conceptualisation. Achievements and accomplishments typically fill the central role of

laying out events in narration and are logical recipients for past/perfective marking. States and activities typically serve supporting roles, and if they receive inflectional marking they tend to be inflected with progressive (for activities) and past imperfectives (Andersen & Shirai 1994). Thus, we may expect to find more perfective accomplishments and achievements in discourse, whereas it might also be possible to suggest that states and activities might exhibit more complex sequences of tense-aspect.

2.5.5 Emergence and Morphosyntactic Complexity

How a form emerges is important to our understanding of the learning process of the form. Fortunately, when learners attempt to produce a form, any errors they make provide valuable data for researchers attempting to infer why learning did not take place. Because of a lack of data, the process a learner undergoes as the form is receptively interpreted by way of instruction is much harder to determine. Further complicating matters is the fact that learners learn at their own respective paces. Be this as it may, while forms will emerge at different times for each learner, without instruction they do seem to often emerge in relatively the same sequence, although this does not explain why learners tend to overgeneralise certain forms.

2.5.6 Overgeneralisations and Undergeneralisations

After a form has emerged, learners, especially instructed, have a tendency to either use it more than is necessary or when a different form is needed (i.e., overgeneralisation) or not

use it enough (i.e., undergeneralisation), as is often the case with uninstructed learners. According to Bardovi-Harlig (2000b), examining the use of present perfect in overgeneralisations and its non-use in undergeneralisations provides a clue to how learners "carve out" a form-meaning-use association for the present perfect form from their previously established associations of form and meaning, and use for the past and non-past. This carving out has both neurological and cognitive implications between the relationship of conceptualisation and language: The learner must relate the language to the correct time relation concept as well as use the correct phonological and morphological forms.

Specifically, overgeneralisations and undergeneralisations show the features of meaning that learners attempt to convey. The non-target like uses show that learners associate present perfect with both past and present time as well as with non-sequence (Bardovi-Harlig 2000b: 241). Most overgeneralisations are uses of the present perfect in the environment of the simple past. Overuses of the present perfect reflect the learners' association of the present perfect and past time. However, unlike the simple past, with which it is associated, the present perfect cannot be sequenced. Cases of overuse also occurred in environments associated with the pluperfect. The third identifiable area of overuse was in present tense contexts.

As has already been suggested, the overgeneralisation of the present perfect aspect may be related to the Aspect Hypothesis and the fact that in L1 aspect emerges before tense but in L2 instruction tense is most often introduced prior to aspect. Another possible L1/L2 interference explanation is viewpoint. The Aspect Hypothesis involves starting from a situational viewpoint (i.e., lexical aspect) and then extending to a

grammatical viewpoint (i.e., grammatical aspect). Thus, English can be considered an internal viewpoint language. If the L2 learner comes from an external viewpoint language, however, then the risk of overgeneralisation of tense-aspect once again arises. As has already been pointed out, this kind of interference is common with L1/L2 transfer. It might be considered the result of mismatch between the L1 *A* and *B* occurring in the L2 *X* and *Y* distributional analysis. One method to overcome this interference is to develop tense-aspect reconceptualisations (i.e., perfect as resultative viewpoint) in the learner through interaction with the underlying cognitive schemata for the form. Then, rather than have overgeneralisation, the learner uses distributional analysis correctly to make tense-aspect distinctions.

2.5.7 Interlanguage

The result of mistaken over and undergeneralisations is termed *interlanguage* in SLA (Selinker 1972). One of the most common forms of interlanguage is certainly when a learner should use the present perfect aspect in place of the past tense, resulting in only part of the meaning of the present perfect being encoded, for example:

Did you do anything during our spring break? I have stayed here (L1 Japanese).

2.5.8 Contexts of Learning

Pennycook (2001) stated that SLA has had nothing to say about contexts of learning, but clearly Bardovi-Harlig's research of emergence, over and undergeneralisation and interlanguage can provide a rich context for L2 learning. Lantolf (1995) stated that SLA presents a "lopsided" and "uncritical" view of itself and here it might be possible to bring Bardovi-Harlig more to task. In fact, (as is quite common with much of SLA research) the linguistic theory that is presented (in this case Reichenbachian theory) is psycholinguistically invalid (Doughty 2004) and, furthermore, findings from SLA research are rarely applied to develop new teaching methodology. Indeed, the research in this present thesis may be the first to investigate the correlation between the Aspect Hypothesis and instruction.

Consequently, although Bardovi-Harlig's findings are useful to the L2 practitioner, especially with regards to the Aspect Hypothesis, it has been left up to each individual teacher to determine how to apply the findings to their own teaching methodologies. In this sense, SLA remains lopsided and uncritical. As was pointed out in the beginning of this section, SLA research needs to come full circle theoretically and make the results of research applicable to classroom teaching.

2.6 Processability Theory

In this section, we take a closer look at Processability Theory (Pienemann 1989, 1999). The main tenets of which are that the sequence and rate of language acquisition are

unalterable. If a theory's goal is to make rules to determine if language is acceptable or not, then perhaps there would be an unalterable sequence and rate of acquisition. However, because language is usage-based, the sequence and rate of acquisition is not related to rules but to sociocognitive factors. As was explained in the introduction, Pinker (1982) developed a theory of L1 acquisition based on Lexical Functional Grammar and Pienemann (1999) then adapted it to L2. We now look at both in turn. Indeed, it is useful to look at both because they stay within the Lexical Functional/Transformational Grammar paradigm and unintentionally point out the inadequacies of it, thereby revealing how a sociocognitive usage-based approach to language learning can overcome the same inadequacies.

2.6.1 L1 Acquisition

Pinker (1982) explores in greater depth the possibility that lexical grammars may succeed where standard transformational grammars have failed in serving as a foundation for a psychologically plausible theory of language acquisition—a theory both adequate in principle to explain the fact of language learning and capable of interpreting the developmental sequence that children pass through on their way to language mastery. Pinker (1982) makes a very good point that transformational acquisition theories predict a class of overgeneralisations errors that no child has been observed to make. Thus, a cognitively plausible theory of language acquisition should explain why learners do not overgeneralise from a poverty of stimulus. With an overabundant wealth of stimulus (i.e., instruction), on the other hand, L2 learners very quickly learn to do so. In this sense, then,

a sociocognitive sequence of acquisition is based on analogical conceptualisation factors, which explains language acquisition in such a way as to label the "poverty of stimulus" a misnomer.

A transformation-by-transformation acquisition theory makes a prediction about the order of acquisition of grammatical constructions: A construction derived by the application of a particular transformation should be mastered only after each of the transformations is mastered in isolation. This may be where Pienemann got the idea for the sequence of acquisition in Processability Theory but Pinker (1982; see also Tomasello 2003) makes it very clear that the sequence of acquisition has to be based on something more complex than derivational factors. L1 child language data reveal that more complex derivations appear earlier than less complex ones. Unfortunately, the problem stems from attempting to make holistic cognitive processes into rules or a "parameter-setting model." Learners do not set parameters with underlying schemata, instead they conceptualise. If they did set parameters, as Pinker (1982) points out, it would be a trial-and-error method. However, schemata help to analogically eliminate the trial-and-error process through correct distributional analysis of stimulus.

Pinker (1982) proposes the "flagging" of elements for each syntactic schema with some feature in the semantic representation of a sentence. Once a set of parameters was "bootstrapped" into the grammar by these semantic means, the rules could be used in conjunction with further data to set the rest of the parameters in the grammar. Again, it is doubtful how effective bootstrapping semantics, parameters and rules could be with a usage-based activity like language acquisition. Instead, SCM proposes the use of cognitive functions such as metaphor and metonymy to link meaning to form. Further

research should investigate whether the use of rules or cognitive schemata lead to more language acquisition.

Pinker (1982) also proposes that rule schemata are innate. The child is *assumed* to encode a small number of semantically identifiable and linguistically relevant features of each utterance, such as its tense-aspect, and the number, person, gender, animacy, humanness and the like of each of its grammars. However, SCM holds that these things could not be innate because most of them are language specific. Additionally, SCM maintains that innateness of rules will never work. If we replace rules with metaphor and innateness with usage and introduce the concept of constructions between semantics and form then Pinker's theory of L1 acquisition might be compatible with SCM. If tense-aspect is innate, then Pinker (1982) contradicts himself once again by saying that one of the most striking features about language acquisition is that the learning of agreement and inflections is a drawn-out, error-prone process. SCM maintains that the sequence of acquisition of subject-verb agreement and tense-aspect are inseparable because of complex argument structure and they are conceptualised in tandem (e.g., mass/count nouns and mass/count verbs).

Finally, though he does not explicitly state it, Pinker (1982) is aware of how the Aspect Hypothesis affects language acquisition. He explains that children's grammars allow only certain predicates to witness transformations so some information about a predicate's ability to appear in a transformed construction must be stored with the particular predicate. Thus, he argues that children learn conservatively, entering predicate-construction pairs into their lexicon only upon hearing a particular predicate used in a particular construction (cf. distributional analysis). The difficulty he finds with

this account is in developing a plausible learning mechanism that will take the child from rules that operate on semantic or thematic symbols to the correct adult rules, which operate on grammatical functions. SCM, however, maintains that through a sociocognitive metonymic reconceptualisation process and social interaction, the learner gradually achieves native-like usage.

2.6.2 L2 Acquisition

It is the sole objective of Processability Theory to determine the sequence in which procedural skills develop in the learner. According to Pienemann (1999), and in direct opposition to SCM, this stance does not imply a denial of the social dimension of learning; it merely separates the cognitive from the social aspect. In this view, the two aspects of learning have a degree of autonomy, each following its own internal logic. While the two aspects of learning doubtless interact with each other, Pienemann's assumptions imply that the internal logic of cognitive processes cannot be altered by social dynamics and visa versa. This first generation cognitive approach to form, which is affecting the effectiveness of SLA research, is exactly the problem that more sociocognitive holistic learning approaches hope to address.

Again, as with Bresnan & Kaplan's (1982) use of algebraic formulas and Pinker's (1982) use of terms such as "innateness," "parameters" and "rules," Pienemann uses terms like "language processor" and "computational mechanisms" to describe the native speaker's linguistic knowledge. The following processing procedures and routines form the hierarchy that underlies Processability Theory:

1. lemma access,
2. the category procedure,
3. the phrasal procedure,
4. the S-procedure,
5. the subordinate clause procedure.

Presumably, one stage is not acquirable before having attained the previous one. However, as Pinker (1982) pointed out, this is not always the case with L1 acquisition. It is possible for argument or phrasal structure to affect acquisition of tense-aspect inflection or agreement. Of interest, Radical Construction Grammar did away with the second category procedure. Furthermore, children acquire spoken forms of subordinate clauses earlier than previously thought (Tomasello 2003).

Processability Theory is intended to provide a wider theoretical context for the "teachability hypothesis" which predicts that stages of acquisition cannot be skipped through formal instruction and that instruction will be beneficial if it focuses on structures from the "next stage." The problem, as Pienemann (1999) shows by contradicting his own theory, is that it is "impossible" to predict how suppliance in obligatory contexts will develop in any given structure or learner. Pienemann (1999) also exempts himself from the main tenet of Lexical Functional Grammar (i.e., including semantics to make the grammar psychologically plausible) when it comes to studies on the acquisition of verbal morphology because they focus on the acquisition of tense from a semantic/pragmatic aspect, rather than on the form of morphological markers. This very fact, of course, is what makes tense-aspect the best choice for an SCM approach to language acquisition.

2.6.3 Acquisition of Verbal Morphology

Processability Theory states that studies investigating the development of reference to time irrespective of the rule system underlying morphological form are perfectly legitimate, however it limits the usefulness of these studies for the purpose of testing Processability Theory. SCM, in contrast, allows for a holistic usage-based study of tense-aspect almost irrespective of the rules. Rather than rules, SCM uses metonymy to map meaning to form. Processability Theory (Pienemann 1999) also uses distributional analysis to test hypotheses made by it. However, it seems Processability Theory cannot make the correct predictions. For example, with plural marking, Pienemann notes that low accuracy rates are not produced by the absence of plural markers but by the *oversuppliance* of such markers. Because of awareness that instruction increases overgeneralisation, SCM would make this prediction.

2.6.4 Processability and Universal Grammar

As Pinker (1982) stated regarding innateness, much of the sequence of acquisition should result from universal grammar. This must be why Processability Theory distances itself from it. Processability Theory divides the labor of acquisition along the following lines: universal grammar for L1 and Processability Theory for L2. According to Pienemann (1999), universal grammar has been productive mostly as a property theory, addressing the issue of origin of linguistic knowledge and has been far less successful in accounting for development. This distancing of Processability Theory from universal grammar appears to be another fabrication to avoid the acquisition of rules set out by universal

grammar. In SCM terms, making recourse to rules only represents a linguistic pretense when the underlying cognitive schema is no longer transparent.

In conclusion, I hope enough contradictions and inconsistencies have been pointed out with Processability Theory to make it less than plausible.

2.7 L1 and Conceptual Transfer

Odlin (2003, 2005) perhaps more than other recent SLA researchers has reviewed the literature into language transfer (though see also Slobin 1985). These studies discuss problems of defining transfer and related terms, two of which are directly related to this thesis: *linguistic relativity* and *conceptual transfer*. According to Odlin (2005), linguistic relativity is often defined as the hypothesised influence of language on thought. Such influence might affect comprehension or production in L2, where the L1 is influenced by the L2. Conceptual transfer can be defined as those cases of linguistic relativity, most typically, an L2. We have already noted the problem with overgeneralisation of grammatical aspect with Japanese learners of English as their L2 and this problem is related to the need for linguistic relativity to become conceptual transfer, which I prefer to term, reconceptualisation.

Empirical work on the Aspect Hypothesis has shown an impressive if not total consistency in studies of learners of many different language backgrounds (Odlin 2005). However, as Shirai & Nishi (2003) make clear, there are real differences in how languages code temporal meanings. Odlin (2005) uses the Aspect Hypothesis to point out how transfer affects such differences. According to Odlin (2005), transfer of tense-aspect

does not occur until learners show considerable progress in making the canonical associations predicted by the Aspect Hypothesis. Once they have made such associations (i.e., between L1/L2 Aspect Hypothesis predictions), learners may then tailor tense-aspect to the correspondences between the L1 and L2.

2.7.1 Tense-Aspect in Japanese

This section analyses aspect, with emphasis on the Aspect Hypothesis, in the Japanese language. Attempting an analysis of Japanese aspect in English may make the previous meta-analysis of aspect in English appear to have been somewhat of an indulgence. Obviously, analyses of tense-aspect in Japanese have not been as thorough as those of English in English language journals, though fortunately there have been comparative analyses of the Aspect Hypothesis in Japanese (Shirai & Nishi 2003; Shirai 2002; Li & Shirai 2000). In this section, we are primarily concerned with understanding the extent to which there is Japanese and English cross-linguistic influence between tense-aspect and the Aspect Hypothesis. In a later section, we will explore the extent to which Japanese and English share the TIME IS SPACE metaphor.

Unfortunately, of the various grammars reviewed in the meta-analysis of the present perfect, I was only able to find one Cognitive Grammar analysis of Japanese in English (Kumashiro 2000) but it did not involve tense-aspect. Therefore, the analysis of Japanese tense-aspect in this section relies mostly upon conventional grammar, L1 acquisition studies and SLA research, though Yoshimoto (2000) is a Head-Driven Phrase Structure analysis.

In the Aspect Hypothesis, lexical aspect can be divided into four categories (i.e., activity, state, achievements and accomplishments), and these four categories have similarities as well as differences in Japanese. Grammatical aspect shares the most conceptual similarities between English and Japanese, often relating to the form as well as the underlying cognitive schema or viewpoint. However, the morphology for the experiential grammatical aspect in Japanese is not same as for the other perfect aspects. Being aware of the similarities and differences in both languages is always of value, especially when considering L1 transfer, interference, and overgeneralisation from L1 to L2. This awareness is also of use when we later look at the L1 sociocognitive metaphorm taskplan, which attempts to develop the best method to teach L1/L2 conceptual transfer between aspectual forms.

2.7.2 Verbal Classification in Japanese

We depend mainly on Soga (1983) for a more detailed analysis of tense-aspect in Japanese. Clancy (1985) provides useful input from L1 Japanese acquisition studies. Finally, Li & Shirai (2000) and Shirai & Nishi (2003) provide our SLA analysis of the Aspect Hypothesis and the Japanese *V-te –iru* form, which is used for both perfect and progressive aspect. Apart from the *koto ga aru* experiential aspect form, other aspectual forms in Japanese (e.g., *-te shimau*) will not be analysed. Though there are several other aspectual forms in Japanese, the predominance of the *–te iru* ending in any verbal analysis of the language indicates that it is the focus of any aspectual classification in Japanese.

Kindaichi (cited in Tsujimura 1996: 312) categorises Japanese verbs into four classes: stative, continuative, instantaneous and type 4. Their interpretation varies on the *–te iru* ending. Stative verbs cannot be used with the *–te iru* ending. They must appear with the past tense equivalent of it. Continuative or activity verbs can appear in the *–te iru* construction and they receive the progressive interpretation. Instantaneous (or punctual) verbs can also be used with the *–te iru* construction but the interpretation is perfect rather than progressive (cf. achievements). Finally, Type 4 verbs must appear in the *-te iru* construction, in unique opposition to the Stative class (cf. telic accomplishments). If this analysis were put into a Japanese Aspect Hypothesis context, it would probably look like something along the lines of the following:

1) State verbs – past tense (e.g., *wakatta* "I knew"),

2) Achievement verbs – perfect aspect (e.g., *mitsukete iru* "I've found it"),

3) Activity verbs – progressive aspect (e.g., *tabete iru* "I'm eating")

4) Accomplishment verbs – either perfect or progressive aspect (e.g., *e o kaite iru* "I'm drawing a picture" or "I've drawn a picture").

Of note, the inherent aspectual properties of individual verbs (i.e., lexical aspect) together with the behavior in the *-te iru* construction (i.e., grammatical aspect) led Kindaichi to this four-way classification of Japanese verbs (Tsujimura 1996: 321). What is also of note in this paradigm is that the *-te iru* construction with these verb pairs demonstrates an overwhelming tendency for the transitive verbs to induce the progressive reading and for their intransitive counterparts to bear the perfect interpretation. Yoshimoto (2000) found that, similar to Kindaichi, because of inherent semantics most verbs in Japanese usually occur only in either the progressive (i.e., activity verbs) or

perfect aspect (i.e., achievements), not both, although an accomplishment verb, being

inherently telic, can be either progressive prior to attaining telicity or prefect after having

done so.

2.7.3 Aspect in Japanese

Perhaps the most confusing category involved in classifying verbs is *stative* as opposed to

state verbs (cf. *perfect* and *perfective*). The reason may be because there really is not any

spatial metaphor to explain this aspectual relation (cf. bounded and unboundeness).

According to the Aspect Hypothesis, the semantic categories for state verbs include

+durative and –dynamic. Kenny (1963) made the distinction that activities can occur in

progressive aspect but states cannot. On the other hand, the simple present of activities

always has a habitual meaning, whereas the simple present of states does not. Stative

verbs, on the other hand, do not have duration or a distinguished endpoint. They represent

a constant.

There are interesting similarities and differences between classifying Japanese

and English state verbs. Some of the criteria for state verbs in English can be used

correspondingly for Japanese state verbs (e.g., durative), but Shirai & Nishi (2003) found

there to be many more state verbs in English than in Japanese. This being due in part to

the fact that in Japanese perfective verbs are inflected with the past tense. Hence, the lack

of state verbs in Japanese is directly correlated to the use of the –*te iru* form. Prior to

looking in more depth at the Aspect Hypothesis in Japanese, the three kinds of Japanese

present perfect aspect most likely to transfer to English are suggested. First, we

distinguish one type of state lexical aspect verb (i.e., telic) and see that it is similar to the

first two of Comrie's (1976) four perfects (i.e., the resultative). The second and third

aspects are then related to the conventional understanding of grammatical aspect (i.e.,

current relevance and experiential).

2.7.3.1 Resultative Aspect

A resultative sentence refers to a state resulting from the completion of an event indicated

by the verb (e.g., a punctual achievement). The resultative aspect is expressed by a non-

stative verb with the completive aspect embedded most typically in the frame of –*te iru*.

Due to the lack of state verbs in Japanese, this resultative aspect represents stative

grammaticalisation of any verb.

Aspect Hypothesis Schemata

X = dynamic   + = durative   [= ingressive telic   ] = egressive telic   - = punctual

Schema 5. RESULTATIVE
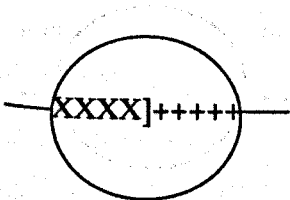
   /XXXX] + + + +/
Kare wa hana o kowarete iru. (He has broken his nose.)

2.7.3.2 Current Relevance Aspect

The experiential construction *V-te iru* may sometimes mean that the effect of the

termination of the event or action indicated by the verb prevails up to the reference point

of time, i.e., the verb may be either durative or punctual. Hence, between English and

Japanese there are differences in conceptualisations for a durative-punctual achievement

event (i.e., English internal viewpoint: *Ken is dying*) and Japanese, (i.e., external

viewpoint: *Ken has died*).

The following schemata attempt to depict the difference in viewpoint for the two

languages:

English Focus   *Japanese Focus*

XXXX]++++   XXXX]++++

Regarding experiential aspect, if anything, Japanese follows the grammatical aspect

schema more closely:

Schema 6. EXPERIENTIAL

--------[++++]--
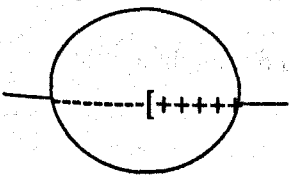
/--------[+++++/
Watashi wa Tokyo e ita koto ga aru.

2.7.3.3 Experiential Aspect

Experiential aspect may refer to the fact that the action or event expressed by the verb took place in the past and that this fact remains true. However, rather than the current relevance form (i.e., *-te iru*), *V-ta koto ga aru*, typically expresses the experiential aspect form, which can be literally translated as, *the fact exists that (someone) did (something)*.

2.7.4 Adverbials and V–te iru Form

Many adverbials in Japanese serve by their presence or absence as criteria to distinguish continuative aspect from the punctual. Hence, the use of adverbials can help to disambiguate the differences between Japanese and English and punctual events. Temporal adverbials can change the meaning in Japanese from resultative to continuative, whereas in English they cannot. Yoshimoto (2000) analysed verbs according to this criterion and discovered that the great majority produce either the perfect or progressive aspect form, not both. And if they are used in both forms then an adverbial is used to distinguish which use (i.e., activity or accomplishment). For example:

> *Watashi wa e o kaite iru.* – "I a picture drawn have" (as accomplishment) *but also possible* "I a picture drawing am" (as progressive)
> However:
> *Ima watashi wa e o kaite iru.* – "Now I a picture am drawing" (activity only)

2.7.5 Perfect Aspect Acquisition

Recent research on the acquisition of the *–te iru* form by L2 learners of Japanese has repeatedly found that the resultative state meaning of *–te iru*, which obtains when combined with achievement verbs, is more difficult than the progressive meaning, which obtains when combined with activity verbs (Shirai & Nishi 2003). This observation is interpreted as support for the Aspect Hypothesis (i.e., that learners universally associate progressive marking with activity verbs, and perfective and past marking with achievement verbs).

To express the notion of action in progress in Japanese, native speakers of English have only to simply transfer their L1 to Japanese by applying progressive markers to the verbs. Most activity verbs in English are also activity verbs in Japanese. Thus, a simple one-to-one translation strategy works quite well. Contrastively, the way Japanese refers to a stative situation is quite different from that in English. First, as was pointed out, there are far fewer state verbs in Japanese, and thus a simple one-to-one translation strategy does not work; there is a contrast between the inherent semantics in English state verbs and a more grammatical aspectual use of the resultative *–te iru* form in Japanese; and, Japanese perfective verbs are inflected with the past tense.

Consequently, similar to the overgeneralisation pattern with perfect aspect for L2 learners of English, L2 learners of Japanese also make predictable aspectual overgeneralisation mistakes from the lack of state verbs in Japanese (i.e., using the *–te iru* form), the differences in the situational and grammatical viewpoints between the two languages and the fact that Japanese uses the *–te iru* form for both progressive and

perfect aspect. In summary, for L2 learners of Japanese to become proficient with tense-aspect they must be aware of (and be able to produce):

- Past tense for state verbs.
- A lack of state verbs, marking the use of the *–te iru* form with L1 state verbs, thereby viewing the state differently.
- Achievements (i.e., telic) + *–te iru* as perfective.
- Activity verbs + *-te iru* as imperfective.
- Different viewpoint for current relevance.
- Use of adverbials to disambiguate accomplishments (i.e., punctual or durative) + *-te iru* as perfective or progressive.
- The *-koto ga aru* form for grammatical aspect (i.e., experiential).

For the purposes of this study, the main similarities between Japanese and English aspect are the resultative (i.e., lexical aspect) and current relevance and the experiential (i.e., grammatical aspect) schemata. It is hoped that using simple cognitive schemata to point out these very complex L1/L2 distinctions to students will make aspect easier to acquire. It will also be worth investigating the extent to which Japanese aspect shares the count/mass noun and boundedness/unboundedness relationship.

The Aspect Hypothesis predicts past tense will emerge first with perfective verbs and this is consistent with both languages. However, it appears Japanese may have grammaticalised further with all perfectives being expressed with the past tense. The Aspect Hypothesis also predicts that progressive will not be overgeneralised with state verbs. This prediction suggests that transitive state verbs have contributed greatly to the conceptualisation of perfective and past tense, whereas activity verbs have greatly influenced the conceptualisation of the progressive and the habitual sense. However, as

we will see, it fails to predict that perfective is overgeneralised with activity verbs. This overgeneralisation stems from learners' desire for direct transfer from L1 to L2. Additionally, because lexical aspect has conceptualised into at least four perfect types and progressive has only the one, it may be possible to suggest that perfect aspect represents the true form of aspect. Progressive, in contradistinction, may be best described as a secondary tense. That Japanese chooses to use one form to express both aspects (i.e., *-te iru*) would seem to contradict this; however, perfect aspect in Japanese appears not to have conceptualised and grammaticalised to the extent that it has in English.

3.0 Vygotsky, the Mind and Sociocultural Theory

At this juncture, we turn away from abstract analyses of grammar and turn our attention

more to how language is acquired through social interaction, how acquisition is related to

learning development and how this development can best be enhanced in the classroom.

The results contained in the previous meta-analysis are intended to provide us with the

best grammatical syllabus for the insruction of tense-aspect. The analysis found in this

chapter is intended to provide us with the best methodology for our syllabus. As we will

see, metaphor, or analogy, also plays a prominent role in the methodology put forth as do

the introduction of joint-attention frames. Distributional analysis also assists in further

integrating sociocultural constructs with cognitive approaches to grammar.

The work of Russian psychologist Vygotsky (1978, 1986), in particular, has been

very influential to the fields of L1 and L2 acquisition in the context of learning

development. The work of other 20th century Russian linguists, Bakhtin (1981, 1986) and

Volosinov (1973), which is for the most part quite complementary to Vygotskian theory

(Johnson 2004), has also found influence among Western linguists. Because Vygotskian

theory is based on the premise that conceptual and language development occurs in

children through social interaction, it is looked at in great detail here.

After the publication of the English translation of Vygotsky's (1978) book *Mind

in Society*, child psychology researchers (e.g., Newman, Griffin & Cole 1989, Newman &

Holzman 1993) began attempting Vygotskian theoretical applications to classrooms.

Since the early 1980s, SLA researchers have been publishing papers that apply

Vygotskian theory to L2 learning (e.g., Frawley & Lantolf, 1985; Lantolf & Appel, 1994).

More recently, Western writers within L1 education (Wells 1999; Wertsch 1998) and

SLA research (Lantolf 2000) have begun calling Vygotskian-based approaches *sociocultural theory.*

This chapter looks at the aspects of Vygotsky's work that can be applied to an L2 classroom-teaching framework. It also points out that thus far most SLA researchers have applied these aspects mainly to the *methodology* of L2 teaching. Additionally, this chapter specifies some of the similarities between sociocultural theory and cognitive approaches to grammaticalisation and takes preliminary steps towards creating an integrated framework for the two. Finally, it suggests possible ways for sociocultural theory to further develop.

Grabe (2005) recently predicted that sociocultural perspectives in SLA would continue to increase in influence. However, though established and accepted as a valid pedagogical approach and though among the most researched of approaches, at present sociocultural theory is not the prevailing methodology used in L2 teaching. Communicative and/or task-based language teaching has been implemented so widely as a teaching methodology that many teachers may still not be prepared to reconceptualise their classrooms in sociocultural terms, for example, as "zones of proximal development." The zone of proximal development (ZPD) is a developmental area by which an individual who could not attain solutions can attain them through the help of others (Vygotsky 1986). In other words, it is a unique human ability to collaborate through shared joint-intention. It involves learning leading the development of the other-regulated learner. Quite possibly, the ZPD has contributed to what has evolved into modern human cultural organisation (Tomasello et al. in press).

Along with the ZPD, Vgyotsky's theory that inner speech first develops in children through vocalised egocentric speech has also resulted in a radical shift in the way applied linguists perceive L1/L2 acquisition. Furthermore, Vygotsky's theories of play and spontaneous and non-spontaneous concepts have many potential applications to language teaching (see Cameron 2003). The specific areas this chapter focuses on are the seven areas of Vygotskian theory that can be most suitably adapted to L2 teaching: (1) the word: what Vygotsky called "the smallest unit of consciousness" (Roebuch 2000: 82) and which is the basis of his theory of communication; (2) inner speech: perhaps the best indication of the individual as a social being; (3) complex and conceptual thinking: the developmental ability of the mind; (4) spontaneous and non-spontaneous concepts: the effect of socially constructed and instructed concepts on the mind of an individual with grammar acting as a bridge between the two (Vygotsky 1986; Robbins 2001); (5) the zone of proximal development: learners developing by either self- , other- or, object-regulation; (6) scientific concepts and play: when instructing non-spontaneous scientific concepts, the difference in levels of development between self-regulated and other-regulated individuals can best be mediated through a sense of play; and (7) written language: Vygotsky calls this an "abstraction" and compares it to learning an L2.

During the literature review process for this chapter, it became apparent that there were a few areas with which sociocultural theory has had very little to say (Mitchell & Myles 2002) and were possibly still in need of a little "fleshing out" or that could at least be enhanced: (1) outside of the social realm of development there is also a macro world, which may not be socially regulated, and because of grammaticalisation processes it also needs to be cognitively incorporated into any language-learning theory (cf. Heine 1993,

1997); (2) although Vygotsky wrote extensively on the word, a coherent linguistic theory was not achieved and this can be accomplished by combining sociocultural theory with cognitive linguistics; and, finally, (this is related to sociocultural rather than Vygotskian theory) (3) aside from the ZPD it is somewhat unclear what is meant by the "cultural" of sociocultural theory.

At this stage, the reader may well be wondering what all this has to do with the teaching of the present perfect aspect. However, emergence of the resultative, current relevance, and experiential present perfect aspect forms represent to a large extent complete conceptualisation of tense-aspect in the L1 learner and complete reconceptualisation in the L2 learner. Therefore, correct usage of perfect aspect in various contexts is an excellent indication of the level of conceptualisation, of the level sociocognitive development, and of the level of dialogic grammar a learner has achieved. This chapter attempts to explain this conceptual development in an analogical or metaphorical/metonymical method (i.e., *spontaneous concept A is non-spontaneous concept B*). It also utilises cognitive processes (i.e., joint attention and distributional analysis) within the more sociocultural framework of the ZPD.

3.1 The Word

Vygotsky (1978) attempted to show that a generalised reflection of reality is the basic characteristic of words. In this sense, the environment motivates language choice. This aspect of the word brought him to a deeper subject: the problem of the

relation between words and consciousness. Thought and speech, he argued, are the keys to the nature of human consciousness.

3.1.1 Units of Consciousness

Since no language has ever been found in the brain, it is very difficult to prove that the word is the "smallest unit of consciousness." Although it is possible to conceive of a "word" as the smallest unit of consciousness in the mind, when most neurolinguistic research describes brain activity in terms of *neural firings*, it is not as easy to think of a word as being the smallest *biological* unit in the brain. Furthermore, it is possible to reduce the unit to something even smaller than the word (i.e., phonemes). In this sense, however, when we go below the word level, we are no longer talking about meaning. Connectionist models of language acquisition also go below word level and this is due in large part to a disregard for word meaning and the mainly phonetic-to-form development process involved to arrive at word level comprehension (MacWhinney 1999).

Thus, though phoneme recognition ability and attunement to sounds are below the word level, it still needs to be determined whether the basic cognitive *meaning-making* ability is below or at word level. Theories of grammaticalisation have found some success at describing grammatical development through conceptual development. These theories are now being applied to theories of word meaning (Evans 2005). Quite possibly, word-level meaning-making ability is related to holistic or analogical grouping of concepts. The ability to distinguish the phonemes that go into making a word also involves utilising related contiguity, similarity and contrastive analogical functions.

However, thinking of a word as a discrete unit of consciousness is inappropriate. It is a point of access to an open-ended encyclopaedic knowledge, which is necessary to understand a concept.

Further in regard to meaning, Vygotsky asserted that the first word a child produces (e.g., *Mama*) represents a whole sentence (e.g., *Mama, I'm hungry*). Semantically, the child starts from the whole, from a meaningful complex and only later begins to divide formerly undifferentiated thought into those units (Vygotsky 1978: 218). This is the child's first attempt at meaning making and the meaning of the word represents the all-encompassing unit of consciousness (Moll 1990), or in other words, a concept.

Tomasello (2003) labels these phrases, *holophrases*, and he states that when children produce them they have simply assigned the function of the utterance to a single linguistic unit perhaps with an associated intonation contour, and so in the future they will have to attend to other linguistic units in similar utterances. In this way, children learn to grammaticalise their linguistic expression to fit adult-like conventions. That is, all aspects of their grammatical expression for a particular situation involve changes in conceptualisation and usage in one way or another (Croft & Cruse 2004). In this way, *Mama* eventually becomes *Mama, I wanna ...* with an object position slot filler.

3.1.2 Inner Speech

That egocentric speech is relegated to the inside of an individual's mind is perhaps one of the most significant indications that human behavior is socially regulated (and the reverse

may also hold true: that someone who remains egocentric, who does not relegate speech to the inside of the mind, is one of the most significant indications of anti-social behavior). Thus, because other people socially construct a large part of our lives, at an early age we repress our thought to inner speech, where it loses much of the context of outer speech and becomes a language unto ourselves.

SLA research has been conducted into private speech use (i.e., the egocentric emergence of speech as an organiser of private mental functioning). McCafferty (1998), for example, found that low-level learners used twice as much private speech as high-level users. Ohta (2000) found analysis of private speech provides insight into the mental activity that learners engage in with respect to corrective feedback. In her study, learners produced private speech most often when they were not individual addressees, but when they were auditors. Other private speech turns occurred when learners were addressed as members of the class as a whole.

Inner speech, on the other hand, being essentially a mental process, is much more difficult to investigate. If it were possible to study inner speech, we might learn whether it has any grammatical form. Inner speech as a conversation directed at perhaps our quintessential addressee may not require that much schematic context until we choose to make it outer speech. Perhaps inner speech is linked to cognitive schemata as the addresser conceptualises what they wish to say. Private speech may well be the vocalisation of language in need of schematisation. We need to understand much better how inner speech and schemata are connected, thereby possibly activating networks of concepts in listeners with fewer words than we now use. Inner speech, in a sense, represents our internal attention frame where analogy between concepts may play a larger

role than grammar. Unfortunately, Vygotsky did not write about metaphor or analogy; however, if we attempt to draw parallels between them and what he termed "abstraction," then there are several similarities.

Vygotskian theory (1986) posits that inner speech comes about in the following way. A child's first word *Mama*, translated into advanced speech, does not mean the word "mother" but rather a sentence such as *Mama, I wanna...* or *Mama, I need to ...* In other words, it is predicated egocentric speech, which shares a relation to adult inner speech. Much of spoken language, then, involves adding sociocognitive joint-attention context to thought so that the intent is comprehensible to others. Egocentric speech, on the other hand, is inner speech in its functions: it is speech on its way inward, intimately tied up with the ordering of the child's behavior, already partly incomprehensible to others, yet still overt in form and showing no tendency to change into whispering or any other sort of half-soundless speech (Vygotsky 1986: 86). Vygotsky's investigations revealed that speech development occurs in four stages all of which are dependent on the development of an understanding of joint-intention between the child and the caregiver.

The first is the primitive or schematic stage, corresponding to pre-intellectual speech and preverbal thought. The next stage is what might be called "naïve psychology." It is the child's experience of the physical properties of her own body and of the objects around her, and the application of this experience to the use of tools: the first exercise of the child's budding practical intelligence. This phase is very clearly defined in the speech development of the child because there is a direct analogical connection between grammatical forms and their underlying cognitive schemata. Because of this connection to schemata, this phase manifests the correct use of grammatical forms

and structures before the child has understood the logical operations for which they stand. There is a clear correlation between her body-parts and the grammaticalisation process. At this stage, spontaneous metaphor creation or expression of cognitive schemata is just as important as the non-spontaneous internalisation of grammatical forms. Indeed, at this stage in the theory, it is apparent that analogic reasoning as a basic cognitive function acts as the catalyst to combine conceptual and language development, which means it also plays a major role in combining cognitive linguistics and sociocultural theory.

With the gradual accumulation of naïve psychological experience, the child enters a third stage where external signs are used as aids in the solution of internal problems. This is the stage where the child counts on her fingers, resorts to mnemonic aids, and so on. In speech development, it is characterised by egocentric speech and represents the spatiotemporal deictic extension process from body-parts. The fourth stage is what is called the "in-growth" stage. The external operation turns inward and undergoes a profound change in the process (cf. the metonymic function in the grammaticalisation process). The child begins to count in her head, to use "logical memory," that is, to operate with inherent relations and inner signs. In speech development this is the final stage of inner, soundless speech.

At age three, the difference between egocentric speech and social speech equals zero; at seven, egocentric speech in structure and function is totally unlike social speech. In these four years, we see speech development, the mapping from the intra- to the inter-psychological plane, the internalisation of grammar and the development from lower cognitive functions to higher ones involving social interaction. At the end of the fourth

stage, we would expect complete conceptualisation of language and correct usage of all forms of tense-aspect.

If the developing structural and functional peculiarities of egocentric speech progressively isolate it from external speech, then its vocal aspect must fade away; and this is exactly what happens between three and seven years of age. The decreasing vocalisation of egocentric speech denotes a developing "abstraction" from sound (i.e. the child's new analogical faculty to "think words" instead of vocalising them). As inner speech develops, it shows a tendency toward an altogether specific form of abbreviation, namely: omitting the subject of a sentence and all words connected with it, while preserving the predicate. For example, *Mama* would become *want* or *need* in inner speech. The metonymic perspective of part-for-the-whole is the information pertinent to the individual. Any language added in the communication process is essentially the joint-attention frame reference between interlocutors, their goal and the spatiotemporal context. Thus, conceptual development between the inter- and intra-psychological planes goes from whole-to-part (i.e., metaphor) and then from part-to-whole (i.e., metonymy), a process which is similar to that found in grammaticalisation.

Egocentric speech might best be considered as "pragmatic-less" speech [i.e., devoid of any part-to-whole metonymic functions found in Grice's (1975) cooperation principle maxims]. Grammar also functions as an extension to make our inner egocentric speech into a "non-centric" understandable form acceptable for listeners. The egocentric implication must nonetheless be pragmatically inferred from the non-centric utterance. We must develop and use outer speech in social situations to negotiate our egocentric needs or dispense with our egocentric needs in favor of shared joint intention. Indirect

politeness language (i.e., a grammaticalised pragmatic extension) is another example of negotiating egocentric needs. Of note, if our intention is shared then politeness language is no longer necessary. Hence, even if we did learn the relationship between schemata and inner speech, although it would make some communication that much more direct, unless there was also a renegotiation of the joint-intention principles of social interaction (i.e., dialogic grammar), because of the complexities involved we most likely would not start communicating using only egocentric speech.

Vygotsky (1986: 213) called the written language an "abstraction." I would like to propose a slight shift from this conventional perspective of the word "abstract." Of course, in many ways written language represents a second order symbolism or something only in theory and not in matter (i.e. the conventional definition of "abstract"); however, when we consider language in relation to cognition then at times written language actually shares a closer relationship to our inner speech. Perhaps the naïve understanding is that matter is non-abstract and thought is abstract, but, in cognitive terms (i.e., that metaphor is not abstract but a basic cognitive function), the reality might be closer to the opposite or, at least, that the two are equally valid. In this sense, perhaps Vygotsky might agree that analogical reasoning is at work when learning the abstraction of written language (i.e., *phonology X is morphology Y*).

If written language should be construed as abstracted away from thought then in Vygotsky's theory of speech development, children would all fossilise at the naive stage of development (i.e. the child's experience of the physical properties of her own body and of the objects around her). However, this is not the case. The child develops from the second psychological experience stage to the third, which is distinguished by signs that

are used as aids in the solution of internal problems. Hence, the child progresses from comprehension of the external world to the world of symbols. Thus, the supposedly "abstract" symbolic world in one way shares a closer relationship to the individual's basic cognitive processes than the naïve psychological experience from which it stems and becomes one stage more distant. In this sense, it is naïve psychological experience that becomes less direct and more abstracted in a cognitive schematic sense and the social symbolic world of concepts that becomes the new cognitive matter. Indeed, cognitive schemata based on body-parts attempt to reawaken what has become distant or "abstracted away." In sum, the term "abstract" is relative to how you view reality. Written language does, however, remain non-spontaneous.

3.1.3 Complex and Conceptual Thinking

According to Vygotsky (1986), there is no spontaneity in the child's inclusion of a given word in a sentence. Nor is she free when she applies a given word to a number of objects: She merely ventriloquates the meaning of the word from its previous uses. In other words, she does not create her own speech, but acquires the speech of those around her. Complexes corresponding to word meanings were never invented by a child, but were found in adult ready-made generalisations and general names.

Not everyone, however, agrees with this Vygoskian position. Goodman & Goodman (1990) view these forces shaping language as a balance between *invention* and *convention*. Convention, the socially established systems and norms and invention, personal creation of language are both necessary for learning. They maintain that

imitating adults or learning rules is not how language is learned. Each individual invents

it and in the context of its social usage it is adapted to the social conventions. For

example, the child may use a particular intonation when uttering a word to express their

motive.

In either case, the effect within the developing language is a ceaseless struggle

between conceptual thought and the heritage of the child's naïve thinking in complex

schemata. The complex thought, based on an egocentric schema, conflicts with the joint-

attention concept, for which it comes to stand. An advanced concept (e.g., grammatical

aspect as current relevance) presupposes more than unification of pseudo-concepts and

concepts. To form such a concept it is also necessary to single out elements, and to view

the elements apart from the totality of the concrete experience in which they are

embedded (i.e., schematise or reorganise). Only the mastery of representations, combined

with advanced complex thinking, enables the child to progress to the formation of

genuine concepts (i.e., components of multiple higher-level schemata) and achieve inner

speech. Reorganisation of these joint-attention processes have been seen in L1 acquisition

as the learner expresses spatiotemporal relations with more complex language use

(Clancy 1985).

The conflict involved in the development from complex to conceptual thinking

also reveals the cognitive demands when reconceptualising from L1 to an L2. To develop

from complex to conceptual thought in L2 requires the same conflict, reorganisation and

redirection of cognitive effort. This means that L2 learners must do much more than

acquire a repertoire of L2 phrases. They must also single out elements, and view the

elements apart from the totality of the language and then synthesise the traits until they

become an L2 frame of joint-intention, which then becomes the main instrument for language production. Along with cognitive schematic exemplifiers, two related ways to achieve reorganisation within the ZPD are through joint-attention frames (Tomasello 2003) and perspective taking (MacWhinney 1999). Without having undergone this reconceptualisation process, however, learners may continue to speak in holophrases, which are intended to express sentences (i.e., whole-to-part). Yet, if learners get good situated and embodied input, a lot of the adult-like conventions will emerge (MacWhinney, personal communication). The L2 practitioner must also be aware of how to facilitate cognitive reconstruction within the learner from the complex to the conceptual level or from other- to self-regulation.

3.1.4 Spontaneous and Non-Spontaneous Concepts

Vygotsky (1986: xxxiii) distinguished two basic forms of experience, which give rise to two different but interrelated groups of concepts: *scientific* and *spontaneous*. Scientific, academic or non-spontaneous concepts (either term is applicable) originate in the highly structured and specialised activity of classroom instruction and impose on a child logically defined concepts. Spontaneous concepts emerge from the child's own reflections on everyday experience. Mortimer & Wertsch (2003) compare spontaneous concepts to basic-level categories (e.g., dog) and non-spontaneous concepts to super-ordinate level categories (e.g., canine).

Vygotsky (1986: 147) stated that as a result of the effect of instruction the development of scientific concepts runs ahead of the development of spontaneous

concepts. This statement suggests that, in contrast to Processability Theory, instruction—based on concept development processes—could be effective for L2 classroom teaching methodology. If put into an applied linguistic context, interaction with spontaneous language use might be thought of in terms of *interlanguage* utterances, and non-spontaneous language use might be considered *conventionalised* language. SCM holds that with proper instruction conventionalised language use can run ahead of the development of interlanguage.

That scientific concepts run ahead of spontaneous ones led Vygotsky to a hypothesis: there are two different paths in the development of two different forms of reasoning (i.e., cognitive and social). In the case of scientific thinking, the primary role is played by initial verbal definition, which being applied systematically, gradually comes down to concrete phenomena (i.e., similar to but not necessarily deductive reasoning). The development of spontaneous concepts knows no system and goes from the phenomena toward generalisations (i.e., similar to abductive reasoning). The sociocognitive dialectic relationship between the two quickly becomes apparent: Empirical or spontaneous knowledge deals with differences and similarities among basic-level categories: i.e., attributive, whole-to-part and holistic, whereas theoretical or non-spontaneous knowledge deals with a connected system of super-ordinate level categories: i.e., possessive, part-to-whole and metonymic. Scientific concepts develop earlier than spontaneous concepts because they benefit from the part-to-whole system of instruction and cooperation. Indeed, without scientific concepts we may never have had the need for writing systems, analyses of language or L2 instruction. Nevertheless, both forms, holistic and analytic, are necessary for concept and language development.

If this theory is correct, that is, that the classroom is where non-spontaneous concepts are learned, then one of the principles on which communicative language teaching (CLT) methodology is founded may not be quite appropriate. CLT stresses the ability to express meaning (i.e., spontaneity) over form. However, much of language is conventionalised (i.e., non-spontaneous) and in fact CLT introduces mainly non-spontaneous language into the classroom. In order for communicative competence to be achieved, however, there must be a natural conflict between spontaneous and non-spontaneous concepts and this can be accomplished by introducing the other half of the communicative picture, i.e., schemata, metaphor and figurative language, and by focusing on *meaning making* rather than just focusing on meaning. In this way, a link will be established between basic-level and super-ordinate level categories. Also, lacking a sociohistroical context, it is unclear what *meaning* means in CLT.

The question this raises is whether a focus on meaning is sufficient to engage the development process found in the ZPD. It is doubtful if it is and this may be the reason why CLT has seen a shift towards task-based learning. However, in order for task-based learning to initiate the developmental processes found in the ZPD, other factors are necessary, for example, alignment of the self with other to form the shared goal, a differentiation of self from other to understand the differing but complementary roles in joint attention (Tomasello et al. in press) as well as development of self-identity. Nonetheless, CLT has been very successful in its attempt to work with the spontaneous concepts and language that learners bring to the classroom.

In later sections we look at how play also helps to facilitate non-spontaneous language use. Additionally, recent approaches to grammar instruction, i.e., focus on form

(Doughty & Williams 1998) and recasts (Ohta 2001), can be considered top-down attempts to impose some non-spontaneous conventional language onto the spontaneous interlanguage utterances of learners in a CLT classroom. Focus on form overtly draws students' attention to linguistic elements as they arise incidentally in lessons whose focus has been on meaning (Long 1991: 45 – 46). Recasts provide a restatement of all or part of the learner's utterance that grammatically reformulates the utterance while maintaining its semantic content (Ohta 2001: 98). SCM, attempts enhance the benefits gained from these top-down approaches by working from a bottom-up perspective, a schematic part-to-whole method, which links spontaneous and non-spontaneous concepts through cognitive schemata, thereby leading to meaning making, the acquisition of form and language use.

Vygotsky stresses that non-spontaneous concepts learned from adults must be in sharp opposition to those developed by the child. Throughout a child's development "warfare" runs between spontaneous and non-spontaneous (i.e., scientific), systematically learned, concepts. The child's spontaneous or ego-centred concept will conflict with non-spontaneous joint-attention concepts developed to bring benefit to members of a group. Thus, there is no one-to-one metaphorical mapping from spontaneous concept X to non-spontaneous concept Y.

One factor, which can assist in reducing conflict, is that learners are generally motivated by a cognitive need to develop. Furthermore, this motivation can be enhanced by creating a desire for new knowledge in the learner, that is, an understanding that cooperation will lead to egocentric benefit and this can be achieved, for example, through sharing behavior and emotions, goals and perceptions and joint intentions and attention.

Finally, by introducing non-spontaneous concepts with a sense of spontaneous play (i.e., creating an initial symbolic relation between spontaneous X and non-spontaneous Y), there is a greater chance of the blending between the two.

