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Instructions for use

Cognitive Position: Points of View and Utterance Processing

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Abstract

Speaker point of view is known to be of crucial importance in the semantic interpretation of a number of linguistic constructions. Based on the assumption that taking alternate points of view is a basic cognitive ability, the paper approaches the problem of English mood/modals in terms of viewpoint phenomena and utterance processing.

The distinction between Real World and Unreal World Positions, a novel viewpoint dimension in (IR) REALIS, is introduced to explain the basic nature of the indicative mood and hypothetical mood/modals. The proposed viewpoint dimension is integrated with three other viewpoint dimensions, SPATIALITY, OBJECTIVITY-SUBJECTIVITY, and TEMPORALITY. It is hypothesized that the Utterance Processing model be comprised of three components, Mental Space, Cognitive Position and Cognitive Shift. Mental Spaces deal with a situation or a number of situations designated in clauses in discourse. Cognitive Position synthesizes the four dimensions of viewpoint intimately associated with the utterance of each clause in discourse. Together with Cognitive Position, the notion of Cognitive Shift handles the real-time nature of semantic interpretation of a sentence/discourse, and it operates under clearly definable conditions. Such a model is shown to provide a way of capturing meaning relationships concerning (ir) realis between clauses in dis-

course.

0. Introduction

This paper focuses on an important dimension of viewpoint which has been neither fully discussed nor adequately formulated in previous linguistic literature.[1] The discussions include examples like the following:

Indicative Mood
(1)   In this office everyone arrives on time.
(2)   I know everyone arrives on time.
(3)   In the daydream everyone arrives on time.
(4)   He thinks everyone arrives on time.

Note first that each sequence above contains an identical indicative clause, everyone arrives on time.   Careful observation reveals, however, that the clause in (3) or (4) behaves differently from the one in (1) or (2) in an important respect.   The clause in (1) and (2) deals with a fact.   In (1), it reports the fact that everyone arrives on time in a particular office. In (2), it reports the speaker's knowledge that everyone arrives on time.

In contrast, the same clause in (3) or (4) does not deal with a fact. Rather it talks about a nonfact.   In (3), the identical clause refers to a happening in an unreal world of "dream" instead of the real world. Similarly in (4), the clause refers to a happening in Bob's thought; it does not refer to a situation existent in the real (external) world.   We may understand from the comparison that an indicative clause is capable of referring to a situation in an unreal world as well as a situation in the real world.

Compare the following sentences which are in the hypothetical

mood.[2]

Hypothetical Mood

(5) He asks that <u>everyone arrive on time</u>. (Present Subjunctive)

(6) He asks everyone to <u>arrive on time</u>. (Infinitive)

(7) <u>Arrive on time</u>! (Imperative)

The clauses in question in (5), (6) and (7) here contain no such ambiguity. They all invariably refer to a situation in an unreal world instead of a situation in the real world.

Next, look at the corresponding modal-auxiliary sentences:

Modal Auxiliary

(8) Everyone can arrive on time.

(9) Everyone may arrive on time.

(10) Everyone must arrive on time.

Exactly like hypothetical clauses in (5)-(7) above, the modal-auxiliary sentences in (8)-(10) refer to a situation in an unreal world. The senses that these modal auxiliaries convey —— ability, possibility, probability, permission, obligation, etc. (cf. Coates 1983, Perkins 1983, Palmer 1986, etc.) —— all involve something distinct from reality; i.e. nonfactuality.[3]

In light of the discussions given above, we can say the following. First, the indicative mood is capable of dealing with either factual or nonfactual situations. Second, hypothetical mood and modal-auxiliaries are only capable of dealing with a nonfactual situation. I will explore the way in which these phenomena might be captured in a principled manner. Specifically, I will propose a unified theory to answer the following question:

(11) In what way can we neatly handle the difference as well as the similarity between 'nonfactual' indicative mood as in (3) and (4) and hypothetical mood/Modal Auxiliaries as in (5)-(7) and (8)-(10)?