We now look at how the spontaneous/non-spontaneous concept relationship affects grammar acquisition. Vygotsky felt that grammar served as a mediating bridge between scientific and spontaneous concept development (Robbins 2001: 118). That is, he saw the grammar acquisition process as an internalising one, rather than innate: grammar emerges after an internalisation process as a result of development from unconventional to conventional language use or from spontaneous to non-spontaneous concepts. Although CLT has been successful in allowing the learner's abductive reasoning (Hopper & Traugott 1993: 39 – 41) into the classroom, it has not developed an appropriate positive or non-conflictual method of instruction for reconceptualisation of non-spontaneous conventionalised language. Focus on form approaches to language teaching attempt to impose some non-spontaneous conventional language onto the spontaneous utterances of learners. However, mapping form-to-meaning is deductively top-down and somewhat counter-intuitive to development processes where the need for grammar emerges from dialogic metonymic or meaning-to-form mapping processes.

Moreover, it is unclear how focus on form would function in the ZPD because explicit negative forms of feedback have not always been found to yield positive results. Another possible method is for learners' spontaneous interlanguage utterances to be other-regulated with only instances of positive explicit and/or negative implicit feedback until spontaneous utterances no longer occur in the learner. Once a learner's speech has

become non-spontaneous or conventionalised, the learner has achieved communicative competence or self-regulation.

Finally, just as it is possible for L1 and L2 to be part of the same core processes, it may also be theoretically possible for spontaneous and non-spontaneous concepts to develop simultaneously through collaborative joint intention. Quite often the "good learner" is thought of as the one who acquires non-spontaneous concepts the quickest (i.e., is good at intention reading), and the "gifted" learner is the one who with minimal non-spontaneous instruction can create conventionalised utterances (i.e., is motivated to share psychological states with others). If cognitive approaches to language have eradicated the distinction between meaning and form, perhaps the next challenge for sociocognitive approaches is to either eradicate the negative or enhance the positive conflict between spontaneous and non-spontaneous concept development.

3.2 The Zone of Proximal Development

Vygotsky (1986) stated that learning does not alter our overall ability to focus attention but rather develops various abilities to focus attention on a variety of things. This difference in development is what he called the zone of proximal development (ZPD). It is the distance between the actual development level as determined by independent problem solving and the level of potential guidance as determined through problem solving under adult guidance or in collaboration with more capable peers. The ZPD is also an area in which it is possible to conventionalise spontaneous concepts as well as internalise non-spontaneous concepts. Tomasello (2003) notes that children are able to

benefit from guidance as early as their first birthdays. Specifically, infants become able to:

- establish with adults various *joint-attention frames* that create a common intersubjective ground for communication;
- within these frames, *understand communicative intentions* as they are expressed in utterances; and
- engage in *role reversal imitation* to acquire symbolic conventions first used toward them in these frames.

Research into relationships in the ZPD and classroom interaction (De Guerrero & Villamil 1994; Anton 1999) reveal they are asymmetrical in that learners' attention is initially "other-regulated" by teachers or students of a higher level (i.e., initially children are incapable of carrying out a task and their metacognition is controlled by a surrogate "other" who has the ability to perform the task; Frawley & Lantolf 1985). These teachers have achieved "self-regulation" (i.e., the ability to engage successfully as an individual in strategic processes; Frawley & Lantolf 1985) and are teaching their learners to become self-regulated. In many cases, the self-regulated teacher is much older than the other-regulated learners (there may be many other inequalities) but within the ZPD these differences and inequalities disappear and there should be a sense of equality. Object-regulation occurs when the child's attention is still dominated by the objects in the environment.

These principles of *other-*, *self-*, and *object-regulation* have obvious potential for activity-based language-learning methodology. In pair-work, the higher-level student can create a common inter-subjective ground of common communicative intentions to other-

regulate the language production of the other student. Schematic-based grammar principles can also assist as cognitive tools to provide a joint-attention framework for learners to conceptualise grammar in more typological prototypical and spatiotemporal deictic terms.

As Kinginger (2002) pointed out, the original theory of the ZPD has been re-indexed through a process of reduction and simplification to serve and justify existing institutionalised practices while at the same time reinforce traditional views of the language classroom as a center for skill acquisition in the service of standardised education. Stripped of its original meanings, the ZPD has been inserted into a conventional pedagogical scheme, providing no new object for reflection on theory or practice. Put another way, the natural conflict between spontaneous and non-spontaneous concepts has been extinguished to such an extent that development no longer occurs within the ZPD. Thus, the ZPD has been reduced and simplified to an unrecognisable term. Indeed, much of the blame for the ZPD being labeled as an "unfinished construct" can be laid upon misunderstanding researchers who have misapplied the construct.

Nonetheless, the ZPD still has much to us about language acquisition. The results of my literature review into the ZPD suggested that the following were the most fundamental internal constructs:

- Imitation
- Abductive learning
- Learner preferences
- Inefficient/efficient learning
- Initiation-Response-Feedback
- Error correction

3.2.1 Imitation

Following Vygotsky (1986), imitation is what makes it possible for the child's capacities to develop by virtue of doing what she cannot yet do. Thus, in early childhood, the predominant joint-attention activity that occurs in the ZPD is imitation (Newman & Holzman 1993). Within an L2 classroom, because the ZPD consists of only peers, for imitation to be ecologically and to successfully complete the taskprocesses each L2 ZPD requires its own imitator of a "native-speaker." One way to achieve the developmental benefits of the ZPD is for the other-regulator in the group to imitate being a native or expert speaker.

Vygotsky observed that children do not imitate anything and everything, but only what is in the ZPD. Because older students probably find imitation or ventriloquation of the teacher to be somewhat of a non-spontaneous behaviour, in order to facilitate the mapping of spontaneous to non-spontaneous concepts, typical forms of imitation or ventriloquation of teacher utterances include metonymic forms of self-identity expression such as irony or exaggeration. This use of ironic or hyperbolic imitation is also due to the fact that imitation of the other-regulator points to an asymmetrical relationship in the ZPD and ironic or exaggerated imitation helps to restore some symmetry to the relationships (i.e., self-identity). This then allows learners to imitate in the areas that they need to develop most. Hence, imitation or private speech signals the need for development. In sum, the use of repetition in imitation should initiate learning leading development.

3.2.2 Abductive Learning

Logicians have focused until recently on two types of reasoning: induction and deduction. The difference between spontaneous and non-spontaneous concepts has also been compared to these two types of reasoning. However, a third type of reasoning, abduction, first identified by Peirce (cited in Hopper & Traugott 1993) also merits consideration. Although it is often confused with inductive reasoning, abductive reasoning is different. Abduction proceeds from an observed result, invokes a law, and infers that something may be the case (cf. analogy and distributional analysis; Tomasello 2003). For example, given the fact that Socrates is dead, we may relate this fact to the general law that all men are mortal, and guess that Socrates was a man. Even if the premises are true, however, the conclusion need not be so for one may match the wrong result with the law. Perhaps Socrates is not a man but a lizard, a wrong conclusion but nevertheless one that is compatible with the other two premises. This whole-to-part error in reasoning could also help to explain why L2 learners make overgeneralisation errors.

Peirce was interested in abduction because, although he saw it as a weak form of reasoning, he also saw it as the basis of human perception and as the only kind of reasoning by which spontaneous ideas could originate (Hopper & Traugott 1993). Hence, when we see a conflict between spontaneous and non-spontaneous concepts we are also seeing a conflict between natural abductive reasoning and academic inductive/deductive reasoning processes. Spontaneous use of language, i.e., interlanguage, is the result of abductive somewhat prejoint-attention or preother-regulation interaction, whereas instructed L1 and L2 grammar learning involves more non-spontaneous joint-attention deductive and inductive conventionalisation processes. Thus, if we were able to unite

abductive with inductive and deductive reasoning in instruction, we might also be able to reduce the conflict between spontaneous and non-spontaneous concepts.

Many linguists have regarded abduction as essential to development of cultural patterns, including language. Of the process itself, according to Anderson (cited in Hopper & Traugottt 1993), in acquiring language without non-spontaneous instruction, a learner observes the verbal activity of other-regulators, construes it as a "result"—as the output of a grammar—and guesses at what that grammar might be, i.e., the underlying schemata. The guesses are processes of reasoning based on universal principles the basic goal being the construction of a grammar that in some way conforms to the observed data. Here we can see two steps in the learner: (1) observe the verbal activity of an other-regulator, (2) create a spontaneous concept or utterance through abductive reasoning, i.e., interlanguage, but it appears a third non-spontaneous stage is needed to guarantee internalisation of grammar: (3) conventionalise the interlanguage into a non-spontaneous concept through joint-attention, other-regulated deductive and inductive reasoning.

The conflict between forms of reasoning also suggests that at least for L1 a minimal amount of stimulus can lead to acquisition. Perhaps the warfare between spontaneous and non-spontaneous concepts was in actuality that the abductive interlanguage stage was being overlooked in development when in fact it is an *essential* inter-developmental stage. Thus, when an individual who has been using abductive reasoning begins to share a joint-intention frame with another, it becomes collaborative and starts to depend on deductive or inductive reasoning processes—and it is from this kind of cooperation that culture evolved.

171

3.2.3 Learner Preferences

Learners' ability to engage effectively in the different tasksplans that they may be expected to undertake in a classroom depends on the extent to which they have internalised the sociosemantic functions of the specific modes of discourse that mediate these tasksplans, both inter- and intra-psychologically. With efficient learners, these functions have been highlighted in their interactions with the significant others in their immediate family environments which in turn varies according to the family's relationship to the larger social structure (Wells 1999). Inefficient learners, on the other hand, have not had these advantages (e.g., shared behaviors, emotions and goals) and may, for example, be using abductive object-regulated reasoning processes with joint-attention tasksplans requiring shared deductive and inductive processes.

Internalisation does not involve a simple copying of external intermental processes, but rather an internal reorganisation of the corresponding process, which builds upon and is shaped by what the child can already do and understand. Hence, inefficient learners do not want to just copy the inter-psychological relationship of a lesson, which efficient learners may be able to do. Rather, they prefer learning to transform how they perceive the world. In other words, being more abductive-centered, the conflict between spontaneous and non-spontaneous concepts is stronger with inefficient learners. On the other hand, when learning non-spontaneous concepts, efficient learners, being socialised, develop more on the inter-psychological non-spontaneous plane (and should be better language learners because grammar acts as the bridge between these planes).

3.2.4 Efficient and Inefficient Learners

The errors that high achievers produce usually bear a sufficient inductive or deductive resemblance to the correct or desired answer to be interpretable by the teacher, who can thus identify a correction strategy. Less successful learners, however, because they do not share in joint-attention, do not produce correct answers and either remain silent or give abductive answers that were not readily interpretable in terms of the goal (Newman, Griffin & Cole 1989). Furthermore, these low-achieving students sometimes make initial responses that are not easy to interpret.

In a study conducted by Newman, Griffin & Cole (1989) into taxonomic representations, a group of low-achieving learners were picking up and using a *cultural amplifier* (i.e., intellectual tools like written language or schemata) in a previous lesson, but in their case it was thematic rather than taxonomic organisation of the domain. In a segment of the lesson involving stories about pictures, the children could find representations being used and made available for them to pick up and use. In the short run, the amplification paid off. However, in the long run, as the classroom discourse and the charts recurred in the same form and as the stories changed from lesson to lesson, the social world no longer amplified the low group's particular thematic organisations. What was missing in the social world for them to pick up and use along with the teacher and their fellow students was the (deductive and inductive) *taskplan structure*.

What we can be take away from this classroom research are three findings: 1) there are two levels to any task (i.e., taskplans and taskprocesses) and each needs to have explicit amplifiers within any structured syllabus (e.g., cognitive schemata), 2) rather than make the content explicit, make the taskplan explicit through deductive and

inductive joint-attention frames, and 3) always make students' abductive responses to the taskprocesses re-interpretable by the goal (i.e., positive explicit feedback). In this way, as a taskplan changes from thematic to taxonomic, joint-attention and development between teacher and learner is maintained. In an attempt to integrate taskplans and taskprocesses in the ZPD, the following triad can be suggested:

1) taskplan complete & taskprocess complete = *self-regulation*

2) taskplan incomplete & taskprocess completion = *other-regulated*

3) taskplan incomplete & taskprocess incomplete = *object-regulated*

3.2.5 Initiation-Response-Feedback

If there is one finding on which scholars of classroom discourse are agreed, it must be the ubiquity of the three-part exchange structure called *triadic dialogue* (Wells 1999). In its prototypical form, this discourse format consists of three joint-attention moves: an initiation, usually in the form of a teacher question; a response, in which a student attempts to answer the question; and a follow-up move, in which the teacher provides some form of feedback to the student's response. Wood (cited in Wells 1999), for example, accuses teachers of asking too many questions, particularly of the known answer variety, and suggests that, if teachers really want to hear what pupils think and if they genuinely want to encourage pupils to ask questions of their own, they should use a less controlling type of discourse, which would give students a greater chance to take on the initiating role or achieve self-regulation.

According to Wells (1999), if the triadic dialogue genre and the succession of Initiation-Response-Feedback (IRF) exchanges of which it consists were always used to achieve goals similar to those given by Wood it would be good reason to join with Wood in calling for its demise. However, Wells claims this genre can be used to achieve other, and more productive goals, including the co-construction of knowledge on the basis of ideas and experiences contributed by the students as well as the teacher. When the third part of this structure is characterised as *follow-up*, rather than in some cases more narrowly as *evaluation*, according to Wells (1999) there are reasons for seeing the IRF sequence as the prototypical action structure for the achievement of the overarching goals of education. Additionally, when the third move of the IRF exchange is used effectively, the next cycle of knowledge co-construction in the learning-and-teaching spiral has its point of departure.

In her analysis of a teacher who she considered created an exceptionally high-quality class involvement, Verplaetse (2000) also found ways to improve on the IRF triad. Within a sociocultural perspective, she would like to see the three moves joined with scaffolding. The first move, scaffold-initiation, further challenges a student at the point of a successful completion of an exchange. The other two scaffolding events are coded as elicitations in both the response move and the feedback move. The feedback elicitation scaffolds by offering a question to a student answer that was either incorrect or insufficient. The purpose of this second scaffolding event is to redirect or reformulate the student's (abductive) thinking. The third scaffolding event, the response elicitation, reverses the direction of inquiry by responding to a student question with another question.

The addition of scaffolding to the IRF triad by Verplaetse (2000) helps to make it more sociocultural interaction. However, the goal of the ZPD is to make learners self-regulatory and in order to achieve this goal it is possible to further sociocognitively transform the IRF triad to Extension – Development – Equilibrium (EDE).

- *Extension* involves raising the cognitive level of the other-regulated learner to her potential ability.
- *Development* requires the other-regulated learner to learn from the scaffolded language of the self-regulated learner.
- *Equilibrium* involves self-regulated language production of the other-regulated learner (at least within the ZPD).

The EDE triad works to facilitate other-regulation of the teacher and self-regulation of the student. Through joint-attention to form, it attempts to develop the learner's abductive spontaneous concepts or utterances into deductive or inductive non-spontaneous ones. Moreover, EDE interaction with self-regulating students must perform the dual role of leading the other students to achieve self-regulation as well as illuminating areas where the self-regulating student could further develop. Ultimately, IRF only maintains other-regulation of learners. In this way, the EDE helps to facilitate a more symmetrical ZPD classroom.

- E – extend – initiate private speech.
- D – develop – develop inner speech.
- E – equilibrium – produce outer speech.

Verplaetse (2000) also found that good teaching involves much less correcting and much more accepting. In this way, teacher discourse type (e.g., humor) mediates

176

development from spontaneous to scientific concepts. That is, the discourse is collaborative and accepting of new members into an academic/scientific discourse community. Put another way, teacher discourse can act as a model for internalisation for learners. Acceptance in the ZPD as a knowledge construction paradigm also involves the changing of learner evaluation analyses from consisting of merely quantitative factors to more qualitative ones. Qualitative assessment points to the cognitive functions that are absent in the unaided performance of the student but reveal themselves when the student is teacher-aided (i.e., analysis of students' potential for self-regulation). Quantitative assessment is a measure of the difference between self-regulated and other-regulated performance (Kozulin 1998).

3.2.6 Error Correction

Error correction is the final, though perhaps most important factor, learning to continue leading development. We look at it mainly from the viewpoint of the teacher-student level. For the instructor, it mainly involves being aware of the asymmetrical (i.e., the need for other- or object-regulated assistance) or symmetrical (i.e., no assistance required because of self-regulation) relationship with the learner. Piaget (1959) argued that depending on what is being learnt, direct non-spontaneous instruction, if it gets in the way of the child's own spontaneous exploration, will actually inhibit the child's understanding (cited in Newman, Griffin & Cole 1989).

My analysis of teacher-student interaction also indicates that direct instruction in the form of explicit negative error correction can halt the learning-leading-development

process. Perhaps only forms of positive explicit or negative implicit feedback are useful with error correction. In effect, the best error correction procedures "erase" the incorrect answer and provide a place for the correct answer to go (Newman, Griffin & Cole 1989).

3.3 Scientific Concepts and Play

Along with non-spontaneous or scientific concept acquisition occurring at school, Vygotsky explained how play affects the development of children. This section examines how a relationship between scientific concepts and play can be combined and applied to language teaching and the acquisition of conventional language. In the scientific concepts that the child acquires in school, the relation to an object is mediated from the start by some other concept. Thus, the very notion of a scientific concept implies a certain analogical position in relation to other concepts within a system of concepts, i.e., *spontaneous concept X is non-spontaneous concept Y.*

Vygotsky would present learners with a task beyond their present capabilities, a task that could not be solved using existing skills or tools. An object (or several objects) would be introduced into the task to observe how, in what ways, the object became part of the problem-solving task. That is, he would offer the subjects a second set of stimuli in order to study how the learners accomplished the task with the aid of new auxiliary means. Vygotsky contended that the rudiments of systemisation first enter the child's mind by way of her contact with scientific concepts and are then transferred to everyday concepts, changing their psychological structure from the top down. SCM maintains that that the change can also occur from the bottom up. Cognitive schemata represent tools to

position concepts in relation to other concepts and interaction with them helps to facilitate non-spontaneous concept acquisition.

3.3.1 Symbolic Play

Play creates the ZPD for the child. In play, a child always behaves beyond her average age, above her daily behavior; in play it is as though she were a head taller than herself (Newman & Holzman 1993). In the course of play, the plaything absorbs the meaning of the signified object and then carries it without the assigning gesture (i.e., analogically). Thus, the child first spontaneously uses a gesture to designate a broom as a *horse*, and next the broom is used in its capacity of a horse without any special gesture (cf. a non-spontaneous concept). Then the child discovers that certain properties of playthings fit their roles. In this way, the child comes to have an intuitive sense of the metonymic mapping of concepts. Through symbolic play the child masters symbolic relationships and the conventional character of the relations between signifier and signified.

This is the psychological reality of metonymy, suggesting that the more the ZPD taskplan is based on metaphor and basic cognitive event schemata, the easier the reconceptualisation from signifier to signified, from spontaneous to non-spontaneous concept or from L1 to L2. Symbolic play once again reveals the similarities between cognitive development and the language acquisition process.

3.3.2 Playzones

Play is usually thought of as just enjoyment, but, in actuality, play often imitates, or is a metaphor for, the harshness of life (e.g., the game *war*)—although in most cases much of the true harshness has been removed. Consequently, because a "warfare" rages between the spontaneous and non-spontaneous concepts in the classroom, introducing an element of play might be the best way to mediate this natural conflict. If the teacher attempts to teach with a sense of play, that is, accepting and exploiting the spontaneous concepts learners bring into the classroom, it can reduce the tension between the non-spontaneous concepts being taught and help to facilitate learning (i.e., teacher-student intersubjectivity towards and co-authorship of education). Indeed, language play often involves the ventriloquation of the teacher's utterances as well as repetition, which can encourage language entrenchment (Duff 2000). Furthermore, language play often involves the creation of original metaphors or idiomatic expressions, which can lead to the conventionalisation of language. The ability to make games out of systems, for example, language games, is another benefit of a more abductive or holistic approach to interaction.

Finally, humour is an important medium for sociohistorical change. Change is accepted through humor. Through the window of humor, the spontaneous thinker is granted access into the non-spontaneous academic community. Obviously, play in this sense is not meant as *fantasy*. Even university age *s*tudents are still to a large part thinking in spontaneous concepts, and spontaneous-only thinking can be prone to adolescent fantasy making. Students might consequently get the wrong impression from inappropriate use of play in the classroom (i.e. that normal non-spontaneous behaviour no longer pertains).

3.3.3 Play and Language

Wittgenstein (1953) called "the whole, consisting of language and the actions into which it is woven, a 'language-game.'" More recently, there have been applied linguistic publications (see Crystal 1998; Cook 2000) on the benefits of a sense of play in language learning. Typical examples of language play include rhymes, limericks, jokes, puns, riddles, etc, all of which contain a healthy amount of metaphor or figurative language.

3.3.4 Chance, Randomness and Repetition

The repetition found in language creates an order out of the randomness and chance that also pervades it. Repetition in music, for example, helps most people learn simple pieces of music and then go on to more complex pieces, indicating that it is through repetition and imitation that we learn. Thus, the effect of repetition, which is often found in inner speech play, is to refine new ideas or at least new contiguity, similarity or contrast connections, which may become part of new language-network formation. It is a natural byproduct of our ability to produce original utterances. However, it should be noted that this repetition is of a playful generative meaning-making kind and is not a constrained drilling.

3.3.5 The Seriousness of Play

God is happiest when his people are at play.

Play, when all is said and done, is the supreme law of egocentric thought. (Piaget 1959: 244).

You see, in every job that must be done there is an element of fun. You find the fun— snap—the job's a game! (Mary Poppins cited in Dörnyei 2001)

Almost certainly, there is a cognitive link between inner speech and language play. Quite often while a mind is engaged in some cognitively entrenched or automaticised function which does not require explicit higher-level attention processes, the other cognitive areas of the mind are released to indulge in a song or rhyme or recalling a recent conversation or even some other form of "nonsense" language play. Furthermore, if people are alone and engaged in nonsense language play, do they not egocentrically vocalise it as they did before the age of three? Could this vocalisation be related to the use of private speech during a demanding cognitive task? Thus, one of the main purposes of inner-speech language play may be that it is a remaining form of spontaneous egocentric activity, related to, but possibly the opposite of, private speech use. Perhaps the relation between spontaneous inner-language play and non-spontaneous private speech is the demands, or lack of, made on cognition.

Vygotsky (1978: 93) was well aware of the usefulness of play in development. He reversed the old adage that child's play is imagination in action: imagination in adolescents and in school children is play *without* action. It is here that the child learns to act in a cognitive-only framework. Therefore, the use of imaginary situations is necesssary when developing from signifier to signified thought in conceptual space, which should not be left out of the language-learning process. Suspension of reality frees the mind of the conscious awareness of the "work" or conflict that most students feel

learning is and opens the way for inner speech use. Indeed, language play might just as well be called *cognitive* play. Thus, though non-spontaneous concepts are instructed in schools and therefore study is necessary, the absence of the harshness in life in this situation also creates a playful environment conducive to learning.

Following Cook (2000: 184), there is a resemblance between games and learning in conventional educational settings. Both typically take place within a separate bounded area (i.e., the classroom, playing field or game board) and time especially set-aside for the purpose (i.e., the lesson or game). Both are conceived as being apart from ordinary life, somehow outside of the real world, and for this reason behavior can be practiced in games and lessons without fear of serious consequences for error. Both set up temporary relationships between participants (i.e., students or players), which are different from those pertaining to outside the classroom or off the field or board. These can be intense, and may involve both collaboration and competition. In both situations, novices submit to direction by an expert (i.e., the teacher or coach), and this expert—or another—acts as a judge of performance and an arbiter in disputes (i.e., the examiner or umpire). Thus, the classroom itself is unavoidably an artificial metaphorical representation of reality.

3.4 The Written Form, L2 and Emerging Linguistic Theory

Another idea of Vygotsky's was that learning to write is similar to learning an L2 (i.e., both require reconceptualisation). The acquisition of foreign language—in its own peculiar way—liberates the learner from the dependence on conventional L1 linguistic forms and expressions (Vygotsky 1978). Although Vygotsky did not put down any clear

linguistic theory, he was aware of linguistics (e.g., Jakobson, Shlovsky and Jakubinsky, famous members of the Formalist school; Blanck 1990) and his theories of child development are explained within a linguistic framework, which applied linguists have applied to language teaching. This section looks at the relationship between learning the written form and learning an L2.

> The acquisition of the foreign and the native languages belongs to one general class of the processes of speech development. One may also add to this class the acquisition of written language, which has many idiosyncratic features that cannot be derived from either one of the previously mentioned types of speech development. (Vygotsky 1986: 154)

Simultaneously, all three of these processes are intricately interconnected. Learning the written form differs from speaking because of transfer from phonological sounds. L2 acquisition differs from L1 acquisition because of L1 transfer as the initial cognitive foundation. One may call the development of one's native language a spontaneous process and the acquisition of written language or an L2 a non-spontaneous one. Both the written form and L2 are involved in the acquisition of scientific concepts, which is carried out through the mediation provided by already acquired concepts. Typically, only native speech develops during the complex-to-conceptual timeframe (i.e., between the ages of 3 and 7); hence, we might be able to posit that beginning to learn the written form or an L2 begins at the conceptual level and is therefore more spontaneous complex-linking developmental processes are inaccessible. Thus, until reconceptualisation has occurred in the written form or the L2, perhaps it is best to use as spontaneous language

184

as possible, which can reopen access to analogical complex-linking processes and underlying cognitive schemata.

Vygotsky questions why writing is so difficult for the schoolchild. At certain periods there is a lag of as much as six or eight years between the "linguistic age" in speaking and writing. This lag represents the time required to reconceptualise from phonological sounds to orthographic symbols (cf. from L1 to L2). Additionally, for an adult learner, learning any L2 is very text dependent, which, along with L1 transfer, may be another contributing factor to why learners rarely achieve native-like fluency in the L2. That said, reliance on texts also facilitates a certain level of L2 competence.

Vygotsky's investigation showed that the development of writing does not repeat the developmental history of speaking. In learning to write, the child must reconceptualise from the sensory aspect of speech (i.e. phonology) and replace words by images of words (i.e. orthography). I suggest that one way to possibly shorten the lag between speaking and writing, or L1 and L2, is through the use of cognitive schemata or reverting back to the naïve psychology stage. Rather than teach learners how to write as "abstracted away" from speaking, if orthographic symbols were analogically connected to speaking through underlying cognitive symbols (i.e., schemata) then development might reduce the lag in the reconceptualisation processes. Indeed, the reconceptualisation process in learning to write is very similar to that of learning an L2.

3.5 Making Sociocultural More Social and More Cultural

In this section, we begin by taking a brief look at the notion of *critical sociocultural theory*. Pennycook (2001) criticises traditional sociolinguistics for its use of a static liberal view of society, which fails to establish a connection between people's place in the societal hierarchy and the linguistic and other kinds of oppression to which they are subjected. As an alternative, critical sociolinguistics seeks to recognise the political and economic distortions imposed by society. The recent interest in L2 culture and its influence on language acquisition might also benefit from a similar critical stance (Kramsch 1995). Though culture-concept models play a substantial role in language acquisition, there is much less of a chance that there is direct transfer between L1 and L2 cultures. For complete reconceptualisation to occur, it is essential to access the underlying cognitive-concept model ties between the two culture-concept models and language.

One possible way to enhance L2 culture reocnceptualisation is to view the interaction in ZPDs as the emergence of culture. Then it becomes possible to metaphorically expand Vygotskian ideas (i.e., self-, other- and object-regulation) outside of the L2 classroom and apply them to society and culture. As a simple example, let us compare a culture to a house. When a person visits someone's home for the first time, they are almost completely other-regulated by the person who owns the home, for example, in order to find a glass, they must ask where it is. Additionally, it is in such situations that a pragmatic understanding of politeness language can be useful. It is much the same when first living in a different culture. The person must ask—not because they are incapable of doing the task—but because they are in an unfamiliar environment and

186

must rely on the culture-regulator, the one with knowledge about the environment. The house owner's method of behavior represents non-spontaneous concepts and the visitor's actions represent spontaneous ones. Furthermore, if the visitor does not cooperate with the owner's non-spontaneous ways, there will be conflict with his spontaneous actions. Thus, many of the main factors within a ZPD have been established.

Vygotskian theory develops from the word and social interaction, from complex to conceptual thinking, from spontaneous to other-instructed non-spontaneous concepts and, finally, from an understanding of these scientific or academic concepts to sociocultural self-regulation. This can be thought of as the *social* learning part of sociocultural theory but does this imply that in the process the learner has also acquired *cultural* understanding? Geertz (cited in Lantolf 1999) defines culture as a "historically transmitted semiotic network constructed by humans and which allows them to develop, communicate and perpetuate their knowledge, beliefs and attitudes about the world." If this is accurate, then we should be able to find evidence of shared knowledge, beliefs and attitudes in ZPDs.

Lantolf (1999) is aware of the dearth of description for *sociocultural* and proposes that the study of second culture acquisition (SCA) not be restricted to social and attitudinal considerations, but that it can be investigated from a cognitive perspective as well. From this SCA perspective, according to Lantolf (1999), when dealing with cultural models, the way minds, selves, and worlds are re-organised, re- constructed and re-conceptualised is at stake. Although the evidence is not overwhelming, it does seem to be possible for some adults under some circumstances to restructure, to some extent at least, their conceptual perspective, whereas for others, as in the case of classroom learners,

SCA reorganisation does not seem to be that likely of an alternative. However, if the relationship between underlying cognitive-concept models and C1/C2 were further exemplified then more SCA might be a possibility.

Though Vygotsky's original formulation of the ZPD was concerned with interaction between "novice" and "expert," current sociocultural theorists have expanded the concept to include other forms of collaborative activity, including pair and group work among peers (Mitchell & Myles 2002). Cultures also share many similarities with socially constructed activity such as those found in these kinds of ZPDs. Or put another way, cultures utilise extended principles from the ZPD, in that their members have agreed to cooperate in order to acquire mutual benefit. For the individual this involves sociocultural development, but for the group it involves the larger task of achieving a shared joint-culture goal (e.g., making a tool, preparing a meal, playing a game or collaborating scientifically; Tomasello et al. 2004). Consequently, the restructure process of SCA in critical sociocultural theory can benefit from an understanding of how culture emerges from ZPD or interdependent networks and how cooperation exists at complex levels to achieve the benefits of the target culture (e.g., collective beliefs and the creation of social practices and institutions such as marriage and government). In this way, the benefits of C2 acquisition would become clearer to L2 acquisition.

Other critical factors in need of determining are whether actions by one culture could be interpreted as being inappropriate by other cultures simply because that particular culture has agreed to behave in a way that is beneficial to it. Exclusion of other culture interdependent groups could also be viewed unfavorably by most other cultures. In many ways, whether internal or external, asymmetrical relationships (i.e., conflict and

188

competition) are integral to any complex-interdependency. Perhaps the other-regulation of less capable members in a complex-interdependency (i.e., the strong helping the weak) is the direct result of the existence of other complex-interdependencies and a conflictual relationship between them (i.e., strong against strong). Only if symmetrical self-regulating relationships existed among all the complex-interdependencies would conflict cease. On the other hand, conflict does not always have to be negative. There is the possibility for positive conflict in the form of competition to establish symmetry or asymmetry. The existence of strong or weak complex-interdependencies and generalised collective conventions to regulate behavior also raises issues of social rationality or morality (i.e., the stronger other-regulating complex-interdependency decides what is right or wrong) and ethics (i.e., the other-regulating complex-interdependency decides how to treat the other-regulated complex-interdependency). Perhaps the discourse within pair or group work ZPDs should be investigated for further evidence of emergence of SCA or C1/C2 transfer, reconceptualisation and acquisition.

Finally, metaphor plays a prominent other-regulation C1/C2 role in any SCA theory. Indeed, there may perhaps be an unhealthy sociocognitive effect of metaphor as an objective truth-value (i.e., where the people who get to impose their metaphors on the culture get to define what is considered true; Lakoff & Johnson 1980). This objective truth-value can cause beliefs and social roles to be improperly founded or almost delusional (e.g., racism).

4.0 Sociocognitive Metaphorm Theory

The purpose of this chapter is to set out how best to develop a *sociocognitive* approach to L2 teaching. Neither cognitive nor sociocultural approaches are new to L2 teaching. The similarities between them have also not gone unnoticed (Stockwell 2002). Langacker (personal communication) believes that cognitive grammar and cognitive linguistics have a firm sociocultural basis, though the basis has not been sufficiently emphasised or systematically articulated. He also believes that applied cognitive approaches hold much promise for pedagogical applications (see Putz, Neimeier & Dirven 2001a, 2001b). Thus, it is integral for SCM to find the proper balance between cognitive approaches to grammar and sociocultural theory and then apply them systematically. As I have already suggested, cognitive metaphor plays a vital role in uniting Cognitive Grammar with SCT.

One drawback SCT has had to deal with, since it deals primarily with behavior and the development of speech, is that its application, specifically the ZPD, has only been to language teaching methodology and consequently remains a somewhat unfinished construct (Kinginger 2002). Vygotsky himself only wrote twice about the ZPD (translations can be found in Vygotsky 1978, 1986) and therefore it in itself can also be considered incomplete (Wells 1999). The fact that the ZPD can only be considered a methodological tool for language teaching has left open the question of the most suitable syllabus with which to ally SCT, thereby possibly "completing" the concept Vygotsky initiated.

The position of this thesis, as has already been stated, is that second-generation cognitive grammars such as construction or usage-based (Croft 2001; Barlow & Kemmer 2000; Heine 1993, 1997; Langacker 1987, 1991) can serve very well as a language-

190

learning syllabus within the ZPD-SCT methodology. The use of joint-attention frames (Tomasello 2003) and perspective taking (MacWhinney 2003, 1999) also serve to further construct the ZPD into a more sociocognitive framework. This integration of theories represents a sociocognitive approach to language learning, which I call *sociocognitive metaphorm* (SCM; Hill 2003a, 2003b, 2004).

In brief, SCT and Cognitive Grammar are compatible because Cognitive Grammar takes grammar from its conventional role of textual analysis of linguistic forms to that of sharing a conceptual relationship with psychology and thought. SCT further extends on this psychological and cognitive basis with its reasoning that language and concept development are the result of sociocultural knowledge construction. Most important, then, as is now commonly accepted, to a large degree both approaches share the psycholinguistic principle that thought and language are related through conceptualisation processes. Additionally, conceptual metaphor as a basic cognitive function plays a central role in concept development. In the grammaticalisation section of the analysis of present perfect aspect, we saw how tense-aspect concept formation is the result of intra-psychological schemata acting as metaphorical psychological tools, which metonymically extend from body-part/spatiotemporal inter-psychological deictic reference. In the analysis of Vygotskian sociocultural theory, we saw how conceptual development similarly extends from learning processes. In this theoretical chapter, we now look at how cognitive processes within the ZPD (i.e., joint-attention frames and distributional analysis) can be used to internalise the schemata necessary for L2 grammar acquisition.

In order to develop language proficiency within the L2-learning classroom, there is also a need for language learners to develop *conceptually*. To achieve this end, the combination of the SCT-ZPD with cognitive event schemata taskplans based on underlying grammaticalisation processes helps to co-schematise thought, language and the classroom into a grammatical joint-attention perspective, which is spatially, temporally and dynamically embodied. By using the comparison-contrast-contiguity meaning-making functions of metaphor and metonymy, which are perhaps two of the most powerful cognitive tools, grammar is internalised through, and then conventionalised from, social interaction. We now turn to a more detailed explanation of the sociocognitive language acquisition process. It is divided into five parts: 1) why SCT and Cognitive Grammar should be combined; 2) how we got to this point; 3) the basics of SCM, especially metaphor; 4) the four joint-attention levels of SCM; and 5) SCM applications to the classroom.

4.1 Why Combine SCT and Cognitive Grammar?

Along with a need to reduce ambiguity when interpreting the ZPD in the classroom (Kinginger 2002: 243), there are at least three additional reasons why there is a need for an SCM approach to language teaching: first, to present language as it is related to cognition (i.e., analogically mapping meaning making to form), second, to reduce SLA research dependence on the relation between L1 and L2 (i.e., not simply L1-L2 transfer but SCM *reconceptualisation* into the L2) and, third, to begin to construct a cross-linguistically valid model of language learning, which adequately describes the

complexities of the language acquisition processes for all languages. Though it is not within the scope of this thesis to expand fully upon these issues, they are the general objectives found underlying the theoretical discussion. Within SLA, there is also another need to present teaching methodologies as research indicates language is acquired.

There are other possible choices of grammars to combine with SCT, for example, corpus-based (Biber et al. 1999) or systemic-functional (Hickmann 1995; Wells 1999). However, though there is certainly nothing inadequate about these grammars and they have contributed greatly to our understanding of language, they do remain text-based and view language as a social-semiotic without entering the domain of an intra-psychological relationship of language with thought. Therefore, they are not completely compatible with the psycholinguistic theory proposed by Vygotsky and on which SCT is based. That said, any texts in an SCM classroom should be authentic, corpus-derived and usage-based (Barlow & Kemmer 2000). Much of the interaction between the intra- and inter-psychological planes can be analysed as the usage-based production of language. Combining corpus linguistics with neural network software programs (see Elman et al. 1996; Regier 1996; Pulvermuller 2002) has opened up additional areas of psycholinguistic research. Finally, through analysis of how dialogue is co-constructed, learner corpora (Granger, Hung & Petch-Tyson 2002) like the one compiled in the *Researching SCM* part of this thesis can also advance our understanding of the relationship between Cognitive Grammar and SCT.

Considering the scholarship that has gone into the analysis of language and cognition, current pedagogical grammars for teaching L2 do not seem to be taking full advantage of our greater understanding of the roles between language, cognition and

social interaction. In fact, language has been reduced to text and then to a utilitarian simplified marketable form (Kramsch 1995). Moreover, L2 learners often spend only a few hours or less each day using the L2, thus, teaching methods must affect a maximum amount of language acquisition in a minimum amount of time. Compounding matters is that these hours are often interspersed with ongoing L1 input and usage. At present, learning strategies amount to little more than paying attention to the teacher and doing exercises in a textbook (MacWhinney 2003) when what is needed is for teachers to conceptually restructure their learners' L1 into the L2.

Is this restructuring taking place in classrooms? TESL/TEFL teaching has recently become more dependent on L1 transfer or with learners' L1 cultural factors (see, for example, Celik 2003), resulting in actual reinforcement of L2 conceptualisation in L1. I previously argued that SCA is also a reconceptualisation process derived from the understanding that the origin of culture stems from sociocognitive shared joint-attention/intention frames. These frames are involved in the massive amount of transfer from L1 to L2, and to a certain level this is a useful approach to L2 teaching. Nonetheless, though L1 and L2 will always share cognitive areas, at some point each learner must reconceptualise L2 into its own functioning perspective-taking joint attention/intention system. SCM maintains this reconceptualisation process should begin at initial L2 learning stages.

If L2 teaching methods were based more on those of L1 teaching, linguists may discover that both L1 and L2 actually share the same core learning mechanisms (i.e., *re*organisation processes in L1 and *re*conceptualisation processes in L2). It goes without saying that there are some highly strategic formulaic processes unique to L2 learning, but

to a large degree the cognitive processes are also shared, warranting the construction of a unified L1-L2 or C1-C2 theory. The fact that the Aspect Hypothesis begins in L1 development with the semantics of certain verbs, for example, and then spreads to all forms of verbs is a good indication that reorganisation is also an essential L1 acquisition process. Moreover, the basic representations of the linguistic and cognitive systems are similar enough for monolinguals and bilinguals. Indeed, considering that L2 learning is so heavily influenced by transfer from L1 it would be impossible to construct a model of L2 learning that did not take into account the structure of L1. In short, it is the ability to use symbols to create meaning making through joint-attention frames irrespective of the artifacts of a particular culture that will lead to a cross-linguistically valid model of language learning.

4.2 How We Got Here

The actual origin of SCM would of course begin much earlier but a good starting point, which predates the cognitive revolution, is the work of Saussure (1916/1972). Robins (1967: 224) refers to him as "the key figure in the change from 19th to 20th century attitudes." Besides laying down much of the groundwork for structuralism (Matthews 2001) and the phoneme, Saussure specifically pointed out the need for synchronic and diachronic analyses of language as well as the effects of the evolution of grammar (i.e., grammaticalisation). Saussure (1972: 9) was also well aware that a sound combines with an *idea* to form another complex unit, both physiologically and psychologically—and this we might take as the origin of Cognitive Grammar.

However, Saussure has also been criticised (Volosinov 1973; Mitchell & Myles 2002; Lantolf & Thorne 2006) for his abstraction of language as a formal system (i.e., *langue*) and and in use (i.e., *parole*), which is related to the Cartesian mind-body distinction that influenced first generation cognitive grammars. To a large extent, this is the reason why we also have antithetical theories stressing the social and dialogic nature of language in use and context (Humboldt 1836/1988; Bakhtin 1981, 1986; Rommetveit 1992). As a synthesis of both theories, SCM strives to not only garner the best from both worlds but to go over and beyond them (Volosinov 1973).

The next logical step is to the work of Jakobson (1990). It was Jakobson who coined the term "structuralism." The first function of dialogue, according to Jakobson (1990: 26), and this agrees very much with the SCM approach being put forth, is to bridge temporal and spatial discontinuity. Beginning in the late 1960s, Jakobson reserved his most indirect and implicit criticism for the work of Halle, his former student, and Chomsky (Chomsky & Halle 1965), both prominent figures in the first-generation cognitive revolution. Jakobson viewed their work as only a chapter in the history of structuralism, and he was disturbed by their disregard for the functional, pragmatic, social, and communicative basis of language.

Jakobson (1956/1990) may also have been the first to associate similarity and contiguity as meaning making with the most common figures of speech: metaphor and metonymy. By doing so, it opened the way for metaphor to play a more prominent role in language analysis, thereby creating a more unitary view of semiotics (i.e., no longer strictly grammatical analysis of language). Jakobson (1990) also noted that aphasic regression is a mirror of the child's acquisition of speech sounds, that is, it shows the

child's development in reverse—similar to the reversal of the grammaticalisation process. This reversal and loss of language suggests that apart from the internal meaning-making function of metaphor and metonymy, much of the language and grammar acquisition process is an internalisation one. That we are still just coming to understand the meaning of these observations is also a good indication that Jakobson transcended the cognitive revolution.

Unfortunately, however, as Jakobson pointed out in his critique of Halle and Chomsky, in the first generation of the cognitive revolution disregard for the communicative basis of language led linguists astray. CLT, therefore, has not been as successful as hoped, most likely because of the misguided approaches of the first-generation cognitive revolution. Apart from introducing terms such as "bottom-up" and "top-down" processing, "schema" and "background knowledge" (Richards 2003), CLT has seemed to miss out on the second-generation cognitive revolution and has not correctly interpreted the relationship between meaning, spontaneous use, invention and form, and non-spontaneous use and convention.

That said, recent SLA publications (see, for example, Doughty & Long 2003) are making a call for SLA to become part of cognitive science and perhaps this might be the best way to resolve the conflicts within it. Additionally, the work of Ellis, N. (2003) and Larsen-Freeman (1997) has for some time been pointing toward second-generation cognitive approaches; however, it has yet to achieve such a paradigm shift. Perhaps forthcoming work (i.e., Robinson & Ellis 2006) and conferences (i.e., *Sociocognitive Approaches to Second Language Learning*) will achieve more in bringing CLT into the second generation of the cognitive revolution.

Simultaneous with the rejection of audiolingualism and the development of CLT, experimentalist behaviorism was replaced in the other humanity or social science disciplines with cognitive developmental approaches (e.g., cognitive psychology). Thus, for some time now learning has been understood in those disciplines as a cognitive developmental process. The same cannot be said for CLT. Of course, CLT has seen the arrival of cognitive approaches to language teaching (see Skehan 1998; Pienemann 1999; Robinson 2001) but they have remained within the first-generation cognitive approach to mental processes. "Consciousness-raising" activities (Rutherford 1987), which require more social interaction, are good examples of initial second-generation cognitive language-teaching approaches. With more focus on joint-attention frames, task-based learning could also function within a second-generation cognitive framework.

In sum, it is the position of SCM that if SCT perspectives to language learning continue to be paralleled with rule-governed Chomskian-based first-generation cognitive grammars (Zuengler & Miller 2006) then they will meet with minimal success. First generation cognitive approaches leave mental processes inaccessible to observation, second-generation approaches, on the other hand, are aware that mental processes are observable in jointly created discourse (Harre & Gillett 1994). The best step forward to achieve unification of cognitive and sociocultural theories, then, is with second-generation cognitive grammar (i.e., Langacker 1987; Tomasello 2003). Indeed, it may lead to a third-generation sociocognitive revolution. The difficulty with bringing CLT into the third generation of the cognitive revolution is no doubt due in large part to the fact that apart from Putz, Niemeier & Dirven (2001a, 2001b) and a few others there has not been much research done into applying cognitive grammar to the classroom. The

third part of this thesis attempts to contribute to the small body of growing research into applying sociocognitive linguistics in the classroom.

4.3 The Basics of SCM

SCM takes a connectionist joint-attention approach to language learning. It holds that brain development has a three-fold effect on grammar: it is connected, perspective taking and goal-oriented. First, neural networks connect the production and comprehension functions of language through a connectionist meaning condensation process of brain development. Second, the neural activity interacting between the visual and action-related and the comprehension and production areas of the brain create the cognitive ability for spatiotemporal perspective taking. Finally, grammar (i.e., argument structure) is shaped through the joint-attention frames between speaker, listener and object (i.e., goal-orientation or problem-solving orientation). Along with schemata, this three-fold effect contributes to creating conceptual space.

4.3.1 Teaching Grammar as Metaphor

Cognitive Grammar makes no distinction between literal and figurative language. Metaphor as the basis for figurative language represents the brain's unique ability to create associations between cognitive domains in order to develop meaning. Therefore, metaphor and figurative language play a very influential part in any cognitive approach to language learning. However, apart from phrasal verbs and idioms, most approaches to L2

teaching fail to even mention metaphor. Indeed, grammar is at the center of the focus. Contrastively, the empirical research in this thesis attains more symmetry between the two by establishing how metaphor is involved in the grammar learning process. For example, we do not learn the meaning of function words; we learn their function. In this sense, a function word is used metonymically. A pronoun replaces the noun it represents (i.e., part-to-whole). Much the same can be said for other grammatical functions such as proforms, substitution or ellipsis. Thus, this metonymic relation is actually essential to describing grammar.

The following three findings also provide incentive for this investigation into teaching grammar as metaphor. First, though there have been numerous neurological investigations done into finding where "grammar" is located in the brain, as of yet, none have been successful. On the other hand, as Jakobson (1956/2003) pointed out, every aphasiac has a problem with metaphor:

> The varieties of aphasia are numerous and diverse, but all of them lie between the two polar types just described [i.e. similarity and contiguity disorders]. Every form of aphasiac disturbance consists in some impairment, more or less severe, either of the faculty for substitution or for combination, and, contexture. (41)

This fact suggests that metaphor, more so than grammar, is a basic cognitive function. Add to this the finding that metaphor comprehension seems to lag behind production (Todd & Clarke 1999). That is, children appear to be able to produce spontaneous metaphors prior to being able to comprehend them. Typically, the reverse is understood to be the case with grammar comprehension and production. Perhaps, then, metaphor and grammar share a relationship similar to the conventional understanding of the top-

200

down/bottom-up dichotomy. In grammar's case, it derives from a top-down, input and comprehension sociocultural context whereas metaphor stems from a bottom-up, output and production-driven cognitive function. If this is the case, then not one but *both* forms of development are necessary for language acquisition.

Furthermore, as Rumelhart (1991) notes, if a child uses the term *open* to mean *turn on* (i.e., as with a television set or a light) the child will be perceived as having produced a metaphor. Yet the process of applying words to situations is much the same in either case—namely that of finding the best word or concept to communicate the idea in mind. Thus, it would be difficult to claim the child had made an error with language. Though it could be claimed she had made an error with convention. This fundamental metaphorical use of language to find the best word to communicate also extends to L2 learning. Quite often teachers may correct their students for a grammatical error when in fact the student may have been trying to communicate figuratively or metaphorically rather than grammatically. Most L2 teachers have probably had the experience where they point out to their student the grammatical awkwardness of an interlanguage phrase just uttered only for the student to defy convention and reply that it was the best way to communicate what they had wanted to say. In such cases, perhaps teachers should choose to accept that the spontaneous metaphorical intent of the utterance overrides convention and, rather than provide explicit negative grammatical feedback, request a more conventional metaphorical recast from their student, thereby allowing grammar to emerge. In short, teachers need to be aware that metaphoric competence extends much beyond the use of phrasal verbs or idioms and is also essential for communicative competence (Low 1988; Littlemore 2001).

It may well be the case that metaphor is being reevaluated and is finding new popularity in light of the second-generation cognitive revolution. In the twenty-five or so years since the first publication of Ortony's (1979) *Metaphor and Thought*, metaphor has gone from being considered a literary device to being at the center of cognition, thought formation and meaning creation (Lakoff 1993). In fact, there are now two definitions of metaphor, namely, linguistic metaphor (i.e., metaphor in language) and conceptual metaphor (i.e., metaphor in the mind). Unfortunately, however, though conceptual metaphor is closely linked to and plays a primary role with cognition in L1 linguistic analysis, apart from a few seminal studies into cognitive semantics (see Kovecses & Szabo 1996), there has been little or no mention of metaphor within SLA research. Robinson's (2001) book entitled *Cognition and Second Language Acquisition*, for example, has no mention of it, nor does Ellis' (1994) *The Study of Second Language Acquisition*, though the recent Ellis & Barkhuizen (2005), *Analysing Learner Language*, dedicates an entire chapter to metaphor analysis. Thus, an awareness of metaphor may herald CLT into the second generation of the cognitive revolution. Cameron (2003) also provides a Vygotskian sociocultural theory analysis of linguistic metaphor.

This lack of mention of metaphor may also imply that metaphor is not relevant enough to even merit being cited or mentioned in SLA research—or it may point to another imbalance: Within the field of SLA research, grammar, especially a particular view of grammar heavily influenced by the Chomskian paradigm, has always been at the center of things. Thus, any rise in the position of metaphor represents a challenge rivaling the position of grammar, which in turn presents some very interesting empirical

questions: What is the relationship between grammar and metaphor? Which has the largest influence on language acquisition?

Due in large part to the research into metaphor (Cameron 2003; Cameron and Low 1999a, 1999b), which in turn is heavily influenced by the substantial L1 literature on metaphor (Lakoff & Johnson 1980; Ortony 1991; Dirven & Porings 2003), metaphor is gradually being introduced into L2 teaching classrooms. Furthermore, though figurative language has always held a place in L2 teaching, recently there are signs of a shift towards acknowledging that it is ubiquitous in language (Carter & McCarthy 2004)—to an extent equal to that of grammar. Though brief, it is hoped that this discussion has raised enough interest to warrant the teaching of grammar as metaphor as a valid research topic and, should the investigation results prove significant, shown that there is reason to propose the addition of teaching grammar as metaphor to any language syllabus—though perhaps the best-suited syllabus, as has been suggested, is SCM (Hill 2004).

4.3.2 Connectionism and Back Propagation

Aside from classroom research and neurological photo imaging, perhaps connectionism holds the most promise for understanding the unobservable functions of the mind. Connectionism (Rumelhart & McClelland 1986) is the name for neural network modelling systems, which can simulate learning processes and interactions of language (Elman et al. 2001). For instance, connectionism offers new ways of looking at the emergence of grammar as the natural result of brain development and the internalisation process of language. This is especially salient with a term called back-propagation. Back-

propagation (Regier 1996: 37) is a supervised learning algorithm for connectionist networks. This means that the network is given a training set of input patterns paired with desired output patterns. The network is then trained to produce the input-output associations given in the training set. Back-propagation uses every *positive* instance for one concept to be an *implicit negative* instance for all other concepts being learned (Regier 1996: 62). In this way, the system learns without the use of explicit negative feedback, that is, it learns from a "poverty of stimulus" and, as has been argued previously, this renders a "poverty of stimulus" as a misnomer and explicit positive and implicit negative feedback become the best forms of error correction.

The basic idea is to treat positive instances and implicit negative instances differently during training. In particular, implicit negatives are viewed as supplying only weak negative evidence and in that sense are taken less seriously than the explicit positive evidence encountered. In this way, the neural network is performing a kind of distributional analysis on the input. This weighting of the nodes leads to learning development in connectionism and may share a relationship with joint-attention frames and self-, other- and object-regulation. In this sense, neural networks function along similar lines as the sociocultural functions found in ZPDs.

It is no small achievement that neural networks can successfully describe possible brain interactions below the word level (i.e., morphology). In spite of this progress, however, neural networks still remain far from biological. They are computer simulations of the complex interactions of functional neuronal units. So far they have been successful in simulating the complex interactions of language but they have yet to incorporate a view with details of neuroanatomical connections (Pulvermuller 2002; Lamb 2000). One

possible way to advance in this area would be to make more meaning-making oriented neural networks by connecting words with images (see, for example, Regier 1996). This would encourage neural-networks to make language distributional analysis decisions based more on underlying schemata, which then in turn presents the potential for metaphor and word meaning creation.

Neural networks also offer potential simulations of unobservable cognitive functions—which could then be investigated for any relationship to the observed phenomenon of learner interaction in the classroom. According to Pulvermuller (2002), there have been three relationships found between language and brain processes. A relationship between words and phonology has been found. Thus, below the word there is a phonological unit. A separation between production and comprehension has also been found. Possibly this separation exists because comprehended language is stored in working memory (or explicit attention) but words for production are drawn from long-term memory (or implicit attention). Perhaps grammar might also profit from being reanalysed as comprehension grammar (i.e., form-to-meaning) and production grammar (i.e., meaning-to-form). The final separation exists between action words and visually related words. The brain and language are divided according to the cognitive demands of vision and action, which has obvious applications joint-attention frames, perspective taking, verb semantics, tense-aspect and the Aspect Hypothesis. Pulvermuller (2002) theorises that these neurons group together into functional webs. Theoretically, then, the internalisation of grammar has the following result on the internal workings of functional webs:

- to condense meaning making,
- to create a perspective between action, vision and body-part related words,

- to use these relations to express spatiotemporal relations,
- to create cause-and-effect joint-attention frames,
- to make the associative connections between production and comprehension as effective as possible.

As the brain develops along these lines and language is internalised through social interaction, inner speech also develops. Following Regier (1996), if we can steer clear of overgeneralisation mechanisms, if we can deliberately limit too-powerful models such that they are no longer capable of learning a wide range of functions, but rather can only learn a clearly demarcated subset of all possible functions, we are beginning to say something: namely, that the stimulus and learning are consistent with the constraints built into the model. In this sense, we have begun to develop a more cognitive simulation connectionist theory and thereby come a step closer to a neurological understanding between the inter- and the intra-psychological planes, cognitive schemata and language acquisition.

4.4 SCM Genesis

One of the most common forms of interaction in L2 classrooms is pair-work. As effective as this taskplan can be, it can also be a non-spontaneous one where students simply exchange information, unproductively imitating native speakers. With pair-work, there is often also no intervention by the teacher so any learning that takes place occurs indirectly between non-self-regulating students. Obviously, unless one of the students is self-regulated, for students encountering the taskplan and the taskprocess for the first time, it

is too much to also ask one student to other-regulate the other. An alternative method is to set up the taskplan to enable learners to affect language acquisition in their partners, i.e., learning leading development, and this can be accomplished by grounding the taskplan in cognitive schemata exemplifiers and providing shared joint-attention frames for a focus on language. If each student feels sociocognitively embodied in the taskplan, then they can non-spontaneously other-regulate the spontaneous taskprocesses of their partner with productive imitation of the target language.

One of the main challenges to SCM is to combine and expand on Cognitive Grammar and SCT theories to transform the SCM environment—i.e., the classroom—into an area, which can enhance and enrich learning and development. We can meet this objective by using Cognitive Grammar notions of main event schemata, grammar emergence through metaphor, and SCT ideas about the development and the internalisation of grammar through self-, other- and object-regulation. Furthermore, recent research into the embodiment of cognition and the emergence of language (Tomasello 2003; MacWhinney 1999) can also enhance language learning by further organising the sociocognition into four joint-attention frames.

4.4.1 Cognitive Simulations

As soon as learners enter the classroom (which is in itself to some extent a sociocognitive metaphor), they should feel a heightened sense of conceptual awareness. Spontaneous metaphoric and figurative language use in the classroom can help facilitate this awareness. The purpose is to get each student consistently thinking in terms of universals or

schemata and other psychological tools such as typological prototypes so that they are prepared and anticipating their spontaneous naïve cognitive models to extend, interact and develop into non-spontaneous expert ones. Furthermore, as much as possible, it is important for each student within the ZPD to share the same perspective or joint-intention frame relating to the grammar or typological prototypes to be produced. By doing so, there is a greater chance that learners will internalise the same forms.

One way to fully reconceptualise words in L2 involves the learner coming to understand the meaning of an object through a form of neural processing: *cognitive simulations*. A cognitive simulation is a mental rehearsal of interactions with a typological prototype in terms of its most salient affordances (e.g., definite or indefinite; singular or plural). Hence, rather than listing its attributes, cognitive simulations involve defining a typological prototype according to how it interacts at each joint-attention frame of SCM. Cognitive simulations are a form of distributional analytical entrenchment between cognitive schemata and language. Entrenchment is related to back propagation. Cognitive simulations are evidence of entrenchment occurring on the intra-psychological plane, which then allows the performance of a task or utterance of a phrase without explicit attention to it.

If a house is permissible as a metaphor for culture, then perhaps a good example of a cognitive simulation is traveling to a place we have never been. The first time to go somewhere is very much a cognitively demanding entrenchment process of planning where and how we will go and preparing what we will need, as well as mentally rehearsing both. The usual result of this planning and preparing is that the next time we go to the same place, we no longer feel the same cognitive demand to plan and prepare

(i.e., the pattern has been entrenched). Furthermore, the second time we go, we may find that much of the L2 we acquired on the first visit is related to the functions of planning and preparing. In sum, cognitively demanding situations requiring cognitive simulations or rehearsals are necessary for cognitive development.

4.4.2 Domain Networking

Most cognitive approaches to the perspective of event representations include three levels: spatiotemporal deixis, processing events, and causal action. The conceptualiser (C) epistemically views each level of a linguistic predication. Spatiotemporal deixis is often termed from the viewpoint figure and ground (Langacker 1987: 173). The subject-verb-object-complement pattern can be viewed as a reflection of the general cognitive principle of figure-ground segregation. The processor of events involves viewing the event from the different perspectives of agent, patient and experiencer. From these perspectives, events are capable of initiating motion or physical activity in objects or other persons.

Typological prototypes include objects, properties and actions (Croft 2001). Studies on joint attention and early language acquisition clearly demonstrate that being able to segment speech and to conceptualise the world are by themselves not adequate for acquiring a linguistic convention. The child must also be exposed to convention in the context of social interaction in which she and the adult find some way to share attention (Tomasello 2003). According to MacWhinney (1999), the grammatical systems for event

representations (i.e., tense, transitivity, deixis, aspect and agency) have as their solitary purpose the elaboration of embodiment through perspective taking.

Although languages vary widely in the ways they mark these basic functions (i.e., typological prototypes, shared attention and event representations), the need to mark these relations is universal. When children learn language and develop from complex to conceptual thinking, they use perspectival and joint-attention relations as keys to acquiring lexical and grammatical forms and to single out, view, and synthesise concepts. They do this by focusing on typological prototypes that correspond to their own embodied perspectives (MacWhinney 1999). Thus, we now look at the SCM joint-attention framework in order to further integrate a cognitive syllabus within a sociocultural ZPD methodology.

4.4.3 The Four Levels of SCM

A perspective-taking approach to cognition has four levels: (1) affordances, (2) spatiotemporal reference frames (i.e., deixis), (3) action chains (i.e., causation), and (4) social roles (i.e., discourse structure). The hypothesis is that these four perspectival systems are grounded on specific brain structures that have evolved to solve major adaptive challenges (MacWhinney 1999). These joint-attention frames utilise typological prototypes (i.e., objects, attributes, and predicates), which together establish a partial cognitive reflection of the entire human being and allow for the development of non-spontaneous concepts. Joint-intention frames result in the development of social roles and culture.

Beginning with the affordance system, each domain extends unidirectionally. The affordance system internalises and adapts typological prototypes to the ways in which humans act on the world using sensation and action. Spatiotemporal frames internalise our mental models of positions, moments, and movements in the world. Causal action chains allow the activities of the world to be coded in terms of causative perspective. Social frames allow actions to be viewed in terms of their personal consequences and implications (MacWhinney 1999). At some point, perhaps 150,000 years ago with the emergence of modern humans, individuals who could collaborate together in various social activities came to have a select advantage (Tomasello et al. in press). Each frame requires an increasing level of joint attention and metacognitive awareness.

4.5.3.1 Joint-Attention Frame One

In the first perspectival system, language and cognition relate to individual objects and actions through prototypes. Prototypes, or best examples, are grounded in both the visual and the activity areas of the brain and view an object in a very basic way. The perspective towards individual words is one that reactivates normal, personal encounters with these objects (i.e., relationality, stativity, transitoriness and gradability).

Prototypes also build upon the comparison-and-contrast meaning-making metaphor domain and can be divided into basic, sub- and super-ordinate categories. Examples of each level are: super-ordinate: canine; basic: dog; and subordinate: collie. Of note, names for superordinate categories are often bounded mass nouns when basic level terms are unbounded count nouns (Croft & Cruse 2004). This domain has a mainly

word-level focus and the grammar associated with it is, for example, countable or mass nouns (i.e., definite/indefinite or singular/plural):

Prototypical Joint-Attention Frame:

       1) Article/Determiner/Singular/Plural Agreement
       An apple
       Some apples

4.5.3.2 Joint-Attention Frame Two

This perspective is related to the metaphors of *TIME IS SPACE* or *TIME IS MOTION* and the concept of *grounding* in cognition and narrative discourse (i.e., foreground and background). To develop the sequence of actions necessary for spatiotemporal relations, this second cognitive domain incorporates a set of reference frames located in the activity area of the brain. This domain has an added triangular joint-attention frame between speaker-centered, object-centered and environment-centered. It is also necessary for this frame to develop the concept of a state verb derived from cognitive constants found in temporal regularities.

At this level, we see a dramatic increase in the amount of schemata used to describe spatiotemporal relations (e.g., the Aspect Hypothesis). Along with deictic relations, temporal relations also use these three analogous frames and movements to specify a perspective that matches up with the tense-aspect in the sentence. To illustrate, the speaker-centered (i.e., ego-centered) or anthropocentric dimension is what the speaker senses visually or actively and matches up to the present tense or progressive aspect.

Depending on whether the object-centered dimension (i.e., an inanimate object) is deictically ahead of the speaker or behind or simultaneous with it, this dimension matches either future or past tense or grammatical aspect respectively. Finally, the environment-centered dimension (i.e., event-centered) involves landmark (e.g., earth or sky) and cardinal (e.g., north and south) orientation in the same way tense-aspect is used to shape discourse in the Discourse Hypothesis.

Spatiotemporal Joint-Attention Frame:

    1) Deictic

        self – here

        other – there

        environment – relative object

    2) Tense (e.g., past)

        self – now

        other/event – past

        environment/reference – past

    3) Aspect (e.g., perfect)

        self – now

        other/event – past

        environment/reference – now

In our visual system, we can detect space and motion but there is not any way to detect time so the conceptual forms of tense-aspect and the ability to alter or deviate from chronological order has also developed from the spatiotemporal comparison-and-contrast function of metaphor and metonymy.

4.5.3.3 Joint-Attention Frame Three

The third frame is sentential and is the one that is most centrally involved in the emergence of argument structure. This joint-attention frame is the system of causal action, which allows us to understand the action and centrality of a verb from the perspective of the "subject," namely, transitivity. The relationship between cause, effect and result in this domain creates a form of lexico-grammatical meaning derived from the different possible constructions between objects, motion, time and space.

At this level, by understanding the interrelation in the cause-and-effect relationship of argument structure along with the spatiotemporal prototypical basis, goal-setting and problem-solving ability should emerge:

Causal Action Joint-Attention Frame:

    1) Transitivity
        self – subject
        other – direct object
        object – indirect object
    2) Agency
        self – agent
        other – patient
        object – instrument

Problem solving is closely related to meaning making. At this point, the dialectical connections between scientific concepts (i.e., superordinate categories), as compared to spontaneous ones (i.e., basic-level categories) and grammar are irrevocable. This level also sees the linking of clauses according to cause-and-effect:

SVO *because* SVO = cause

SVO *so* SVO = effect

SVO to SVO = purpose

4.5.3.4 Joint-Attention Frame Four

The final cognitive level allows for the adoption of the sociocognitive perspectives of other human beings. This cognitive level has many similarities to forms of interaction that can create social advantage, for example, displays of mastery of language such as giving opinions, persuasion, and argument. If each previous domain has been organised similar to the way that has been outlined, learners should be able to express opinions with less chance of them containing biased or faulty logic (i.e., they should be able to manifest joint-intention in others). Put another way, the speaker is able to express how their understanding of the prototype, spatiotemporal and cause-and-effect joint-attention frames can be used to form social bonds or benefit society:

Social Roles:

1) self – child
2) other – mother
3) environment – family

1) self- student
2) other – teacher
3) environment - school

Sociocultural roles (e.g., leaders), organisations and opportunities for social change develop through language use at this level. In terms of its linguistic reflexes, this level goes beyond sentential level and it involves the use of linguistic metaphor as well as the more complex pragmatic features of discourse patterning.

4.4.4 Uniting the Levels of SCM

Within the ZPD, SCM taskplans must focus on one or more joint-attention frame in a way that stresses collaboration, intention reading and the sharing of psychological states in order for learners to acquire underlying cognitive schemata, develop self-identities and language to emerge. Each of these joint-attention frames establishes a partial cognitive reflection of the entire human being.

4.4.5 SCM and L2 Language Teaching

Applying SCM to language teaching involves reconstructing the typical L2-teaching syllabus and methodology into SCM terms. This involves creating cognitively demanding joint-attention taskplans so that learners internalise affordances (e.g., singular and plural), spatiotemporality (e.g., tense-aspect), causation (e.g., argument structure) and social roles (e.g., discourse and pragmatics) through joint-attention, cognitive schemata interaction, cognitive simulations and reconceptualisation. Typical cognitive language-learning strategies include knowledge restructuring, schema preservation, schema reinforcement, schema accretion, schema disruption, and schema refreshment (Stockwell 2002: 80).

4.4.5.1 Restructuring and Reinforcement

Once the four joint-attention frames of SCM have been reestablished in L2, in order for L2 to become a completely reconceptualised connectionist system (Elman et al. 2001; Ellis 1994), further restructuring and reinforcement are necessary. By building direct links between the L2 and underlying cognitive schemata, the learner is able to increase the automaticity of lexical access in L2. This automaticity constitutes a "firewall" against ongoing interference effects from L1 and L2 (MacWhinney 2001). Initial transfer from L1 to L2 is expected but the learning of L2 requires the formation of links between the new word, the cognitive schema and other related L2 words. Thus, the schema underlying the word will become increasingly linked to the L2-speaking world rather than the L1-speaking world. In essence, the same neural networks are then functioning with both L1 and L2. The more these two synonymous words can be linked into separate worlds and to other words in the same language, the stronger the firewall will be preventing interference. In effect, cognitive simulations undo the early parasitic association of concepts that the beginning L2 learner used to acquire the first phases of learning (MacWhinney 2001: 81).

4.5 Summarising SCM Theory

In summation, it is hoped SCM theory has been explained in a coherent and well-founded enough manner to warrant an empirical investigation into whether it might have applications to the teaching of tense-aspect and the Aspect Hypothesis. In the next part of the thesis, we look at applying sociocognitive theory to language materials development.

These are the revised taskplans that were used to collect empirical classroom data for the mixed-method research project designed to investigate the extent to which the introduction of metaphorical cognitive schemata into the L2 classroom can enhance tense-aspect grammar acquisition as well as affect reconceptualisation from L1 to L2. To understand the research analysis, it is useful to look at the taskplans next, however, it is important to keep in mind that they have been revised according to the results of the findings in the research. The original taskplans are in Appendix A. A follow-up research paper is then presented that investigated the extent to which tense-aspect instruction based on metonymic sequences of conceptualisation can affect L2 acquisition.

5.0 Applying Sociocognitive Metaphorm

This part is intended to be an application of SCM. SCM can and will be applied to other areas of L2 language teaching and, indeed, throughout this dissertation many of them have been touched upon (e.g., the written form or pragmatics). However, because of metaphorical-metonymical investigative hypotheses, grammar was found to be initially the most appropriate.

5.1 Teaching Grammar Through Metaphorm

This part attempts to improve on existing pedagogical grammars by teaching grammar through metaphorm (Hill 2005). These taskplans are post-research versions that have been revised according to the following Aspect Hypothesis factors of acquisition which became apparent when researching the initial taskplans:

1. Revise grammatical metaphor to conceptual metaphor by using phrasal verbs.

2. Revise sociocultural temporal adverbials with the metaphor TIME IS CYCLES.

3. Create the state/activity verb distinction.

4. Introduce telic/punctual lexical aspect schemata as well as provide example verb lists for the four types of lexical aspect.

4. Separate lexical aspect from grammatical aspect.

5. Include a past participle metonymic taskplan.

6. Discourage activity verb use with lexical aspect (i.e., achievements and accomplishments), rather than teach that present progressive is not used with some verbs.

7. Sequence tense-aspect based upon conceptualisation and grammaticalisation processes.

Because of these factors, the sequence of the taskplans has been changed from the original:

1. Introducing Metaphorical and Literal Meaning

2. Grammatical Metaphors

3. Introducing TIME (i.e., TIME IS SPACE)

4. Tense as Metaphoric Domains

5. Time Phrases as Culture

6. Aspect as Metonymy

7. Perfect Aspect in Japanese and English

8. Different Uses of Tense (i.e., present and progressive for future use)

9. Pragmatic Uses of Tense (i.e., past tense for past tense)

10. Aspect and Modality Blend to Create a New Aspect

11. Tense and Aspect to Structure Discourse

to the following which more accurately reflects the actual sequence of acquisition as well as the various communicative competences involved (i.e., metaphoric, cognitive, sociocognitive, sociocultural, and pragmatic):

1. Introducing Metaphorical and Literal Meaning

2. Conceptual Metaphors

3. Lexical Aspect

4. Grammatical Aspect

5. Lexical and Grammatical Aspect in L1

6. Different Uses of Tense

7. The Future

8. Introducing TIME (i.e., TIME IS SPACE)

9. Tense as Metaphorical Domains

10. Sociocultural Temporal Phrases (i.e., TIME IS CYCLES)

11. Pragmatic Uses of Tense (i.e., past tense for politeness)

12. Aspect and Modality Blend to Create Bounded Irreality

13. Tense as Narration (i.e., TIME IS A MOVING OBJECT)

14. Tense-aspect and the Discourse Hypothesis

The taskplan for grammatical metaphor has been changed to conceptual metaphor. An Aspect Hypothesis taskplan has been added to separate lexical aspect and grammatical aspect. Another taskplan was also added because in the original the TIME IS A MOVING OBJECT metaphor was introduced at the same time as the TIME IS SPACE metaphor. However, since the TIME IS A MOVING OBJECT metaphor is related to the sequence of narration and therefore is a more advanced discourse function, it was moved to a later position as well as given its own taskplan. In order to show the similarity in the relationship between perfect aspect and past tense and *going to* and *will* for future, another taskplan based on the follow-up research for future was introduced after different uses of tense. Examples of how to do the taskplans have been added. Finally, other minor improvements to enhance students' schematic knowledge construction ability have also been added.

The suggested methodology for teaching the metaphorm taskplans, which was developed from the quantitative and qualitative analysis of the taskplans, is the following six steps:

1) Introduce the underlying schema for the form.

2) Present the mapping of schema to language use through metaphorical extension.

3) Introduce a joint-attention taskplan, which requires inductive or deductive mapping of the underlying metaphor to the grammatical form.

4) Check answers as a class (Note this involves the more specific teacher-student EDE triad and also establishes who the other-regulator is in smaller pairs or groups).

5) Introduce a metonymic taskplan mapping meaning-to-form.

6) Have pair or group discussions, which allow for spontaneous language use and analogical distributional analysis of the form.

5.1.1 Taskplan 1: Introducing Metaphorical and Literal Meaning.

Literal means a direct relationship between the word and the thing or activity, for example:

> *Life is difficult.*

Metaphor means there is a meaningful relationship between the word and the thing or activity, for example:

> *Life is a dream.*

Words	Literal Meanings	Metaphorical Meanings
diet	the kind of food and drink someone eats regularly	what something is mostly made of
flavor	the particular taste of a food or drink	the quality you identify something with

Look at the sentence below. Are the words *diet* and *flavor* used metaphorically or literally?

222

Traditionally, the diet of language offered to our students has been grammar with a separate helping of vocabulary mixed in to give it the required flavor.

2) Metaphor or Literal? Circle *M* if you think the word is used metaphorically and *L* if you think it is used literally.

diet   *M*   *L*

flavor   *M*   *L*

3) What is the general metaphor of the sentence above? Circle the correct letter to complete the sentence.

Teaching language is like ...

a) a dream   b) a cooking recipe

c) dancing   d) being a good student

4) Matching Metaphors. Try matching the words below to make metaphors.

___ 1) A star is...   a) a monkey

___ 2) The little boy student is...   b) white as snow

___ 3) The old woman's hair is...   c) a flower

___ 4) A cloud is...   d) a pillow

5) Make Metaphors. Now read the sentences below. Make metaphors with four of them and make literal sentences with three.

1) A good/bad student is_____. M   L

2) Language is_____. M   L

3) Education is_____. M   L

4) A good/bad teacher is_____. M   L

5) Studying is_____. M   L

6) Tokyo is _____. M   L

7) Life is _____. M   L

6) Group Work. Now read your sentences to your group. Circle either *M* for metaphor and *L* for literal. Then listen to the other members' sentences. Can you guess which sentences are metaphors and which sentences are literal?

	Me		Member 1		Member 2		Member 3	
1)	M	L	M	L	M	L	M	L
2)	M	L	M	L	M	L	M	L
3)	M	L	M	L	M	L	M	L
4)	M	L	M	L	M	L	M	L
5)	M	L	M	L	M	L	M	L
6)	M	L	M	L	M	L	M	L
7)	M	L	M	L	M	L	M	L

Did you make any mistakes? If you did, ask the person to tell you why it is a literal or metaphorical meaning. Discuss the reason why you guessed wrong.

7) Articles. Remember when you use nouns in your metaphors they may need either *a* or *the*. For example:

one = a   *this = the*   *all = no a or the*

↓   ↓   ↓   ↓   ↓

One star is ***one*** *flower.*   ***This*** moon is ***one*** *face.*   ***All*** Love is ***one*** rose.

↓   ↓   ↓

A** star is **a** flower.*   ***The moon is ***a*** face.   ____ Love is ***a*** rose

224

Next circle whether you think it should be *a* or *the* or neither. Then make two more metaphors.

1. A/The life is a/the dance floor.

2. A/The love is a/the rhythm.

3. A/The you are a/the music.

4. _____ .

5. _____ .

5.1.2 Taskplan 2: Conceptual Metaphors.

1) **Making Conceptual Metaphors.** Look at the sentences with gaps in them. Then read the hints next to the sentences. Can you think of conceptual metaphors to write in the gaps?

Example:

What shows are ___on___ TV tonight? (Shows are like lights.)

1) What time does your watch _____? *(If watches could talk, write the verb.)*

2) She's never happy. She's always _____ a bad mood. *(A mood is like a box.)*

3) I _____ what you mean. *(We often understand with our eyes.)*

4) My father is the _____ of a company. *(This is at the top of your body.)*

5) My mother always listens to my conversations to my friends. She's a very _____ person.
(Add –y to this part of your face that sticks out.)

6) She has no feelings. She's a _____ person.
(Add –less to this part of your body that is the center of feelings.)

7) His head is always in the clouds. He's a real _____ .
(Add –er to what you do when you sleep.)

2) Group Work. Now discuss and compare your answers with your group. Can you agree on the best answer? Do you want to change any of your answers? Write your group's best answers in the spaces below.

Best Answers:

1) _____   4) _____   7) _____

2) _____   5) _____

3) _____   6) _____

3) Phrasal Verbs. Look at these phrasal verbs. Can you guess their meaning from the *up*

and *down* metaphors?

to the limit

↑

fill up

| use   give   shut |

fast

↓ *do the opposite*
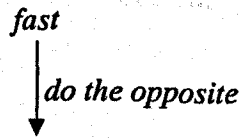
slow down

| quiet   cool   shut |

Fill in the blanks using one of the words in the box.

opposite

1. the limit of trying = _____ up
2. the limit of talking = _____ up
3. the limit of using = _____ up

1. warm ⟶ _____ down
2. noisy ⟶ _____ down
3. open ⟶ _____ down

226

5.1.3 Taskplan 3: Lexical Aspect

1) There are two kinds of verbs: STATE and ACTIVITY.

| STATE | ACTIVITY |

STATE: +++++++++ — + = no change

ACTIVITY: XXXXXXXX — X = dynamic
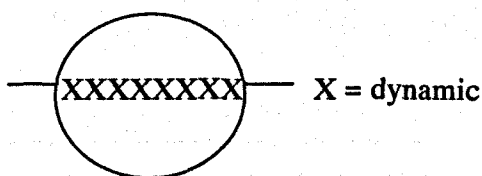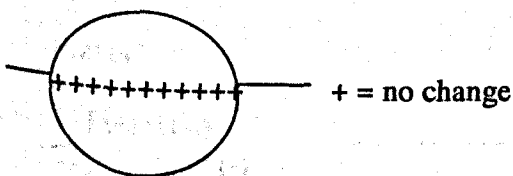
Example State Verbs:

want, like, love, have

I love. -> I have loved.

Example Activity Verbs:

walk, run, swim, push

I walk. -> I have walked.

2) ACHIEVEMENTS. These are also change of state verbs.
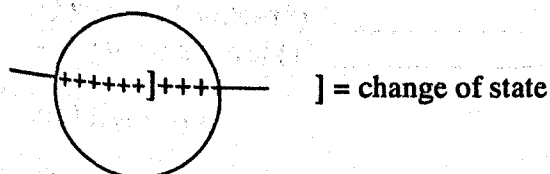
+++++]+++ —] = change of state

Example Achievement Verbs: *find something, recognise someone*

I found love. -> I have found love.

ACCOMPLISHMENTS. Finally, when activities have an object, they often become accomplishments.
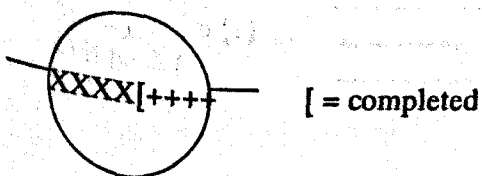
XXXX[+++ — [= completed

Example Accomplishment Verbs: *paint a picture, write a novel, build a house*

I built a house. -> I have built a house.

227

3) Make sentences (+), or negative sentences (-) or questions (?) using *have* and the past participle for the following verbs.

Example: *I break a glass (+) I have broken a glass*

States

1) I want (+) _____
2) you enjoy (-) _____
3) we love (?) _____
4) he have (+) _____
5) she know (-) _____

Accomplishments

1) it eat a pizza (?) _____
2) they build a house (+) _____
3) I swim an hour (-) _____
4) you run 5 miles (?) _____
5) he write a novel (+) _____

Achievements

1) she break a glass (-) _____
2) it fall (?) _____
3) they drop a book (+) _____
4) I win a race (-) _____
5) you find a cat (?) _____

Activities

1) he walk (+) _____
2) she run (-) _____
3) they swim (?) _____
4) it push (+) _____
5) I play (-) _____

4) Write S if you think it is a State verb, ACT for an Activity verb, ACH for an Achievement verb and ACC for an Accomplishment verb.

1) I've lost my purse.   S   ACT   ACH   ACC
2) She's started studying.   S   ACT   ACH   ACC

3) They've sung a song.	S	ACT	ACH	ACC
4) He's painted a picture.	S	ACT	ACH	ACC
5) I've been ill.	S	ACT	ACH	ACC
6) It's lived a long time.	S	ACT	ACH	ACC
7) He's jumped.	S	ACT	ACH	ACC
8) I've eaten.	S	ACT	ACH	ACC
9) The movie's ended.	S	ACT	ACH	ACC
10) I've driven to Tokyo.	S	ACT	ACH	ACC
11) You've understood.	S	ACT	ACH	ACC
12) I've sang.	S	ACT	ACH	ACC

5) Your Turn. Can you write examples of the different kinds of present perfect sentences?

State Perfect

I've changed.

1.

2.

3.

Accomplishment Perfect

I've painted a house.

1.

2.

3.

Achievement Perfect

I've finished high school.

1.

2.

3.

Activity Perfect

I've played.

1.

229

2. _____

3. _____

6) Group Work. Now read your sentences to your group. Can you guess which sentences are state, accomplishment, achievement or activity? Circle *S* for state, *ACC* for accomplishment, *ACH* for achievement and *ACT* for activity.

	Me				Member 1				Member 2		
1) S	ACC	ACH	ACT	S	ACC	ACH	ACT	S	ACC	ACH	ACT
2) S	ACC	ACH	ACT	S	ACC	ACH	ACT	S	ACC	ACH	ACT
3) S	ACC	ACH	ACT	S	ACC	ACH	ACT	S	ACC	ACH	ACT
4) S	ACC	ACH	ACT	S	ACC	ACH	ACT	S	ACC	ACH	ACT
5) S	ACC	ACH	ACT	S	ACC	ACH	ACT	S	ACC	ACH	ACT
6) S	ACC	ACH	ACT	S	ACC	ACH	ACT	S	ACC	ACH	ACT
7) S	ACC	ACH	ACT	S	ACC	ACH	ACT	S	ACC	ACH	ACT
8) S	ACC	ACH	ACT	S	ACC	ACH	ACT	S	ACC	ACH	ACT
9) S	ACC	ACH	ACT	S	ACC	ACH	ACT	S	ACC	ACH	ACT

Now check your answers. If you made any mistakes, ask the person to tell you why it was a state, accomplishment, achievement or activity sentence. Discuss the reason why you guessed wrong.

1) Activity Verbs

These verbs are used with the present progressive aspect.

PROGRESSIVE = MOTION IS ACTIVE

I am running

Progressive can be used with all tenses of activity verbs. Change the sentences below to be progressive.

Example:

I run. -> I am running.

1. I will run. _____

2. I'm going to run. _____

3. I run. _____

4. I can run. _____

5. I have run. _____

6. I ran. _____

7. I had run. _____

2) Activity verbs with habits. We also use activity verbs with things we do every day. But we don't use them in the progressive. Finish the sentences and compare the times with your partner.

1. I usually **wake up at** _____.

2. I <u>always/sometimes/never</u> **eat** breakfast.

3. Usually my first class **starts at** _____.

4. I usually **eat** lunch in the _____.

5. I usually **get** home at _____.

6. I like to _____ in the evening.

7. I usually **go** to bed at _____.

3) Non-Activity Verbs

We don't use progressive with non-activity verbs. They cannot be activated. Choose the sentences that are not correct. Mark *C* for correct and *I* for incorrect.

Example:

   _I_   *I'm understanding you.*

____ 1.We're late. I'm knowing it.

____ 2. I'm feeling a little sleepy.

____ 3. I'm thinking about the weekend.

____ 4. I know three languages.

____ 5. I'm feeling it's a good decision.

____ 6. I'm thinking you're wrong.

____ 7. I'm seeing what you mean.

____ 8. I'm watching a movie today.

____ 9. I'm liking this weather.

____ 10. What is he wanting?

Compare your answers with your partner. Do you agree on which ones are correct or incorrect?

5.1.4 Taskplan 4: Grammatical Aspect

EXPERIENCES ARE POSSESSIONS

Example: *I have a car.* ⟶ *I own a car.*

Perfect: *I have been to Hiroshima.* ⟶ *I own the being in Hiroshima experience.*

1) True or False Experiences. Write down four true experiences you have had and two that are false.

Example: *I have gone bungee jumping.*

T or F   **Partner's Guess**

____ 1. _____ ____

____ 2. _____ ____

____ 3. _____ ____

____ 4. _____ ____

____ 5. _____ ____

____ 6. _____ ____

Now read them to your partner. Can your partner guess which ones are true?

2) *Have you ever...?* We use *ever* in questions about experience but we DON'T use *ever* in the positive reply.

Example:

*Have you **ever** been to Hokkaido? Yes, I have ~~ever~~ been to Hokkaido.*

have never = haven't ever

> *No, I have never been to Hokkaido.*
> *No, I haven't ever been to Hokkaido.*

Answer the following questions:

1. Have you ever been abroad?
_____

2. Have you ever played pachinko?
_____

3. Have you ever gone on a diet?
_____

3) Plus Grammatical Aspect Compares the Past with the Present. The past tense contrasts the past with the present. But grammatical aspect compares the past with the present.

PERFECT= COMPARE   PAST = CONTRAST
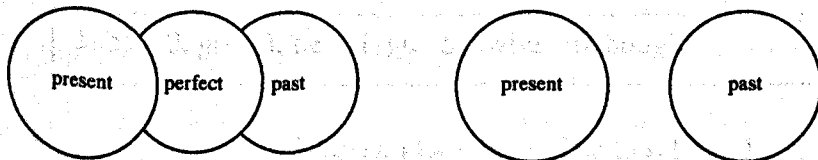
4) Perfect in Discourse. When we first give news, we often use the present perfect. When we give more details, we change to the simple past.

Example:

Mary has gone to Australia. She left last night.

Fill in the blanks with present perfect or the past tense.
1. Bill _____ an accident. He _____ off his bike last night. (*have, fall*)
2. John and Sue _____ yet. They _____ the wrong train. (*not arrive, take*)
3. John _____ his car. He _____ a good price. (*sell, get*)

5) Read the sentences and questions and circle the correct answers. Is it important to now?

1. Alan has lost his glasses. *Has he lost his glasses now?* NO / DON'T KNOW

2. Jane went to France. *Is she there now?* YES / DON'T KNOW

3. The cat has run away. *Is the cat at home now?* NO / DON'T KNOW

4. I made a cup of tea. *Is there tea now?* YES / PROBABLY NOT

6) When something does not have a connection to the present, we use the past. Fill in the blanks.

1. I ___*made*___ a cake for the children but they didn't like it. (make)

2. I _____ a new dress for the party last Tuesday. (buy)

But compare:

1. I _*have made*__ a cake. Would you like some? (make)
2. I _____ a new dress for the party next week. (buy)

7) Read the story and fill in the blanks. Use perfect and past.

1. be 2. go 3. be 4. go 5. swim 6. bought

I _____ to Okinawa two times. The first time, I _____ on my high school trip. It _____ interesting. I _____ again last year with my family. I _____ in the beautiful ocean and _____ a lot of souvenirs.

8) Durative Aspect. We use the present perfect, not the present, to say **how long** something has continued up to now.

Example:

> *I've been here since Tuesday.*
> *I've known him for ten years.*

Put in *since* or *for*
1. _____ six weeks   2. _____ Sunday
3. _____ 1996   3. _____ a long time

9) Ask and answer questions with your partner.

1) How long have you known each other?

_____

2) How long have you studied English?

_____

3) How long have you ...?

_____

4) How long have you ...?

_____

10) Past Participles. The present perfect is formed using the auxiliary *have* plus the past participle. The past participle with many verbs is *-ed*, the same as the past tense and with other verbs the ending is *-en*. Change the verbs to the past participle.

Example:

talk   _talked_   *take*   _taken_

Activity Past Participle   **Punctual or Telic Participle**

1. work   _____   1. build   _____

2. dance   _____   2. fall   _____

3. shop   _____   3. give   _____

4. walk   _____   4. make   _____

5. play   _____   5. forget   _____

5.1.5 Taskplan 5: Lexical & Grammatical Aspect in Japanese

Japanese has two kinds of verbs too: ACTIVITY and STATE

ACTIVITY VERBS

X = + dynamic

XXXXXXXXX
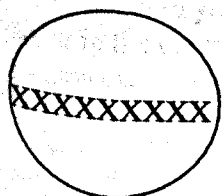
Example:

Hasiru -> Watasi wa hasite iru.

Activity verbs are the same in Japanese and English. State verbs are usually past tense in Japanese.

1) Progressive or Perfect? Circle *PROG*, *EITHER* or *PERF* if you think the sentence is progressive, perfect or either.

1. Tanaka-san wa ima sono heya ni haitte iru.	PROG	EITHER	PERF
2. Kare wa isya ni natte iru.	PROG	EITHER	PERF
3. Kare wa pizza o tabete iru.	PROG	EITHER	PERF
4. Wakai gakusei-tati wa isya ni natte iru.	PROG	EITHER	PERF
5. Kare wa e o kaite iru.	PROG	EITHER	PERF
6. Kare wa e o kaite ita.	PROG	EITHER	PERF

5) Perfect and Progressive. Write two perfect sentences and two progressive sentences, one in Japanese and one in English. They should all be different sentences.

Perfect

Japanese: _____

English: _____

Progressive

Japanese: _____

English: _____

Next, listen to your partner's sentences and translate them into English or Japanese. Then write in the column on the left whether you think they are perfect or progressive sentences.

My Partner: _____

___ _____

___ _____

___ _____

___ _____

Now read your sentences to your partner and ask them to read their translations of the same sentence.

2) Which Is the Best English Translation for the Japanese Sentence? Mark your choice with an X.

1. I live in Tokyo.   ____ Watasi wa Tokyo ni sunde iru.

                                 ____ Watasi wa Tokyo ni sumu.

2. I have lived in Tokyo.   ____ Watasi wa Tokyo ni sunda koto ga aru.

                                 ____ Watasi wa Tokyo ni sunde ita.

3. I have two children.   ____ Watasi wa futari kodomo ga iru.

                                 ____ Watasi wa futari kodomo ga aru.

4. I lived in Tokyo.   ____ Watasi wa Tokyo ni sunda.

                                 ____ Watasi wa Tokyo ni sunde ita.

5. I am living in Tokyo.   ____ Watasi wa Tokyo ni sunde iru.

                                 ____ Watasi wa Tokyo ni sumu.

6. I have been to Tokyo.   ____ Watasi wa Tokyo ni itta koto ga aru.

                                 ____ Watasi wa Tokyo ni itte aru.

STATE VERBS

In English there are three kinds of states (i.e., state, telic and punctual) but Japanese does not have many state verbs so basically there are only two in Japanese, telic and punctual:

X = activity   + = durative

TELIC

XXXXX[+++++
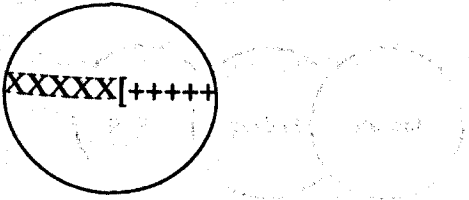
With telic verbs, when an activity stops it becomes a state.

Example Telic Verb:

Watasi wa e o kaite iru.   *I have drawn a picture.*

PUNCTUAL

------]++++++
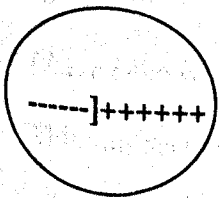
With punctual verbs, something happens instantaneously.

Example Punctual Verb:

Watasi wa kimatte ita.   *I have decided.*

3) Puntcual or telic? Read the verb and choose either *P* for perfect punctual or *T* for perfect telic.

1. Kono kabin ga kowarete ita.   P   T

2. Kare wa uchi o tate ita.   P   T

3. Sono koto rikai dekite ita.   P   T

Grammatical Aspect

Japanese also has grammatical aspect.

1) COMPARING PAST AND PRESENT
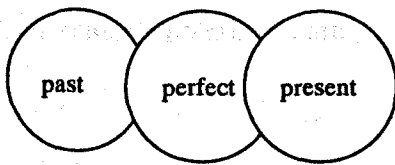
When something has meaning to the present, we use the comparing perfect.

Example:

I was a student. Watasi wa gakusei desita.

This sentence is past tense because there is no relation to the present.

Example:

I have become a teacher. Watasi wa sensei ni natte ita.

This sentence is perfect because it compares the past (when the person was a student)

with the present (when they are a teacher).

2) EXPERIENCES ARE POSSESSIONS

Example English: **Japanese:**

I have a car.   *Watasi wa kuruma ga aru.*

Perfect:

I have been to Hiroshima.   *Watasi wa Hiroshima e itta
koto go aru.*

239

3) Comparing or Experience Grammatical Aspect? Read the sentences and mark a C if you think it is a comparing aspect and an E if you think it is an experience perfect.

1. Ginkoo ni sono okane ga azukerarete iru.　　　　　　　C　　E

2. Kore made ni sono byooki de go-nin no hito ga sinde iru.　C　　E

3. Kyonen kare wa Tokyo de hataraite ita.　　　　　　　　C　　E

4. Gakusei wa sono hon o yonda koto ga aru　　　　　　　C　　E

5. Okane o motte ita koto ga aru.　　　　　　　　　　　　C　　E

4) Aspect in Japanese and English. Write one punctual, telic and grammatical aspect sentence in Japanese and in English. They must all be different sentences. In the column on the left, number the sentences in random order (1 – 6).
Punctual

____ Japanese: _____

____ English: _____

Telic

____ Japanese: _____

____ English: _____

Grammatical

____ Japanese: _____

____ English: _____

Next, listen to your partner's sentences and translate them into English or Japanese. Then write in the column on the left whether you think they are punctual, telic or grammatical aspect sentences.

My Partner: _____

____ _____

____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Now compare answers with your partner. If you made any mistakes with your guesses, discuss them with your partner.

5.1.6 Taskplan 6: Different Uses of the Present Tense

THE PRESENT TENSE FOR FUTURE: THE FUTURE IS REAL

The train arrives at 8:00 p.m.
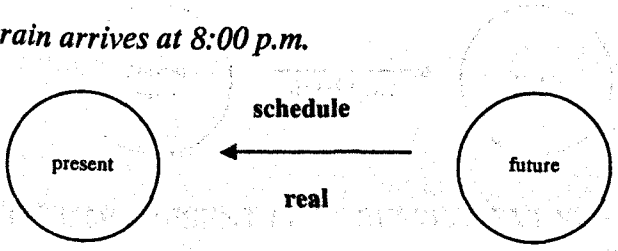
FUTURE SCHEDULED EVENTS ARE PRESENT

The present tense can have a future meaning when the time is scheduled. Using the present makes the event seem real.

Example:

    Our train leaves at 8:10. = Our train will leave at 8:10.   P   ~~F~~

1) Present or Future? Are these sentences present or future? Circle *P* for present meaning or *F* for future.

1. The next English lesson starts at 2:00 p.m.   P   F

2. My English lesson is on Tuesday at 2:00.   P   F

3. The bank closes at 3:00.   P   F

241

4. The banks close at 3:00 p.m.   P   F

5. She flies to Paris on the 8:20 flight.   P   F

6. She often flies to Paris on business.   P   F

7. The train doesn't arrive after 12:00 p.m.   P   F

8. The train is often late.   P   F

TIME IS SPACE

Do you have plans next weekend?   Next weekend is fixed in the future space.

TIME IS MOTION

What are you doing next weekend?   Progressive moving towards the future space.

THE FUTURE IS UNDERSTOOD
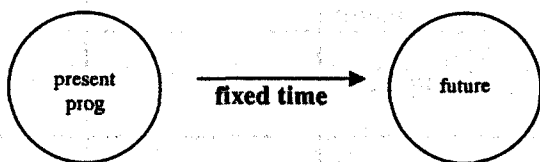
FIXED TIME PRESENT PROGRESSIVE EVENTS ARE FUTURE

Present progressive can have a future meaning when the time is fixed. Using present progressive means you are moving towards the future time.

Example:

> *What are you doing this evening? = What are you going to do this evening?*

2) Present or Future? Are these sentences present progressive or do they have a future meaning? Circle *P* for progressive or *F* for future.

1. You're not eating much these days.   P   F

2. I'm starting a new job next week.   P   F

3. John is wearing a blue shirt.   P   F

4. He's going to the theater on Thursday evening.   P   F

5. He's seeing his doctor this afternoon.　　　　　　P　　F

6. I'm not working.　　　　　　　　　　　　　　P　　F

Group Work. Look at the schedule and write five scheduled event (present tense) sentences and five fixed time (progressive) sentences. Today is Friday so do not write anything in for Friday.

	Friday	Saturday	Sunday	Monday
Morning		Baseball Game Practice	Go jogging	Catch the train
Lunch		Go out for lunch	Make lunch	See the dentist
Afternoon		See a movie	Do homework	Attend a meeting
Evening		Out to Dinner	Watch TV	Do a report

Scheduled Event Sentences:

1) _____

2) _____

3) _____

4) _____

5) _____

Progressive Event Sentences:

1) _____

2) _____

243

3) _____

4) _____

5) _____

Now ask your partner:

Do you have plans on _____Sunday_____ *?*

Write you partner's schedule

Partner's name: _____

Future Scheduled Event Sentences:
Saturday

_____
_____

Sunday

_____
_____

Monday

_____
_____

Now ask your partner:
What are you doing on _____Saturday_____ *?*

Future Progressive Event Sentences:
Saturday

_____
_____

Sunday

_____
_____

Monday

_____
_____

5.1.7 Taskplan 7: The Future
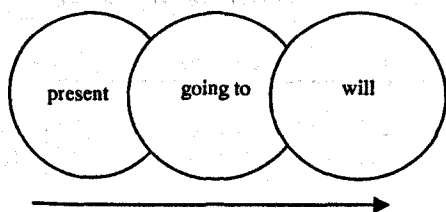
1) Will You or Are You Going To? *Will* and *going to* can both be used for the future tense. Quite often either can be used for the future, but there are differences in their meaning. *Going to* means more that there is a high probability that the event will happen. The event is related more to the present. *Will*, on the other hand, is more of a prediction that the event will happen. It is much less related to the present.
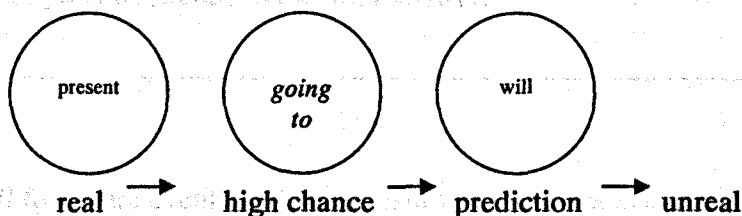
Examples:

break a glass ➔ high probability ➔ *Look! The glass is going to break.*

rain tomorrow ➔ prediction ➔ *It will rain tomorrow.*

If you think it's a high probability, circle *HP*. If you think it's a prediction, circle *P*. Then make future sentences using either *will* or *going to*.

1. It/ rain now	HP	P
2. Arnold Schwarzenegger/ become president	HP	P
3. She/ have a baby next month	HP	P
4. He/ fall down	HP	P

5. My team/ win the game   HP   P

2) Future in Conversation. When we speak of the future, we often start from the present and *going to* is closer to now so we start by using *going to*. So for this weekend we usually use *going to*.

What are you doing this weekend?

I'm going to go shopping.

What are you doing this weekend? Write your answer.

Then we use *will* for future events and the present tense for events that are real.

Example:

What we are going to do is take you back. Jack will carry you because you can't walk. You're ankle will be all right. It's only a sprain.

Fill in the blanks with either *going to*, *will*, or the present or progressive form of the verb.

1. *have*   2. *talk*   3. *sit*   4. *enjoy*   5. *meet*   6. *see*

1. First we _____ a nice drink. Then we can _____ about your vacation. We _____ on the beach and _____ our drinks. Don't forget we _____ this Saturday at 2:00. Okay? Bye-bye. I _____ on Saturday.

Fill in the blanks with either *going to*, *will*, or the present or progressive form of the verb.

1. *finish*   2. *eat*   3. *sleep*   4. *be*   5. *be*

2. I _____ my diet and training next week. As soon as it's finished, I _____ a chilidog. Then I _____ for a whole day. It _____ great! I _____ so glad I finished!

3) *Is* **is** *Be* **in the Future.** Don't forget with the future that *is* becomes *be*:

Present: *Is everybody listening to me?*

Future: *Will everybody listening to me?*   No!   *Will everybody be listening to me?*

Fill in the blanks with *will* or *be*.

1. _____ you _____ here tomorrow?

2. _____ the 10:15 train _____ running today?

3. I _____ not _____ coming to school tomorrow.

4. I _____ _____ twenty years old next October.

5. If you are late, I _____ not _____ happy.

5.1.8 Taskplan 8: Introducing TIME IS SPACE

We use space expressions to take a metaphorical view when expressing time relations. For example, the *future* is **ahead** and the *past* is **behind**:
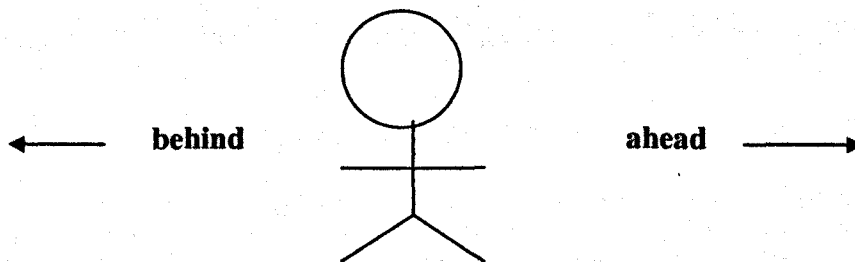
⟵ **behind**   **ahead** ⟶

In the days ahead...(future →)

You're behind the times. (←past)

1) Fill in the blanks in the following sentences with either *ahead* or *behind*.

Example:

You're young. You have so much __ahead__ of you!

1. High school was difficult, but that's all _____ us now.

2. Don't get _____ on your homework!

3. Always think of the good things _____ of you, don't think of the bad things _____ you.

4. My best days are still _____ of me!

2) Ahead and Behind in Your Life. Make a list of four things that are ahead in your life and four things that are behind you. Then discuss it in your group.

__Ahead__	__Behind__
marriage	high school

5.1.9 Taskplan 9: Tense as Metaphorical Domains
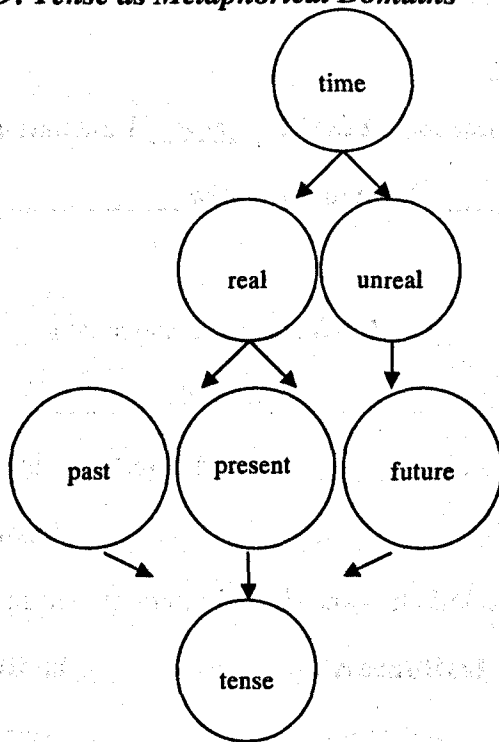
1) Is it Real or Unreal? Read the sentences and circle R if you think the sentence is real and U if you think it is unreal.

Example:

The door is opening.   ~~R~~   U

1) The door is going to open.   R   U

2) The door will open.   R   U

3) The door opened.   R   U

4) The door opens.   R   U

Past/Real	Present/Real	Future/Unreal
It opened.	It opens. It's opening.	It's going to open. It will open.

2) Contrast Past, Present and Future. Complete the sentences

Example:

I am a university student. I __was__ a high school student. I _will be_ a teacher.

1. I <u>live</u> alone. I _____ with my parents. I _____ with my

   husband/wife.

2. I _____ a teenager. I <u>was</u> a child. I _____ an adult.

3. The sun _____. The sun _____. The sun <u>will rise</u>.

4. I didn't ____<u>like</u>____ English. I _____ English a little. I _____

   English very much.

Now write each of the sentences into the correct circle.

Past/Real	Present/Real	Future/Unreal

3) Write About Events in Your Past. What are the top 10 events in your life? List them here. Remember #1 is the most important!

Top 10 Events in My Life

1 _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

Now write them in the order that they happened in the past. Is it different from the top 10 order?

The Order They Happened

1 _____   6. _____

2. _____   7. _____

3. _____   8. _____

4. _____   9. _____

5. _____   10. _____

Tell your partner the top 10 events in your life. Can he or she guess the order they happened? Then write your partner's top 10 events. Can you put them in order?

Here's some useful questions to ask your partner when trying to guess the order:

Are you ...now? How long have you been ...? Did you ... after you ...?

My Partner's Top 10 Events

___ 1. _____   ___ 6. _____

___ 2. _____   ___ 7. _____

___ 3. _____   ___ 8. _____

___ 4. _____   ___ 9. _____

___ 5. _____   ___ 10. _____

The Order They Happened

1 _____   6. _____

2. _____   7. _____

3. _____   8. _____

4. _____   9. _____

5. _____   10. _____

4) Questions and Negatives in the Present and the Past. When making questions and negative sentences in the present and future, *do* is very important. Look at these sentences:

You like swimming?   *I not like swimming.*

One is a present question and the other is a negative sentence but they are not correct. The word order needs a little help from *do*. Here are the correct sentences:

Do you like swimming?   *I do not like swimming.*

The same is true for the past tense. The word order of questions and negative sentences need a little help from *do*.

You liked swimming?   *I not liked swimming.*

But notice here that *do* becomes *did* and the main verb becomes present.

Did you like swimming?   *I did not like swimming.*

Fill in the blanks with *do, does or did.*

1. _____ you speak Chinese?

2. _____ this train go to Tokyo?

3. _____ Keita and Toshinori go to the same university last year?

4. I _____ not speak Korean.

5. Hitoshi _____ not like heavy metal music in junior high school.

5.1.10 Taskplan 10: TIME AS CYCLES

Cultural time phrases make time seem literal (not metaphors). Especially, we look at *in/on/at* and Japanese and English time phrases.

1) Space is an object. Fill in the blanks with either *in, on* or *at*.

Example:

The cat is _____on_____ *the mat.*

in the box   [X]   *on* the box   [X̄]
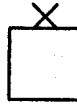
at the spot ——►◄——

1. You need to change trains _____ Shinjuku Station.

2. I live _____ Tokyo.

3. The TV is _____ the stereo.

4. I met my girlfriend _____ a party.

5. Is anything interesting _____ the newspaper?

6. Tokyo is _____ Japan.

7. You look good _____ a kimono.

8. I'm studying English _____ a juku.

9. I live _____ Maple Street.

2) Time is a moving object in cycles. Fill in the blanks with *in, on* or *at*.
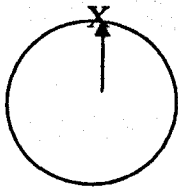
at + time   *on* + day/weekend
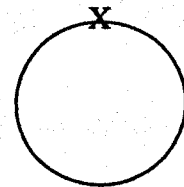
in + month/season/year   X
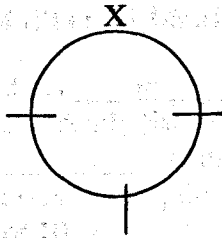
1. Cherry blossoms bloom _____ spring.

2. Everyone goes to the shrine _____ New Year's Day.

3. Hina Matsuri is _____ May.

4. My tennis circle meets _____ 4:00 p.m.

5. Midnight is _____ 12:00 p.m.

6. Halloween is _____ October.

7. Valentine's Day is _____ February 14th.

8. I had to work _____ Christmas Day.

9. Shakespeare died _____ 1616.

10. We say "itadakimasu" _____ dinnertime.

3) *It* **helps to make time seem more real.**

Example:

It is on the table.   and   *It is at two o'clock.*

Read the sentence and choose whether *it* is for time (T) or for space (S).

1. It is on my birthday.   T   S

2. It is in the box.   T   S

3. It is in January.   T   S

4. It is at the bank.   T   S

4) Read the passages and fill in the blanks with either *in, on* or *at*.

In Japan, the school year starts _____*in*_____ April. Traditionally, most schools had classes _____ Saturdays, but recently Saturday is a holiday. Classes start early so many students have to wake up _____ about 6:00 a.m. _____ the morning. _____ the spring, the weather is quite warm. Japanese students study very hard and may not get home until 9 or 10 _____ night. They get a chance to relax _____the weekend.

In America, people celebrate Halloween ____*in*____ autumn. The nights are long _____ October and it is cold as winter approaches. The sun rises late and sets _____ about 5:00 _____ the evening. The trees have lost their leaves and it is the perfect time of year for scary fun. If Halloween is _____ a weekday, then children usually have Halloween parties at school. Then they dress up in costumes _____ night. They also believe that it is bad luck _____ Friday the 13th.

5) About You. Complete the sentences with answers about you.

1. In the morning, _____

2. Last weekend, _____

3. Next year, _____

4. At night, _____

5. On my birthday, _____

6) Pair Work. Ask your partner the questions below. Write his or her answers.

1) What's your favorite month? Why? What do you like to do in that month?

_____

2) What's your favorite holiday in the year? Why? What do you like to do on that day?

_____

3) What do you like to do at night? Why? What do you like to do at that time?

_____

4) What's been the best part of your life? Why?

_____

5.1.11 Taskplan 11: Narration: TIME IS A MOVING OBJECT

1) The train will arrive. (*future*)

2) The train is going to arrive. (*future*)

3) The train can arrive. (*present*)

4) The train arrives. (*present*)

5) The train is arriving. (*present*)

6) The train has arrived. (*past*)

7) The train arrived. (*past*)

8) The train had arrived. (*past*)

1) **The Sun Order**. Put the following narrative in order:

The sun rose.	1) _____
The sun rises.	2) _____
The sun is rising.	3) _____
The sun will rise.	4) _____
I can see the sun.	5) _____
The sun had risen.	6) _____
The sun is going to rise.	7) _____
The sun has risen.	8) _____

Read your narrative to your group. Is it the same as the others?

2) Make a Chain Narrative. Choose a topic. Then one student writes a sentence and the next student writes the next sentence. Read your chain narrative.

1) _____   5) _____

2) _____   6) _____

3) _____   7) _____

4) _____   8) _____

5.1.12 Taskplan 12: The Pragmatic Use of the Past
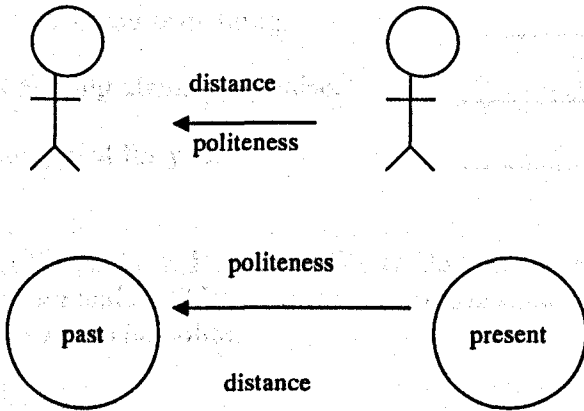
DISTANCE IS POLITENESS.

When people are close together there is the chance of conflict. This is why people find distance between people more comfortable and polite. Things in the past are also more distant. This is why we use the past tense for politeness. And this is the meaning of the metaphor DISTANCE IS POLITENESS.

Example:

> *Could you please tell me the time?*

1) Past Tense or Politeness? Read the sentences. Are they past tense or past for politeness? Circle *T* for past tense or *P* for politeness.

1. I was wondering if I could speak to you.   T   P

2. Could he really not speak English?   T   P

3. Could you tell me where the train station is?   T   P

4. Would you like some cake?   T   P

5. I wanted to ask you something.   T   P

6. I would never have recognized him.   T   P

2) Are You Polite? Read the sentences. Can you change them to be more polite?

1. I will be happy to come.   _____

2. Like some tea?   _____

3. Can you come at 2:00?   _____

4. I want to ask you something.   _____

5. I'm wondering about a pay raise. _____

6. I can carry that for you.   _____

3) Group Work. How Polite Are You? Do you say *please*? Do you use *could* and *would* instead of *can* and *will*? Write down your top-5 rude situations and the top-5 situations when you have to be polite.

Rude Situations   Polite Situations

1) _____   1) _____

2) _____   2) _____

3) _____   3) _____

4) _____   4) _____

5) _____   5) _____

Now tell the different rude and polite situations to your partner. What would your partner say to the person in each situation? Here is some helpful language for your partner to use:

Polite Situations: **Rude Situations:**

Would you ..., please? Could you ..., please?   *Please don't ....*

Write your partner's answers.

Partner's name: _____

Rude Situations   *Polite Situations*

1) _____   1) _____

2) _____   2) _____

3) _____   3) _____

4) _____   4) _____

5) _____   5) _____

5.1.13 Taskplan 13: Aspect and Modality Blend

OBLIGATION CAN HAVE OBSTACLES

I have no money.
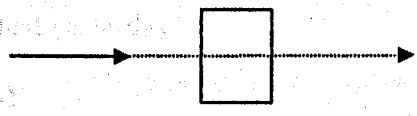
MODALS (CAN, COULD, MAY, MIGHT, SHALL, SHOULD, WILL, WOULD, MUST) REMOVE THE OBSTACLE

You should get a part-time job.

WHEN MODALS OCCUR WITH THE PERFECT ASPECT, OGLIGATION

BECOMES UNREAL
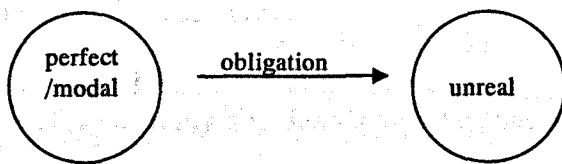
```
   perfect        obligation
   /modal      ───────────►      unreal
```

OBLIGATION IS HYPOTHETICAL.

When we say, *You should study*, it means that the speaker thinks you have a real obligation to study. But when we say, *You should have studied*, it makes an obligation from the past no longer real, like they are trying to change the present result for the future.

1) Real or Unreal? Read the sentences. Are the obligations real or unreal? Circle *R* for real and *U* for unreal.

1. He has to be in London tomorrow.   R   U

2. He should have gone to London the next day.   R   U

3. If I were you, I would have kept the money.   R   U

4. He should come, but he won't.   R   U

5. He should have come, but he didn't.   R   U

6. I wouldn't dream of it.   R   U

2) Give Advice. Read the sentences and write either real or unreal obligation answers.

1. I failed the test yesterday.   You _____.

2. I have a cold.   You _____.

3. I didn't have enough money to buy   I _____
   my mother a present.   _____.

4. I need some help.   I _____.

5. I missed the last train. You _____.

6. I forgot my girlfriend's birthday and she   If I were you, _____
   left me.   _____.

Can you complete these sentences?

1) If I had not missed the rain, I would not have _____.
2) If I had not forgotten my girlfriend's birthday, she would not
have_____.

3) **Pair Work.** Pretend you can go back and change time. What would you change or
have done differently in your life? Write down 5 regrets or mistakes that you made in the
past.

Regrets or mistakes
1) _____

2) _____

3) _____

4) _____

5) _____

Now tell your regrets and mistakes to your partner. What advice do they give? Write their
answers. Here is some useful language to use:

You should have....   *If I were you, I would have....*

Partner's name: _____
Advice:

1) _____

2) _____

3) _____

4) _____

5) _____

5.1.14 Taskplan 14: Tense to Structure Discourse

Tense   **Discourse**
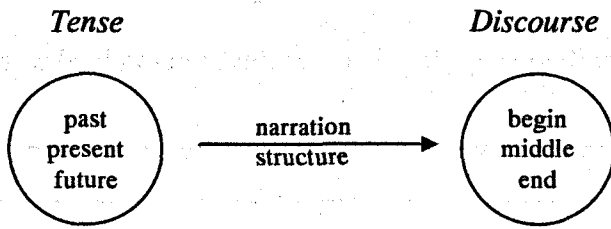
Depending on whether the object is ahead of the speaker or behind it, the tense matches either future or past tense. In a story, however, the past tense is used for foreground information and the present tense is background.
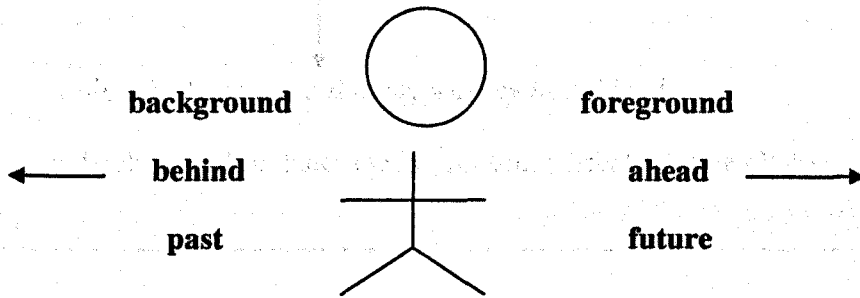
Choose a topic for a story. Now try to write three or four things that are background (before the story happens) and three or four things that are foreground (the same time the story happens).

Background   *Foreground*

_____   _____

_____   _____

_____   _____

_____   _____

Can you change your present tense background sentences to past perfect sentences?

Example:

Bob was my best friend. He is a doctor.

↓

Bob was my best friend. He had been a doctor.

Try writing new background sentences using the past perfect.

1. _____

2. _____

3. _____

4. _____

Can you change your past perfect sentences to be present perfect relative clauses?
Example:

       Bob was my best friend. He is a doctor.

              ↓

       Bob, who has been a doctor, was my best friend.

Try writing new background sentences using present perfect relative clauses.

1. _____

2. _____

3. _____

4. _____

The present perfect, especially the experiential, can be used to introduce an event or story from the past or background to the foreground.

Example:

       Bob has been my best friend for a long time. We went to high school together.

Try writing some introductory experiential present perfect sentences and then a past tense foreground sentence.

1. _____

2. _____

3. _____

4. _____

Now try writing your story using past tense for the foreground. Start with an experiential present perfect sentence that brings the past to the foreground. Then use present tense, past perfect and present perfect in relative clauses for the background sentences.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

6.0 Researching Sociocognitive Metaphorm

The initial research in this part investigates the holistic approach to language learning that used metaphor to map grammatical forms to cognitive schemata. Consequently, it is somewhat of a longitudinal study, approximately two months in duration, involving the eleven taskplans. Because the investigation was intended to be holistic rather than analytic, piloting and revision of the taskplans was not done. As a result, some of the taskplans were more successful than others. Mackey and Gass (2005) state that pilot studies sometimes result in data that might be useable for the main study. Some researchers choose to seek permission to carry out an experiment in such a way that if they do not encounter problems with their pilot testing they can use the data for their main study. However, it is a rare pilot study that does not result in some sort of revision of materials or methods.

Because these taskplans were not piloted, for the most part the data is quantified only to measure the overall accumulated effect of the taskplans. The results of the grammar test administered after the posttest are also analysed. As we will see, though not piloted, the results still proved significant. The follow-up research presented after the longitudinal study is directly related to the results found in the longitudinal study. Rather than holistic and metaphorical, the follow-up attempts a more analytical or metonymic approach to teaching grammar and it was completely piloted. The combination of the two projects represents the initial stages of researching SCM.

Prior to looking at the longitudinal and follow-up research studies, the results of a questionnaire that was distributed to teachers working at the universities in which I teach is presented. This questionnaire is intended as a form of triangulation research (i.e., the

use of multiple, independent methods of obtaining data in a single investigation in order to arrive at the same research findings; Mackey & Gass 2005). I was interested in knowing how these teachers, both native and non-native speakers, taught tense-aspect and whether they thought it was possible to teach grammar, especially tense-aspect, using metaphor. It was not intended to provide quanitifiable results. Rather, prior to doing research, it was intended as a means to discover research parameters and operationalise constructs. Though the questions can appear somewhat ambiguous, each question is related to a hypothesis about how learners might interact with the schemata used in the eleven taskplans in the study. If responses had been contrary to what I had expected, it may have resulted in revision of the taskplans. However, none of the teachers' responses differed significantly from what was expected. All teachers responded in English only.

6.1 Results of the Teacher Questionnaire

I administered the informal questionnaire to a sample of 14 native and non-native speaker university English teachers (native n = 10; non-native n = 4). All of the teachers were teaching Japanese students and all of the non-native speakers were Japanese. The teachers varied in teaching experience but on average each had approximately 10 years of experience teaching at the university level.

A rule of thumb for questionnaires is that the sample should have a normal distribution and to achieve this the sample should include 30 or more people. Since there were less than 30 in the sample I collected, the data are only interpreted informally. In addition, from the perspective of statistical significance the principle concern is to sample

enough teachers for the expected results to be able to reach statistical significance. L2 studies often have been reported in journal articles with correlations as low as 0.30 and 0.40 (Dörnyei 2003) so around 50 participants are needed to make sure that these coefficients are significant. Nonetheless, though my sample was small, according to the reliability analysis in the questionnaire software, *SphinxSurvey*, the internal consistency reliability of the questionnaire in this study reached approximately 0.90.

Attitudinal measures are used to find out what people think. Attitudes concern evaluative responses to a particular target (i.e., teachers). According to Dörnyei (2003), attitudes are deeply embedded in the human mind, can be rooted back in our past or modeled by certain significant people around us, and are often not the product of rational deliberations of facts. For this reason, they are rather pervasive and resistant to change. As we will see, eliciting teachers' attitudes about grammar and how it should be taught is an excellent example of attitudes resistant to change. All the questions, except two short answer ones, used a Likert scale with a ranking as follows:

1 = Very Much; 2 = A Little; 3 = Don't Know; 4 = Not so Much; and 5 = Not at All

*Respondents could reply to each more than once with this SphinxSurvey questionnaire software.

Table 3 shows the results of the questionnaire. The figures below the Likert scale represent the percentage of teachers who chose that number in the scale. If so desired, it was possible in the questionnaire software to check more than one of the scales so occasionally the results are higher than 100%.

Table 3. Results of the Teacher Questionnaire

1. Do you think that language is conceptual?

Native speaker					Non-native speaker				
1	2	3	4	5	1	2	3	4	5
70	20	10				75	25		

2. Is metaphor a basic cognitive function?

Native speaker					Non-native speaker				
1	2	3	4	5	1	2	3	4	5
50	50	30			50	50			

3. Is grammar a basic cognitive function?

Native speaker					Non-native speaker				
1	2	3	4	5	1	2	3	4	5
40	40	20			50		50		

4. Which is a more basic cognitive function, metaphor or grammar?

Native speaker		Non-native speaker	
Metaphor	Grammar	Metaphor	Grammar
50	50	25	75

5. Are you aware of grammatical metaphor?

Native speaker					Non-native speaker				
1	2	3	4	5	1	2	3	4	5
	70		20	10	25	25		50	

6. Is there a relationship between metaphor and grammar?

Native speaker					Non-native speaker				
1	2	3	4	5	1	2	3	4	5
20	50	30	10		25	50		25	

7. Do you think time is metaphorical (e.g., TIME IS SPACE)?

Native speaker					Non-native speaker				
1	2	3	4	5	1	2	3	4	5
70	30				25	25		50	

8. Could the concept of tense be conceptual domains (i.e., past, present and future)?

Native speaker					Non-native speaker				
1	2	3	4	5	1	2	3	4	5
70	20	10			50		25	25	

9. How do you teach tense (i.e., past, present and future)?

Native speaker	Through narration, chronological (time) order, schedules; I usually teach the form if necessary, then meaning, I use a communicative situation after that, mostly I don't have to; primarily through translation and repetition of high frequency patterns; example, metaphor, time-line; grammatically, pragmatically; see "Aim High"; all; use of time lines on blackboard; both literally and figuratively; grammar-function-situations
Non-native speaker	By contrast; in relation to time expressions "ago" "by" also by focusing on time ("now" "before" or "in the future"); I teach tense drawing a line on board with some actions

10. How do you teach aspect (i.e., perfect and progressive)?

Native speaker	Through narration, chronological order; I use time lines quite often, there is also a pretty good correlation between Japanese and English so the students understand the basic concept; Honestly, I don't have much opportunity to teach these at the levels I'm dealing with. When I do, I essentially use the same translation and repetition as with tense; same; time line diagrams; perfect usually; use of time lines with emphatic explanation; same as 9; grammar function situation
Non-native speaker	By giving examples (contexts); focus on experience, completion as opposed to things that are continuing or things that are planned in the future, time expressions "already" "yet" "for" "since" and "now"; drawing a line on the board and with some actions

| (running) | | | | | | | | | |

11. Is grammar usually taught as something literal?

Native speaker					Non-native speaker				
1	2	3	4	5	1	2	3	4	5
10	40	10	20	20	50	25	25		

12. Could you teach grammar using metaphor as opposed to teaching it as being literal?

Native speaker					Non-native speaker				
1	2	3	4	5	1	2	3	4	5
10	40	40			25		25	25	25

13. Could tense and aspect be taught using metaphor?

Native speaker					Non-native speaker				
1	2	3	4	5	1	2	3	4	5
10	20	60			25	50			25

14. Could aspect be taught as periphrastic metonymy (example metonymy: *crown* for *king*)

Native speaker					Non-native speaker				
1	2	3	4	5	1	2	3	4	5
	40	60			25	25	25	25	

15. Do temporal adverbial phrases (e.g., *at 2:00*, *on Friday* or *in March*) conventionalise or literalise time?

Native speaker					Non-native speaker				
1	2	3	4	5	1	2	3	4	5
40	40	20			50	50			

16. If tense was taught using metaphor, do you think students might be more able to acquire non-temporal uses of tense?

Native speaker					Non-native speaker				
1	2	3	4	5	1	2	3	4	5
	50	50			25		50	25	

17. Can students transfer concepts like tense from L1 to L2 or is reconceptualisation necessary?

Native speaker					Non-native speaker				
1	2	3	4	5	1	2	3	4	5
40	50	10			50	25	25		

In general, most responses were in the *Very Much* to the *Don't Know* range. The native-speaker teachers seemed somewhat more receptive to the question of whether there is a conceptual, metaphorical relation to grammar. Somewhat contradictory, however, is that most native-speaker teachers answered that language is conceptual but they were split over whether grammar or metaphor is a more basic cognitive function. Metaphor scored higher than grammar as being conceptual, so teachers seem to keep metaphor and grammar conceptually separate.

According to Questions 9 & 10, most teachers teach aspect in the same way that they teach tense (and this is also common in pedagogical grammars) irrespective of the fact

that the two are very different conceptually. There is also a great deal of reliance on the linear-metaphoric timelines to teach tense-aspect with native speaker teachers, indicating that timelines may be the current standard for teaching tense-aspect. However, many native teachers responded that tense could be conceptual domains, though this is also somewhat contradictory because I argue these cannot be adequately depicted on a timeline. Unfortunately, the questionnaire did not elicit responses concerning lexical aspect. If it had, then it may have been possible to clearly distinguish teachers' understanding of tense-aspect and the Aspect Hypothesis.

The non-native speaker teachers, who were all near native-like in English ability, used more adverbial phrases (e.g., *now* or *since*) to teach tense-aspect, suggesting that they teach tense-aspect in a more meaning-oriented or socioculturally fashion in relation to fixed temporal adverbials and expressions, similar to how current EFL materials present tense-aspect. In conclusion, because of its newness, results suggest that teachers are a little uncertain about using metaphor to teach grammar. However, if they were given an alternative to timelines that was more effective, results also suggest that they would be willing to use it. Finally, as addenda to question seventeen, two teachers stated that students can transfer tense concepts but they cannot transfer aspect, revealing a greater understanding of tense-aspect on their part and that reconceptualisation from L1 into L2 is necessary.

6.2 The Research Framework

This section outlines the research questions for the preliminary study into the teaching of grammar as metaphor. The research methodology chosen for this investigation was mixed methods (i.e., quantitative and qualitative). Because I noticed the need for the taskplans from my own teaching experience, however, this research could also be considered a form of action research. Action research overlaps areas of professional development and conventional research, possibly forming a bridge between the two (Wallace 1998). Although this research was conducted in the spirit of action research, because the factors in this investigation have been quite rigorously monitored for any correlation, it is most appropriate to label this a mixed-methods research study.

The epistemological framework for SLA measurement in this investigation is a combination of two constructs: sociocultural theory and emergentism (Norris & Ortega 2003). Sociocultural theories maintain that learning of any kind is essentially a social process and emergentist theories view learning as the outcome of a neurobiological tendency of the brain to attune itself to primary sensory experience (i.e., joint-attention frames and cognitive schemata). Strictly speaking, both these constructs apply more to grammar than metaphor. Conceptual metaphor might be thought of as less the result of learning and more as an underlying cognitive function, which *initiates* emergentism. Nonetheless, if a relationship is found between grammar and metaphor, it may lead not only to further synthesise sociocultural and emergentist SLA measurement constructs, it may also introduce a new sociocognitive factor to our understanding of grammar acquisition.

Another action research distinction relates to the issue of wanting to conclusively prove that something is the case, or simply wanting to throw some new light on a topic or problem (i.e., illuminative research) or discover something about that topic/problem that was not known before (i.e., heuristic research). Since (as far as I am aware) no prior research into teaching grammar as metaphor has been conducted, the bulk of this investigation remains empirical and hence seeks to be illuminative as well as heuristic.

6.2.1 Research Questions

1) How can ideas from cognitive linguistics be combined with sociocultural theory to be used in teaching grammar, in particular tense-aspect and the Aspect Hypothesis?

2) Is there a relationship between grammar and metaphor in grammar instruction?

3) Does the use of cognitive schemata assist in SLA?

4) Can cognitive schemata alter the sequence or rate of acquisition?

5) How do students respond to the taskplans and what kind of interaction do the taskplans generate?

When making the sociocognitive metaphorm taskplans for this research, it was difficult not to design them with particular results in mind. Therefore, it is also possible to make a few hypotheses about the findings of the research questions.

6.2.2 Research Hypotheses

- It is easier for students to reconceptualise L1 into L2 by using metaphor *conceptually* rather than textually or literally.

- Because learners have been taught grammar as something literal throughout their academic lives, evidence of reconceptualisation may not become apparent until they use tense-aspect as a function outside of temporal relations (e.g., metaphorically, pragmatically or to shape discourse).

- Conceptual mismatches between the metonymic concepts of aspect in L1/L2 (e.g., overgeneralisation of perfect aspect) can be made evident and can be corrected by teaching grammar as metaphor.

A mixed-methods approach tends to base knowledge claims on pragmatic grounds (e.g., consequence-oriented, problem-centered, and pluralistic) and employs strategies of inquiry that involve collecting data either simultaneously or sequentially to best understand research problems. Data collection also involves gathering both numeric information (i.e., statistics) as well as text information (e.g., questionnaires) so that the final database represents both quantitative and qualitative information (Creswell 2003). Quantitative research also requires the controlling of variables. An independent variable causes, influences or affects outcomes. Dependent variables depend on the independent variables. The results depend on the influence of the independent variable on the dependent variables. Within the context of this study, the independent variable is cognitive schematic input through metaphor and the dependent variable is grammar acquisition.

I did not make qualitative research questions because the qualitative study is a discovery process. However, there is still the potential for considerable rigor and discipline in qualitative research (i.e., that there is science within its complex nature). This rigor largely resides in the way in which research is expressed (Holliday 2002; Wolcott 2001). Qualitative research does not solve the problems of quantitative research, but neither does it see them as constraints. The sociocultural interaction of small groups of students and ZPD development lend themselves very well to qualitative open-ended studies designed to lead the researcher-teacher into unforeseen areas of discovery within the lives of his or her students. Furthermore, it is by becoming aware of sociocultural qualitative variables within student groups (e.g., inefficient learners) that we better understand the significance of quantitative results. Quantification of qualitative results is also possible.

These sociocultural factors are why I have chosen to present the qualitative results prior to the quantitative data. It is hoped the analysis of learner variables in the qualitative analysis will assist the interpretation of the quantitative data. In this way, quantifying of sociocultural interaction in combination with qualifying cognitive functions may lead toward more sociocognitive-oriented research. Classrooms are in themselves particularly good locations for SCM research because they are controllable and possess special features, such as routines and scripts, which occur in a controlled context (van Lier 1988).

6.2.3 Method

6.2.3.1 Participants

According to Light, Singer & Willet (1990), the best control group is composed of students as similar as possible to students in the treatment group. One needs similarity across objective criteria, such as class year, sex, and academic achievement, and similarity across subjective criteria, such as motivation to learn, flexibility and orientation to school. The participants in this study included two first-year classes from Seigakuin University in Saitama, Japan. Saitama is a city bordering Tokyo. Seigakuin University is a lower-ranked university with six faculties. A low-ranked university was chosen for this study because the taskplans in it (i.e., focusing on acquisition of tense-aspect) were part of the English syllabus being taught there.

The Seigakuin English Program (SEP), which focuses on speaking and listening, is a required course for first-year students. The Child Studies faculty was chosen as the Test Group because of it having a larger number of students (At the beginning of the study: n = 22; students who completed the SEP in-house pre/posttest, the research study pre/post-test, grammar test and all of the taskplans: n = 16). For the control group, the Euro-American Studies faculty was selected (initial: n = 19; final: n = 11).

First-year English classes are streamed into three levels (A, B & C) of which these classes were both A-level. The students' initial average TOEFL score was approximately 380. Though the Euro-American Studies faculty is similar to an English major, the Child Studies group scored higher on the SEP pretest. The reason the Child Studies faculty students may have had higher English proficiency was most likely due to the fact that the Child Studies department has the highest enrolment at this university with only approximately half of the applicants being accepted. Thus, these students

should be relatively motivated and good learners because they are going to be elementary or preschool teachers, but they may also have lowered motivational expectations from attending a low-ranked university. There is a higher acceptance rate for Euro-American Studies students to enter the faculty. The students were all first-year students between the ages of 19 and 20, who had studied English in the Japanese public school system for at least six-years (i.e., junior and senior high school).

6.2.3.2 Materials

The taskplans consisted of the following factors: 1) comprehension and production of metaphor, 2) introducing grammatical/conceptual metaphor, 3) sociocultural temporal adverbials as conventionalising or literalising time, 4) tense as metaphor (i.e., TIME IS SPACE; TIME IS A MOVING OBJECT), 5) lexical and grammatical aspect as metaphor (i.e., resultative, current relevance and experiential), 6) L1 comparison of tense-aspect (i.e., whether lexical and grammatical aspect were easier to distinguish in L1 or L2), 7) other uses of tense-aspect (e.g., present tense for future), and 8) non-temporal uses of tense (e.g., past tense for politeness). To see the actual taskplans used in the research, please refer to Appendix A.

Most of the taskplans started with the introduction of a metaphorical concept or a schema based on the grammaticalisation process, then presented a taskplan for students to map meaning to the form, which was followed by a group or pair discussion taskplan intended to provide opportunities for students to produce the form. Almost all of the taskplans included some form of taxonomic deductive or inductive comprehension task

as well as a more abductive discussion task (except for the one which uses L1). The sequencing of the taskplans was intended to introduce conceptual metaphor prior to grammar and hence establish a relation between them. The taskplans then extended from grammatical uses of tense-aspect to metaphorical ones.

6.2.3.2.1 Assessment Materials

In this investigation, there is a pre-/posttest quantitative analysis of the taskplans designed to teach grammar as metaphorm as well as a qualitative analysis of data recorded as students performed the metaphorm taskplans in small groups. The pre/posttest was a written test consisting of at least five questions related to each of the eleven taskplans in the study. The pre/posttests can be found in Appendix B. For reasons of construct reliability and validity, certain grammatical forms such as interrogative and negation formation were intentionally not introduced in the taskplan pre/posttest so that they could be tested for in a grammar test following the posttest. This test has been placed in Appendix C.

6.2.3.3 Procedure

The pretests were first administered to the Test Group that did the SCM taskplans as well as to the Control Group, which did not. The Test Group was then administered the taskplans. The Control Group participated in the regular SEP curriculum. All the taskplans were introduced and taught by the researcher-teacher. The classes met twice a

week for one ninety-minute class. The research took place during a two-month period (approximately from mid-Oct to mid-Dec) during the fall semester of 2004. One taskplan per class was conducted, usually requiring the entire class time to complete. After completing all of the taskplans, the posttest was administered. Finally, the traditional grammar test was administered. The students did the pre/posttests individually but all of the taskplans were done with partners or groups of four and checked as a class. The students' interaction in pairs and groups was recorded as they did the taskplans. Four tape recorders were placed at the desks of four groups of four students. For the most part, they were always in the same groups.

6.2.3.4 Analysis

Student interaction was analysed through the pre/posttests and grammar test, collection of the completed taskplans, and the approximately 13 hours of tape, which was recorded and transcribed into an approximately 30,000-word database. The quantitative data was analysed using one- and two-way ANOVAs as well as paired-samples t-tests.

6.3 ZPD Results

278

We begin our analysis with the ZPD observations in the metaphorm taskplan study. We start this way in order to get an understanding of the kind of taskprocess interaction that occurred between participants as they did the taskplan.

Vygotsky was an educator turned psychologist and his writing clearly reflects his pedagogical concerns, perhaps most so in the ZPD. Rather than evaluating an individual's hereditary qualities, the ZPD makes an individual's performance possible before competence. In this sense, intelligence involves the ability to create a new means of problem solving.

6.3.1 The L2 ZPD

This section looks specifically at the development of ZPDs or collaboration between pairs or groups of students as they performed the taskplans in this research. It results from the qualitative analysis of the 30,000-word database or learner corpus recorded while students completed the taskplans. The various factors or variables contributing to or detracting from learners' development, most of which were introduced in the theoretical analysis of the ZPD, are discussed. These factors include: ZPD development, ZPD competition, L1 use, playzones, alienation, learning-leading-teacher-development, error correction (including back propagation), and different learners (i.e., efficient/inefficient, and development-leading-learning).

6.3.1.1 ZPD Development

Within ZPD development, the different roles of the members (i.e., symmetrical: equal levels of regulation or asymmetrical: different levels of regulation), especially with the other-regulator, must first be established. One way for this to be established is with a pre-taskplan, which requires production of the target form and from which the other-regulator role naturally emerges. Obviously, the ability to other-regulate does not occur immediately and other-regulator development is something that also needs to be structured into the syllabus.

The other-regulator in the ZPD emerges from joint attention towards the goal. Much of teacher-student interaction is the teacher explaining how to achieve the goal. Once the learners have an understanding of the goal or taskplan, teacher-student interaction often substantially decreases and three patterns of student-student interaction emerge: (1) clarifying the teacher's meta-or non-spontaneous other-regulation language (i.e., the taskplan), in a sense reinterpreting it somewhat more spontaneously so that it can be used as a tool to achieve the goal, (2) taskprocess and target language use and (3) entrenchment through repetition of other students' speech:

T: Okay, here's the metaphor okay time is space right time is space
H1: Time.
H: Space.
S: Time is space.
T: Time is space, right?
H: Yes, yes.

If learners develop a joint-attention frame on the schema introduced by the teacher, then the other-regulator emerges through the interaction of the above three student-student interaction patterns. Hyperbolic and ironic ventriloquation of the teacher's language is

quite frequent in the database. Imitation assists in developing learners' capabilities, and, because the learners are young adults, hyperbole, understatement and irony also helps to establish more symmetry between the other- and self-regulating members. As metonymic functions, hyperbole and understatement, as expression of self-identity, allow learners to express different values along the same scale and irony expresses an opposite intersubjective perspective (Croft & Cruse 2004). Repetition (i.e., metonymic part-to-whole entrenchment) also plays a major role in ZPD development. In the following excerpt, the L1 has been glossed in parentheses in L2:

T: You choose it in your group. Work together in a group. K writes a line here. T1. S1.
Choose something. Write one line. Pass it. Write the next line.
T1: Okay.
K: Hai (Yes) Number one.
T1: Number one.
S1: The sun will rise. Okay? Okay?
T1: The sun is going to rise.
K: The sun rises. Three.
N: Three. Three three three. The sun can rise.
K: I can see the sun.
T1: I can see the sun.
K: I can see the sun.
S1: I can see the sun?
K: Oh, okay.
T1: Okay okay. Nice job.
K: The sun is rises. Four. Four is
T1: Number five.
S1: The sun is rising.
K: Uh. Number six.
T1: The sun has risen.
K: Risen.
T1: Number seven seven.
N: Wakaranai. (I don't know)
K: Number seven.
T1: Number seven.
K: Pass pass
K: Pass pass
S1: Zenzen chigau. (Completely different)
T1: The sun-

K: Rose rose-
S1: Rose-
K: Rose
T1: Rose.
S1: The sun rose.
K: Rose.
S1: The sun had risen.
K: Uh-
S1: Risen.
T1: Risen risen
K: Risen.
T1: Okay. Finished. Next.

The learners are not just repeating as in a drill but using repetition to construct meaning as well as entrench or internalise the morphological form with particular focus on the participial. That is, after the occurrence of conceptualisation processes, morphology begins to emerge. Indeed, even if learners are initially somewhat unsure of the goal, through knowledge construction in the ZPD, they can still successfully achieve it. The unique quality of ZPD development is that it can occur independent of the taskplan.

The ZPD development between T1 and K is especially interesting, because originally K had the strongest or most dominant character in the pair but he was not the one with the strongest L2 language skills. In this next excerpt, T1 makes an attempt at error correction but K does not change the tense to the correct past:

K: Okay. I belong I belong to track and field club.
T1: Belong to-
K: Belong to track and field club.
T1: Past tense? Belong...
K: Belong to track and field club
T1: Just a moment please belong - belong
K: Belong to track
T1: Now?
K: Track and field club

T1: Belong belong to…past? Belong no kako kei wa (past tense is)? Belong, belong, belonged? You belonged?
K: I belong to
T1: Now
K: Track and field club. You understand?
T1: Belong to

However, eventually K accepts to be other-regulated by T1, though T1 literally had to

stop the tape and speak with K privately before K did so. Here K changes *study* to *studied*

and *more study* to *study more*. Also of interest is K's interlanguage use of *was studied*

(i.e., past tense with auxiliary), which is a frequent interlanguage form found in the

corpus:

K: Okay my turn. I study about children
T1: I study
K: About children
T1: About children okay. I you studied about you don't study about children
K: I studied about children just a little a little high school student
T1: Huh?
K: When I was a high school student I was studied about children a little
T1: You studied about children a little
K: The future is more more more
T1: Okay okay okay
K: You understand?
T1: Uh. You will you will study
K: About
T1: About children
K: More
T1: More more more
K: More study
T1: Study more
K: More study
T1: More study? More study? Study more.
K: Study more
T1: More
K: Okay.
T1: About children.
K: Next. Your turn. Your turn your turn

Within this excerpt, it is possible to see the natural emergence of T1 as an other-regulator in the development of the ZPD. Though T1 did use negative explicit feedback, the way he achieved other-regulator was to use only positive explicit feedback and steer away from negative explicit feedback. Also, K asked T1 to explain the taskplan in English, showing their confidence that they have the ability to self-regulate themselves in the L2. Thus, it is their willingness to collaborate rather compete that learning leading development is initiated.

If the other-regulating student in the group has incorrect usage, however, then it can have the negative effect of lowering the level in the ZPD. Consequently, along with students discussing any mistakes and correcting the handout as a class, learners need a language production taskplan to raise awareness of any of their errors as well as gain a greater awareness of the appropriate context of use for the correct form (i.e., a distributional analysis taskplan). If, while correcting the handout, another student has more correct answers than the current other-regulator then this will alter the dynamics of the ZPD.

Though working with the same partners develops cooperation and facilitates ZPD development, being understood by another partner in L2 also creates new opportunities to develop and extend socio-cooperation. Pairs of lower-level students continually working together with persistent incorrect usage can lead to ability deconstruction and levels can actually lower. Therefore, repetition of the taskplan with different partners extends the dynamics of the ZPD outside of the original group and the positive knowledge construction process again becomes established.

Instances of implicit negative feedback were observed in the groups. Occasionally, students would improve their partner's responses with a recast but would not say anything to their partner, leaving the improvements implicit. This may suggest that within symmetrical relationships negative implicit feedback is the best form of correction. Positive explicit feedback is more an indication of other-regulation. Hence, explicit forms of other-regulation, unless asked for by other-regulated members, are rare in the ZPD and can weaken the dynamics of it. Indeed, as we saw between T1 and K, other-regulated learners who have not made the request for explicit feedback, often do not make the correction or reply ironically to any such asymmetrical feedback. Collaboration is for the most part a symmetrical activity.

In addition, as much as possible, the materials in the taskplans should be designed with the utmost care that everything has been included for learners to achieve self-regulation. Actually, to a large extent, that is what teaching involves, i.e., making explicit what needs to be known for self-regulated development to take place, which involves the correct combination of materials, methodology and teaching. If explicit negative error correction is required, then, rather than indicate the learners' inability, it may be more of an indication there is a problem with the design of the materials.

At the beginning of the corpus, many of the learners' utterances are one-word holophrases but by the end of the corpus they are mastering particular units of meaning with the need to use grammar, which agrees with Vygotskian theory of moving from the whole-to-the-part (Newman & Holzman 1993: 132). There was also something motivating students to speak using correct grammar. It was probably not wanting to sound "native speaker-like." It was more the awareness that if one speaks correctly then

one also *thinks* correctly, as though the learners were aware that they have a somewhat naïve conception of the world around them and need to acquire the non-spontaneous concepts of the L2. Before the development of these groups, one may wonder to what extent there was any desire in them to improve *other* students' English? However, once the groups were established, there was a natural desire to share joint-intention together—which is a good indication of development towards self-regulation (De Guerrero & Villamil 1994). In the next section, we take a closer look at how competition affects the ZPD.

6.3.1.2 ZPD Competition

Competition might seem like a foreign dynamic to the collaborative principles of the ZPD, but it is also the result of conflict between spontaneous and non-spontaneous concepts. Indeed, competition predates cooperation and ZPDs in our evolutionary development. Tomasello et al. (in press) state that in a single food-finding task structured as either competition or cooperation, chimpanzees performed much more skillfully in the competitive version.

In this sense, each learner who thinks they have superior knowledge of the non-spontaneous concepts, or L2 language, vies for the asymmetrical hierarchical position of other-regulator. We saw this between T1 and K. T1's superior language knowledge eventually won out with the result of improving K's language level. In another group, H becomes the other-regulator not because she wanted to but because of superior knowledge and because the others were object-regulated. Consequently, she is very

apologetic for any other-regulation she does—especially if she makes an error. She also tries to develop, but no one in the group can provide the language tools to lead her learning. Thus, lack of competition or collaboration can have negative developmental effects with object-regulated learners.

It is necessary to study groups over a series of taskplans to chart the progress of ZPD processes. Learners are often for the most part unaware of the difference in their output and the target language. Through competition and competing with others, they become more aware of any differences. Unfortunately, L2 object-regulated learners are unable to compete and in order to keep them on-task there is a role for language play here. Learning may stifle if the other-regulator's development begins to lead learning. For learning leading development to continually take place, the taskplan must be past the level of *all* the members in the group. Furthermore, in each class, in order to understand cooperative development in the ZPD, as well as being other-regulated, each student should have the chance to experience the role of other-regulator. Seeing that each learner fulfills these roles is a ZPD monitoring task for the teacher. Finally, any competition should be positively channeled towards becoming cooperative and collaborative development.

6.3.1.3 L1Use

One factor that was certainly clear in the database was that with self-regulating ZPDs there was much less L1 use in the ZPD. This might be an indication that a type of joint-intention L2 culture needs to emerge or that at least an agreement with members of the

group to use the L2 tools also needs to be developed. However, a lot of L1 use often indicates that most learners in the ZPD are L2 object-regulated. Hence, if there is excessive L1 use in a ZPD, it is important to distinguish two kinds of use: 1) on-task L1 use to understand and negotiate the taskplan and 2) L1 use instead of using L2 taskprocess target forms. The first is what I call productive use of L1. Because the group is object-regulated (i.e., no one can use the psychological L2 tools), to keep the ZPD functional L1 is used until L2 tools can be used to achieve the taskplan goal. The second form of L1 use I term unproductive L1 use. It involves the lack of internalising or entrenchment of L2 taskprocesses and does not lead to learning leading development or reconceptualisation into the L2.

If the ZPD develops successfully, however, then there is much more repetition between students ventriloquating each other and gradually shifting from L1 to L2 use and unproductive L1 use becomes predicated until it finally recedes completely or is only productive use. The final negative factor about L1 use is that it can break down the cycle of L2 repetition. In the following example, the learner does not recast the phrase *to shopping* without *to*:

To shopping
To wa iranai (You don't need "to")

Had her partner said the correct sentence in English, she may have had a correct L2 uptake with the recast (Ohta 2001). Thus, unproductive L1 stifles L2 repetition and language development, which is also related to the effects of explicit negative L1 feedback.

6.3.1.4 Playzones

There are many occurrences of language or cognitive play within the learner corpus, some of which assist learning to lead development and some of which do not. In order for play or humor to affect an on-task facilitating role within the ZPD certain other factors must also be in place, specifically the roles of other- and self-regulator. If these roles have not been established then any language play between object-regulated learners may be undevelopmental. Once the developmental roles have been established and play and humor are being interpreted as spontaneous interaction with conventional language, both can be used positively for learners to develop self-identity in the L2. In these next excerpts, we can see the interaction between H1's spontaneous utterances and S's non-spontaneous responses:

H1: Okay okay pick one's nose what do you say?
S: Excuse me don't pick picking pick one's nose

H1: Okay body is stink what do you say?
S: Please body wash body washing
H1: Everyday
S: Everyday

H1: Okay oh don't listen the teacher's story
S: Please listen the teacher's story
H1: Don't respect teacher what do you say please oh yes
S: Respect respect teacher
H1: Oh yeah

H1: Next oh yeah polite situation et the present when get the present
S: Ah please say thank you

H1: Okay when everyone gather in happy birthday
S: Everyone
H1: Happy birthday
S: Please sing sing
H1: Happy birthday
S: Happy birthday

H1: To you
S: To you

H1: Okay ah meet of the Mr. Kent Hill
S: Ah please say greeting

This playful interaction with conventionalised language helps to reveal how grammar is

dialogically internalised through the dialectical interaction of spontaneous (i.e., H1's

utterances) and non-spontaneous concepts (i.e., S's utterances). This particular excerpt

involved more formal language use (i.e., the giving of advice) and, because learners have

little use of it, it was an obvious candidate for language play in a playzone. Nonetheless,

there is development in the spontaneous play. Finally, the playzone makes the roles of

other- and self-regulator more symmetrical and may even reduce the effects of any

negative explicit feedback.

6.3.1.5 Learning-Leading-Teacher-Development

Vygotsky wrote about collaboration and direction, and about assisting children through

demonstration, leading questions, and by introducing the initial elements of the task's

solution—but he did not specify beyond those general prescriptions (Moll 1990).

Aljaafreh & Lantolf (1994) were more specific by creating five levels to self-regulation.

By evaluating the development of my teaching within the corpus according to these five

levels, this section reevaluates the teacher-student dialogic triad Initiation-Response-

Feedback (IRF) into a more sociocognitive framework.

Unfortunately, though ubiquitous in the classroom, the IRF triad does not

necessarily entail learning leading development (i.e., self-regulation). That said, within

the transcription of classroom interaction, a learning leading development triad did emerge in the teacher-student interaction. This triad is also embedded within the developmental processes of the ZPD. The transcripts reveal that I learned to explain grammatical forms using much more metaphor (i.e., a form of process instruction). In fact, I hope I learned to teach using metaphor. Teaching grammar through metaphor raises the possibility that students will not learn fixed phrases that they can use only in a limited amount of situations. Instead, as opposed to grammar, they learn that language can be metaphorically applied to any number of dialogic situations. This is an excerpt from the first lecture I recorded:

T: Time is space. So you got ahead and behind. In space what's ahead of you is the future. What's behind you is the past. So in English they use the saying time is space use ahead and behind just like time for space and time. In the days ahead is the future. You're behind the times is the past. Read the sentences. Fill in the blanks. You're so young you have so much ahead of you.

The examples I give here remain quite literal. I hardly exploit the metaphors at all to express meaning or metonymically map meaning to form. Conversely, this is the extract from my final lecture. Of note are the increase in examples, use of metaphor to explain the forms and interaction with students:

T: So "you should study" is like a obligation you got to do it so this would be real right "you should have studied" becomes unreal or a possibility you had the chance to study but you didn't do it you should have studied okay again remember how we said it could be like a possession too so if you study you get the you you learn you learn things right if you didn't study then you don't have the possession you don't you shouldn't you don't have you didn't learn anything so you don't you don't you should have studied you would have a possession you would have these things learned had you studied so it's unreal

T: So number one you got to give advice right. I failed the test yesterday. What's your answer? Or I have a cold. What's your answer? Okay. Remember this is past tense so this would probably be an unreal answer first check if it's a real or unreal I have a cold

so you would want to use a R a real answer okay I failed the test yesterday an unreal answer you should have studied huh.
M: How do we decide if it's unreal or real? The tense?
T: How did you decide up here? If it has "have" it was unreal if it doesn't have a "have" it is real?
M: That's all?
T: No I'm asking you how did you decide up here? I think what I want you to try to do is read this sentence right think of what how you would respond what would I say in reply right what advice what advice are you going to give what are you going to suggest and if you say oh I you should have nani nani then it's an unreal if you say oh you should nani nani then it's real so you just read these I failed the test yesterday oh you should have studied oh I have a cold oh you should take medicine or you should take medicine you should rest
M: I see

The use of examples, metaphorical extensions and interaction with students helps them to distinguish *real* and *unreal* from the context.

Alijaafreh & Lantolf (1994) developed five levels in the transition from other- to self-regulation. These five levels extend from the learner being unable to create a joint-attention frame to mastery of it: 1) the learner is not able to notice or correct the error, even with intervention from the tutor; 2) the learner is able to notice the error, but cannot correct it, even with intervention; 3) the learner is able to notice and correct an error, but only under other-regulation; 4) the learner notices and corrects an error with minimal or no obvious feedback from the tutor and begins to assume full responsibility for error correction; and 5) the learner becomes consistent in using the target structure in all contexts.

Aljaafrah & Lantolf (1994) also designed a regulatory scale arranged according to the type of feedback presented to the learners, which involved moving from the most explicit to the most implicit level. As I have also pointed out, along this cline there is also the need to distinguish between explicit positive and implicit negative feedback. I would also

like to suggest that, by combining the IRF teacher-student triad with the 5 levels to self-regulation as well as my research into ZPD development, we arrive at a more developmental Extension – Development – Equilibrium (EDE) triad:

1) *Extension*: other-regulated learning leading development, which involves raising the cognitive (i.e., spontaneous-abductive) level of the other-regulated learner through joint-attention to cognitive schemata.

2) *Development*: inter-regulation requires the other-regulated learner to learn (i.e., metonymically map meaning to form) from positive explicit or negative implicit feedback (i.e., non-spontaneous/deductive) and scaffolded language of the self-regulated learner.

3) *Equilibrium*: self-regulated joint-intention learning leading development, involves the self-regulation of the other-regulated learner, at least within the ZPD.

This EDE triad incorporates the 5 levels to self-regulation as well as utilises positive explicit or negative implicit feedback rather than an evaluation or feedback turn found in the IRF original triad. In this way, we can see it is a prototypical structure for the emergence of dialogic grammar:

T: Okay? When you're finished four things ahead of you four things behind you. Think of them. Write them down.
T: English.
H: Okay. Okay.
N: English.
T: Let's check those answers quickly. You're so young. You have so much-
M: Ahead.
T: Ahead of you. High school was difficult but that's all-
ALL: Behind.
T: -behind us now. Don't get-
ALL: Ahead.
T: What?
M: Ahead.
T: Behind.

M: Why behind?
T: I've never seen a student-most students get behind on their homework. Always think of the good things-
ALL: Ahead.
T: -of you, don't think of the bad things-
ALL: Behind.
T: -you.
M: Okay.
T: So next. Four things ahead of you. You think. Four things behind you. Write them here and discuss it. Tell your group the four things ahead of you the four things behind.

6.3.1.6 Error Correction

Aljaafreh and Lantolf (1994) found error correction to be very important in the ZPD. Typical teacher error correction in the classroom is by nature explicit but does not necessarily have to be of a negative nature. Indeed, when calling upon students, if most teachers are aware the student might reply incorrectly they generally try to provide enough scaffolding in their question for a correct response or they choose a different student. In other words, if the teacher has not provided enough previous information or context for concept formulation to take place in the learner then in a sense an incorrect response is just as much the teacher's error. Also, if the student has had enough input but has made an error in abductive reasoning then with some negative implicit deductive or inductive feedback from the teacher the learner should be able to adjust interpsychologically (cf. deduction and back propagation), attempt a recast, possibly produce the correct form and develop their dialogic grammar.

Explicit negative error correction, on the other hand, though not completely without use, only reveals the level of development of the learner (i.e., object-regulated) and potentially halts learning. When a learner makes an error, it reveals that they have not

reached the level of development. Hence, at this point it is very important for the teacher not to disrupt learning leading development, the joint-attention frame and dialogic grammar development. Any further interaction from the teacher must be in the form of scaffolding or positive explicit or negative implicit feedback.

6.3.1.6.1 Back Propagation

Efficient learners have their back propagation settings (Regier 1996) set to input (i.e., the teaching methodology or taskplan). Inefficient learners do not have the correct back propagation settings (i.e., focus on the content or taskprocesses). If we apply this connectionist metaphor to language teaching, then we might say that acquiring scientific concepts involves setting the weighting of back propagation indices through a comparative-contrastive cognitive process of deduction and induction. Thus, an efficient learner represents someone who is good at intention reading and has correct back propagation settings to acquire scientific concepts. This means that they can repress spontaneous abductive thinking and learn through explicit teaching.

6.3.1.7 Different Learners

Usually, learner differences are discussed in the qualitative analysis of any research. Awareness that there are different learners, however, is also essential to interpreting any quantitative data. All quantitative data should be interpreted according to qualitative variables in that, no matter how effective the methodology is, there are going to be

inefficient learners (i.e., learners with interfering variables) or object-regulated learners

who will lower the quantitative results. Thus, awareness of any interfering variables in

quantitative research can be factored out or more appropriately analysed in order to come

to a more accurate interpretation of the quantitative data. Indeed, the researcher also has a

role in co-authoring any analysis of the data (Rommetveit 2003). Thus, distinguishing

any interfering variables and understanding how they productively interact with the

dependent and independent variables significantly improves the analysis of quantitative

factors.

Perhaps the greatest distinguishing factor among different learners is their

reaction to exemplifiers or cognitive schemata found in instruction and their

understanding of the taskplan. Inefficient learners are not attracted, are abductively

attracted or are object-regulated by the exemplifiers put out by the teacher. Efficient

learners, on the other hand, use the exemplifiers to create joint-attention frames, construct

knowledge and deductively achieve the goal.

Table 5. Test Scores for Different Learners

Learner	Pre-Test	Post-Test	Grammar Test
Overdeveloped	40	57	36
Efficient	52	60	37
Inefficient	48	46	27

Table 5 shows the scores for three different kinds of learners (i.e., overdeveloped:

development exceeds learning; efficient: awareness of exemplifiers; and inefficient: no

awareness of exemplifiers). Their scores do not vary significantly but the sequence of

them does. The overdeveloped learner does not make significant gains between the three

tests. The results only show that from the outset she was above the level of the taskplans and the other students (though, as we will see, she still does acquire grammatical forms). With the efficient learner, on the other hand, there is a clear correlation between tests and an ability to organise information in, for lack of a better term, a taxonomic manner. The inefficient learner clearly shows that she had a clearer understanding of the content in the pretest and because of a misunderstanding of the deductive/inductive organisation of the taskplan (i.e., the goal) she actually saw her score decrease.

6.3.1.7.1 Efficient Learners

The typical efficient learner seems to succeed through development leading to self-regulation, good intention reading ability, joint attention towards the exemplifiers and the taskplan goal, and an ability to utilise error correction. In brief, these learners improved the most and in general they also had the most cooperative groups.

6.3.1.7.2 Inefficient Learners

As I have pointed out, changing partners and repetition are two ways to minimise any negative inefficient learner effects. Certainly, all students are at varying levels of development and if at this period in their lives they are not learning efficiently in this particular course then it does not mean that they previously always did so or that in the future they will continue to do so, although it may be an indication that because of previous instruction they have become inhibited.

What, then, characterises an inefficient learner? Typically, they are object-regulated, perhaps competitive, and not very adept at intention reading. Compared to an efficient learner, inefficient learners seem to have less understanding of the goal and are involved in much less sharing of psychological states in an academic context. These factors, along with a focus on taskprocesses rather than taskplans and a lack of awareness of the use of exemplifiers and negative implicit feedback with error correction, indicate that inefficient learners need to develop further both sociocognitively and dialogically. Indeed, inefficient learners quite often seem unaware that their partner shares the same internalised language or grammar.

6.3.1.7.3 Development-Leading-Learning

It is unfortunate that teachers may prefer students in which development leads learning (i.e., are self-regulated) because it appears as though significant learning is taking place in the classroom when actually the learner is merely showing that they have already achieved the desired level of development. There is a good deal of evidence of this with M in the learner corpus because I almost always checked the answers of the taskplans with her. This is an indication that I often rely on or teach to the strongest students in the class, though this can also be helpful for lower students because self-regulating learners can identify and provide alternatives for trouble sources in the text (De Guerrero & Villamil 1994).

M's translation ability in the L1 tasks was excellent. Here she shows complete reconceptualisation from L1 to L2:

298

M: Zutto her forever (Always her forever)
M1: Okay next I've never traveled to Europe
M: Europe watashi wa (I am) Europe is Europa ka Eu-Eu-Europa Europa ah maybe I can write
M1: You shouldn't change the spell
M: Watashi (I) Europa oh sorry please read
M1: Okay I've never traveled to Europe
M: Watashi wa Europe wa ichidomo tabishita koto ga nai okay (I've never traveled to Europe)

In conclusion, it is tempting to draw a parallel between overdeveloped students and L1 use in the classroom: they can be both productive and unproductive. Self-regulating students typically have a strong desire to share psychological states, which can potentially break down other-regulating teacher-student interaction. Indeed, M expressed worry as to whether she had been more help or distraction in the classroom. However, a classroom in which all students are at the same level is very rare or non-existent. Furthermore, a classroom where all the learners are far below the desired level can be a nightmare. Thus, in situations such as these, having a cooperative student who is above the level of the others and can act to increase joint attention in the class. That said, if the student is far above the desired level of the class then their role is much less well defined within the classroom. They cannot be expected to have the same responsibilities as the teacher and yet the role of other-regulator in a pair or group ZPD is often also not sufficient.

In this way, correct use of the EDE triad is especially important with development-leading-learning learners. Quite possibly overdeveloped learners identify themselves as being separate from the other learners and hence, rather than risk them losing an interest in developing their language ability by constantly asking them to take part in a ZPD that is below their development, it is best to use the EDE triad to reveal

areas of joint-intention that they can still develop their dialogic grammar and encourage them to do so as well with other learners (while using only the L2). It is then also possible for development-leading-learning learners to continue to develop. Indeed, only M managed to use present perfect aspect correctly in the posttest Discourse Hypothesis taskplan.

This concludes the qualitative analysis of the research data. The factors included within it are considered to be the most influential factors contributing to the quantitative analysis, to which we now turn.

6.4 Taskprocesses: Qualitative Results

Newman, Griffin and Cole (1989) define a task as yielding at least the information about the goal of the activity, the initial conditions confronting the informant, and the set of elements in the task environment that the informant confronts at any time (i.e., task-as-a-plan). An activity, in contrast to a task, consists of the behavior that is actually produced when an individual (or group) performs a task (Coughlan and Duff cited in Johnson 2004). It is the process as well as the outcome of a task (i.e., task-as-process). Thus, I chose the term *taskplan* to refer to the etic perspective of the intended pedagogy of the task and *taskprocess* to refer to the emic perspective of the implementation of what teachers and students do (Seedhouse 2005).

The main goal of a taskplan is that it encourages the acquisition of grammar or contextual pre-existing meaning through analogy or metaphorical meaning making (i.e., a holistic whole-to-part dialectical process). The taskplans were designed to create learner-

learner joint-attention frames through interaction. The taskplan design also intended to create the social and interactional support system found in the ZPD. Developing self-identities and social relationships (i.e., another form of meaning making) can even take precedence over completing the task. For instance, student-student relationships often come before those of teacher-student. Thus, essential features of a successful taskplan are these sociocognitive motivational factors:

1) Completing the taskplan and developing social bonds are not mutually exclusive;
2) Completing the taskplan is not the only indication of success. Learners should have developed self-identity and inter-subjective joint-attention frames with others through taskprocesses;
3) Along with SLA, learners take away a greater awareness of the dialogic basis of collaborative interaction.

In this way, students may become more efficient and autonomous learners.

The students' worksheets were immensely valuable to refer to when it came to interpreting the transcripts recorded of student interaction. Recording the students during the taskplans also made them more aware of their own output (i.e., the Hawthorne Effect). However, considering the years of schooling they had had continually trying to achieve the correct answer, it was a little difficult to impress upon the students that this research was mostly empirical and there were not always, per se, right or wrong answers to the taskplans. What was of more importance was discovering how the students interacted with them.

6.4.1 Introducing Metaphorical and Literal Meaning

This is a quite basic introductory taskplan intended to raise awareness and comprehension of the difference between literal and metaphorical language. Some of the material was taken from Lazar (2003). The research intent behind the taskplan was to determine whether students prefer to produce literal or metaphorical answers. It was also analysed as to whether students gave literal answers when intending to give metaphorical ones or whether they made more grammatical errors with metaphorical or literal sentences, either written or spoken (i.e., metaphor interlanguage). The Control Group may have scored initially better with this taskplan because, being English majors, they were more familiar with the concept of linguistic metaphor.

6.4.1.1 Metaphor Interlanguage

With some students, it is unclear whether one of their responses was intended to be literal or metaphorical. However, considering there was only one debatably metaphorical or literal response, it was not significant. Furthermore, since students were asked to make metaphors in their L2, there was bound to be interference with the L1 in translation and this just as much as metaphor-production interlanguage helps to account for most of the debatable ones.

Additionally, as opposed to grammaticality judgments, which are right, wrong or questionable, metaphorical judgments are metaphorical, literal or questionable and the decision for which often depends on the interpretation of the target or vehicle. If the word is usually taken literally then it may be metaphorically incorrect but if the word can be imbued with a different sense (i.e., as the L2 writer may have intended and which is often

the basic principle underlying the meaning of literary metaphor) then it can be interpreted as metaphorical. Hence, metaphor appears to be more closely linked to each person's understanding of word meaning, their inner speech and how they then choose to grammaticalise their dialogue. In this taskplan, there was also evidence of metonymy creation, for example:

A good student is Yukihiro. (i.e., his name metonymically refers to *a good student*)

As well as, metaphor blend (i.e., GOOD = HOT):

A good hot = A good teacher is hot kettle.

6.4.2 Grammatical Metaphors

This taskplan introduced the idea of grammar as metaphor and examined learners' ability to locate instances of grammatical metaphor within a sentence. It also began to analyse students' ability to produce grammatical metaphor from the underlying metaphors on which they are based. As can be seen from Chart 2, starting from this taskplan the Test

Chart 2. Grammatical Metaphor Taskplan
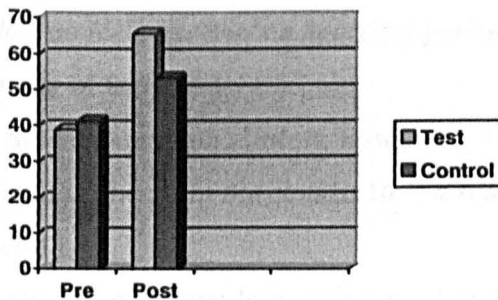
Group consistently scores significantly higher on all taskplans.

The group work section in this

taskplan used the ZPD to see if there was any evidence of both grammatical and metaphorical scaffolding. The results reveal that students' choice of grammatical metaphors often did not have any relation to a grammatical judgment that would fit the required part of speech in the word order of the sentence. This result may imply that metaphorical judgments precede grammatical ones. Certainly, if students were choosing to put in grammatically correct forms without relation to the metaphor, it would suggest that grammar dominated but this is not the case. More research into this is necessary. In any case, with all factors considered, students did quite well at thinking of grammar in metaphorical terms. Here are examples of their inter-metaphor:

1) *What shows are on TV tonight?* (Shows are like lights.)

    Student answers: *dramatic, laser, ray*

2) *What time does your watch say?* (If watches could talk, write the verb.)

    Student answers: *tick, talk, instruct, speak*

3) *She's never happy. She's always in a bad mood.* (A mood is like a box.)

    Student answers: *darkness, hole, full*

4) *I see what you mean.* (We often understand with our eyes.)

    Student answers: *look, judged*

5) *My mother always listens to my conversations with my friends.* She's a very nosey person. (Add –ey to this part of your face that sticks out.)

    Student answers: *earey, eyey*

6) *She has no feelings. She's a heartless person.* (Add –less to this part of your body that is the center of feelings.)

    Student answers: *skinless, noseless*

7) *His head is always in the clouds. He's a real dreamer.* (Add –er to what you do when you sleep.)

    Student Answers: *lyer, pillower, sleeper*

Certainly the metaphorical fit comes before the grammatical one. We may even see possible evidence of initial grammaticalisation processes here. Unfortunately, because this taskplan focused on grammatical, rather than conceptual metaphor, the results were not as rich as possible. This taskplan was subsequently revised to create a better understanding of the conceptual nature of metaphor with the use of phrasal verbs.

6.4.3 Introducing TIME

This taskplan introduced time as a conceptual metaphor, in particular, TIME IS SPACE and TIME IS A MOVING OBJECT. The intention of the taskplan was to reveal time as something non-literal but conceptual as well as non-dependent on temporal adverbials. The way the TIME IS SPACE metaphor was schematised was with the spatial adverbials *ahead* (i.e., future) and *behind* (i.e., past). Though the Japanese language also uses *up* and *down* as temporal metaphors and English does so as well (e.g., *down through the ages* and *time's up*), Shinohara (2002) claims that the *ahead* and *behind* temporal relations are still the dominant prototypical ones in Japanese.

Of interest, results of the taskplan showed *behind* had mixed occurrences of past and past perfect, revealing possible conceptions of past for background temporal relations on the part of the learners, whereas *ahead* is consistent with the use of *will*. *Ahead* and *behind* are conceptual adverbs in that they determine tense-aspect. Most of the student responses use *ahead* as a future experiential possession or irrealis state. With *behind* or past, most student responses were experiential possessions, states (achievements or accomplishments) or memories. Because the underlying main event schemata for *ahead*

305

and *behind* are consistent with student responses, making these schemata more explicit to learners might facilitate reconceptualisation (and reduce misconceptualisation) of past and future in L2.

Linearity of temporal relations did not seem to be a major factor contributing to how students sequence events ahead and behind them. Rather, it was the value of the possession, memory of the event or possible irrealis situation that determined any sequence. Hence, another revision to this tense-aspect taskplan was to ask students to write down the top-ten events of their life (i.e., their importance) and then ask the students to put them in temporal sequential order. Non-chronological tense-aspect-usage might then naturally emerge in discourse from expressing any differences in the foreground and background orders of the two.

6.4.3.1 Narrative Time

It is interesting to see in the corpus how students negotiated the objects in their narratives. Unfortunately, because the taskplan was not piloted, I had not realised what a difficult taskplan it was. As can be seen in the revised taskplans, there should be only one verb used in the narrative sequence. Also, I introduced the TIME AS A MOVING OBJECT metaphor at approximately the same time as the TIME IS SPACE metaphor. However, considering the Discourse Hypothesis and foregrounding and backgrounding of events in narration, the TIME IS A MOVING OBJECT is at least as complex a metaphor as the spatiotemporal deictic one of TIME IS SPACE, so it would have been better to introduce this metaphor much later. The best place would be just prior to the tense-aspect-to-

structure-discourse taskplan and it has been moved there in the revised taskplans. Finally, it is possible for the present perfect slot to occur before or after the past tense slot depending on when the moving object is being conceived of as being completed (i.e., lexical aspect) or having current relevance (i.e., grammatical aspect), revealing once again that mastery of present perfect aspect is dependent upon cognitive awareness that "time" is both spatially relative and metaphysically absolute.

6.4.4 Tense as Metaphorical Domains

This taskplan introduced the concept of realis-irrealis and its relation to the comparison-contrast function of metaphor. The intent of the taskplan is for learners to infer that one basic function of tense is to compare and contrast realis and irrealis. The use of diagrams to represent domains is intended to aid students in this conceptualisation process. Realis represents present and past as well because of memory's ability to remember past events. Because the resultative perfect is the first to emerge in L1 acquisition, perhaps events stored in memory represent the result of present events. Future is represented by irrealis because it has yet to occur and hence is often not considered a real tense. Again, once we are able to predict the result of an event, perhaps future becomes linked to the present. By comparing and contrasting realis-irrealis and the results of events, it is hoped students might develop the cognitive ability to further separate events into different domains (i.e., past, present and future) as well as begin to understand the higher-level schematic relations between tense-aspect.

Chart 3. Temporal Uses of Tense and Aspect Taskplan
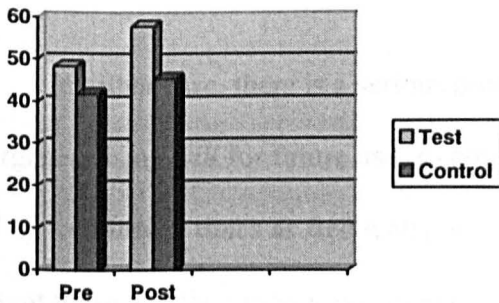
This taskplan also developed the idea that past, present and future tense, rather than being literal, were actually different *conceptual* domains. Present is displayed as the primary domain. Within the ZPD, students were asked to tell their partners about their own present, past and future and then write down their partner's. I also noticed that getting students to think of the three tenses as domains rather than points on a timeline and having them express temporal relations in joint-attention frames seemed to help them to be more aware of how tense-aspect shapes discourse, e.g., the differences in usage of *will* and *going to*, as well as to attend to *be*-insertion for future. It was also at this point that I was aware I was monitoring all of the controllable variables affecting the research: the taskplans, the pairs/groups (i.e., ZPDs), the class interaction and instruction.

Perhaps grammatical aspect is the only cross-domain form (i.e., present and past). Depending on your viewpoint of future as a tense, however, the future meaning of present tense and progressive aspect and especially the *going to* form might also be thought of as crossing temporal domains. Although introducing the future meaning function of the present tense and the progressive aspect at this point (i.e., at the same time as their present tense function) does not agree with the commonly understood sequence of acquisition, by doing so students may be more aware that future tense (i.e., irrealis) represents a conceptualisation process originating from present tense and progressive aspect. The question is, as Bardovi-Harlig (2004) argues, whether learners may prefer the

one-to-one function of using the present tense for present tense alone and *will* for the future. Having another use for the present tense (i.e., future) may cause more interference with present tense use than facilitate its use with future.

In either case, there is a serious problem with L2 learners marking and overgeneralising *will* for future use. According to Bardovi-Harlig (2004), learners use *will* up to fourteen times as frequently as a native speaker. Hypothetically, then, if the present tense and the progressive aspect uses of future were introduced prior to *will*, it may have the effect of reducing overgeneralisation of *will*. It may also show that this use of the present tense and progressive aspect does not represent a new function but an extension of the one they already perform (i.e., the actual sequence of future conceptualisation, acquisition and grammaticalisation stems from the present tense). Thus, though it may not be possible to alter the actual sequence of acquisition, altering the sequence of instruction as it is presently being taught to that of how it is conceptualised by learners might possibly reduce overgeneralisation of *will* for future use. Please refer to the follow-up research in this dissertation for a continuation of this discussion.

6.4.5 *Temporal Phrases as Culture*

Lexical time phrases are often culture specific, which has the effect of making time seem literal or conventionalised (i.e., non-metaphoric), especially with the prepositions *in/on/at* in English (cf. Lindstromberg 1998). To be sure, the regularity of clocks and calendars represent very explicit sociocultural temporal schemata. This taskplan attempted to

determine the extent to which lexical temporal phrases help to make conceptualisations of tense-aspect socioculturally conventionalised. It combines three possible variables into teaching grammar as metaphor: (1) how sociocultural events can make tense-aspect appear literal, (2) how temporal adverbial phrases contribute to making tense-aspect appear literal and (3) the degree to which TIME IS SPACE is a metaphor in the L2.

If learners scored better with Japanese adverbial phrase use, it would suggest that sociocultural factors influence the conventionalisation of grammar as metaphor. Also, the taskplan may show that the use of *in/on/at* phrases help to make

Chart 4. Temporal Adverbial Taskplan
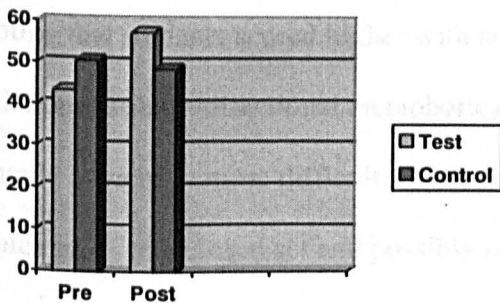
students' responses more literal. Of interest to this taskplan is that Japanese uses a single particle *ni* for all three temporal relations expressed by *in*, *on* and *at* in English (though *de* can also be used for where an activity takes place, similar to *at*). However, with spatial phrases in Japanese, *in* translates to *naka*, *on* to *ue* and *at* to *de*, so the extent to which the TIME IS SPACE metaphor has been conventionalised in Japanese is unclear. Shinohara (2000) found that the TIME IS MOTION metaphor in Japanese is used with up-down motion verbs only when the time is static and the observer is moving, suggesting that directionality rather than spatial deictics is more dominant with temporal adverbials in Japanese (i.e., *ni* is also a directional adverbial).

310

In Japanese, time may also be more of a directional because *ni* is also a spatial particle that often translates into *to* in English. Of course, in English *to* is a temporal and a directional particle. Perhaps the biggest temporal adverbial obstacle for L2 learners is acquisition of *at*. It is similar to the indefinite article in that, especially spatially, there is not any clear metaphor to explain it (other than where an activity takes place). However, when comparing temporal with spatial relations, temporal *at* is quite specific, whereas the spatial *at* can be of less-close proximity. Regarding the underlying body-part schema (Heine 1997), the spatial *at* is a kind of joining of person and place and does not have to be exact, but with time this joining is always very exact. These findings about *at* suggest that time represents more of a closed set than space.

One must be cautious when considering this small amount of data, but it is worth noting that students scored higher with temporal prepositions than spatial. Since temporal relations are a unidirectional metaphorical extension from spatial prepositions they should have been more difficult. However, perhaps the conventionalisation of time, being much more of a closed set and possibly representing only one dimension, makes it easier to conceptualise and learn than the various orientations and adverbials for space in the L1. Students also scored lower in *Japanese* sociocultural types than in English. That they scored higher on Western cultural questions may show how prepositions help to socioculturally conventionalise language. Thus, we see the L2-cultural model is a great influence on language transfer, mainly due to the salience of temporal adverbials.

The main use of tense in the discussion part of the taskplan is the reference-less, unconstrained present tense. The time has been specified but only habitually or hypothetically so the discourse uses activity verbs and is naturally unconstrained,

expressing presentness rather than events conforming to tense-aspect constructions. The

language flows naturally because presentness is the easiest to conceptualise. Of particular

interest, the sociocultural temporal adverb phrases become elided out of the responses in

the dialogue. They either become the subject of the sentence or are no longer contextually

necessary for meaning making. Thus, unless tense-aspect or temporal adverbs are

contextually necessary, they are quickly dispensed with in discourse.

Y: What's your favorite month?
A: My favorite month is August.
Y: August?
A: August
Y: Why
A: It is month has my birthday
Y: Oh
Y: This month has your birthday?
A: Yes
Y: What do you like to do in that month?
A: I like I like uh celebrate uh be celebrated with my sisters friends and more
Y: Celebrated your your
A: Uh sisters
Y: Sisters
A: And more
Y: What's your favorite holiday in the year?
A: I like Children's Day
Y: Children's Day
A: Yeah
Y: Why?
A: It holiday is boy's day but my family but my parents bring at bring at me go out go out eating food go out
Y: What do you like to do on that day?
A: I like go out go out eat
Y: To eat?
A: With my family
Y: What do you like to do at night?
A: Yes yes uh I like Internet
Y: I like Internet
A: Internet?
Y: Why?
A: Internet links all over the world I like it. Link links Internet links all over the world.

Y: What do you like to do at that time?
A: Chatting and looking and hearing and more
Y: What's been the best part of your life?
A: My best part is my high school days.
Y: Why?
A: I was so young and I tried I tried everything. Everything. Little dangerous
Y: You were very young.
A: Huh?
Y: You were very young?
A: Yeah I'm very young and and I tried everything
Y: Thank you

The topic of holidays generated a lot of meaning making from the learners here because there is a collective understanding of what people do on these days. However, conceptual interference remained with some students who failed to make the necessary shift from unconstrained presentness to the past tense.

Perhaps the best way to map the use of temporal adverbials to spatial ones is with the TIME IS A MOVING OBJECT; however, with space it changes to SPACE IS AN OBJECT and then the same spatial and temporal adverbials can be used for both SPACE IS AN OBJECT and TIME IS A (MOVING) OBJECT. Additionally, many sociocultural temporal adverbials are cyclic (e.g., hours, days, years) or durational and in this underlying manner they can be represented, rather than as literal, more metaphorically as TIME IS CYCLES or TIME IS DURATION. Finally, another important factor contributing to the conventionalisation of time is the metonymic use of the dummy subject, *it* (e.g., *It's two o'clock*). These qualitative findings contributed to the revisions to this taskplan found in the previous part of the thesis.

313

6.4.6 Aspect as Metonymy

In this taskplan, with the use of capitalised metaphors, we see the first direct attempts to teach aspect as metaphor-metonymy. One metonymic meaning of perfect grammatical aspect is the possession of an experience or event (i.e., *have* as an auxiliary and as a metaphorical periphrastic extension of possession). Another is that, as opposed to the *contrastive* metaphoric function between present and past, perfect acts as a *comparative* metonymic function between present and past (i.e., current relevance). A final lexical aspect metonymic meaning is the resultative. The *–ed* and *–en* inflections represent periphrastic metonymical extension of a resultant state. That there are three types of aspect is important because there is not a one-to-one mapping of meaning-to-form. Progressive, on the other hand, is always grammatical aspect (or a secondary tense) and indicates the absence of stativity or the presence of activity or motion and there is always a one-to-one mapping of meaning-to-form.

As was pointed out in the analysis of Japanese aspect, the three aspects in this taskplan represent the most common forms found in both English and Japanese. Some of the example sentences in it were adapted from Swan & Walter (2001). Unfortunately, the taskplan should have included better schematic depictions of the differences between grammatical aspect and lexical aspect (i.e., punctuality and telicity). To see these schemata, please refer to the revised taskplan in the third part of the thesis. The introduction of the progressive or imperfect aspect was kept separate to emphasise its one-to-one secondary tense mapping ability.

The correct participle is not the determining factor in students' judgments of C (i.e., current relevance), E (i.e., possessive or experiential), or S (i.e., resultative). If there

is a participial morphological error, they will still make the correct C, E, or S judgment. This may be evidence of reconceptualisation in L2 but it also indicates that students did not appropriately link the conceptualisation of the aspect with the need for morphology. To enhance reconceptualisation from L1 to L2 and the metonymic link between the concept and the morphology, there needs to be additional amplification of metonymic entrenchment between conceptualisation and morphology.

A native speaker associates morphology with the conceptualisation. The non-native speaker suffers from L2 interference. To eliminate interference, after students read their passage into the microphone, the other students in the group should have checked the passages to see if they thought there were any errors. The next person to read their passage then could have had the opportunity to use the previous student's input to test hypotheses and construct knowledge, thereby possibly making their response a little more morphologically accurate.

This taskplan attempted to find evidence of reconceptualisation taking place with present perfect aspect from L1 to L2. Learners for the most part were able to distinguish the three kinds of perfect aspect, although they did not improve with morphological accuracy. However, because most activity verbs follow the common –ed inflection, taskplans utilising them will not lead to morphological accuracy. Taskplans need to focus on accomplishment and achievement verbs because they are for the most part irregular. Awareness of this distinction could also enhance morphological accuracy.

In Housen's (2002b) study of acquisition of perfect aspect in relation to the verb's inherent semantic structure, he found that aspect acquisition did not occur as predicted by the AH (i.e., -ed or –en are initially restricted to telic-punctual verbs or

achievements). His learner corpora revealed that perfect morphology with lexical verbs first appear with states (i.e., perfective) when the Aspect Hypothesis predicts it should end there. Housen also stated that his analysis could not satisfactorily explain these patterns and he suggested a possible explanation could be found in psycholinguistics (e.g., metaphor and metonymy and main event schemata). Considering the results of this taskplan in line with Housen's study, I decided to do a follow-up research project to investigate in more detail how the sequencing of the Aspect Hypothesis is related to present perfect aspect use and found that it also did not predict overgeneralisation of perfect aspect with activity verbs.

6.4.6.1 Progressive

In order for students to make the correct or incorrect judgment for verbs in the progressive, I explained that state verbs such as those of sensing, desiring, and knowing do not usually occur in the progressive. However, it probably would have been better to explain that progressive usually occurs with activity verbs.

On the other hand, the fact that progressive does occasionally occur with state verbs may have a sociocognitive basis. When the progressive is used with state verbs, it is often contracted which blends the clitic verb and the subject together and becomes a more direct expression of an internal state, inner thoughts in progress(ive), or inner activity, for example, compare: *I'm happy* and *I'm feeling a little sleepy.*

6.4.7 Perfect in Japanese and English

As has been pointed out, in Japanese the –te iru form can entail both progressive and resultative perfect aspect. Of note, however, because of the one-to-one mapping ability, Japanese students do not overgeneralise progressive use in English. The present perfect, on the other hand, is often overgeneralised, especially to activity verbs. Progressive is the first tense-aspect morphology to emerge in L2 production (Bardovi-Harlig 2000b), which suggests that activity is the easiest to conceptualise and activity verbs also often have a one-to-one mapping with an animate subject. The lack of any progressive overgeneralisation, then, whereas overgeneralisation of perfect is common, seems to point to a conceptual rather than linguistic factor. Because of the complexity involved in conceptualising resultative verbs (i.e., telicity, punctuality and duration), I have argued that L1-L2 conceptual transfer cannot occur with perfect aspect and that reconceptualisation into L2 is necessary.

By showing the similarity of the previous three aspects in L1 and L2 as well as the underlying schemata (i.e., the auxiliary is necessary for the possession schema and the V-ed, V-en forms are necessary for the resultative schema), it is hoped students will achieve reconceptualisation from L1 to L2.

Chart 5. L1 Aspect Taskplan
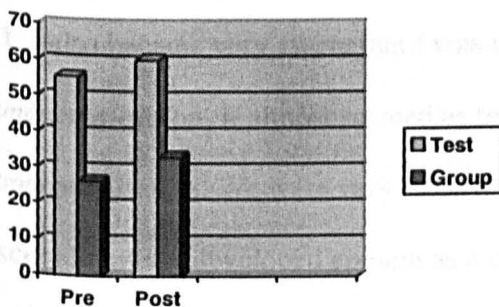
Unfortunately, this taskplan was somewhat confusing to administer. Using the students' L1 in class had effects that I was unprepared for. Especially with the three perfects, it was

almost like simultaneously teaching L1-L2 in which L1-L2 comparison was interfering. In fact, I still had some reconceptualising of the learners' L1 forms to do and this affected my teaching. Whether to introduce an L2 conceptual comparison or contrast needed to be well established at the outset (i.e., if there is a different conceptualisation in the L1 and L2 then it is difficult to know which conceptualisation to teach). Thus, as opposed to introducing an L2 form, if teachers introduce the L1 form with the L2, then the correct reconceptualisation direction stems from the students' L1. In this way, reconceptualisation into the L2 may be possible and any inconsistencies that become apparent between them would then help in reconceptualisation.

For the L2 native-speaker teacher it means being the other-regulator not only in the students' L2 but in their L1 as well, which is a very difficult ZPD task. Nonetheless, being able to point out the different conceptualisations in L1 and L2 is very important, as is explaining ways to blend them. To do so, the teacher must be completely other-regulatory and have made complete L1-L2 reconceptualisation. Unfortunately, I could explain the differences in L1 but had not completely reconceptualised or created a firewall between L1 and L2. Trying to teach the students what to conceptualise in their L1 also seemed a little presumptuous on my part and I wanted to stop and rethink this particular taskplan. In short, this taskplan would have benefited from being piloted. Finally, it seemed as though I was not just using L1 in the classroom I was *teaching* with L1. I also became very aware that I was no longer teaching language but *conceptualisation*. It almost seemed as though language was no longer a barrier to conceptualisation. We were very close to exchanging concepts rather than language— except I was not developed enough as a concept teacher.

We saw earlier that students scored higher with L2-cultural temporal adverbial terms but we are seeing here that they are also scoring higher with L1 conceptual aspect, suggesting once again that the sooner cognitive schemata are introduced to learners the sooner L2 reconceptualisation may take place. The learners with the lowest levels in L2 scored highest in L1 use of aspect, which further suggests that L2 reconceptualisation is necessary. If the concept is expressed grammatically then it is necessary for that concept to be made salient in the periphrasis of the grammar. With the L1, there is also either real-world experience or sociocultural context to link to the metaphor and grammar but in many cases the L2 learner in the classroom does not have this mental image or linking ability, hence, concept acquisition can be facilitated with metaphorical real-world schemata. Once sufficient cognitive schemata re-acquisition has occurred, higher-level reconceptualisation can take place more easily in dialogue.

6.4.8 Different Uses of the Present Tense

We have seen significant change in learners' tense-aspect usage in the previous seven taskplans. With these last four, tense-aspect is used in some different or extended metaphorical senses. At this point, it was hoped that the students who had completed the previous metaphorm taskplans might be more able and better equipped than students with no knowledge of grammar as metaphor to take the next metaphorical leap. Other uses of tenses are quite difficult for L2 learners. This taskplan attempted to find out if an SCM

approach can assist in any way in the acquisition of the use of present tense and progressive aspect as future.

After having completed seven taskplans as well as the problem with the L1 taskplan, students began to worry that the level of the taskplans might be getting too high and they seemed to be expecting not to be able to understand it. Nevertheless, they still did quite well with this taskplan and there were no problems introducing it. With this taskplan, I noticed that not having any prior conventional or literal conceptualisation for other uses of tense is similar to the L1 learning process. Hence, there is not a need for them to *reconceptualise*, just to conceptualise. Conceptualising other uses of tense may also actually be easier in L2. This was made apparent when students were asked to differentiate between the normal tense use and the different one.

The use of present tense for future scheduled events. My schema for this was that using the present tense for future scheduled events makes them seem more "real." In retrospect, I understood that it would have been better to explain it as an extension of the TIME IS SPACE metaphor, in that if time is scheduled then it is at a fixed point (e.g., *at 8:00*). Thus, if the point is fixed in time or space then the irrealis of future is released and tense is no longer the determining or most salient contextual factor—at least with future-irrealis events. The TIME IS SPACE or TIME IS A MOVING OBJECT metaphor also works for using present progressive in the future. The progressive suggests activity with activity verbs and hence it can be used to infer motions towards a future point in time or space. Also worth noting is (according to context) the closeness in grammar but the differences in meaning between:

1) *I catch the train (on) Monday mornings.* - habit

2) *I catch the train (on) Monday morning.* – future scheduled event

3) *I'm catching the train (on) Monday morning.* – progressive as future

And then the other alternatives:

4) *I might catch the train Monday morning.*

5) *I'm going to catch the train on Monday morning.*

6) *I will catch the train on Monday morning.*

For 1 - 3, the grammar is insufficient to explain their full meaning and much more joint-attention context or intersubjectivity is required. That *Monday morning* is in the future must be gleaned from the context because it cannot be from the grammar. Thus, the use of present and progressive for future is a form of tense or domain ellipsis. The use of modals for future is also possible (e.g., *I might catch the train Monday morning.*) With 5 and 6, shared understood temporal context is not needed. Indeed, the grammar provides a joint-attention intersubjective frame. Consequently, if the context is implicitly known, the unidirectional mapping of metaphor to form is released and metaphor can function alone (i.e., present tense and progressive aspect for future).

6.4.9 Pragmatic Use of the Past Tense for Politeness

Tyler & Evans (2001) suggest that two important aspects of the cognitive linguistic perspective allow us to view non-temporal meanings as being related to temporal meaning in a systematic way. First, grammatical markers, such as tense morphemes, are

treated as being meaning-bearing elements in the same way as lexical items. This entails tense markers being treated as form-meaning pairings. The second is that form-meaning pairings are subject to usage-based metaphorical or metonymical meaning extensions. As such, through use, additional meanings can become associated with a particular form, resulting in the lexical form becoming related to a semantic network of distinct though related senses (cf. parts of speech).

Put into the context of past tense for politeness, being in past time-reference correlates with not being physically proximal with the current location, and politeness correlates with not being physically proximal to your interlocutor. After all, very close proximity can be perceived as being overly assertive and/or aggressive (Tyler & Evans 2001). Thus, expressing the pragmatics of politeness using the past tense may have developed from the relations between the body-part schemata of two people. That is, distance or indirectness between them is perceived as politeness (i.e., DISTANCE IS POLITENESS).

Chart 6. *Non-Temporal Use of Tense Taskplan*
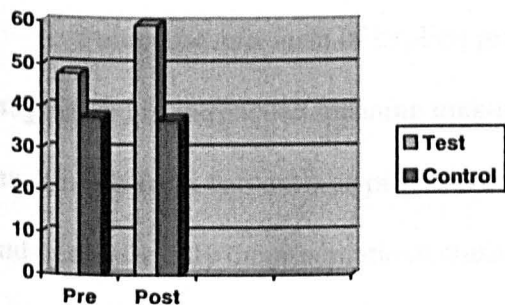
In Western culture, if two people are approaching each other on the same path, it is typically the first to spot the other that moves out of the way. If this occurs then in most cases the other person continues on her course and there is avoidance of any contact, revealing indirectness as politeness. Providing adequate body space is interpreted as

being polite and this distancing and indirectness is metaphorically mapped onto the distancing caused by using the past tense. In contrast, an imperative (i.e., the non-finite form) is often a direct command or an order to get people to move their bodies often in close proximity (similar to pointing) and it is often interpreted as impolite. Quirk et al. (1985) offer a different interpretation of this use of the past tense. They refer to it as politeness or *tentativeness* in that the use of the past tense stems from the hypothetical use and hence has developed these senses. Both interpretations, however, whether tentative/hypothetical or indirect/past tense, avoid any form of direct expression.

Students are often told that the past tense forms are more polite and told to memorise them with no other explanation as to why. In most cases, this is a cause of confusion or interference to learners, which may confound their using the past tense with politeness or avoid using it for alternative forms (e.g., overuse of *please* and *thank you*). Another, possibly more successful approach, is to show learners how the underlying pragmatic metaphor extends from past tense to politeness. This approach would present another opportunity to alter the typical sequence of instruction and acquisition. If, rather than as a separate form, politeness using the past tense was made salient at the same time the past tense was taught, correct politeness usage might be acquirable at that time.

Politeness as a form of explicit pragmatics (as opposed to implicit or inferred pragmatics) is entrenched meaning making added to language. Unfortunately, not enough meaning-to-form context was provided for students to complete this taskplan successfully and generally only the pragmatic overuse use of *please* emerges. In order to have seen more politeness forms emerge in this taskplan, students needed to be told explicitly in the rude situations to use *please* plus the negative imperative form *don't*. Then for the polite

situations they needed to be reminded to use the indirect past tense *would* or *could* plus *please*. However, more importantly, they needed to be aware of the extension form past tense to politeness and to link metonymically link them with morphology. Thus, there were again inherent problems with the design of this taskplan and it could also have benefited from piloting. Please see the revisions made to this taskplan. In any case, though the taskplan was not originally piloted, there is still some illuminative, holistic evidence of development in learners' pragmatic skill through the use of metaphor and the past tense.

That said, it is quite commonly known that young people often do not acquire or reorganise their utterances to include the pragmatic use of polite language until quite late. In fact, Japanese has its own politeness language (i.e., *keigo*), which is a periphrastic extension to their verbs. Though past tense and indirectness also signal politeness, *keigo* forms are used only for politeness. Indeed, the metaphor for *keigo* is probably not DISTANCE IS POLITENESS but RAISING IS POLITENESS, because these forms are intended to elevate the person with whom you are speaking to a higher level of status. Japanese youth are notorious for not using *keigo* and when they are employed for a service position they are explicitly trained in its use. However, making them more aware of the RAISING IS POLITENESS metaphor (i.e., as a pragmatic form of joint-attention) might assist in *keigo* acquisition.

Explicit pragmatic development, while conceptually not difficult to grasp, can be difficult because of the investment in effort involved. With explicit pragmatic use (i.e., politeness), the investment in the use of language is greater than the meaning making involved and this is counter-intuitive to younger speakers. Intersubjectivity usually

involves the elision of forms not the extension. Explicit pragmatic development is not necessary to complete the speech act, but without it the speech act is less socioculturally cooperative and hence less successful.

Consequently, politeness language is possibly one of the least acquired forms for students, probably because it has very little use in their discourse contexts (much like learning the written form in L1 or learning an L2). Once learners become aware that *keigo* is a form of sociohistorical collaboration leading towards a kind of sociocultural advantage, they learn it. Additionally, if it was presented to them at an earlier stage of development as a metaphorical extension, for example, at the same time the past tense is, we might see earlier acquisition of it. Perhaps pragmatic language is one of the most metaphorical forms of language use but most methods of teaching pragmatics do not exploit this relationship and hence have not been very effective.

6.4.10 Aspect and Modality Blend to Create Irrealis

This taskplan stems from my own analysis of the BNC. Present perfect with modals of obligation frequently appeared in the corpus. As the LGSWE makes clear, this represents another function of aspect. When modals are combined with present perfect aspect, it acts as a bounded irrealis (e.g., *You should have...* or *I would have...*). This taskplan investigates the extent to which students are able to reconceptualise realis-irrealis as perfected or bounded irrealis, once again revealing perfect aspect's cross-domain ability. Students did not seem to experience any difficulty in reconceptualising perfect aspect in this way. Perhaps they could extend the use of grammatical aspect as an intermediary

between present and past and use it to bound a hypothetical event and reevaluate past events in the present. Learners were also quite capable of distinguishing the difference in meaning between modals located in the present tense and modals with present perfect use. Perhaps an analysis of which kinds of verbs (i.e., state, activity, accomplishment and achievement) occur most frequently with this form might also prove significant.

6.4.11 Tense as Irrealis to Structure Discourse

Finally, this taskplan investigated the extent to which any reconceptualisation had taken place in students' ability to extend the use of grammar as metaphor and structure discourse using tense-aspect. Hopper (1982) hypothesises that the fundamental notion of aspect is not a local-semantic one but is discourse pragmatic, and is characterised as a completed event in discourse (i.e., the Discourse Hypothesis). Unfortunately, the schemata and use of tense-aspect in this taskplan needed to be much more explicit for foreground and background use to become distinguished. A revised version of this activity can be found in the follow-up Aspect Hypothesis research. However, even in the follow-up research, results were not tabulated. A completely new research project should be developed to specifically investigate how to instruct the Discourse Hypothesis, then it might be possible to investigate its relationship to the Aspect Hypothesis.

Table 4. Tense-Aspect as Discourse Perfect Slot

Pretest		Posttest	
Continuous	5	Continuous	2
Present	4	Present	10
X	6	X	1
Past	2	Past	3
Perfect	0	Perfect	1

Table 4 shows the students' results for the fill-in-the-blank slot for the present perfect aspect in discourse. No students scored correctly on the pretest and only one scored correctly on the posttest. These results are not significant and they suggest that an understanding of the Discourse Hypothesis was not acquired. However, there was much development from avoidance of answering (i.e., X) to answering with the present tense. This suggests that present tense is the initial point of conceptualisation. Perhaps if the taskplan had emphasised the current relevance perfect there might have been evidence of a higher level of Discourse Hypothesis development. Students also seemed surprised that present perfect would appear at the end of the discourse and I should have used this intersubjective joint attention to form to metonymically contrast the comparative function of the present perfect (i.e., current meaning making) to the past tense. Perhaps the L1/L2 reconceptualisation process is also a metonymic one.

In order to use aspect properly in discourse, two reconceptualisations are necessary: the Aspect Hypothesis and the Discourse Hypothesis Hence, when grammatical aspect or lexical aspect are clearly marked a correct Aspect Hypothesis response is possible. Where discourse structure is clearly marked, tense-aspect change is possible. However, when the Aspect Hypothesis and the Discourse Hypothesis's functions are combined or vague, until reconceptualisation of both has taken place the response is left open to learners and in such cases they seem to prefer the present simple tense.

The Discourse Hypothesis states that foreground for the most part uses past tense and background the present tense. However, it has been noted that the past perfect functions to background events and the present perfect in relative clauses serves a similar

function. Furthermore, grammatical aspect forms of present perfect aspect (i.e., current relevance and experiential) may have a cross-domain function of bringing a background event to the foreground. Thus, along with distinguishing the Aspect Hypothesis from the Discourse Hypothesis, these three functions need to be investigated in association with the Discourse Hypothesis. Finally, as Wold (1978) points out, temporal aspects of message structure do not necessarily refer to the temporal sequence of events or the foreground and background of the topic but may refer to *the sequence of understanding* the dialogue between interlocutors and this adds a third dimension to the investigation of tense-aspect.

6.5 Taskplans: Quantitative Results

The pre/posttest used in the research can be found in Appendix B and the grammar test administered after the posttest is in Appendix C. Table 6 shows the results of a two-way ANOVA of the main effects between the pre/posttests and the grammar test with the Test and Control Groups. There were significant differences in test scores between the Test Group and the Control Group, pre-/posttest and grammar test scores, $p < .01$. Chart 7 illustrates the differences in results between the two groups.

Table 6. Two-Way ANOVA of Main Effects Between Pre-/Posttests and Grammar Test

Source	Df	SSQ	MS	F	P
Test	2	2004.29	1002.14	15.73	0.01
Group	1	946.33	946.33	14.85	0.0002
Test/group	2	267.55	133.77	2.1	0.129
Error	75	4776.41	63.68		

Chart 7. Pre-, Posttest and Grammar Test Results for Test and Control Groups
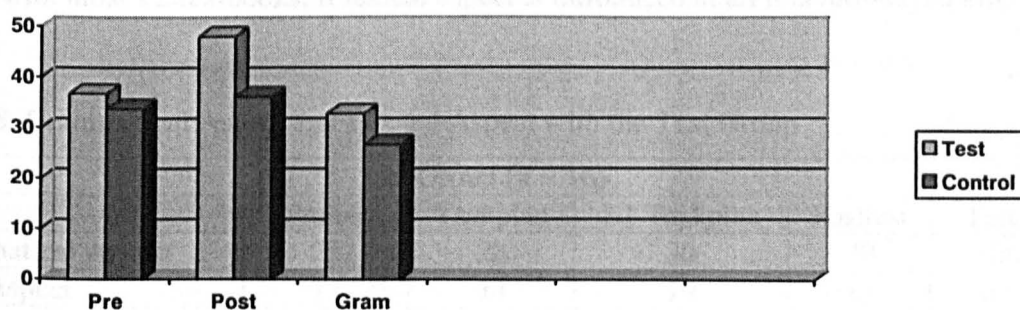
The fact that the Test Group scored significantly higher on the posttest grammar test when none of the forms were explicitly taught in any of the taskplans suggests that there was an accumulated result from the taskplans and that teaching grammar though metaphor can help learners to holistically focus on form. Table 3 shows the results of a one-way ANOVA between the pre/posttests and the grammar test for the Test Group only. Again, there were significant differences between the pre-/posttest and grammar test scores, $p < .01$. Considering the taskplans were not piloted, it is unusual for the Test Group to make significant gains. However, qualitative factors involved in the taskplans may have contributed to this result.

Table 7. One-way ANOVA of Main Effects for the Test Group

Source	Df	SSQ	MS	F	P
Test	2	2008.79	1004.4	17.02	0.01
Error	45	2655.69	59.02		
Total	47	4664.48			

Table 8 shows the results of grammatical aspect and lexical aspect use for the Test Group. These results are preliminary but it is still possible to interpret them and make suggestions for how to make further gains in tense-aspect acquisition. The results suggest

the sequence of instruction for tense-aspect needs to be reversed. With these taskplans

and as with most L2 textbooks, if lexical aspect is introduced at all it is introduced after

Table 8. Grammatical Aspect and Lexical Aspect with the Test Group

Test Group (n = 16)					
	Pretest	Taskplan	L1 Taskplan	Posttest	Total
Grammatical Aspect	22	28	36	20	106
Telic Aspect	17	14	19	17	67
Punctual Aspect	11	19	24	14	68
Total	50	61	79	51	

Grammatical aspect. However, the results in Table 8 indicate an improvement in lexical

aspect use with a decrease in use of grammatical aspect, suggesting that correct usage of

grammatical aspect is dependent on an understanding of lexical aspect (i.e., the initial

mapping of meaning and form). Hence, lexical aspect should occur initially in the

sequence of instruction. Furthermore, the concepts or schemata for lexical aspect (i.e.,

telicity and punctuality) need to be presented in more easily acquirable ways.

Table 9. Number of Activity Verbs with Grammatical Aspect and Lexical Aspect and L1
Aspect Taskplans

	Test Group Activity Verb % Use Per Learner	
	L2 Aspect Taskplan	L1 Aspect Taskplan
Total	21	9

Table 9 compares the percentages of activity verbs used in the L2 aspect taskplan with

the percentage used in the L1 aspect taskplan. Results of a paired-samples t-test were

significant, $t(14) = 3.68$, p< .01. This initial use of activity verbs with L2 does not concur

with the Aspect Hypothesis, which states aspect first emerges with accomplishments and

achievements. However, because the learner is unaware that perfect aspect does not

frequently occur with activity verbs, activity verbs are initially selected because of the

one-to-one mapping with progressive aspect. Unfortunately, there is not the same one-to-one mapping with present perfect aspect and overgeneralisation occurs.

The lack of activity verb use in L1 does concur with L1 Aspect Hypothesis research, which states that L1 Japanese speakers use progressive with activity verbs and perfect aspect with achievement verbs. Consequently, these results indicate that inaccurate use of perfect aspect is often with activity verbs and thus avoidance of perfect aspect use with activity verbs should be made explicit in instruction. This avoidance can be achieved by showing students the contrast between activity and achievement or resultative verbs. Additionally, students used activity verbs much more with objects, thereby sometimes making the verb telic (i.e., accomplishment). This is most likely due to the factor that accomplishment verbs are often transitive verbs (e.g., *write a letter*) and if the object is removed, the verb can often be interpreted as an activity (e.g., *write*). Thus, accomplishments can have either progressive or perfect aspect. Finally, it may not have been the telic schema but the past participle morpheme that was motivating their choice.

Table 10. Past Participle Use of Activity Verbs

Aspect	Activity Verbs				
	-ed	*-en*	past	errors	Total
Total	20	6	3	5	34

As Table 10 shows, it may also have been the one-to-one mapping of the *–ed* past participle with activity verbs that was motivating their verb choice (i.e., not the difficulty of morphology but the lack of it). Here we see how difficulty in meaning, schemata or conceptualisation (e.g., activity or resultative verbs) can focus attention on morphological form (i.e., regular and irregular verbs).

6.5.1 The Grammar Test Error Analysis

Although explicit grammar instruction was never the intent of the metaphorm taskplans, the quantitative data from the grammar test administered after the taskplan posttest is still of interest. The Test Group scored significantly higher than the Control Group on the grammar test, $t(8) = 6.17$, $p < .00$. Generally, errors for both groups in the test were distributed fairly evenly but there were some differences. This section analyses the grammar test for errors with word order, auxiliary insertion (i.e., *be, do* and *have*) and participial use with affirmative sentence, negative sentence and interrogative formation. The initial error analysis is divided into three parts:

1) instruction error
2) affirmative statement, negation or interrogative (+, -, ?) error
3) grammatical error

Table 11 shows the results of the error analysis for both groups in percentages.

Table 11. Error Analysis for the Test and Control Groups in Percentages

Grammar Test	Test Group Errors % (n = 16)							Control Group Errors % (n = 11)						
	Grammar				Instruct	+,-,?	Other	Grammar				Instruct	+,-,?	Other
	Verb			W O				Verb			W O			
	A	Q	N	O				A	Q	N	O			
1) Present Tense	81	69	75	6				109	64	73	9			9
2) Future with *going to*		6		13		13		9	9	18		45	18	
3) Future with *will*	88		6	6		19	6	100	9		36		36	9
4) Past Tense		37		6					100	27			18	
5) Perfect Aspect	63	44	75	6		13	6	73	64	45	9		18	
6) Pres Prog		13	6.3			6		27	27	27			27	9
7) Future Prog	31	37	31	6		13		55	55	45			54	9
8) Past Prog	6	6	6			6		36	27	45			27	
9) Perfect Prog	31	19				13		55	45	45			27	

It was somewhat surprising how many students in both groups made mistakes with the present simple tense (i.e., relatively little inflectional change) although the Test Group did not do so with more complex morphological forms like the future. This may indicate that the complexity of grammatical morphology was more salient to the Test Group. On the other hand, it may also indicate interference with the present simple tense from pronominal agreement, tense-aspect and argument structure. The Control Group consistently made more mistakes with combining tense with the progressive aspect. In Table 12, the totals for the errors are presented in percentages.

Table 12. Totals of Grammatical Errors

Errors Per Learner	Test Group	Control Group
Grammar	7.75	11.9
Word Order	0.63	0.55
Instruction	0.0	1.82
Affirmative, negation or question	0.81	1.09
Other (vocabulary)	0.125	0.18

The total of grammar errors made by the Test Group is equivalent to 7.75 per student. The total of grammar errors made by the Control Group is equivalent to 11.9 per student. Of note, the Test Group's errors were concentrated around perfect aspect. Grammatical errors were also divided into whether the grammatical error was made in an affirmative statement (A), a negative statement (N) or an interrogative (Q). Errors were occasionally dispersed according to this division. With the past tense, for example, most errors were made with the interrogative (i.e., *do*-support). The two forms with the least errors were present progressive aspect and future using *going to*, again, the two forms with the clearest one-to-one mapping. Along with the larger number and the wider dispersion of errors within the Control Group, other patterns of errors became evident within the results. They are itemised in the following Tense Error and Aspect Error

Sections. Finally, though not correlated to grammatical errors, the Control Group made more errors with the instructions of the test suggesting that the Test Group, because of having participated in the holistic taskplans, had achieved greater awareness of the joint-attention frames.

6.5.1.1 Tense Errors

As has been previously stated, the grammar test was intended to evaluate the grammar involved with sentence, negation and interrogative formation, for example, *do*-support. The findings of the error analysis of *do*-support with present (*Do elephants eat meat?*) and past tense (*When did my letter arrive?* and *What did all those people want?*) are presented in Table 13. Predictably, most tense errors occurred either with third person *-s* (*She often flies to Paris on business*), interrogative formation and *do*-support or *be-*insertion with future reference using *will* (*I think the train will be late*). With the present tense, the plural *elephants* caused much confusion over correct argument structure and whether to use *do* or *does*.

Table 13. Errors with Tense

Tense Errors Per Learner	Test Group	Control Group
Do Support with Present Tense Questions – Third Person	0.56	0.64
Do Support with Past Tense Questions (2x)	0.44	1.0
Third person "s"	0.63	0.91
Be Insertion with Future Tense	0.88	0.91
Total	2.5	3.45

The Test Group made 2.5 tense errors per person and the Control Group made 3.45 errors per person. *Be*-insertion with future tense was also not covered in the metaphorm taskplans. Of note, only two students in the Test Group and one in the Control Group correctly answered this item. Unfortunately, results did not reveal more evidence that the SCM taskplans assisted learners to attend to argument structure. This suggests the SCM taskplans should be revised to include a metonymic taskplan that maps the conceptualisation for a form to its morphology, for example, third person -*s*, *do*-support and *be*-insertion. To see these revisions, please refer to the revised taskplans in the thesis.

6.5.1.2 Aspect Errors

Table 14 shows the data for aspect errors and whether they occurred with the auxiliary, the –*ed* or the –*en* past participle.

Table 14. Errors with Aspect

| Aspect Errors Per Learner	Test Group	Control Group
Auxiliary (*have* or *has*)	0.43	0.27
-*ed* Participle	0.00	0.00
-*en* Participle	0.43	0.55
Past Tense Participle	0.88	0.91
Total	1.75	1.73

The Test Group made 1.75 errors per person and the Control Group made 1.73 errors per person. Hence, there is no noticeable difference in errors with aspect unless we look at the –*en* participle in which case the Test Group made 0.43 errors per learners whereas the Control Group made 0.55 errors per learner.

Worth noting in these data is that there were no occurrences of students eliding the auxiliary (i.e., grammatical aspect). Only errors of person agreement with the auxiliary were made. Additionally, approximately twice as many errors were made with past participles in which there was no inflectional change from irregular past tense to past participle (i.e., lexical aspect). There were no occurrences of errors with the *–ed* past participle. Once again, then, to improve these results, when introducing the conceptual schemata for lexical aspect, a metonymic taskplan should also link the schemata to the past participle morphology.

Regarding the three different morphological endings for the past participle (i.e., -*ed*, -*en* and past tense), it may be that these verbs can also be grouped according to the Aspect Hypothesis. In fact, seventeen of the twenty-one participle errors occurred with just three achievement verbs (i.e., *forgot* (punctual)/**forgot*, *heard* (punctual)/**heared*, and *shut* (punctual)/**shutted*), which has implications for teaching different levels of morphological difficulty as well as what is normally understood as irregular verbs. Perhaps they are not irregular at all. Perhaps the "irregular" morphology is more a result of participial conceptualisation processes (i.e., achievements or accomplishments).

Chart 2 illustrates the relationship between total grammatical, tense and aspect errors. Overall, the Control Group made more errors than the Test Group. As they should, these figures represent the reverse of the data collected from the pre- and posttests. It is important to repeat that the metaphorm taskplans were not intended to explicitly teach

Chart 8. Aspect, Tense and Total Errors with the Test and Control Groups
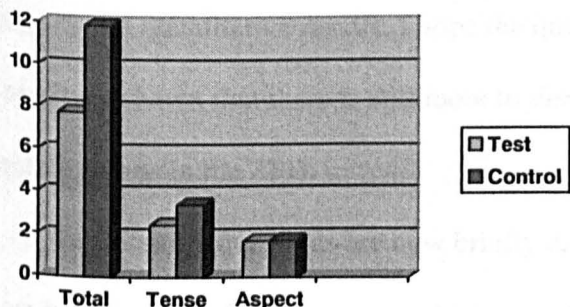
any grammatical forms so, though it is promising that the Test Group scored significantly higher than the Test Group on the grammar test, it does not necessarily mean there is a causal correlation between the results and the metaphorm taskplans. Finally, this error analysis also looked at all of the grammar in the test and therefore it is hard to determine whether an error might have occurred because of, for example, the auxiliary, the participle, tense, agreement or word order. The meta-analysis of grammars, however, revealed possible ways in which each might influence the other and this might be an exciting area for further research.

6.6 Discussion

Until researching and observing the effects of the ZPD in groups, I had never really grasped what was involved in it. Reading the relevant literature was not sufficient. Doing research is fundamental to coming to a better understanding of one's own teaching and its relation to theory. A mixed-methods research approach also proved to be a good choice. The quantitative results indicated there is good reason to believe there is a relationship between metaphor and grammar and this can be exploited when teaching grammar.

Considering much of our understanding of metaphor and cognitive schemata is based on psycholinguistic and mostly unobservable knowledge, it is encouraging to have found significant quantitative results. I hope the qualitative findings have also been of interest and have shown that there is still more to discover about the symmetrical-asymmetrical relationships in the ZPD.

The research questions are now briefly discussed and suggestions are made for additional types of competence, which complement grammatical competence and contribute to completing communicative competence. As the reader may recall, the first research question asked:

1) *How can ideas from cognitive linguistics be combined with sociocultural theory to be used in teaching grammar, in particular tense-aspect and the Aspect Hypothesis?* Because language is conventionalised and literalised within each culture, cognitive universals are expressed differently according to the conventions of the language, thus, when teaching language, it is important to be aware of this relationship. Furthermore, I have argued that grammar is to a large extent internalised through sociocultural interaction and metaphorical-metonymic cognitive processes (cf. the grammaticalisation process). Thus, recreating this sociocognitive process through metaphor is effective in the teaching of grammar. Tense-aspect, being almost completely metaphorical, and the Aspect Hypothesis, being more metonymical, are especially good candidates for this method. In particular, cognitive schemata based on grammaticalisation processes represent possible depictions of our concept system.

2) *Is there a relationship between grammar and metaphor in grammar instruction?* There is certainly no indication that grammar might be a more basic cognitive function than metaphor. When asked to make grammatical metaphors, metaphor creation dominated in learners over any grammaticality judgment. Thus, metaphor represents a bottom-up intra-psychological process of language acquisition, whereas grammar is a top-down inter-psychological process. The relationship they share is that each is necessary to describe the functions of the other. I have set out how metaphor is necessary to explain grammar but grammar is also necessary to explain metaphor, for example, the similarity found in the grammatical constructions of idioms.

Another relationship in need of researching is whether metaphor or metonymy plays a more fundamental role in grammar acquisition. This investigation had a mainly holistic focus on metaphor and grammar acquisition. However, metonymy is also an important factor, especially when mapping meaning to form. Thus, by better understanding how metonymy maps meaning to form, results could show better acquisition than metaphor.

3) *Does the use of cognitive schemata assist in SLA?* Basing grammar instruction on the underlying cognitive schemata used in the grammaticalisation process seems to be a very productive method of instruction at least for tense-aspect. Schemata reduce reliance on L1 transfer and encourage reconceptualisation into L2, thereby creating a direct link between schemata, non-spontaneous super-ordinate concepts and the L2. Evidence of reconceptualisation could be seen when learners scored higher with L2 temporal adverbials as well as scoring higher with L1 aspect (i.e., indicating the need for reconceptualisation). This investigation focused on cognitive schemata and tense-aspect

acquisition. Further research needs to be conducted to see, for example, whether it is also effective with nominal forms of agreement and argument structure or whether cognitive schemata can outperform other methods of acquisition (i.e., grammatical rules or levels of morphological difficulty).

4) *Can cognitive schemata alter the sequence or rate of acquisition?* There was only suggestive evidence in this investigation that cognitive schemata could alter what is commonly understood by the sequence of acquisition. The first occurred when lexical aspect acquisition increased and grammatical aspect decreased, suggesting that lexical aspect should be introduced in instruction earlier. The second was with the politeness form of the past tense and the suggestion that this pragmatic use should be taught at the same time as the past tense. As we will see in the follow-up research project conducted to specifically investigate this research question, there were significant indications that altering the sequence of instruction to the sequence of conceptualisation and grammaticalisation processes can significantly alter what is understood as the sequence or rate of SLA.

5) *How do students respond to the taskplans and what kind of interaction do the taskplans generate?* Students seemed to be receptive and enjoyed engaging with language on a more sociocognitive joint-attention level. For the previous six years, these students had not only been taught grammar as something literal and analytical but they had been taught it in a passive method. Nevertheless, they very quickly adapted to thinking of grammar in holistic and metaphorical terms. They seemed to develop a greater understanding of the relationship between language and thought, as well as develop from social interaction. As we saw in the qualitative analysis, the students also

benefited from collaborating in group or pair-work. Future research needs to analyse their intersubjective dialogue for evidence of dialogic grammatical forms.

Regarding the hypotheses about the results of the research questions, I predicted that the students would do better with non-temporal uses of tense (i.e., pragmatic and discourse). Results indicate that though they did not do better they scored as high as the other highest taskplan, i.e., the L1 tense-aspect taskplan, suggesting that the non-temporal uses did not require as much reconceptualisation from L1 to L2. Because these uses have less L1 transfer and are more metaphorical, object-regulated learners can interact directly with them. There may be more interference and hence more of a need for L2 reconceptualisation with concepts that were learned spontaneously when L1 tense-aspect grammar was acquired, whereas with metaphorical extensions of form these learners were at the appropriate level of development to engage at the meta-metaphor-discourse level (i.e., non-spontaneous concepts interacting with non-spontaneous concepts).

I have emphasised reorganisation in L1 acquisition and reconceptualisation in L2. Though the learners in this study had had six years of previous L2 learning and thus most likely substantial L1/L2 transfer had already occurred, there was still evidence of L1/L2 reconceptualisation. This result presents new factors in need of investigation, that is, learners who have had no exposure to the L2. By comparing two groups (i.e., an L2 non-exposure group with a group who has had L2 exposure) and by using sociocognitive metaphorm taskplans as the method of instruction, it may be possible to determine the degree to which there is direct mapping from cognitive schemata to L2 and/or the extent to which L1/L2 transfer is unavoidable or effective in L2 acquisition. Additionally, a further tense-aspect research project could investigate how tenseless languages rely on

sociocultural adverbials to disambiguate tense and whether there is any metaphorical expression of tense-aspect. It also needs to be determined whether, or how, tenseless languages express literal forms of temporality such as telicity, punctuality and duration and, if so, whether they occur more frequently with certain types of verbs.

In conclusion, the results of the qualitative taskprocesses and the quantitative taskplans analyses suggest that, along with grammatical competence, additional awareness of levels of joint-attention or intersubjectivity are also necessary to achieve communicative competence:

1) *Metaphoric Competence*: This involves using the comparison-contrast function of analogy to initiate making meaning.

2) *Cognitive Competence*: This competence involves the use of cognitive schemata in language (i.e., whole-to-part).

3) *Sociocognitive Competence*: This represents the inter/intra-metonymical link between cognitive and sociocultural factors (i.e., part-to-whole).

4) *Sociocultural Competence*: This involves how meaning-oriented expressions contribute to conventionalising or literalising language.

5) *Explicit Pragmatic Competence*: This competence involves the metaphorical extension of mapping meaning to form for pragmatic reasons, for example, politeness.

6.6.1 Limitations of the Study

The main limitation of this study was that the taskplans were not piloted. Had they been, certainly better results could have been achieved. For example, the grammatical tests administered after the posttest could have analysed only tense-aspect. Furthermore, the

taskplans were too comprehensive and attempted to cover too much ground (i.e., tense-aspect, grammatical aspect, lexical aspect, temporal adverbials, L1 tense-aspect and tense-aspect in discourse). Though the intent was to make a holistic longitudinal study, each of these factors represents a research study in itself. Also, after cognitive schemata have been metaphorically introduced into a taskplan, there needs to be an additional taskplan that metonymically maps meaning to form. Although these have been added to the revised taskplans, they are also in need of piloting. Additionally, much more research needs to be conducted into the differences between the Aspect Hypothesis and the Discourse Hypothesis. Nevertheless, many of the taskplans did indicate a positive conceptual relationship between cognitive schemata, metaphor and grammar. Indeed, the study was intended as illuminative empirical research and it has resulted in many new possibilities to use metaphor in grammar teaching.

Investigation of these possibilities also motivated me to conduct follow-up research into the relationship between metonymical sequencing of tense-aspect and its acquisition, in particular present perfect aspect and the future tense. In my teaching experience, I have found both the present perfect aspect and future tense with *will* to be overgeneralised in learners. It is hoped the results of this research also present some promising new ideas for teaching both.

6.7 Follow-up Research: Altering the Sequence of Acquisition

This follow-up research study investigates the relationship between the Aspect Hypothesis and its sequence of acquisition in L2 learners. According to Processability Theory (Pienemann 1999), the sequence and rate of acquisition are unalterable in L2 learners; however, I have already argued that actual acquisition depends on what the sequence has been based (i.e., on morphology or on metonymical conceptualisation-grammaticalisation processes). For instance, typical instructional materials begin with overt grammatical markings for tense-aspect constructions and end with the inherent semantics of the verb. That is, most L2 materials sequence the future tense first with *will*, then *going to* and finally the present tense and progressive aspect uses. Likewise, present perfect aspect is often taught beginning with the durative form using *for* and *since*, then experiential and current relevance forms, ending with the resultative (i.e., the main semantic construal). The effect of these form-to-meaning sequences is that learners often significantly overgeneralise the first forms to be introduced (i.e., *will* with future tense and the durative or experiential with perfect aspect). Hence, I argue that the reverse order (i.e., from meaning-to-form) metonymically maps the conceptualisation process to the grammaticalisation one, thereby reducing overgeneralisation and producing more accurate usage.

The results of the meta-analysis of grammars, the review of the sociocognitive theoretical literature and the previous study into teaching grammar as metaphorm, all suggest that the sequence of conceptualisation for tense-aspect forms may be closer to the reverse of orders of present instruction. In other words, as I have been arguing from the outset of this dissertation, the sequence of conceptualisation for a form is a metonymical

extension from meaning-to-form. In the research conducted in this study, the test group was taught future tense and present perfect aspect *beginning* with the semantics of the verbs and then the orders of the typical sequences of instruction were reversed (i.e., future tense: present tense, progressive, *going to* and *will*; present perfect aspect: present tense, perfect states, perfect accomplishments, perfect achievements, perfect activities, current relevance perfect, experiential perfect, durative perfect and past tense). A control group was also taught the same forms but the sequences of instruction were not reversed.

Results of the study clearly indicate that the reversed order of the Test Group helped to correct any input distributional analysis errors made by learners and significantly reduced overgeneralisation of each of the two forms. These results suggest that the reversed sequence of instruction, which analogically extends the semantics of the verbs from the present tense to the future and/or past tense, represents a metonymic tense-aspect construction more closely paralleling its sequence of conceptualisation and usage. These results also suggest that if the sequence of acquisition is based on the complexity of conceptualisation, rather than morphological complexity, then the sequence and rate of acquisition are significantly alterable. Finally, the results also suggest that there is good reason to reanalyse the *going to* form as grammatical aspect rather than future tense.

Because this study is intended to follow-up on the results found in the previous research, a literature review was deemed unnecessary. However, a few contextual matters do need to be made explicit.

6.7.1 Present Tense and Progressive Aspect as Future

Bardovi-Harlig (2004) has stated that L2 learners overgeneralise *will* for future up to fourteen times as much as native speakers. However, when I asked her if introducing present tense and progressive aspect uses for future before *will* could reduce overgeneralisation, she stated that present tense and progressive aspect have "their jobs to do" and therefore learners may not acquire the future tense use at that time (Bardovi-Harlig personal communication). Unfortunately, the reasoning behind this seems to be a little unclear. For example, according to cross-linguistic studies, many languages do not have a future tense, and languages like these commonly use the present tense for future reference (e.g., Japanese). Hence, for any L2 learner of English whose L1 does not have a future tense, the use of the present tense for future use should not develop into a problem with interference; furthermore, using *will* for future would be very salient to such a learner and would weigh very heavily in their distributional analysis of future forms, thereby possibly resulting in overgeneralisation.

6.7.2 The Similarity Between Going to and Present Perfect Aspect

Perhaps the best way to point out the similarity between *going to* and the present perfect is that if present perfect aspect is understood as the result of a cause-and-effect action (e.g., *He has broken his nose*), then *going to* represents a high probability of the same result occurring, and, hence, may be used most, and has grammaticalised from, achievement verbs (e.g., *He's going to break his nose*). Furthermore, this conceptualisation extends unidirectionally (i.e., present tense-*going to*-will). In this sense,

going to and present perfect aspect share a similar relationship to the present tense and represent current meaning-making forms for the future and past tense respectively. *Will* and the past tense, on the other hand, are non-current meaning-making forms. Thus, *going to* and present perfect aspect represent an intermediary conceptual domain in the unidirectional conceptualisation process from the present to the future and/or past:

It will fall -> it is going to fall -> it falls/is falling -> it has fallen -> it fell

It is also possible to sequence the four types of verbs in the AH:

It is going to break (achievement) / sing (activity) / sing a song (accomplishment) / know (states) / future

In this conceptual sequence, as opposed to the perfect aspect, it is the ingressive rather than the egressive point that entails the resulative. Hence, punctuality occurs first, then telicity and duration. In each stage of the sequence, there is a greater chance of delay before the event takes place. In conclusion, for *will* acquisition to occur without overgeneralisation, it is necessary to indicate how future conceptualises unidirectionally from the present tense, the progressive aspect, then *going to* and, finally, *will*.

6.7.3 The Sequence of Present Perfect Aspect

As was argued with *going to*, the initial point of conceptualisation for the present perfect aspect begins with the present and extends from there. My position with the sequence of perfect conceptualisation is that it extends thus: present tense, perfect states, perfect achievements, perfect accomplishments, perfect activities, *current relevance perfect*,

347

experiential perfect, durative perfect and, finally, past tense. Unfortunately, this metonymic sequence is nowhere to be found in L2 instructional materials. Typical L2 materials start with the durative form (i.e., with *for* and *since*), although it is the last form to be conceptualised and acquired in L1. Indeed, as we saw in the meta-analysis, it is often the only perfect aspect form to be introduced in L2 teaching materials.

Of related interest, *ever* is often overgeneralised with the experiential perfect aspect (e.g., **I have ever broken my nose*). The reason it is relates to the fact that it is used only in interrogative and negative statements. However, *ever* is incorrectly associated in learner's distributional analysis of input with confirming the present possession of an experience, when in actuality its function is to link the past and the present with the subject and therefore is not required in affirmative responses (Note: *Have you broken your nose?* current relevance intact; *Have you ever broken your nose?* link with the past). In sum, if the sequence and rate of acquisition reflected the actual conceptual sequences of acquisition, once again mapping meaning-to-form, then these errors in learners' distributional analysis of input would not result in overgeneralisation.

6.7.4 Research Questions

1) Is overgeneralisation of perfect aspect related to lexical aspect or grammatical aspect?
2) Is it related to the past tense?
3) Which of the four lexical aspect types do learners use most?
4) Does the sequence of instruction alter overgeneralisation of *will* and present perfect aspect?
5) Can learners use present tense and progressive aspect for future use?

6.7.5 *Research Hypotheses*

1) The revised sequence of instruction reduces overgeneralisation of forms.

2) Reduction in overgeneralisation is related to the revised sequence being based on the sequence of conceptualisation.

3) Reduction of overgeneralisation is related to the distributional analysis of learners.

4) Basing the revised sequence on metonymical grammaticalisation processes aids acquisition of forms.

The only qualitative research hypothesis in this second study is that spoken pre/posttests help to further integrate sociocultural and cognitive factors. The research framework for the research is a quantitative analysis of spoken data, which is typically interpreted qualitatively.

6.7.6 *Method*
6.7.6.1 Participants

The participants for this study also included first-year students from Seigakuin University. Apart from being in the fall semester of 2005 rather than 2004, there were only two other differences from the participants in the previous study. The first difference between them was that this time the Control Group came from the Human Welfare Faculty (i.e., social work) rather than Euro-American Studies. This was not a moderating factor. The other difference was that this time each group, i.e., the Test and Control Group, came from B-level rather than the A-level students. Again, this was not a moderating factor because it meant the participants most likely had less exposure to the target language. Hence, less

L1/L2 transfer may have previously taken place. Both the present perfect aspect and future tense were not part of the B-level syllabus.

6.7.6.2 Materials

The materials created for this research were based on and similar to the lexical aspect and grammatical aspect taskplans found in the teaching grammar as metaphorm study. They can be found in Appendices D and F. The materials were completed in one ninety-minute class. The materials used for the Control Group can be found in *Understanding and Using English Grammar (UUEG*, Schrampfer Azar 1989), future tense (44 – 51), and present perfect aspect (28 – 35).

6.7.6.2.1 Assessment Materials

The assessment materials consisted of spoken pre/posttests for each form under investigation. They can be found in Appendices E and G.

6.7.6.3 Procedure

Both treatments followed the same procedure, although the sequence of instruction for the Test and Control groups was reversed. In the first class, both groups were recorded doing the future tense pretests (see Appendix E). In the following class, the Test Group was administered the future tense treatment (see Appendix C) and the Control Group was taught from *UUEG*. In the next class, participants were recorded doing the future tense

posttest. The following class, the same participants were recorded as they did the present perfect aspect pretest (see Appendix G). In the following class, the Test Group was administered the present perfect aspect treatment (see Appendix F) and the Control Group was taught using *UUEG*. On the final class, participants were recorded doing the present perfect aspect posttest. Thus, the complete procedure required two sets of three classes or six classes in total.

6.7.6.4 Analysis

Some L2 studies have focused on grammatical accuracy with respect to specified linguistic features (Mackey & Gass 2005). This is commonly known as suppliance-in-obligatory contexts. Analysis for the future tense spoken posttest involved first transcribing the recorded data and analysing it to determine the degree to which the participant chose *will* for future use in *non*-obligatory contexts. Each participant was shown the following list of verbs, asked to choose six verbs, and make future questions and responses using either present tense, progressive aspect, *going to* or *will*.

VERBS

States	Activities	Achievements	Accomplishments
want	*walk*	*recognize (someone)*	*eat a pizza*
enjoy	*run*	*break (something)*	*build a house*
love	*swim*	*fall*	*swim an hour*
have	*push*	*drop (something)*	*run 5 miles*
know	*play*	*win a race*	*write a novel*
need	*sleep*	*find (something)*	*grow up*
be	*study*	*lose (something)*	*make a chair*
understand	*sing*	*begin/start*	*sing a song*
ill	*jump*	*end/finish*	*drive from/to*
live	*eat*	*realize (something)*	*paint a picture*

Analysis of the present perfect spoken pre/posttest data involved analysing whether, after asking an initial question that had an obligatory present perfect aspect response, the participant replied to a follow-up question which had an obligatory past tense response with either the past tense or present perfect aspect. The transcribed data was analysed to determine the extent to which respondents overgeneralised present perfect aspect use in the obligatory past tense follow-up response. For example, the initial question may have been, *Have you graduated high school?* To which the respondent would reply, *Yes, I have.* The follow-up question then had an obligatory past tense response, for example, *When did you graduate?* If the respondent replied with, *I graduated last year*, then it was not counted as an instance of overgeneralisation. However, if the response was something like, *I have graduated last year*, it was counted as overgeneralisation. The main measurement of analysis for this investigation was a paired-samples t-test of the means of both groups for the pre/posttest scores.

6.7.7 Future Results

The data indicate a significant reduction in the use of *will* in the Test Group, $t(35) = -3.37$, $p < .01$. Effect size: 0.75 (Cohen's d). Chart 9 shows the means of each of the two groups' posttest scores, indicating the use of *will* for future (the total mean is 6.0). After the treatments, each group responded to six questions using the four forms of the future tense.

Chart 9. Means of the Test and Control Groups for *will* Use
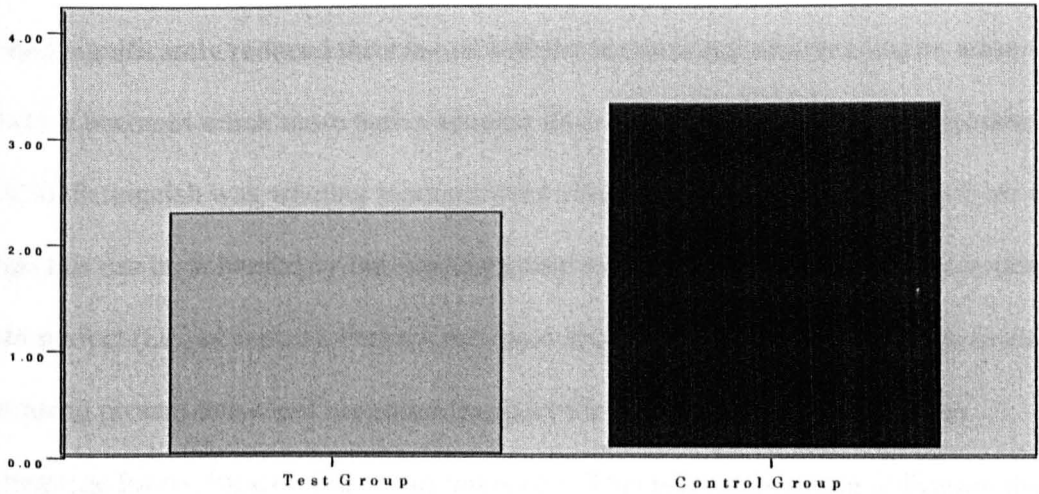
The Test Group also showed significant increase in present tense and progressive aspect use for future tense. Chart 10 shows the results for each group according to whether they used present tense, progressive aspect, *going to*, or *will* to express future tense. The Test Group has a much more even distribution of use among the four choices, whereas the Control Group relies heavily on or continues to overgeneralise, *will*.

Chart 10. Test Group and Control Group Use of Future
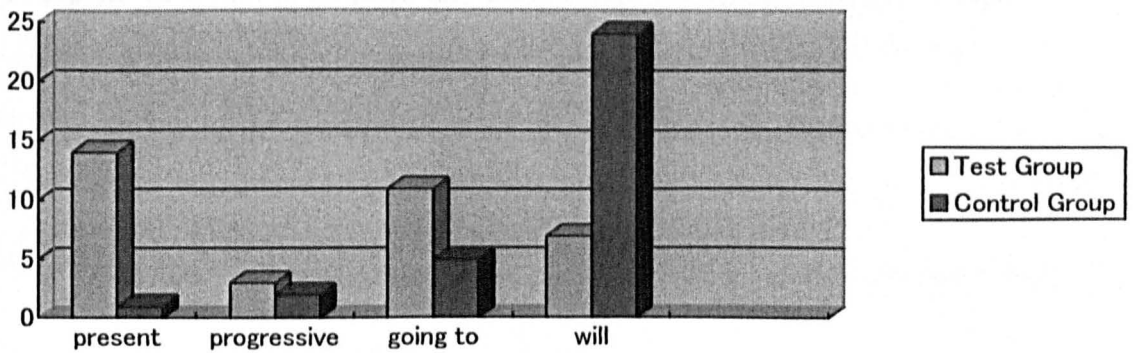
Thus, because the Test Group was introduced to the other forms of present tense prior to *will*, they significantly reduced their use of *will* for future tense, and their future tense production becomes much more native speaker like. One factor that these results were unable to distinguish was whether learners were able to separate use of *going to* from *will*. Perhaps this can be achieved by introducing *going to* in a sequential way similar to that of present perfect (i.e., as aspect). Perhaps the most important observation from this research is that using present tense and progressive aspect for future is also very similar to interlanguage forms, for example, *I run tomorrow*. This is another strong indication that present tense and progressive aspect use for future tense more closely resembles the future conceptualisation and grammaticalisation processes.

6.7.8 Present Perfect Results

These results again clearly indicate a significant reduction in the overgeneralisation of present perfect aspect use, $t(26) = -2.75$, $p. < .05$. Posttest Effect Size: 1.34 (Cohen's d). Chart 11 depicts the means of the pre/posttests scores for the Test and Control Groups.

Chart 11. Means (total 6.0) of the Pre/Posttests Scores for the Test and Control Groups
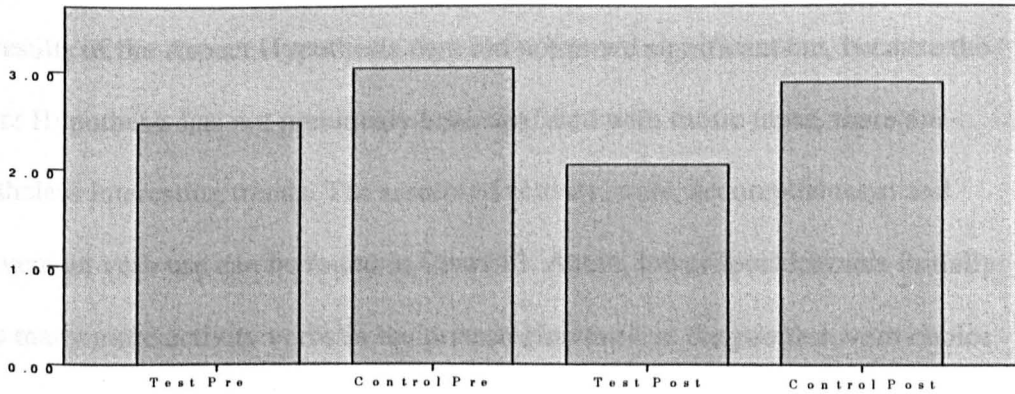
Chart 12 further delineates present perfect aspect use between correct usage, incorrect

usage and overgeneralisation. The Control Group actually saw increases in

Chart 12. Incorrect Usage, Correct Usage and Overgeneralisation
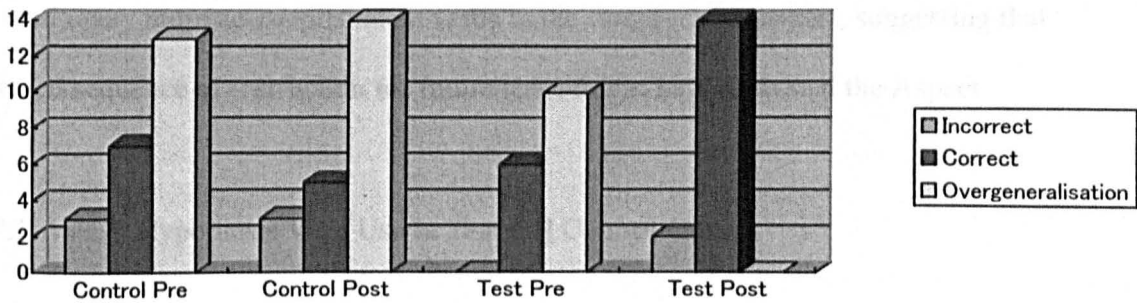
overgeneralisation and decreases in correct usage. The Test Group, on the other hand,

saw significant improvement in correct usage as well as complete reduction in

overgeneralisation of the form. Thus, by introducing the present perfect aspect prior to

the past tense, learners were able to make correct distributional analytical hypotheses and

not overgeneralise its use.

355

6.7.9 *Aspect Hypothesis Results*

The results of the Aspect Hypothesis data did not prove significant but, because the Aspect Hypothesis has not previously been analysed with future tense, there are nonetheless interesting trends. The results of activity, state, accomplishment and achievement verb use can be found in Chart 13. Again, lower-level learners initially chose many more activity verbs in the pretest. However, in the posttest, verb choice dispersed to agree much more with the Aspect Hypothesis.

The activity verb, *play*, was used eleven times. Of course, learners may be most familiar with the verb, play, but it is also a prototypical activity and can be an accomplishment. For example, *play basketball* remains an activity; however, *play a basketball game* (i.e., with an inherent endpoint) becomes an accomplishment. The Test Group used many more accomplishment verbs in the future tense posttest, suggesting that the reversed sequence of instruction for future tense might have activated the Aspect

Chart 13. Aspect Hypothesis Verb Use in Test and Control Groups
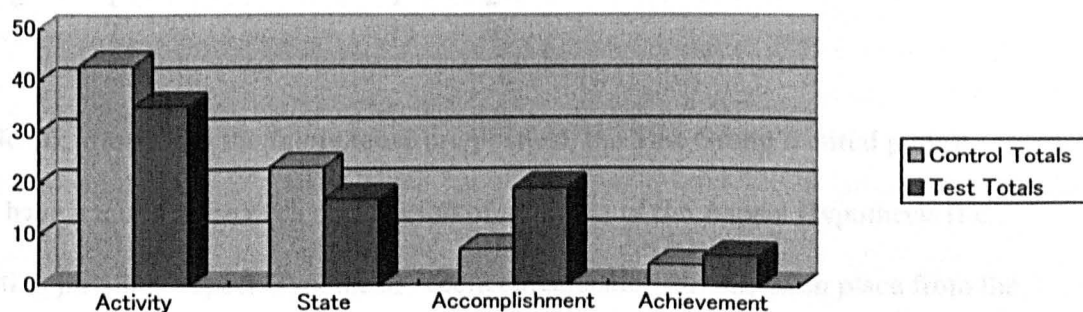
Hypothesis in the Test Group. This suggests that the Aspect Hypothesis is not restricted to just aspectual uses but affects tense as well. The Control Group continued to use

activity verbs in both pre- and posttests. It is important to keep in mind that verb choice was not obligatory and participants were free to make their verb choices. With the Test Group at least, there was a shift in choice from activity verbs to accomplishments (i.e., activity verbs with objects).

Table 15. Future Tense Aspect Hypothesis Use

	Test		Control	
	Pre	Post	Pre	Post
State	3	1	7	2
Acc	1	10	1	3
Ach	3	0	0	1
Act	11	1	10	11

Table 16. Present Perfect Aspect Hypothesis Use

	Test		Control	
	Pre	Post	Pre	Post
State	8	5	6	8
Acc	2	8	3	2
Ach	2	1	1	2
Act	7	7	11	9

In Table 16, after doing the future tense pre/posttest, the Test Group's initial pretest results have a much more even distribution of all forms of the Aspect Hypothesis (i.e., suggesting possible Aspect Hypothesis reconceptualisation having taken place from the sequence of instruction) and then once again shifts to more accomplishment verb use in the posttest. The Control Group, on the other hand, shows a lower level of Aspect

Hypothesis development in that it continues to overuse activity verbs in the pretest but then begins to achieve a more even distribution with in the posttest.

Though not significant, these figures are some fairly strong indicators. That is, errors with present perfect aspect might stem from activity verb use so activity verbs should be restricted to progressive aspect and habitual use. Along with the sequences of instruction I have suggested, perhaps the best way to incorporate the Aspect Hypothesis into the teaching of tense-aspect is activity verbs with the habitual and progressive aspect and accomplishment and achievements with present perfect aspect. Learners seem to naturally develop an understanding of the resultative from transitive state, accomplishment and achievement verb use. Thus, they should be used when introducing the present perfect aspect and activity verbs should be introduced with progressive and then with present perfect aspect only once the student has mastered perfect aspect use with accomplishment and achievement verbs and there is no risk of overgeneralisation to the progressive.

Perhaps the best sequence of instruction for resultative acquisition is to start with transitive state verbs, then achievements and, finally, accomplishments. The learner may then have conceptualised a domain for aspect (i.e., separate from present and past) and may then be able to metonymically map the conceptualisation to the correct morphological form (i.e., the auxiliary and the past participle). After the resultative conceptualisation and morphology acquisition have taken place, introduce grammatical aspect in the form of current relevance and experiential and contrast it with the past tense using temporal adverbials. Once learners are aware that perfect aspect morphology is mainly related to the resultative and temporal adverbials are used specifically for current

relevance and the experiential, they will no longer associate it with, and overgeneralise it for, the past tense.

Finally, when analysing my research, I was occasionally unsure if the student response was an activity or accomplishment (i.e., telic), I found this problem could be solved with one of Dowty's (1979) Aspect Hypothesis rules about placing them in the past tense:

She is studying English = *She studied English* (entailment: activity)
She is painting a picture ≠ *She painted a picture* (non-entailment: accomplishment)

6.7.10 Discussion

In response to the research questions and hypotheses for this study, it appears that overgeneralisation of perfect aspect is related to a lack of an understanding that lexical aspect (i.e., resultative) is its prototypical form as well as an inverse relationship between grammatical aspect, temporal adverbials and the past tense. Because learners do not have a clear conception of the resultative and the verbs it mainly occurs with, they are unaware it should be used with present perfect aspect and not the past tense. Then, because of the saliency of the experiential and durative perfects, each is overgeneralised for past tense. Additionally, perfect aspect is the first to emerge in L1 development as well as in the grammaticalisation of languages. Therefore, these reasons merit present perfect aspect's introduction to instruction prior to the past tense.

By making the specific uses of present perfect aspect explicit through the metonymic sequence of conceptualisation, overgeneralisation can be reduced. Another factor to control is perfect aspect with activity verbs. The Aspect Hypothesis points out learners do not overgeneralise progressive aspect from activity verbs but perhaps the Aspect Hypothesis should be reanalysed for how activity verbs affect correct perfect aspect use. Regarding future tense, the reversed sequence significantly reduced overgeneralisation of *will* and learners did not appear to have any interference problems from using the present tense and progressive aspect for future.

One quite valuable observation I made when piloting the taskplans was that the terms *activity*, *state*, *accomplishment* and *achievement* were too difficult for learners and I respectively revised them to *dynamic*, *no change*, *complete* and *change*. Perhaps the reason the present prefect research was significant was because I was able to define the different perfect aspects separate from the present and past tense. In this way, learners were able to make a metonymical mapping between the schemata and the periphrasis. If this was done with *going to* as well as all other tense-aspect forms, it might meet with the same success; unfortunately, *going to* is presently taught only in contrast to *will*.

The remainder of this discussion is in three parts: (1) a corpus analysis of tense-aspect in the BNC, (2) the variables encountered in the research, and (3) how the study relates to research ethics.

6.7.10.1 Corpus Analysis of *Going to* and Perfect

While analysing the data in this study, it occurred to me that if *going to* occurs with certain verbs and *will* occurs with other verbs then the inherent semantics of each might be further disambiguated. Hence, I decided to pursue this research-based observation by analysing the BNC for *going to* and *will* as well as *have* with a participle (i.e., the present perfect aspect). The *LGSWE* (Biber et al. 1999) points out that *going to* is perhaps non-existent in academic prose and it is a casual form. This fact, however, did not seem to appear in the results of the corpus analysis. Please refer to Table 17 for the results of the top-twenty collocations for verbs with *have*, *going to*, and *will*.

Table 17. Top-Twenty Lexical Verbs in the BNC not including (*have, be* or *do*)

	have	*going to*	*will*
1.	said	get	take
2.	agreed	say	make
3.	made	make	need
4.	seen	happen	come
5.	come	take	get
6.	taken	tell	continue
7.	found	see	give
8.	gone	work	find
9.	given	give	help
10.	thought	die	become
11.	used	put	see
12.	known	come	pay
13.	heard	like	provide
14.	lost	look	remain
15.	put	find	end
16.	left	ask	run
17.	changed	use	want
18.	tried	start	look
19.	told	change	mean
20.	written	need	cost

Of the top-twenty verbs, all three forms (i.e., *have, going to* and *will)* had six verbs in common: *make, see, come, take, find* and *give.*

Table 18. Verbs Occurring in the Same Pairs of Forms

have/going to	*going to/will*	*have/will*
make	make	make
see	see	see
come	come	come
take	take	take
find	find	find
give	give	give
*say	*look	
*use	*need	
*put		
*change		
*tell		

The verb *look* occurs with *will* because it is an activity but *see* is a state (Dowty 1979) and it occurs with *going to*. Of particular note, *have/going to* has three more collocations in common than *will/going to*. Also, all of the *have/will* matches are shared by both *have/going to* and *will/going to*. This suggests that *have* and *going to* share much more in common semantically (i.e., aspectually) than *will* and *going to* (i.e., tense). I also wanted to analyse the top twenty past tense verbs but because of irregular past tense forms was not able to do so. Another important observation is that the top six words (i.e., *make, find, give, take, see* and *come*) are mostly accomplishments or achievements. The remaining verbs in each the top-twenty are in Table 19.

Table 19. Verbs Occurring with Only One Form

Will	Going to	Have
get	get	agree
continue	happen	go
help	work	think
become	die	know
pay	like	hear
provide	look	lose
remain	ask	leave
end	start	try
run	need	write
want		
mean		
cost		

Of the remaining verbs, *will* had the most activity verbs, suggesting that activity verbs are more closely related to tense. *Will* also had aspectual verbs of duration (i.e., *continue* and *remain*). *Going to* leans towards accomplishment and state verb use similar to grammatical aspect. *Have* seems to include states of perception.

6.7.10.2 Moderating and Intervening Variables

Moderator variables are characteristics of individuals or of treatment variables that may result in an interaction between an independent variable and other variables (Mackey & Gass 2005) and in the context of this study previous exposure to the future tense and present perfect aspect was a moderating variable. Intervening variables are similar to moderator variables, but they are not included in the original study either because the researcher has not considered the possibility of their effect or because they cannot be identified in a precise way (Mackey & Gass 2005).

Initially, I was unaware of why participants avoided answering questions during the study. However, analysis of the spoken data indicated that most cases of avoidance were in the Control Group and this may have been the result of doing two consecutive pre-/posttest studies, i.e., in the *second* pre-/posttest study, participants were aware that if they avoided answering during the pretest, they could then do their best in the posttest. Perhaps it was a mistake to use the same participants for both studies but the reason I did so was to study how the Aspect Hypothesis was used with future tense and present perfect aspect. Avoidance, then, is really the only interfering factor in the study. Finally, if I had not allowed avoidance but had made full sentence responses obligatory, more evidence of reduction of overgeneralisation might have been found. On the other hand, not requiring full sentence answers for the follow-up question was for the most part more native-speaker-like.

6.7.10.3 Research Ethics

Although participants did not sign a formal letter of consent, they were asked in their L1 prior to doing the research if they would be willing to participate in my doctoral research project. For the most part, they reacted positively and let me know they would try their best. Of course, learners' participation had no relation to the course requirement or credit; however, because it occurred during class time, I did let them know that their participation, as a class, would help their scores should we not be able to complete the course syllabus. As it turns out, the Test Group actually scored higher on the SEP posttest than the Control Group, who had studied the course syllabus.

Regarding recording their interaction, all participants are anonymous through the use of pseudonyms. At the time, I had not considered publishing the results outside of my thesis and therefore written consent was not sought. Nonetheless, participants had agreed to the research and therefore would most likely not have any problem with publication of the results. Prior to doing the research, it was not explained to participants whether they were in a control or test group. After completing the research, it was explained to them which group they had been in. Although learners can benefit from the experience of participating in research, it can also make the classroom seem very teacher-centered or for the teacher's benefit, when of course the reason for being there is to benefit the students.

The Hawthorne Effect is quite well known in the field of research. It is the positive impact that may occur simply because participants know that they are part of an experiment and therefore participants may also try to please the researcher by giving the answers or responses they think are expected. This is also known as the *Halo Effect* (Mackey & Gass 2005) and is similar to the increased level of development found in the ZPD. In contrast, in this research I observed the opposite effect with the Control Group. As I mentioned in the analysis of the pre-posttests, participants in the Control Group avoided responding in the pretest and this could have been because they were aware that they were not benefiting from their participation in the study. I had made the decision not to inform the participants about which group they had been assigned, but informing them may have been a better decision. Perhaps along with the Halo Effect in the Test Group, there should also be an opposite term for the effect participants may experience in the Control Group, i.e., the Avoidance Reaction.

This effect made me question the social need and beneficial impact of my research (Ortega 2005). Hagtvet & Wold (2003) make clear that a researcher's personal history, concerns, and agendas are brought into the focus and in fact co-author research. I gained a greater awareness of the ethical challenges of enquiring into my own practice (Arnold 2005) and my responsibility as a researcher and to those who participate in the study. Carrying out a systematic and thorough enquiry requires a great deal of experience and expertise, requiring an understanding of research design, research methods, analysis of data, and managing change.

6.7.10.4 Limitations of the Study

In general, this second study attempted to overcome many of the limitations of the first. However, one area where it failed to do so was with attempting to use the Discourse Hypothesis with the Aspect Hypothesis. The Discourse Hypothesis taskplan in this research was not successful. It attempted to have participants choose tense-aspect according to the backgrounding and foregrounding of events in the passage but, because it required the learner to choose a verb and then assign tense-aspect to it, this proved too difficult for the participants to achieve accurate tense-aspect use. I have since revised the taskplan by providing the verbs and only asking learners to fill in the discourse tense-aspect. Participants were then much more able to choose the correct tense-aspect.

On another note, because of the brevity of the treatment it was not possible to observe a significant distinction in use of *will* and *going to*. Finally, this study stopped just short of studying the overgeneralisation of *for* and *since* and the durative present

perfect aspect. Had it done so, perhaps overgeneralisation and the reduction of it would also have been observed.

6.7.10.5 Further Research

Further research is needed into the sequence of instruction for the Aspect Hypothesis as well as relating it to the instruction of past participle morphology. Furthermore, the relationship between metaphor (i.e., whole-to-part) and metonymy (i.e., part-to-whole) needs to be further disambiguated in grammar teaching. There should be an initial holistic or metaphorical taskplan between the schemata and the form and then an analytical or metonymic taskplan linking the schemata, the morphology and the sequence of conceptualisation of the form. For example, there are three possible participials, i.e., *-ed*, *-en*, and irregular past tense, and the differences between them and the verbs each occurs with need to be exemplified metonymically to enhance correct usage.

How the semantics of the verbs affect argument structure (and vice versa) is also a potential area for further research. For example, further research needs to be done to disambiguate how count/non-count noun objects change the semantics of the verb. It is almost impossible to study just one grammatical form in isolation, and we may learn much more about how to teach these forms by trying to research how they interact in dialogue. Finally, future research needs to investigate how presentation of the sequence of forms in the method they may be conceptualised and grammaticalised helps to correct any errors in the distributional analysis of the learner.

7.0 Conclusion

The meaning of time has certainly been influential to the development of our concept system and how we express temporality in language. The use of tense-aspect periphrasis creates shared joint-attention discourse frames between interlocutors. This dissertation has argued that instruction in *conceptual complexity*, rather than grammar teaching, per se, results in acquisition and production of conventionalised language (i.e., grammar). In an attempt to sum up the contents of this study and how it might have changed or solidified my perspective towards language and how to teach it, three points come to mind.

One is that sociocognitive approaches to language use and acquisition have been accepted as well founded. It is hoped that the SCM theory set out in this thesis consistently applied metaphor, metonymy and schemata to integrate cognitive and sociocultural theories and took initial steps towards developing a dialogic grammar. I am aware that the quantitative results found in the initial research study were biased towards cognitive factors as were the qualitative results towards sociocultural ones, and hence a lack of sociocognitive integration could also be a valid critique of that research. However, it is hoped that the follow-up research, which uses spoken data from the pre/posttest, helps to address and rectify this critique as well as further integrate sociocultural qualitative taskplans and cognitive quantitative taskprocesses with the consistent use of more psycholinguistic means of evaluation.

The next point in mind is related to the avoidance of reference to any unobservable variable (i.e., psycholinguistic factors), for example, researching only linguistic rather than conceptual or unobservable metaphor. Admittedly, if one endeavors to research conceptual metaphor, it creates a potentially dangerous area filled with

operationalised constructs and the theoretically unknown. Nonetheless, the teaching grammar as metaphorm research in this thesis managed to achieve significant accumulated results from investigating the relationship between what was mainly conceptual metaphor and grammar. Therefore, the fact a variable is unobservable does not necessarily render it un-researchable. Indeed, many things in our surroundings are unobservable but we still have names and developed concepts for them (e.g., *time*).

In fact, we most often use words borrowed from our environment to describe unobservable mental processes (e.g., *domain*). This use of language to represent the unobservable certainly represents a challenge to anyone who undertakes the task of language instruction. That said, because of Vygotskian sociocultural theory and the ZPD, it may well be in language-teaching classrooms that we can observe "unobservable" sociocognitive concept development processes through student interaction, for example, in joint-attention frames. It may bring not only a better understanding of cognition and language but also a better understanding of the last point in mind, that is, an understanding that theory, teaching, researching and materials development all go hand-in-hand.

My final contention in this thesis is that there still remains a large division between the way language is being taught, the way SLA research suggests it is acquired, and how SLA suggests it should be applied. In an effort to shorten the breadth of these divisions, I would like to offer the following 10 suggestions for L2 tense-aspect teaching (many of which have been incorporated into the metaphorm taskplans).

1) Prior to teaching tense, begin teaching base-form verbs with the State-Activity schemata distinction. Teach progressive (unrealised state) and habituals at the same time. Both use activity verbs.

2) Introduce future tense using progressive and present as activities then with *going to* as aspect– thereby possibly reducing overgeneralisation of the use of *will* for future (especially with languages that do not have a future tense).

3) Teach lexical aspect - states as realised accomplishment and achievement verbs (i.e., telic and punctual).

4) Teach grammatical aspect as current relevance (i.e., meaning making) – present perfect then teach past tense as non-relevance, thereby possibly reducing overgeneralisation of perfect for past.

5) Teach the tentative use of past tense through metaphorical extension (i.e., DISTANCE IS POLITENESS) as a pragmatic softener (i.e., politeness). In this way, the metaphor or cognitive schema becomes the grammatical "rule."

6) Do not teach regular and irregular verbs as such. "Irregular" verbs are mostly achievement, accomplishment, or telic activity transitive verbs so provide lists of verbs for each category to raise awareness of the different kinds of morphological inflection.

8) Teach how definite or indefinite objects change the interpretation of punctual and durative perfect aspects.

9) Develop the metonymic relationship between the semantics of verbs, the sequence of auxiliaries and argument structure.

10) Develop and disambiguate the relationship between the Aspect Hypothesis and the Discourse Hypothesis by using the past perfect and the present perfect aspect (e.g., in relative clauses) as well as sequences of understanding.

Further research into these areas will determine whether these suggestions are well founded or not. If they are, then they may provide more reason to challenge the idea that the sequence of acquisition of language is unalterable and that only rarely can the rate of acquisition be significantly increased. Once the sequence is correctly based on the sequence of conceptualisation, it may no longer be alterable. Discovering these true

370

sequences is the challenge presented by cognition and the investigation of the unobservable.

If these points were summarised into as concise a tense-aspect sequence of conceptualisation as possible, then, within the spatio-temporal joint-attention frame, there are five more tense-aspect joint-attention frames:

1) Ego-centered – the Aspect Hypothesis
   Event-centered – the Discourse Hypothesis
2) States/Activity Verbs
3) Punctuality | Aspectual boundedness:
   Telicity | the mass/count noun distinction
   Duration |
4) Ahead/Behind | Tense:
   TIME IS SPACE | past, present and future
   TIME IS A MOVING OBJECT |
5) TIME IS CYCLES – sociocultural temporal adverbials

Needless to say, I am of the opinion that this sequence should be the one used in L2-instruction materials. In that way, SLA research would then be applied in the way it suggests L2 is acquired.

In conclusion, as we saw in the results of the teachers' questionnaire, many teachers relied heavily on timelines in their tense-aspect teaching methodology. Because of the findings presented in this thesis, if those teachers now find reason to reevaluate or change the way they presently teach tense-aspect, then this thesis has served its purpose. Perhaps teachers will no longer rely as heavily on timelines and begin to develop their teaching methodologies in terms of metaphor, metonymy and cognitive schemata. Perhaps they will teach aspect as boundedness and in terms of the literal temporal

functions of telicity, punctuality and duration. They may teach past, present and future tense using metaphors such as TIME IS SPACE or TIME IS A MOVING OBJECT. Finally, to reveal the cyclic sociocultural nature of time, temporal adverbs could be taught with the metaphor TIME IS CYCLES. In sum, metaphor can only help to enhance the description of grammar.

References

Aljaafreh, A. & J. P. Lantolf. 1994. Negative Feedback as Regulation and Second Language Learning in the Zone of Proximal Development. *The Modern Language Journal*. 78/4: 465 - 483.

Andersen, R.W. & Shirai, Y. 1994. Discourse Motivations for some Cognitive Acquisition Principles. *Studies in Second Language Acquisition*. 16: 133-156.

Andersen, R.W. & Shirai, Y. 1996. The Primacy of Aspect in First and Second Language Acquisition: The Pidgin-Creole Connection. In W.C. Ritchie & T.J. Bhatia (Eds), *Handbook of Second Language Acquisition*. San Diego, Cal: Academic Press.

Anton, M. 1999. The Discourse of a Learner-Centered Classroom: Sociocultural Perspectives on Teacher-Learner Interaction in the Second-Language Classroom. *The Modern Language Journal*. 83/3: 303 – 318.

Aristotle. 1933. *The Metaphysics, I-X*. Trans. Hugh Treddenick. London: Heinemann, and Cambridge, Mass.: Harvard University Press.

Arnold, E. 2005. Supporting Teacher Enquiry in Schools. *IATEFL Research Newsletter*. 16: 11 – 15.

Aston, G. & Burnard, L. 1998. *The BNC Handbook*. Edinburgh: Edinburgh University Press.

Bakhtin, M.M. 1981. *The Dialogic Imagination*. Austin, TX.: University of Austin Press.

Bakhtin, M.M. 1986. *Speech Genres & Other Late Essays*. Austin, TX.: University of Austin Press.

Barber, C. 1993. *The English Language: A Historical Introduction*. Cambridge: Cambridge University Press.

Bardovi-Harlig, K. 2000a. Tense and Aspect in Second Language Acquisition: Form,
Meaning and Use. *Language Learning.* Vol 50: Supp 1.

Bardovi-Harlig, K. 2000b. *Tense and Aspect in Second Language Acquisition: Form,
Meaning, and Use.* Oxford: Blackwell Publishers, Ltd.

Bardovi-Harlig, K. 2004. The Emergence of Grammaticalized Future Expression in
Longitudinal Production Data. In B. VanPatten et al. (Eds),

Barlow, M. & Kemmer, S. 2000. *Usage Based Models of Language.* Stanford, Cal.: CSLI
Publications.

Behrens, H. 2001. Development of Time Concepts and Verb Tense. *Language
Acquisition and Conceptual Development.* Cambridge: Cambridge University Press.

Biber, D. et al. 1999. *Longman Grammar of Spoken and Written English.* Essex: Addison
Wesley Longman, Inc.

Binnick, R.I. 1991. *Time and the Verb A Guide to Tense and Aspect.* Oxford: Oxford
University Press.

Blanck, G. 1990. Vygotsky: The Man and His Cause. In L. Moll (Ed),

Bloomfield, L. 1933. *Language.* London: Allen & Unwin.

Bloor, T. & Bloor, M. 1995. *The Functional Analysis of English.* London: Arnold.

Bresnan, J. & Kaplan, R.M. 1982. Introduction: Grammars as Mental Representations of
Language. In J. Bresnan (Ed), *The Mental Representation of Grammatical Relations.*
Cambridge, Mass.: The MIT Press.

Bresnan, J. 2001. *Lexical-Functional Syntax.* Oxford: Blackwell Publishing.

Brinton, L. 1988. *The Development of English Aspectual Systems.* Cambridge:
Cambridge University Press.

Broderick, J.D. 1975. *Modern English Linguistics: A Structural and Transformational Grammar.* New York: Crowell.

Bybee, J., Perkins, R. & Pagliuca, W. 1994. *The Evolution of Grammar.* Chicago, IL.: University of Chicago Press.

Cameron, L. & Low, G. (Eds) 1999a. *Researching and Applying Metaphor.* Cambridge: Cambridge University Press.

Cameron, L. & Low, G. 1999b. Metaphor. *Language Teacher.* 32: 77-96.

Cameron, L. 2003. *Metaphor in Educational Discourse.* London: Continuum.

Carey, K. 1994. The Grammaticalization of Perfect in Old English. In W. Pagliuca (Ed), *Perspectives on Grammaticalization.* Amsterdam: John Benjamins.

Carey, K. 1996. From Resultativity to Current Relevance: Evidence from the History of English and Modern Castilian Spanish. In A. Goldberg (Ed), *Conceptual Structure, Discourse and Language.* Stanford, Cal.: CSLI Publications.

Carter, R. & McCarthy, M. 1997. *Exploring Spoken English.* Cambridge: Cambridge University Press.

Carter, R. Hughes, R. & McCarthy, M. 2000. *Exploring Grammar in Context.* Cambridge: Cambridge University Press.

Carter, R. & McCarthy, M. 2004. Talking, Creating: Interactional Language, Creativity, and Context. *Applied Linguistics.* 25/1: 62 – 88.

Celik, M. 2003. Teaching Vocabulary through Code-mixing. *ELT Journal.* 57/4: 361-369.

Chomsky, N. 1957. *Syntactic Structures.* Berlin: Mouton & Co.

Chomsky, N. 1959. Verbal Behavior. *Language.* 35: 26 – 58.

Chomsky, N. 1965. *Aspects of the Theory of Syntax.* Cambridge, Mass.: MIT Press.

Chomsky, N. & Halle, M. 1965. Some Controversial Questions in Phonological Theory. *Journal of Linguistics.* 1: 97 – 138.

Clancy, P. 1985. The Acquisition of Japanese. In D. Slobin (Ed),

Collins Cobuild English Grammar. 1990. Glasgow: HarperCollins Publishers.

Comrie, B. 1976. *Aspect.* Cambridge: Cambridge University Press.

Comrie, B. 1985. *Tense.* Cambridge: Cambridge University Press.

Cook, G. 2000. *Language Play, Language Learning.* Oxford: Oxford University Press.

Cook, G. 2001. 'The Philosopher Pulled the Lower Jaw of the Hen.' Ludicrous Invented Sentences in Language Teaching. *Applied Linguistics.* 22/3: 366-387.

Creswell, J.W. 2003. *Research Design Qualitative, Quantitative and Mixed Methods Approaches.* Thousand Oaks, Cal: Sage Publications.

Croft, W. 2000. *Verbs: Aspect and Argument Structure.* Under contract Oxford University Press.

Croft, W. 2001. *Radical Construction Grammar.* Oxford: Oxford University Press.

Croft, W. & Cruse, D.A. 2004. *Cognitive Linguistics.* Cambridge: Cambridge University Press.

Crystal, D. 1985. *A Dictionary of Linguistics and Phonetics.* Oxford: Blackwell.

Crystal, D. 1998. *Language Play.* London: Penguin.

Dalrymple, M. 2001. *Syntax and Semantics: Lexical Functional Grammar.* San Diego, Cal.: Academic Press.

De Guerrero, M.M. & Villamil, O.S. 1994. Social-Cognitive Dimensions of Interaction in L2 Peer Revision. *The Modern Language Journal.* 78/4: 484 – 496.

De Saussure, F. 1916/1972. *Course in General Linguistics.* London: Duckworth.

Dirven, R. & Porings, R. (Eds) 2003. *Metaphor and Metonymy in Comparison and Contrast.* Berlin: Mouton de Gruyter.

Dörnyei, Z. 2001. *Motivational Strategies in the Language Classroom*. Cambridge: Cambridge University Press.

Dörnyei, Z. 2003. *Questionnaires in Second Language Research*. Mahwah, NJ: Lawrence Erlbaum Assoc.

Doughty, C. & Williams, J. 1998. *Focus on Form in Classroom Second Language Acquisition.* Cambridge: Cambridge University Press.

Doughty, C. & Long, M. (Eds) 2003. *The Handbook of Second Language Acquisition.* Oxford: Blackwell Publishers.

Doughty, C. 2004. Effects of Instruction on Learning a Second Language: A Critique of Instructed Second Language Acquisition. In B. VanPatten et al. (Eds),

Dowty, D. R. 1979. *Word Meaning and Montague Grammar*. Norwell, Mass.: Kluwer Academic.

Dowty, D.R. 1991. Thematic Proto-Roles and Argument Selection. *Language*. 67/3: 547 – 619.

Duff. P.A. 2000. Repetition in Foreign Language Classroom Interaction. In J.K. Hall & L. S. Verplaetse (Eds), *Second and Foreign Language Learning Through Classroom Interaction*. Mahwah, NJ.: Lawrence Erlbaum.

Ellis, N. 2003. Constructions, Chunking and Connectionism: The Emergence of Second Language Structure. In C. Doughty and M. Long (Eds),

Ellis, R. 1994. *The Study of Second Language Acquisition.* Oxford: Oxford University Press.

Ellis, R. & Gaies, S. 1999. *Impact Grammar.* Hong Kong: Longman.

Ellis, R. & Barkhuizen, G. 2005. *Analysing Learner Language.* Oxford: Oxford University Press.

Elman, J.L. et al. 2001. *Rethinking Innateness: A Connectionist Perspective on Development.* Cambridge, Mass.: The MIT Press.

Evans, V. 2005. *The Structure of Time.* Amsterdam: John Benjamins.

Firth, J.R. 1964. *The Tongues of Men and Speech.* London: Oxford University Press.

Frawley, W. & Lantolf, J.P. 1985. Second Language Discourse: A Vygotskyan Perspective. *Applied Linguistics.* 6/1: 19 – 44.

Gethin, A. 1999. *Language and Thought.* Exeter: England.

Goldberg, A. 1995. *Constructions: A Construction Grammar Approach to Argument Structure.* Chicago, IL.: The University of Chicago Press.

Goodman, Y. & Goodman, K. 1990. Vygotsky in a Whole-language Perspective. In L. Moll (Ed)

Grabe, W. 2005. Perspectives in Applied Linguistics: A North American View. In S. Gass & S. Makoni (Eds), *AILA Review.* 17: 105 – 132.

Granger, S., Hung, J. & Petch-Tyson, S. 2002. *Computer Learner Corpora, Second Language Acquisition and Foreign Language Teaching.* Amsterdam: John Benjamins Publishing Company.

Grice, H.P. 1975. Logic and Conversation. In P. Cole and J. Morgan (Eds), *Syntax and semantics.* (vol. 3): *Speech Acts.* New York: Academic Press.

Hagtvet, B.E. & Wold, A.H. 2003. On the Dialogical Basis of Meaning: Inquiries into Ragnar Rommetveit's Writings on Language, Thought and Communication. *Mind, Culture, and Activity: An International Journal*. 10/3: 186 – 204.

Halliday, M.A.K. 1994. *An Introduction to Functional Grammar*. London: Edward Arnold.

Harre, R. & Gillett, G. 1994. *The Discursive Mind*. Thousand Oaks, Cal.: Sage Publications.

Heine, B. 1993. *Auxiliaries Cognitive Forces and Grammaticalization*. Oxford: Oxford University Press.

Heine, B. 1997. *Cognitive Foundations of Grammar*. Oxford: Oxford University Press.

Hickmann, M. 1995. Discourse Organization and the Development of Reference to Person, Space and Time. In P. Fletcher & B. MacWhinney (Eds), *The Handbook of Child Language*. Cambridge, Mass.: Blackwell.

Hill, K. 2003a. Quantum Linguistics. *ELT Journal*. 57/3:175–178.

Hill, K. 2003b. Quantum Leaps in Language Learning. In M. Swanson and K. Hill (Eds), *JALT2003 Conference Proceedings*. Tokyo: JALT. 574 – 582.

Hill, K. 2004. The Socio-Cognitive Method. Paper presented at AAAL 2004 Conference, Portland, Oregon.

Hill, K. 2005. Teaching Grammar as Metaphorm. Paper presented at AILA/AAAL 2005 Conference, Madison, Wisconsin.

Holliday, A. 2002. *Doing and Writing Qualitative Research*. Thousand Oaks, Cal.: Sage Publications.

Holme, R. 2004. *Mind, Metaphor and Language Teaching*. New York: Palgrave Macmillan.

Hopper, P. 1979. Aspect and Foregrounding in Discourse. In T. Givon (Ed), *Syntax and Semantics: Discourse and Syntax*. New York: Academic Press.

Hopper, P. 1982. *Tense Aspect Between Semantics and Pragmatics*. Amsterdam: John Benjamins Publishing Company.

Hopper, P. & Traugott, E.C. 1993. *Grammaticalization*. Cambridge: Cambridge University Press.

Housen, A. 2002a. A Corpus-based Study of the L2-Acquisition of the English Verb System. In S. Granger, J. Hung & S. Petch-Tyson (Eds),

Housen, A. 2002b. The Development of Tense-Aspect in English as a Second Language and the Variable Influence of Inherent Aspect. In R. Salaberry & Y. Shirai (Eds),

Huddleston, R. 1976. *Introduction to the Grammar of English*. Cambridge: Cambridge University Press.

Huddleston, R. & Pullum, G.K. 2002. *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.

Humboldt, W. von. (1836/1988). *On Language: The Diversity of Human Language-Structure and its Influence on the Mental Development of Mankind*. Cambridge: Cambridge University Press.

Jakobson, R. 1990. *On Language*. Cambridge, Mass.: Harvard University Press.

Jakobson, R. 2003. The Metaphoric and Metonymic Poles. In (Eds) R. Dirven & R. Porings,

Johnson, M. 2004. *A Philosophy of Second Language Acquisition.* New Haven: Yale University Press.

Kenny, A. 1963. *Actions, Emotions and Will.* New York: Humanities Press.

Kinginger, C. 2002. Defining the Zone of Proximal Development in US Foreign Language Education. *Applied Linguistics.* 23/2: 240-261.

Klausenburger, J. 2000. *Grammaticalization.* Amsterdam: John Benjamins.

Klein, W. 1994. *Time in Language.* London: Routledge.

Kovecses, Z. & Szabo, P. 1996. Idioms: A View from Cognitive Semantics. *Applied Linguistics.* 17/3: 326 – 355.

Kozulin, A. 1998. *Psychological Tools: A Sociocultural Approach to Education.* Cambridge, Mass.: Harvard University Press.

Kramsch, C. 1995. The Applied Linguist and Language Teacher: Can They Talk to Each Other? In G. Cook and B. Seidlhofer (Eds), *Principle and Practice in Applied Linguistics.* New York: Oxford University Press.

Kumashiro, T. 2000. *The Conceptual Basis of Grammar: A Cognitive Approach to Japanese Clausal Structure.* Unpublished Doctoral Dissertation. Univ. of California, San Diego.

Labov, W. 1972. *Sociolinguistic Patterns.* Philadelphia: University of Philadelphia Press.

Lakoff, G. 1993. Contemporary Theory of Metaphor. In A. Ortony (Ed), *Metaphor and Thought.* Cambridge: Cambridge University Press.

Lakoff, G. & Johnson, M. 1980. *Metaphors We Live By.* Chicago, IL.: The University of Chicago Press.

Lamb, S. 2000. Bidirectional Processing in Language. In M. Barlow & S. Kemmer (Eds),

Langacker, R.W. 1987. *Foundations of Cognitive Grammar Vol I Theoretical Prerequisites.* Stanford: Stanford University Press.

Langacker, R.W. 1991. *Foundations of Cognitive Grammar Vol II Descriptive Applications.* Stanford: Stanford University Press.

Lantolf, J.P. & Appel, G. (Eds) 1994. *Vygotskian Approaches to Second Language Research.* Norwood, NJ: Ablex Publishing Corp.

Lantolf, J.P. 1995. Second Language Theory Building: Letting all the Flowers Bloom! *Language Learning.* 46: 713-749.

Lantolf, J.P. 1999. Second Culture Acquisition: Cognitive Considerations. In E. Hinkel (Ed), *Culture in Second Language Teaching and Learning.* Cambridge: Cambridge University Press.

Lantolf, J. P. 2000. *Sociocultural Theory and Second Language Learning.* Oxford: Oxford University Press.

Lantolf J.P. & Thorne, S.F. 2006. *Sociocultural Theory and the Sociogenesis of Second Language Development.* New York: Oxford University Press.

Larsen-Freeman, D. 1997. Chaos/Complexity Science and Second Language Acquisition. *Applied Linguistics.* 18/2: 141-165.

Lazar, G. 2003. *Meanings and Metaphors.* Cambridge: Cambridge University Press.

Leibniz, G.W. 1981. *New Essays on Human Understanding.* Cambridge: Cambridge University Press.

Li, P. & Shirai, Y. 2000. *The Acquisition of Lexical and Grammatical Aspect.* Berlin: Mouton de Gruyter.

Light, R.J., Singer, J.D. & Willett, J.B. 1990. *By Design Planning Research on Higher Education*. Cambridge, Mass.: Harvard University Press.

Lindstromberg, S. 1997. *English Prepositions Explained*. Amsterdam: John Benjamins.

Lindstromberg, S. & Boers, F. 2005. From Movement to Metaphor with Manner-of-Movement Verbs. *Applied Linguistics*. 26/1: 241 – 261.

Littlemore, J. 2001. Metaphoric Competence: A Language Learning Strength of Students With a Holistic Cognitive Style? *TESOL Quarterly*. 35/3: 459 – 491.

Long, M. 1991. Focus on Form: A Design Feature in Language Teaching Methodology. In K. de Bot, R. Ginsberg & C. Kramsch (Eds.), *Foreign Language Resaerch in Cross-Cultural Perspective*. Amsterdam: John Benjamins.

Low, G. 1988. On Teaching Metaphor. *Applied Linguistics*. 9/2: 125 – 147.

Mackey, A. & Gass, S.M. 2005. *Second Language Research: Methodology and Design*. Mahwah, NJ.: Lawrence Erlbaum.

MacWhinney, B. 1999. The Emergence of Language from Embodiment. In B. MacWhinney (Ed), *The Emergence of Language*. Mahwah, NJ: Lawrence Erlbaum.

MacWhinney, B. 2000. Connectionism and Language Learning. In M. Barlow & S. Kemmer (Eds), *Usage Based Models of Language*. Stanford, Cal.: CSLI Publications.

MacWhinney, B. 2001. The Competition Model: the Input, the Context, and the Brain. In P. Robinson (Ed),

MacWhinney, B. 2003. Extending the Competition Model. *International Journal of Bilingualism*. (in press).

Matthews, P. 2001. *A Short History of Structural Linguistics*. Cambridge: Cambridge University Press.

Matthiessen, C. & Bateman, J. 1991. *Text Generation and Systemic Functional Linguistic Experiences from English and Japanese.* London: Pinters Publishers.

McCafferty, S.G. 1994. The Use of Private Speech by Adult ESL Learners at Different Levels of Proficiency. In J.P. Lantolf & G. Appel (Eds), *Vygotskian Approaches to Second Language Research.* Norwood, N.J.: Ablex Publishing Corp.

McCarthy, M. 1998. *Spoken Language & Applied Linguistics.* Cambridge: Cambridge University Press.

McCarthy, M. 2001. *Issues in Applied Linguistics.* Cambridge: Cambridge University Press.

Mitchell, R. & Myles, F. 2002. *Second Language Learning Theories.* London: Arnold.

Moll, L.C. (Ed) 1990. *Vygotsky and Education.* Cambridge: Cambridge University Press.

Mortimer, E.F. & Wertsch, J.V. 2003. The Architecture and Dynamics of Intersubjectivity in Science Classrooms. *Mind, Culture, and Activity: An International Journal.* 10/3: 230 – 244.

Mourelatos, A. P. 1981. Events, Processes, and States. In P.J. Tedeschi & A., Zaenen (Eds), *Syntax and Semantics: Vol. 14. Tense and Aspect.* New York: Academic Press.

Newman, F. & Holzman, L. 1993. *Lev Vygotsky: Revolutionary Scientist.* London: Routledge.

Newman, D., Griffin, P. & Cole, M. 1989. *The Construction Zone: Working for Cognitive Change in School.* Cambridge: Cambridge University Press.

Norris, J.M. & Ortega, L. 2000. Effectiveness of L2 Instruction: A Research Synthesis and Quantitative Meta-analysis. *Language Learning.* 50/3: 417-528.

Norris, J. & Ortega, L. 2003. Defining and Measuring SLA. In C.J. Doughty and M.H.

Long (Eds), *The Handbook of Second Language Acquisition*. Oxford: Blackwell.

Odlin, T. 2003. Cross-linguistic Influence. In C. Doughty & M. Long (Eds),

Odlin, T. 2005. Crosslinguistic Influence and Conceptual Transfer: What are the

Concepts? *Annual Review of Applied Linguistics*. 25: 3-25.

Ohta, A.S. 2000. Rethinking Recasts: A Learner-Centered Examination of Corrective

Feedback in the Japanese Language Classroom. In J.K. Hall & L.S. Verplaetse (Eds),

Second and Foreign Language Learning Through Classroom Interaction. Mahwah, NJ:

Lawrence Erlbaum Associates, Inc.

Ohta, A.S. 2001. *Second Language Acquisition Processes in the Classroom: Learning

Japanese*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Ortega, L. 2005. For What and for Whom Is Our Research? The Ethical as

Transformative Lens in Instructed SLA. *The Modern Language Journal*. 89: 427 – 443.

Ortony, A. (Ed) 1991. *Metaphor and Thought*. Cambridge: Cambridge University Press.

Palmer, F.R. 2001. *Mood and Modality*. Cambridge: Cambridge University Press.

Piaget, J. 1959. *The Language and Thought of the Child.* London: Routledge.

Pienemann, M. 1989. Is Language Teachable? Psycholinguistic Experiments or

Hypotheses. *Applied Linguistics*. 10: 52 – 79.

Pienemann, M. 1999. *Language Processing and Second Language Development*.

Amsterdam: John Benjamins.

Pennycook, A. 2001. *Critical Applied Linguistics A Critical Introduction*. Mahwah, N.J.:

Lawrence Erlbaum Assoc, Inc.

Pinker, S. 1982. Lexical Interpretive Grammars. In J. Bresnan (Ed), *The Mental Representation of Grammatical Relations.* Cambridge, Mass.: The MIT Press.

Pulvermuller, F. 2002. *The Neuroscience of Language.* Cambridge: Cambridge University Press.

Putz, M. Niemeier, S. & Dirven, R, 2001a. *Applied Cognitive Linguistics I: Theory and Language Acquisition.* Berlin: Mouton de Gruyter.

Putz, M. Niemeier, S. & Dirven, R, 2001b. *Applied Cognitive Linguistics II: Language Pedagogy.* Berlin: Mouton de Gruyter.

Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. 1972. *A Grammar of Contemporary English.* London: Longman.

Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. 1985. *A Comprehensive Grammar of the English Language.* Essex: Longman Group Limited.

Radford, A. 1988. *Transformational Grammar A First Course.* Cambridge: Cambridge University Press.

Radford, A. 1997. *Syntactic Theory and the Structure of English.* Cambridge: Cambridge University Press.

Regier, T. 1996. *The Human Semantic Potential.* Cambridge, Mass.: The MIT Press.

Reichenbach, H. 1947. *Elements of Symbolic Logic.* New York: The Macmillan Company.

Richards, J.C. 2003. Then and Now: 30 Years of TEFL/TESL. In M. Swanson and K. Hill (Eds), *The Proceedings of JALT2003.* 16 – 32.

Robbins, D. 2001. *Vygotsky's Psychology-Philosophy.* New York: Kluwer Academic Publishers.

Robins, R.H. 1967. *A Short History of Linguistics*. Essex: Addison Wesley Longman, Inc.

Robinson, P. (Ed) 2001. *Cognition and Second Language Instruction*. Cambridge: CUP.

Robinson, P. & Ellis, N. (Eds). 2006. *Handbook of Cognitive Linguistics and Second Language Acquisition*. Hillsdale, N.J.: Lawrence Erlbaum .

Robison, R. 1995. *The Aspect Hypothesis Revisited: A Cross-sectional Study of Tense and Aspect Marking in Interlanguage. Applied Linguistics. 16/3: 344 – 370.*

Roebuck, R. 2000. Subjects Speak Out: How Learners Position Themselves in a Psycholinguistic Task. In J.P. Lantolf (Ed), *Sociocultural Theory and Second Language Learning*. Oxford: Oxford University Press.

Rommetveit, R. 1992. Outlines of a Dialogically Based Social-Cognitive Approach to Human Cognition and Communication. In A. H. Wold (Ed.), *The Dialogical Alternative. Towards a Theory of Language and Mind.* Oslo: Scandinavian University Press.

Rommetveit, R. 2003. On the Role of "a Psychology of the Second Person" in Studies of Meaning, Language and Mind. *Mind, Culture, and Activity: An International Journal*. 10/3: 205 - 218.

Rumelhart, D. and McClelland, J. 1986. On Learning the Past Tenses of English Verbs. *Parallel Distributed Processing: Explorations in the Microstructure of Cognition*. Cambridge, MS.: MIT Press.

Rumelhart, D.E. 1991. Some Problems with the Notion of Literal Meanings. In A. Ortony (Ed)

Rutherford, W.E. 1987. *Second Language Grammar: Learning and Teaching*. Essex: Addison Wesley Longman.

Sadock, J.M. 1991. Figurative Speech and Linguistics. In A. Ortony (Ed),

Salaberry, R. & Shirai, Y. (Eds) 2002. *The L2 Acquisition of Tense-Aspect Morphology.* Amsterdam: John Benjamins.

Schrampfer Azar, B.S. 1989. *Understanding and Using English Grammar.* Englewood Cliffs, N.J.: Prentice Hall Regents.

Schrampfer Azar, B.S. 1993. *Understanding and Using English Grammar Teacher's Guide.* Essex: Addison Wesley Longman, Inc.

Seedhouse, P. 2005. "Task" as Research Construct. *Language Learning.* 55/3:533 – 570.

Selinker, L. 1972. Interlanguage. *International Review of Applied Linguistics.* 10/3: 209 - 231.

Shibatani, M. 1990. *The Languages of Japan.* Cambridge: Cambridge University Press

Shinohara, K 2000. Up-Down Orientation in Time Metaphors: Analysis of English and Japanese. *AILA 99 Papers* in CD-ROM.

Shirai, Y. 2002. The Prototype Hypothesis of Tense-Aspect Acquisition in Second Language. In R. Salaberry & Y. Shirai (Eds),

Shirai, Y. & Nishi, Y. 2003. Lexicalisation of Aspectual Structures in English and Japanese. In A. Giacalone Ramat (Ed), *Typology and Second Language Acquisition.* Berlin: Mouton de Gruyter.

Shirai, Y. 2004. A Multiple-factor Account for Form-meaning Connection in the Acquisition of Tense-aspect Morphology. VanPatten, B., Williams, J., Rott, S. & Overstreet, M. (Eds),

Skehan, P. 1998. *A Cognitive Approach to Language Learning.* Oxford: Oxford University Press.

Skinner, B.F. 1957. *Verbal Behavior.* New York: Appleton-Century-Crofts.

Slobin, D. (Ed) 1985. *The Crosslinguistic Study of Language Acquisition, Vols. 1 & 2*. Hillsdale, NJ: Erlbaum.

Slobin, D.I. 1994. Discourse Origins of the Present Perfect. In W. Pagliuca (Ed), *Perspectives on Grammaticalization*. Amsterdam: John Benjamins.

Soga, M. 1983. *Tense and Aspect in Modern Colloquial Japanese*. Vancouver: University of British Columbia Press.

Stockwell, P. 2002. *Cognitive Poetics: an Introduction*. London: Routledge.

Swan, M. & Walter, C. 2001. *The Good Grammar Book*. Oxford: Oxford University Press.

Sweetser, E. 1990. *From Etymology to Pragmatics*. Cambridge: Cambridge University Press.

Todd, Z. & Clarke, D. 1999. When is a Dead Rainbow not like a Dead Rainbow? In L. Cameron & G. Low (Eds),

Tomasello, M. & Herron, C. 1989. The Garden Path Technique. *Studies in Second Language Acquisition*. 11: 385 – 395.

Tomasello, M. 2003. *Constructing a Language: A Usage-Based Theory of Language Acquisition*. Cambridge, Mass.: Harvard University Press.

Tomasello, M., Carpenter, M., Call, J., Behne, T. & Moll, H. (in press). Understanding and Sharing Intentions: The Origins of Cultural Cognition. *Behavioral and Brain Sciences*.

Tsujimura, N. 1996. *An Introduction to Japanese Linguistics*. Oxford: Blackwell.

Tyler, A. & Evans, V. 2001. The Relation Between, Experience, Conceptual Structure and Meaning: Non-temporal Uses of Tense and Language Teaching. In (Eds) M. Putz, S.

Niemeier & R. Dirven, *Applied Cognitive Linguistics I: Theory and Language Acquisition*. Berlin: Mouton de Gruyter.

Ungerer, F. & Schmid, H.J. 1996. *An Introduction to Cognitive Linguistics*. Essex: Addison Wesley Longman.

Van Lier, L. 1988. *The Classroom and the Language Learner*. London: Longman.

VanPatten, B., Williams, J., Rott, S. & Overstreet, M. (Eds) 2004. *Form-Meaning Connections in Second Language Acquisition*. Mahwah, NJ: Lawrence Erlbaum Assoc.

Van Valin, R.D. 1993. *Advances in Role and Reference Grammar*. Amsterdam: John Benjamins.

Vendler, Z. 1967. *Linguistics and Philosophy*. Ithaca, NY: Cornell University Press.

Verplaetse, L.S. 2000. *Mr. Wonder-ful: Portrait of a Dialogic Teacher*. In J.K. Hall & L.S. Verplaetse (Eds), *Second and Foreign Language Learning Through Classroom Interaction*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Volosinov, V.N. 1973. *Marxism and the Philosophy of Language*. Cambridge, Mass.: Harvard University Press.

Vygotsky, L. S. 1986. *Thought and Language*. Cambridge, Mass.: MIT Press.

Vygotsky, L.S. 1978. *Mind in Society*. Cambridge, Mass.: Harvard University Press.

Wallace, M.J. 1998. *Action Research for Language Teachers*. Cambridge: Cambridge University Press.

Weist, R. 1986. Tense and Aspect. In P. Fletcher and M. Garman (Eds), *Language Acquisition*. Cambridge: Cambridge University Press.

Wells, G. 1999. *Dialogic Inquiry Toward a Sociocultural Practice and Theory of Education*. Cambridge: Cambridge University Press.

Werstch, J. 1988. *Mind As Action*. Oxford: Oxford University Press.

Wittgenstein, L. 1953. *Philosophical Investigations*. Oxford: Blackwell.

Wolcott, H.F. 2001. *Writing Up Qualitative Research.* Thousand Oaks, Cal.: Sage Publications.

Wold, A.H. 1978. *Decoding Oral Language*. London: Academic Press.

Yoshimoto, K. 2000. *Tense and Aspect in Japanese and English*. Berlin: Peter Lang.

Zuengler, J. & Miller, E.R. 2006. Cognitive and Sociocultural Perspectives: Two Parallel SLA Worlds? *TESOL Quarterly*.40/1: 35 – 58.

Appendix A

The Original Metaphorm Taskplans

1) Introducing Metaphoric and Literal Meaning.

Literal means a direct relationship between the word and the thing or activity, for example:

> *Life is difficult.*

Metaphor means a conceptual relationship between the word and the thing or activity, for example:

> *Life is a dream.*

Words	Literal Meanings	Metaphorical Meanings
diet	the kind of food and drink someone eats regularly	what something is mostly made of
flavor	the particular taste of a food or drink	the quality you identify something with

Look at the sentence below. Are the words "diet" and "flavor" used metaphorically or literally?
> *"Traditionally, the diet of language offered to our students has been grammar with a separate helping of vocabulary mixed in to give it the required flavor."*

2) Circle "M" if you think the word is used metaphorically and "L" if you think it is used literally.

diet	M	L
flavor	M	L

3) What is the general metaphor of the sentence above? Circle the correct letter to complete the sentence.

Teaching language is like ...

a) a dream   b) a cooking recipe

c) dancing   d) being a good student

4) Try matching the words below to make metaphors.

_____ 1) A star is...   a) a monkey

_____ 2) The little boy student is...   b) white as snow

_____ 3) The old woman's hair is...   c) a flower

_____ 4) Love is...   d) a rose

5) Now read the sentences below. Make metaphors with four of them and make literal sentences with three.

8) A good/bad student is_____.   M   L

9) Language is_____.   M   L

10) Education is_____.   M   L

11) A good/bad teacher is_____.   M   L

12) Studying is_____.   M   L

13) Tokyo is_____.   M   L

14) Life is_____.M   L

Group work. Now read your sentences to your group. Can you guess which sentences are metaphors and which sentences are literal? Circle "M" for metaphor and "L" for literal.

	Me		Partner 1		Partner 2		Partner 3	
1)	M	L	M	L	M	L	M	L
2)	M	L	M	L	M	L	M	L
3)	M	L	M	L	M	L	M	L
4)	M	L	M	L	M	L	M	L
5)	M	L	M	L	M	L	M	L
6)	M	L	M	L	M	L	M	L
7)	M	L	M	L	M	L	M	L

If you made any mistakes, ask the person to tell you if it is a literal or metaphoric meaning. Discuss the reason why you guessed wrong.

2) Grammatical Metaphors.
Did you know grammar is like metaphor? When one word that usually acts as a verb then acts as a noun or subject then that is called grammatical metaphor. For example, *to communicate* is a verb, but when you add *–tion* it becomes a noun. So in this sentence *communication* is a grammatical metaphor:

> *Communication was difficult between the two groups.*

1) Read the sentences below and try to underline the grammatical metaphors.

1) The exploration of the world went on.   _____

2) I just bought his best-selling novel.   _____

3) The usefulness of this computer is amazing.   _____

4) We should throw a party for our friends.   _____

5) I really go for that new sports car.   _____

6) He's in trouble. _____

7) That movie was a real bummer. _____

8) The ham sandwich wants a glass of water. _____

Now write the part of speech (e.g., noun, verb, adjective, or preposition) of the word(s) you underlined in the space next to the sentence. Notice the endings on the nouns: *-er*, *-tion*, and *–ness*.

2) Read the sentences with gaps in them. Then read the hints next to the sentences. Can you think of grammatical metaphors to write in the gaps?

1) What shows are _____ TV tonight? *(Shows are like lights.)*

2) What time does your watch _____? *(If watches could talk, write the verb.)*

3) She's never happy. She's always _____ a bad mood. *(A mood is like a box.)*

4) I _____ what you mean. *(We often understand with our eyes.)*

5) My father is the _____ of a company. *(This is at the top of your body.)*

6) My mother always listens to my conversations to my friends. She's a very _____ person.
(Add –ey to this part of your face that sticks out.)

7) She has no feelings. She's a _____ person.
(Add –less to this part of your body that is the center of feelings.)

8) His head is always in the clouds. He's a real _____.
*(Add –er to what you do when you sleep.)*

3) Group work. Now discuss and compare your answers with your group. Do you want to change any of your answers? Can you agree on the best answer? Write your group's best answer in the spaces below.

1) _____   5) _____

2) _____   6) _____

3) _____   7) _____

4) _____   8) _____

3) Introducing TIME

We use space expressions to take a metaphoric view to express time relations. For example, the *future* is in front and the *past* is behind:
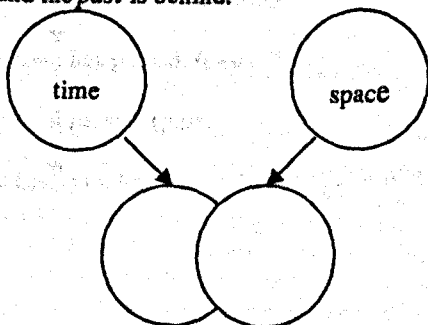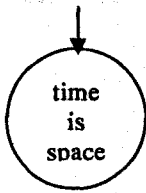
time
is
space

In the days ahead...(future →)

You're behind the times. (←past)

1) Fill in the blanks in the following sentences with either *ahead* or *behind*.

1. You're young. You have so much _____ of you!

2. High school was difficult, but that's all _____ us now.

3. Don't get _____ on your homework!

4. Always think of the good things _____ of you, don't think of the bad things _____ you.

2) Make a list of four things that are ahead of you and four things that are behind you. Then discuss it in your group.

Ahead	Behind
_____	_____
_____	_____
_____	_____
_____	_____

2) Narrative Time: TIME IS A MOVING OBJECT

1) The train will arrive. (future)

2) The train is going to arrive. (future)

3) I can see the train. (present)

4) The train is here. (present)

5) The train is passing. (present)

6) The train has passed. (past)

7) The train passed. (past)

8) The first train had passed before the second train. (past)

3) Put the following narrative in order:

The sun rose.   1) _____

The sun rises.   2) _____

The sun is rising.   3) _____

The sun will rise.   4) _____

I can see the sun.   5) _____

The sun had risen.   6) _____

The sun is going to rise.   7) _____

The sun has risen.   8) _____

Read your narrative to your group. Is it the same as the others?

4) Make a chain narrative like the one above. One student writes a sentence and then the next student writes the next sentence. Read your chain narrative.

1. _____   5) _____
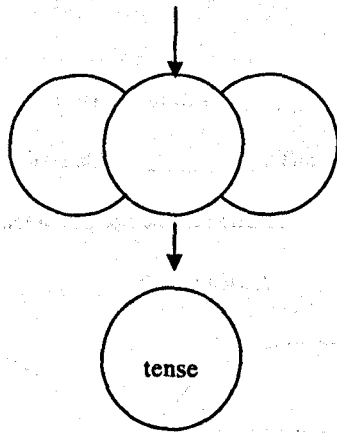
2. _____   6) _____

3. _____   7) _____

4. _____   8) _____

4) Tense as Metaphoric Domains (past, present and future).
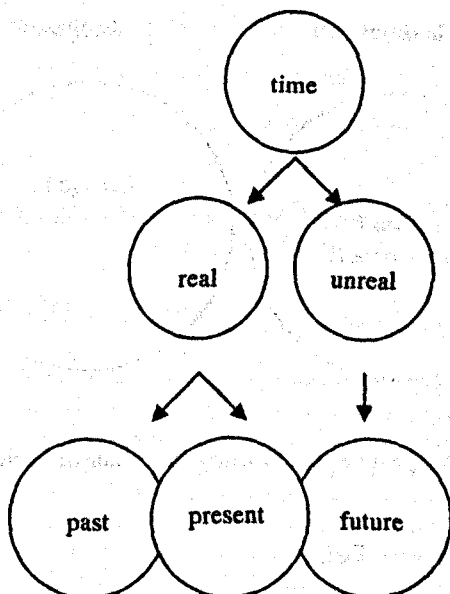
tense

1) Read the sentences and circle R if you think the sentence is real and U if you think it is unreal.

4)	The door is opening.	R	U
5)	The door is going to open.	R	U
6)	The door will open.	R	U
7)	The door opened.	R	U
5)	The door opens.	R	U

Past/Real

Present/Real

Future/Unreal

It opened.

It opens.
It's opening.

It's going to
open.
It will open.

2) Complete the sentences to show the contrast between the past, present and future.

1. I am a university student. I _____ a high school student. I _____ a _____.

2. I live alone. I _____ with my parents. I _____ with my

husband/wife.

3. I _____ a teenager. I was a child. I _____ an adult.

4. The sun _____. The sun _____. The sun will rise.

Now put each of the sentences into the correct circle.

Past/Real   Present/Real   Future/Unreal

1._____   1._____   1._____

2._____   2._____   2._____

3._____   3._____   3._____

4._____   4._____   4._____

3) Write about your past, present and future.

My:

Present   Past   Future

_____   _____   _____

_____   _____   _____

_____   _____   _____

_____   _____   _____

_____   _____   _____

Now tell your partner about your past, present and future. But only tell either the present past or future. Can your partner guess the other two? Write what your partner tells you about their past, present and future and try to guess the other two.

My Partner's:

Present   Past   Future

_____   _____   _____

_____   _____   _____

_____   _____   _____

_____   _____   _____

_____   _____   _____

5) Time Phrases as Culture.

Cultural time phrases make time seem literal (not metaphoric). Especially, we look at *in/on/at* and Japanese and English time phrases.

in the box   *on* the box

in + month/season/year   [X]   *on* + day/weekend   [☒]

at the spot

at + time   ✕

1) Fill in the blanks with either *in, on* or *at*.

1. The cat is _____ the mat.

2. You need to change trains _____ Shinjuku Station.

3. I live _____ Tokyo.

4. The TV is _____ the stereo.

5. I met my girlfriend _____ a party.

6. Is there anything interesting _____ the newspaper?

7. I have a black belt _____ karate.

8. You look good _____ a kimono.

9. I'm studying English _____ a juku.

10. I live _____ Maple Street.

2) Fill in the blanks with *in, on* or *at*.

1. Cherry blossoms bloom _____ spring.

2. Everyone goes to the shrine _____ New Year's Day.

3. Hina Matsuri is _____ May.

4. My tennis circle meets _____ 4:00 p.m.

5. Midnight is _____ 12:00 p.m.

6. Halloween is _____ October.

7. Valentine's Day is _____ February 14th.

8. I had to work _____ Christmas Day.

9. Shakespeare died _____ 1616.

10. We say "itadakimasu" _____ dinnertime.

2) Read the passages and fill in the blanks with either *in, on* or *at*.

In Japan, the school year starts _____ April. Traditionally, most schools had classes _____
Saturdays, but recently Saturday is a holiday. Classes start early so many students have to wake up
_____ about 6:00 a.m. _____ the morning. _____ the spring, the weather is quite warm.
Japanese students study very hard and may not get home until 9 or 10 _____ night. They get a chance
to relax _____ the weekend.

In America, people celebrate Halloween _____ autumn. The nights are long _____ October and
it is cold as winter approaches. The sun rises late and sets _____ about 5:00 _____ the evening.
The trees have lost their leaves and it is the perfect time of year for scary fun. If Halloween is _____
a weekday, then children usually have Halloween parties at school. Then they dress up in costumes
_____ night. They also believe that it is bad luck _____ Friday the 13th.

3) Complete the sentences with answers about you.

1. In the morning, _____

2. Last weekend, _____

3. Next year, _____

4. At midnight, _____

5. On my birthday, _____

4) Pair work. Ask your partner the questions below. Write their answers.

   5) What's your favorite month? Why? What do you like to do in that month?

    _____

   6) What's your favorite holiday in the year? Why? What do you like to do on that day?

    _____

   7) What do you like to do at night? Why? What do you like to do at that time?
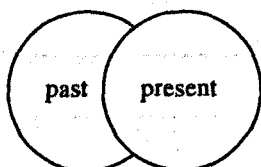
    _____

8) What's been the best part of your life? Why?

---

6) Aspect (perfect and progressive) as Metonymy (e.g., "crown" for "king").

PRESENT PERFECT= COMPARING PAST AND PRESENT

I loved you then (past) and I love you now (present).

I have always loved you.

PRESENT PERFECT = EXPERIENCES ARE POSSESSIONS

Example:

I have a car.

Perfect:

I have been to Hiroshima.

PERFECTION = STATES ARE COMPLETE

The movie has finished.

I have finished my homework.

1) Read the sentences and mark a C if you think it is Perfect Comparing, an E if you think it is Perfect Experience, and an S if you think it is Perfect States.

1. Bill has been to America.	C	Ex	S
2. Bill has broken his arm twice.	C	Ex	S
3. We've lived here a long time.	C	E	Ss
4. Bill has just arrived.	C	E	Ss
5. I've returned from holiday.	Cx	E	S
6. I've been on a diet.	Cx	E	S
7. I've made a cake.	C	E	Sx

401

8. I have graduated from three universities.   C   Ex   S

9. I've forgotten your name.   Cx   E   S

6) Aspect (perfect and progressive) as Metonymy (e.g., "crown" for "king").

PRESENT PERFECT= COMPARING PAST AND PRESENT

2) Can you write examples of the different kinds of present perfect sentences?

Comparing Perfect

   4. _____

   5. _____

   6. _____

Experience Perfect

   1. _____

   2. _____

   3. _____

State Perfect

   4. _____

   5. _____

   6. _____

Group work. Now read your sentences to your group. Can you guess which sentences your partner says are comparing, experience or state? Circle "C" for comparing, "E" for experience and "S" for state.

|	Me			Partner 1			Partner 2			Partner 3	
1) C	E	S	C	E	S	C	E	S	C	E	S
2) C	E	S	C	E	S	C	E	S	C	E	S
3) C	E	S	C	E	S	C	E	S	C	E	S
4) C	E	S	C	E	S	C	E	S	C	E	S
5) C	E	S	C	E	S	C	E	S	C	E	S
6) C	E	S	C	E	S	C	E	S	C	E	S
7) C	E	S	C	E	S	C	E	S	C	E	S
8) C	E	S	C	E	S	C	E	S	C	E	S

9) C   E   S   C   E   S   C   E   S   C   E   S

If you made any mistakes, ask the person to tell you if it was a comparing, experience or state sentence. Discuss the reason why you guessed wrong.

3) Perfect compares the past with the present. The past tense contrasts the past with the present.

PAST = CONTRAST   PERFECT= COMPARE
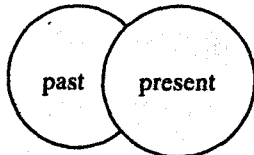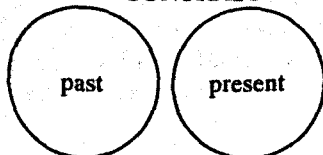
Read the passage and circle the correct answer, present, perfect or past tense.

Bill and I *have/ have been* best friends since elementary school. I *know/have known* him for almost thirty years. Last night, he *came/has come* to see me to ask for my advice. His company *did/has done* well for the last few years and they just asked Bill to move to America and run an office there. He *didn't decide/hasn't decided* what to do yet. He doesn't really want to move. He *never lived/ has never lived* away from his family. But the new job would be interesting and well paid. We *talked/have talked* about it for a long time, but he couldn't decide what to do.

PROGRESSIVE = ACTIVATION IS MOTION

I am running

4) Progressive can be used with all tenses of verbs. Most tenses can be activated. Change the sentences below to be progressive.
Example:

I run. -> I am running.

1. I will run. _____

2. I'm going to run. _____

3. I run. _____

4. I can run. _____

5. I have run. _____

6. I ran. _____

7. I had run. _____

NON-PROGRESSIVE WORDS

403

5) But some verbs cannot be used in progressive. They cannot be activated. Choose the sentences that are not correct. Mark a "*C*" for correct and an "*I*" for incorrect.

_____ 1. We're late. I'm knowing it.

_____ 2. I'm feeling a little sleepy.

_____ 3. I'm thinking about the weekend.

_____ 4. I know three languages.

_____ 5. I'm feeling it's a good decision.

_____ 6. I'm thinking you're wrong.

_____ 7. I'm seeing what you mean.

_____ 8. I'm seeing a movie today.

_____ 9. I'm liking this weather.

_____ 10. What is he wanting?

Compare your answers with your partner. Do you agree on which ones are correct or incorrect?

7) **Perfect in Japanese and English.**

Let's compare and contrast the different English perfects with the Japanese perfects to see if they are the same in each language.

PERFECT= COMPARING PAST AND PRESENT
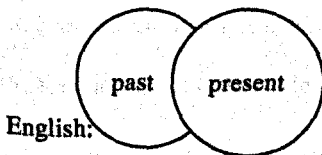
English:

I loved you then (past) and I love you now (present).

I have always loved you.

PERFECT = EXPERIENCES ARE POSSESSIONS

Example English:

I have a car.

Perfect:

I have been to Hiroshima.

Japanese:

Mukashi mo aishite ita (past) shi ima

mo aishite iru (present).

Itsumo aishite ita.

Japanese:

Watashi wa kuruma ga aru.

Watashi wa Hiroshima e itta koto go

aru.

404

PERFECTION = STATES ARE COMPLETE

English: Japanese:

The movie has finished.   Eiga ga owatta.

I have finished my homework.   Shukudai wa oete iru.

*NOTE! PERFECTION in Japanese sometimes uses the past tense.

1) Read the sentences and mark a "C" if you think it is Perfect Comparing, an "E" if you think it is Perfect Experience, and an "S" if you think it is Perfect States.

1. Ginkoo ni sono okane ga azukerarete iru.	C	E	Sx
2. Kore made ni sono byooki de go-nin no hito ga sinde iru.	Cx	E	S
3. Kyonen kare wa Tokyo de hataraite ita.	Cx	E	S
4. Gakusei wa sono hon o yonda koto ga aru	C	Ex	S
5. Okane o motte ita koto ga aru.	C	Ex	S
6. Sono tegami ga kaite aru.	C	E	Sx
7. Sore wa kare ni sirasete aru.	C	E	Sx
8. Kare wa san-nen-kan kekkon-site iru.	Cx	E	S
9. Kodomo ga kono kawa de sinda koto ga aru.	C	Ex	S

2) Which Japanese sentences are Progressive or Perfect? Circle "PROG,""EITHER" or "PERF."

1. Tanaka-san wa ima sono heya ni haitte iru.	PROG	EITHER	PERF
2. Kare wa isya ni natte iru.	PROG	EITHER	PERF
3. Hitobito wa ima sono heya ni haitte iru.	PROG	EITHER	PERF
4. Wakai gakusei-tati wa isya ni natte iru.	PROG	EITHER	PERF
5. Kare-ra wa sono yama ni mainiti nobotte iru.	PROG	EITHER	PERF
6. Sakana ga mainiti sunde iru.	PROG	EITHER	PERF

3) Which is the best English translation for the Japanese sentence? Mark your choice with an X.

1. I live in Tokyo.   _____ Watashi wa Tokyo ni sunde iru.

                                       _____ Watashi wa Tokyo ni sumu.

2. I have lived in Tokyo.   _____ Watashi wa Tokyo ni sunda koto ga aru.

                             _____ Watashi wa Tokyo ni sunde ita.

3. I have two children.   _____ Watashi wa futari kodomo ga iru.

                             _____ Watashi wa futari kodomo ga aru.

4. I lived in Tokyo.   _____ Watashi wa Tokyo ni sunda.

                             _____ Watsahi wa Tokyo ni sunde ita.

5. I am living in Tokyo.   _____ Watashi wa Tokyo ni sunde iru.

                             _____ Watashi wa Tokyo ni sumu.

6. I have been to Tokyo.   _____ Watashi wa Tokyo ni itta koto ga aru.

                             _____ Watashi wa Tokyo ni itte aru.

4) Write one comparing, experience and state sentence in Japanese and in English.

Comparing

____ Japanese: _____

____ English: _____

Experience

____ Japanese: _____

____ English: _____

State

____ Japanese: _____

____ English: _____

Listen to your partner's sentences and translate them into English or Japanese. Then write whether you think they are comparing, experience or state present perfect sentences.
My partner: _____

____ _____

____ _____

____ _____

____ _____

____ _____

406

5) Write two perfect sentences and two progressive sentences, one in Japanese and one in English.

Perfect

Japanese: _____

English: _____

Progressive

Japanese: _____

English: _____

Listen to your partner's sentences and translate them into English or Japanese. Then write whether you think they are perfect or progressive sentences.
My partner: _____

—— _____

—— _____

—— _____

—— _____

Now read your sentences to your partner and ask them to read their translations of the same sentence.

8) Different Uses of the Present Tense
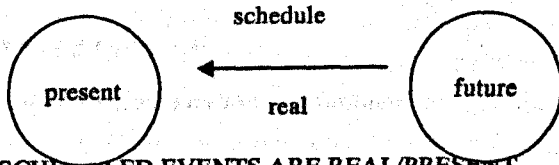
FUTURE SCHEDULED EVENTS ARE REAL/PRESENT.

The present tense can have a future meaning when the time is scheduled. Using the present makes the event seem real.

Example:

Our train leaves at 8:10. = Our train will leave at 8:10.

1) Are these sentences present or future? Circle "P" for present or "F" for future.

1. The next English lesson starts at 2:00 p.m.   P   F

2. My English lesson is on Tuesday at 2:00.   P F

3. The bank closes at 3:00.   P F

4. The banks close at 3:00 p.m. today.   P F

5. She flies to Paris on the 8:20 flight.   P F

6. She often flies to Paris on business.   P F

7. The train doesn't arrive after 12:00 p.m.   P F

8. The train is often late.   P F
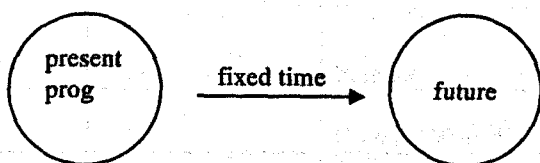
FIXED TIME PRESENT PROGRESSIVE EVENTS ARE UNREAL/FUTURE

Present progressive can have a future meaning when the time is fixed. Using present progressive means you will be active at that future time.

Example:

 What are you doing this evening? = What are you going to do this evening?

2) Are these sentences present progressive or do they have a future meaning? Circle "P" for progressive or "F" for future.

1. You're not eating much these days.   P F

2. I'm starting a new job next week.   P   F

3. John is wearing a blue shirt.   P F

4. He's going to the theater on Thursday evening. P F

5. He's seeing his doctor this afternoon.   P F

6. I'm not working today.   P F

2) Read the sentences. They combine two clauses. Is the grammar OK? Circle "OK" if you think the grammar is okay and "NO" if you think there is a grammar mistake.

1. I'm working today and I'm working tomorrow. OK NO

2. Sandra is wearing a hat and she's going to the bus stop. OK NO

3. She is brushing her teeth and starting a new job.   OK   NO

4. He is looking at the sea and seeing his doctor tomorrow.   OK   NO

5. My father watches TV most evenings and the next show starts at 2:00. OK   NO

6. Ann teaches French and she plays the piano.   OK   NO

3) Group work. Look at the schedule and write five scheduled event (present tense) sentences. It is Friday.

	Friday	Saturday	Sunday	Monday
Morning		Baseball Game Practice	Go jogging	Catch the train
Lunch		Go out for lunch	Make lunch	See the dentist
Afternoon		See a movie	Do homework	Attend a meeting
Evening		Out to Dinner	Watch TV	Do a report

Scheduled Event Sentences:

____ 1) _____

____ 2) _____

____ 3) _____

____ 4) _____

____ 5) _____

Use the same schedule to write five progressive event sentences.

Progressive Event Sentences:

____ 1) _____

____ 2) _____

____ 3) _____

____ 4) _____

____ 5) _____

Now ask your partner: What are you doing on Saturday, Sunday and Monday? Write you partner's answer.

Partner's name: _____

Future Scheduled Event Sentences:
Saturday

___ _____

___ _____

Sunday

___ _____

___ _____

Monday

___ _____

___ _____

Future Progressive Event Sentences:
Saturday

___ _____

___ _____

Sunday

___ _____

___ _____

Monday

___ _____

___ _____

9) The Pragmatic Use of the Past for Politeness.

politeness

(past) ←———————— (present)

410
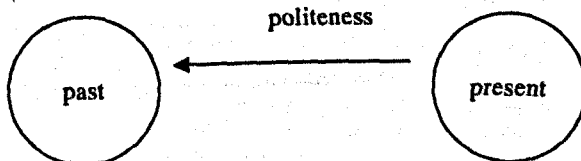
DISTANCE/PAST IS POLITENESS.

As a memory becomes past it becomes more distant and less immediate. If it was a bad memory we forget the bad things. Thus, when we ask someone for something we use the past tense so that asking for something won't seem so immediate or direct. This is the meaning behind the metaphor "Distance is politeness."

Example:

Could you please tell me the time?

1) Read the sentences. Are they past tense or past for politeness? Circle "T" for past tense or "P" for politeness.

1. I was wondering if I could speak to you.   T   P

2. Could he really not speak English?   T   P

3. Could you tell me where the train station is?   T   P

4. Would you like some cake?   T   P

5. I wanted to ask you something.   T   P

6. I would never have recognized him.   T   P

2) Read the sentences can you change them to be more polite?

1. I will be happy to come.   _____

2. Like some tea?   _____

3. Can you come at 2:00?   _____

4. I want to ask you something.   _____

5. I'm wondering about a pay raise.   _____

6. I can carry that for you.   _____

3) Group work. Are you polite? Do you say "please" and "could" and "would" instead of "can" and "will"? Write down the top 5 rude situations you can think of and the top 5 situations where you have to be polite.

Rude Situations   Polite Situations

1) _____   1) _____

2) _____   2) _____

3) _____   3) _____

4) _____   4) _____

5) _____   5) _____

Now tell the different rude and polite situations to your partner. What would your partner say to the person in each situation? Write their answers.
Partner's name: _____

Rude Situations

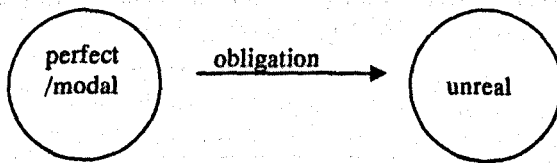1) _____

2) _____

3) _____

4) _____

5) _____

Polite Situations

1) _____

2) _____

3) _____

4) _____

5) _____

10) Aspect and Modality Blend to Create Irrealis.

OBLIGATION IS HYPOTHETICAL.

When we say, "you should study," it means that the speaker thinks "you" has an obligation to study. But when we say, "You should have studied," it makes the obligation unreal or just a possibility.

1) Read the sentences. Are they real or unreal? Circle "R" for real and "U" for unreal.

1. He has to be in London tomorrow.   R   U

2. He should have gone to London the next day.   R   U

3. If I were you, I would have kept the money.   R   U

4. He should come, but he won't.　　　　　　　　　　　R　　　U

5. He should have come, but he didn't.　　　　　　　R　　　U

6. I wouldn't dream of it.　　　　　　　　　　　　　R　　　U

2) Read the sentences and write either real or unreal obligation answers.

1. I failed the test yesterday.　　　　　　You _____.

2. I have a cold.　　　　　　　　　　　You _____.

3. I didn't have enough money to buy　　　I _____
　my mother a present.　　　　　　　　_____.

4. I need some help.　　　　　　　　　I _____.

5. I missed the last train.　　　　　　　You _____.

6. I forgot my girlfriend's birthday and she　' If I were you, _____
　left me.　　　　　　　　　　　　　_____.

3) Pair work. Pretend you can go back and change time. What would you change or have done differently in your life? Write down 5 regrets or mistakes that you made in the past.

Regrets or mistakes
1) _____

2) _____

3) _____

4) _____

5) _____

Now tell your regrets and mistakes to your partner. What advice do they give? Write their answers.

Partner's name: _____
Advice:

1) _____

2) _____

3) _____

4) _____

5) _____

11) Tense as Irrealis to Structure Discourse

Tense

past
present
future

→ narration structure →

Discourse

begin
middle
end
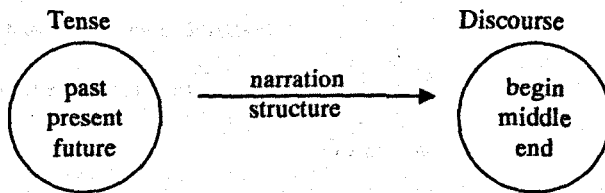
Look at the passage and notice how tense structures the discourse.

Example:

> In November 1859, Charles Darwin's "The Origin of Species," one of the greatest and most controversial works in the literature of science, was published in London. The central idea in this book is the principle of natural selection. In the sixth edition, Darwin wrote: "This principle of preservation of the survival of the fittest, I have called Natural Selection."

1) Fill in the blanks in the passage with the words in the box. Change the verb to the correct tense or aspect.

introduce	teach attend	be	believe	improve

Last year at a conference, I _____ a new approach to show teachers how to _____ tense and aspect. Most of the people who _____ the conference seemed to agree with me. The reason it _____ important to teach tense and aspect is because of fluency. Many teachers _____ that an understanding of tense and aspect is necessary to speak fluently. This year, many teachers told me that after using my approach their students' fluency _____ a great deal.

begin	be	met	find	conclude	love

In 1994, an investigation into Michael Jackson _____. One of Jackson's long-time friends had issued a statement in his defense. "I _____ shocked by what has been reported. Michael is one of the most decent people I _____ ever _____ in my life." Jackson's own public statement expressed confidence that he would be _____ innocent. "I am grateful for the support of my fans throughout the world," it _____. "I _____ you all."

414

Appendix B

Metaphorm Taskplans Pre & Posttest

1) Try matching the words below to make metaphors.

_____ 1) Life is...   a) a pillow.

_____ 2) A cloud is...   b) a window.

_____ 3) The sky is...   c) a dream.

_____ 4) The moon is...   d) a face.

2) Read the sentences below and <u>underline</u> the grammatical metaphors.

    5)   There was a flood of ideas at the meeting.

    6)   He's so confident that he oozes charm.

    7)   August 12th found the travelers at home.

    8)   Advances in technology are happening more often.

    9)   She was so angry she threw a fit.

3) Read the sentences with gaps in them. Then read the hints next to the sentences. Can you think of grammatical metaphors to write in the gaps?

1) What shows are _____ TV tonight? *(Shows are like lights.)*

2) Your children are grown? Wow, time _____, doesn't it? *(Time is like a bird.)*

3) She's unlucky. She's always getting _____ trouble. *(Trouble is like a box.)*

4) I hear you're going abroad. That _____ interesting. *(What do we hear?)*

5) My father is the _____ of a company. *(This is at the top of your body.)*

4) Put the following narrative in order:

The moon set.   1) _____

The moon sets.   2) _____

The moon is setting.   3) _____

The moon will set.   4) _____

I can see the moon set.   5) _____

The moon had set.   6) _____

The moon is going to set.   7) _____

The moon has set.   8) _____

5) Complete the sentences to show the contrast between the past, present and future.

1. I am nineteen years old. I _____ eighteen years old. I _____ twenty years old.

2. I was a freshman. I _____ a sophomore. I _____ a junior.

3. I _____ single. I _____ married. I will never divorce.

6) Fill in the blanks with *in, on* or *at*.

1. O-Bon is _____ August.

2. We're going to Hokkaido _____ the first week of February.

3. My child was born _____ Heisei 11.

4. Classes start _____ 8:40 a.m.

5. I always have a party _____ my birthday.

7) Read the sentences and mark a C if you think it is Perfect Comparing, an E if you think it is Perfect Experience, and an S if you think it is Perfect State.

1. Tomoko has seen the aurora.	C	E	S
2. Bill has had two colds this winter.	C	E	S
3. We've lived here a long time.	C	E	S
4. Bill has just left.	C	E	S
5. I've changed my hair color.	C	E	S
6. I've moved again.	C	E	S
7. I've made some coffee.	C	E	S
8. I've had four jobs.	C	E	S
9. I've put on some weight.	C	E	S

8) Read the passage and circle the correct answer, present, perfect or past tense.

Koji and I *were/ have been* best friends since elementary school. We *were/have been* always together back then. We *live/lived* on the same street and *play/played* street hockey on it all the time. We *went/have gone* to the same university. He *was/has been* best man at my wedding. Now our children *play/have played* together. He *was/has been* a great friend.

9) Some verbs cannot be used in progressive. They cannot be activated. Choose the

sentences that are not correct. Mark a "*C*" for correct and an "*I*" for incorrect.

_____ 1. I'm knowing her a long time.

_____ 2. I'm feeling a little tired.

_____ 3. I'm thinking about going away next week.

_____ 4. I know three languages.

_____ 5. I'm feeling it's a good idea.

10) Which Japanese sentences are Progressive or Perfect? Circle "*PROG*," "*EITHER*" or "*PERF*."

1. Tanaka-san wa ima gohan o tabete iru.	*PROG*	*EITHER*	*PERF*
2. Kare wa sensei ni natte iru.	*PROG*	*EITHER*	*PERF*
3. Hitobito wa ima sono heya ni nette iru.	*PROG*	*EITHER*	*PERF*
4. Watashi wa daigaku kara sotsugyo shite iru.	*PROG*	*EITHER*	*PERF*
5. Kare-ra wa sono michi ni mainiti to hashite iru.	*PROG*	*EITHER*	*PERF*

11) Read the sentences. They combine two clauses. Is the grammar OK? Circle "OK" if you think the grammar is okay and "NO" if you think there is a grammar mistake.

1. Now I'm eating lunch and I'm working tomorrow.	*OK*	*NO*
2. Sandra is wearing a dress and she's going to dance at 3:00 p.m.	*OK*	*NO*
3. She is brushing her teeth and starting a new job.	*OK*	*NO*
4. He is watching TV and seeing his lawyer tomorrow.	*OK*	*NO*
5. My father watches TV most evenings, starting at 6:00 p.m.	*OK*	*NO*

12) Read the sentences. Are they past tense or past for politeness? Circle "*T*" for past tense or "*P*" for politeness.

1. I was wondering whether you might have a moment.	*T*	*P*

2. Could he understand the question?   *T*   *P*

3. Could you tell me the time?   *T*   *P*

4. Would you like to see a movie?   *T*   *P*

5. I wanted to let you know.   *T*   *P*

13) Read the sentences. Are they real or unreal? Circle "*R*" for real and "*U*" for unreal.

1. He has to be in Tokyo tomorrow.   *R*   *U*

2. He should have gone to Tokyo the next day.   *R*   *U*

3. If I were you, I would have told the truth.   *R*   *U*

4. He would try, but he can't.   *R*   *U*

5. He should have tried, but he didn't.   *R*   *U*

14) Fill in the blanks in the passage with the words in the box. Change the verb to the correct tense or aspect.

1) start   2) write   3) practice   4) be   5) believe   6) improve

Last year, I ___(1)____ to study Japanese and I also learned how to how to ___(2)____ Kanji. I ___(3)____ writing Kanji everyday. The reason it ___(4)____ important to study Kanji when you study Japanese is to be able to read. I ___(5)____ that an understanding of Kanji is necessary to read Japanese. Now my ability to read Kanji ___(6)____ a great deal.

Appendix C

The Traditional Grammar Test

1) Simple Present. Make sentences (+), negative sentences (-) or questions (?).

I / like / getting up early. (-) _____ I don't like getting up early _____

1. you / want / something to drink. (?) _____
2. Joe / play / football on Saturdays. (+) _____
3. you / remember / her phone number. (?) _____
4. that clock / work. (-) _____
5. she often / fly / to Paris on business. (+) _____
6. it / rain / much here in the summer. (-) _____
7. elephants / eat / meat. (?) _____
8. he / think / he can sing. (?) _____
9. we / need / a new car. (+) _____

2) Future.
Make sentences (+), negative sentences (-) or questions (?) with *going to*.

Mary/ phone/ this evening. (?) _____ Is Mary going to phone this evening? _____

1. I / stop / smoking. (+) _____
2. Peter / marry / his boss. (+) _____
3. It / rain. (-) _____
4. I / cook steak / this evening. (-) _____
5. When / you / have a haircut. (?) _____

Make sentences (+), negative sentences (-) or questions (?) with *will*.

I/ be/ here next week. (+) _____ I will be here next week _____

1. We / have / enough money for a holiday. (-) _____
2. Where / I find / the key. (?) _____
3. John/ pass / the exam. (-) _____
4. I think / the train / late. (+) _____
5. all this money / change your life. (?) _____

3. Past. Make sentences (+), negative sentences (-) or questions (?).

the train/ stop/ at every station. (+) _____ The train stopped at every station _____

1. when / my letter / arrive. (?) _____
2. the doctor / remember / my name. (-) _____
3. what / all those people / want. (?) _____
4. all your brothers / send / birthday cards. (?) _____
5. the baby / eat / some toothpaste this morning. (?) _____
6. the teacher / answer / my question. (-) _____

4. Perfect. Make sentences (+), negative sentences (-) or questions (?).

I / speak / to the boss. (+) _____ I have spoken to the boss _____

1. they / eat / anything. (-) _____
2. she / forget / my address. (+) _____
3. you / hear the news. (?) _____
4. you / shut / the door. (-) _____
5. I/ made / a mistake. (+) _____
6. where / you / put the keys. (?) _____

5. Progressive. Make sentences (+), negative sentences (-) or questions (?).

Present

everybody / listen / to me. (?) ___ Is everybody listening to me? _____.

1. I / look for / station. (+) _____
2. you / work/ tonight. (?) _____
3. it / rain. (-) _____

Future

everybody / listen / to me. (?) ___ Will everybody be listening to me? _____

1. I think she / make / a big mistake. (+) _____
2. the 10:15 train/ run / today. (?) _____
3. it / snow / again. (-) _____

Past

everybody / listen / to me. (?) ___ Was everybody listening to me? _____

1. we / wait/ for a phone call. (?) _____
2. you / look/ very beautiful yesterday. (+) _____
3. she / wear / a coat. (-) _____

Perfect

everybody / listen / to me. (?) ___ Has everybody been listening to me? _____

1. I / work/ lately. (-) _____
2. you / eat/ much these days. (?) _____
3. the students / learn/ a lot`. (+) _____

Appendix D
Present and Progressive as Future

1) Group Work. Look at the schedule and write five scheduled event (present tense) sentences and five fixed time (progressive) sentences. Today is Thursday so do not write anything in for Thursday.

VERBS

want	walk	recognize (someone)	eat a pizza
enjoy	run	break (something)	build a house
love	swim	fall	swim an hour
have	push	drop (something)	run 5 miles
know	play	win a race	write a novel
need	sleep	find (something)	grow up
be	study	lose (something)	make a chair
understand	sing	begin/start	sing a song
ill	jump	end/finish	drive from/to
live	eat	realize (something)	paint a picture

	Thursday	Friday	Saturday	Sunday
Morning				
Lunch				
Afternoon				
Evening				

Scheduled Event Sentences:

1) _____

2) _____

3) _____

4) _____

5) _____

Progressive Event Sentences:

1) _____

2) _____

3) _____

4) _____

5) _____

Now ask your partner:
What do you do on __Sunday__ ?
Write you partner's schedule

Partner's name: _____

Future Scheduled Event Sentences:
Friday

_____
_____

Saturday

_____
_____

Sunday

_____
_____

Now ask your partner:
What are you doing on __Saturday__ ?

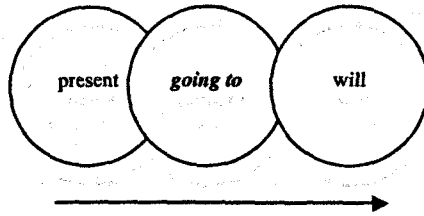**Future Progressive Event Sentences:**
Friday

_____
_____

Saturday

_____
_____

Sunday

_____
_____

Tense as Metaphorical Domains

1) Will You or Are You Going To? *Will* and *going to* can both be used for the future tense. Quite often either can be used for the future, but there are differences in their meaning.

Going to = high chance   *Will* = prediction

real ⟶ high chance ⟶ prediction ⟶ unreal

Examples:

break a glass ⟶ high chance   ⟶   *Look! The glass is going to break.*

rain tomorrow ⟶ prediction   ⟶   *It will rain tomorrow.*

If you think it's a high chance, circle "HC." If you think it's a prediction, circle "P." Then make future sentences using either *will* or *going to*.

1. It/ rain now   HC   P

_____

2. Arnold Schwarzenegger/ become president   HC   P

_____

3. She/ have a baby next month   HC   P

_____

4. He/ fall down   HC   P

_____

5. My team/ win the game   HC   P

_____

3) Future in Conversation. When we speak of the future, we often start from now and *going to* is closer to now so we start by using *going to*. So for the weekend we usually use *going to*.

Going to = high chance   *Will* = prediction
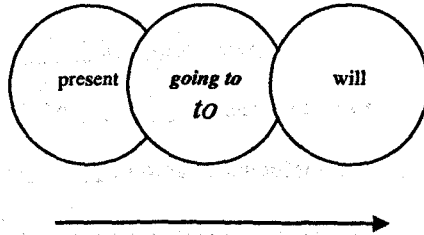
What are you doing this weekend?

I'm going to go shopping.

What are you doing this weekend? Write your answer.

_____

4) Then we use *will* for future events and the present tense for events that are real.

Example:

We are going to take you back. Jack will carry you because you can't walk. You're ankle will be all right. It's only a sprain.

Fill in the blanks with either *going to*, *will*, present or progressive.

talk	sit	have	see	meet	enjoy

1. First we _____ a nice drink. Then we can _____ about your

vacation. We _____ on the beach and _____ our drinks. Don't forget we

_____ this Saturday at 2:00. Okay? Bye-bye. I _____ you on Saturday.

eat	sleep	finish	be (2x)

2. I _____ my diet and training next week. First, I _____ a chilidog.

Then I _____ for a whole day. It _____ great! I _____ so

glad I finished!

1) "Is" is "Be" in the Future. Don't forget with the future that *is* becomes *be*:

Present: *Is everybody listening to me?*

Future: *Will everybody listening to me?* No! *Will everybody be listening to me?*

Look at these incorrect future sentences. Correct them again with *will* and *be*.

1. _____ you _____ here tomorrow?

2. _____ the 10:15 train _____ running today?

3. I _____ not _____ coming to school tomorrow.

4. I _____ _____ twenty years old next October.

5. If you are late, I _____ not _____ happy.

Appendix E
Future Pre/Post Test Spoken

VERBS

want	walk	recognize (someone)	eat a pizza
enjoy	run	break (something)	build a house
love	swim	fall	swim an hour
have	push	drop (something)	run 5 miles
know	play	win a race	write a novel
need	sleep	find (something)	grow up
be	study	lose (something)	make a chair
understand	sing	begin/start	sing a song
ill	jump	end/finish	drive from/to
live	eat	realize (something)	paint a picture

1. Present, progressive, *going to* or *will*? You choose. Fill in the blanks.

1. When _____? Write the answer.
(this weekend) _____

2. He _____. Write the question.
When _____

3. When _____? Write the answer.
(never) _____

4. _____ now? Write a negative answer. (in twenty minutes)
No, _____

5. Look – it _____. Write the question.
_____

6. What time _____? Write the answer.
(this evening) _____

2. Future in Discourse. Fill in the blanks with either present, progressive, going to or will.

live	be	have	try	study	get

1. I _____ a doctor. I _____ medicine at university for five years. Then I _____
in a hospital for two years. After I graduate, I _____ to find cures for many diseases. I
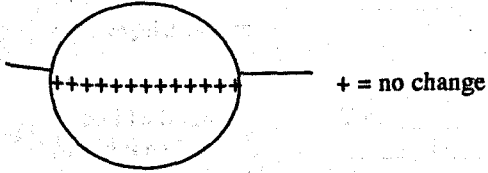_____ also _____ married. I _____ a big family.

3. Talk about the Future.

1. What are your plans for this weekend?

2. What are your future goals?

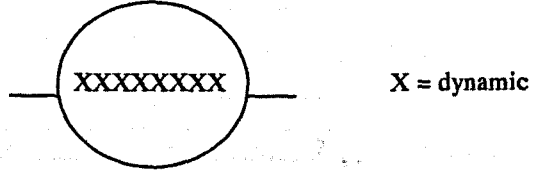## Appendix F
Present Perfect Research Study

1) There are two kinds of verbs: STATE and ACTIVITY.

STATE   ACTIVITY

+++++++++++++   + = no change   XXXXXXXX   X = dynamic

Example State Verbs: **Example Activity Verbs:**

want, like, love, have   *walk, run, swim, push*

I love. -> I have loved.   *I walk. -> I have walked.*

2) ACCOMPLISHMENTS. Activities with an object become accomplishments.
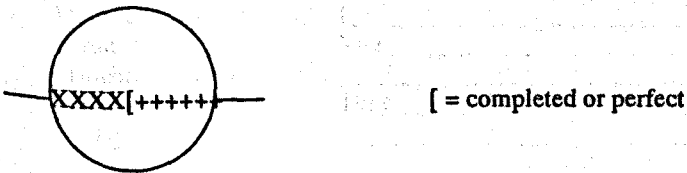
XXXX[+++++   [= completed or perfect

Example Accomplishment Verbs: *paint a picture, write a novel, build a house*

I built a house. -> I have built a house.

3) ACHIEVEMENTS. States with objects become achievements.
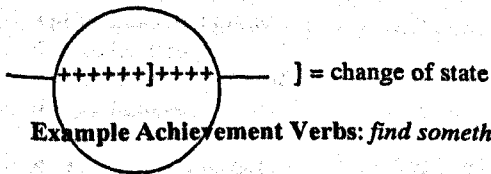
+++++++]++++   ] = change of state

Example Achievement Verbs: *find something, recognise someone*

I found love. -> I have found love.

3) Make sentences using *have* and the past participle for the following verbs.

Example: *break a glass   I have broken a glass*

427

States

1) want	I _____
2) enjoy	He _____
3) love	_____ ?
4) not have	She _____
5) know	_____ ?

Accomplishments

1) eat a pizza	I _____
2) build a house	You _____
3) swim an hour	_____ ?
4) not run 5 miles	They _____
5) write a novel	_____ ?

Achievements

1) break a glass	I _____
2) fall	He _____
3) drop a book	_____ ?
4) not win a race	She _____
5) find a cat	_____ ?

Activities

|	
1) walk	I _____
2) run	You _____
3) swim	_____ ?
4) not push	They _____
5) play	_____ ?

4) Write ACC if you think it is an ACCOMPLISHMENT verb, ACH if you think it is an ACHIEVEMENT verb, ACT if you think it is an ACTIVITY verb, and S if you think it is a STATE verb.

1) I've lost my purse.	S	ACT	ACH	ACC
2) I've started studying.	S	ACT	ACH	ACC
3) I've sang a song.	S	ACT	ACH	ACC
4) I've painted a picture.	S	ACT	ACH	ACC
5) I've been ill.	S	ACT	ACH	ACC
6) I've lived a long time.	S	ACT	ACH	ACC
7) I've jumped.	S	ACT	ACH	ACC
8) I've eaten.	S	ACT	ACH	ACC
9) The movie's ended.	S	ACT	ACH	ACC
10) I've driven to Tokyo.	S	ACT	ACH	ACC
11) I've understood.	S	ACT	ACH	ACC
12) I've sang.	S	ACT	ACH	ACC

5) Completed Actions. When we first give news, we often use the present perfect. When we give more details, we change to the simple past.

PERFECT= COMPARE   PAST = CONTRAST
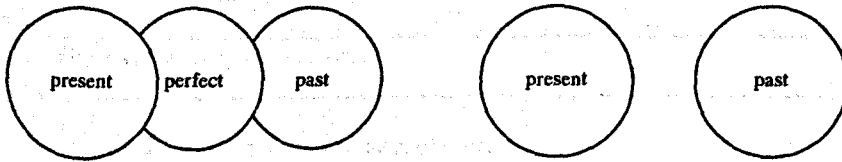
Example:
Mary has gone to Australia. She left last night.

1. Bill _____ an accident. He _____ off his bike last night. (*have, fall*)
2. John and Sue _____ yet. They _____ the wrong train. (*not arrive, take*)
3. John _____ his car. He _____ a good price. (*sell, get*)
4. He _____ a novel. He _____ it last year. (*write, finished*)
5. I _____ 5 miles. It _____ me an hour. (*run, take*)

6) Current Relevance. Read the sentences and questions and circle the correct answers. Is it important to now?

1. Alan has lost his glasses. *Has he lost his glasses now?*   YES / DON'T KNOW

2. Jane went to France. *Is she there now?*   YES / DON'T KNOW

3. The cat has run away. *Is the cat at home now?*   NO / DON'T KNOW

4. I made a cup of tea. *Is there tea now?*   YES / PROBABLY NOT

7) Grammatical Aspect. There is one last kind of aspect. It is called grammatical aspect.
EXPERIENCES ARE POSSESSIONS

Example: I have a car. ——▶ *I own a car.*

Perfect: I have been to Hiroshima. ——▶ *I own the experience of being in Hiroshima.*

True or False Experiences. Write down four true experiences you have had and two that are false.
Example: *I have gone bungee jumping.*
T or F   **Partner's Guess**
_____ 1. _____
_____ 2. _____
_____ 3. _____
_____ 4. _____
_____ 5. _____
_____ 6. _____
Now read them to your partner. Can your partner guess which ones are true?

8) Have you ever...? We use "ever" in questions about experience but we DON'T use "ever" in the reply.

Example: *Have you ever been to Hokkaido? Yes, I have ever been to Hokkaido.*

No, I have never been to Hokkaido.   No, I haven't ever been to Hokkaido.

Answer the following questions:

1. Have you ever been abroad?

_____

2. Have you ever played pachinko?

_____

3. Have you ever gone on a diet?

_____

9) Perfect or Past? Circle the best choice.

1. *Did you talk / Have you talked* to your boss **yesterday?**

2. *Did you see / Have you seen* the movie on TV **last night?**

3. *I went / I have ever been* to London.

4. The movie *just finished / has just finished*.

10) When we are only thinking of the past we only use the past. Fill in the blanks.

1. I _____ a cake for the children but they didn't like it. (make)

2. I _____ a new dress for the party last Tuesday. (buy)

3. I _____ to the dentist twice last week. (go)

4. They _____ married in 1990. (get)

5. I _____ how to drive when I was eighteen. (learn)

11) Perfect in Discourse. We start a story about the past with the perfect. That way we move from the present to the perfect to the past.

go (x2)	want	buy	be (x2)	swim

I _____ to Okinawa two times. The first time, I _____ on my high school trip. It _____ interesting. I _____ again last year with my family. I _____ in the beautiful ocean and _____ a lot of souvenirs. I _____ to go again soon.

Appendix G
Perfect Pre/Post Spoken Test

VERBS

States	Activities	Achievements	Accomplishments
want	walk	recognize (someone)	eat a pizza
enjoy	run	break (something)	build a house
love	swim	fall	swim an hour
have	push	drop (something)	run 5 miles
know	play	win a race	write a novel
need	sleep	find (something)	grow up
be	study	lose (something)	make a chair
understand	sing	begin/start	sing a song
ill	jump	end/finish	drive from/to
live	eat	realize (something)	paint a picture

1) Choose one of the verbs and make perfect questions and answers.
1. I _____

2. He _____

3. They _____

4. It (not) _____

5. How long _____ ?

6. Have you ever _____ ?

7. Have _____ ?

2) Answer the question and then answer the follow-up question.
1. Have you been to Tokyo Disneyland?

2. Have you ever been in love?

3. Did you watch TV last night?

4. Did you take the train this morning?

5. Have you eaten breakfast?

6. Have you graduated high school?

4) Perfect or Past? Read the best choice.
1. *Did you belong / Have you belonged* to a club in high school?
2. *I never saw / I've never seen* that movie before.
3. *I went to / I have ever been* to Okinawa.

5) Read the story and fill in the blanks. Use present, perfect and past.

| be | watch | talk | visit | ask | know | not know |

I __(know)___ my best friend for a long time. We ___(be)_____ friends since high school. He __(visit)___ me yesterday and we __(watch)__ a movie. We ___(talk)___ about the old days. Then he told me his company ___(ask)____ him to move to America. He __(not know)__ what to do.