An adequate theory which handles this question will automatically answer the following related questions as well:

(12) i) In what way can we handle the difference between the two —— factual and nonfactual —— readings of the indicative mood?

ii) In what way can we handle the unitary —— nonfactual —— reading of hypothetical mood and modal auxiliaries?

The paper falls into five sections. Section 1 will make a hypothesis concerning the conceptual structures of Indicatives and Hypotheticals/Modals in English and propose a novel viewpoint dimension of (IR) REALIS involving the Real World vs. Unreal World Positions. Section 2 will introduce the concept of Cognitive Position in order to integrate the proposed viewpoint dimension with other viewpoint dimensions. In section 3, I will introduce an Utterance Processing model, which consists of Mental Space, Cognitive Position and Cognitive Shift components, to explain meaning relationships between clauses/sentences in discourse. In section 4, I will discuss the condition on Cognitive Shift, a condition which controls the shift in viewpoint between Real World and Unreal World Positions. Finally in section 5, I will revise the hypothesis in section 1 in order to cover a wider range of Hypothetical/Modal usage in English.

The present paper is unique in the following two respects. First, it introduces the concepts of Cognitive Position and Cognitive Shift, concepts which are intended to capture two features inherent and essen-

tial to utterance Processing: "point of view" and "on-line interactivity." Second, it attempts to integrate these concepts through Mental Space semantics. The paper will demonstrate that the proposals here give a unified analysis of problems of mood and modals and meaning relationships between clauses/sentences in discourse. I believe that such an analysis also provides a step toward handling a number of phenomena called point of view.

1. Hypothesis 1

In this section I will begin my discussion by characterizing the basic nature of expression. Then I will deal with the examples treated in the previous section. In 1.1 I will explain the necessity and importance of introducing a new dimension of viewpoint, which I call the Real World Position vs. the Unreal World Position. In 1.2 I will discuss the relationship between the proposed viewpoint distinction and Mental Space theory.

1.1 the Object Viewed vs. the Viewing Position

It is generally understood that Hypothetical Mood and Modal Auxiliary, as opposed to Indicative Mood, represent a situation more or less detached from reality, although unreality can be expressed in the Indicative Mood as well. This paper attempts to handle the basic nature of English mood/modals in terms of viewpoint phenomena. However, when we examine the way in which viewpoint phenomena have been generally treated, we find at least four serious inadequacies in the previous literature on this subject. First, with general emphasis upon 'extraordinary' viewpoints, the discussions too often fail to characterize the viewpoint which is basic and central. Second, viewpoint phenomena have been

frequently discussed without having the OBJECT VIEWED and the VIEWPOINT clearly separated from each other. Third, viewpoint phenomena have been too often analyzed in terms of a single dimension rather than in terms of multiple dimensions. Fourth, the association of viewpoint with the utterance time is usually not carefully discussed, although it is a central property of viewpoint. In the introduction of a new viewpoint dimension, this paper attempts to overcome these limitations prevalent in the previous studies.

I would like to begin my discussions from a very basic and probably uncontroversial aspect of expressions of any kind. An expression in its broadest sense comes out of the interaction of two components: an OBJECT OF REPRESENTATION is viewed from a particular VIEW-ING POSITION. Crucially important here is the fact that an expression is not produced without being viewed from a particular viewpoint. There is no such thing as a 'perfectly objective' expression or an expression made without its conceptualizer's viewpoint involved. To put it differently, an expression by nature does not show the object as it is. Rather it shows the object as it is seen from a particular viewing position of the viewer. This idea is represented in the formula below:

Figure 1 : the basic conceptual structure of expression

View of _____ as seen from _____ yields _____
      OBJECT   VIEWING   EXPRESSION
      VIEWED   POSITION

Consider photography, a visual expression. In this case, the OBJECT VIEWED would be any concrete entity (entities) in the external world —— a baby, school building, mountain, downtown, fire and smoke, stars, the sky or the combination of whatever these. The VIEWING POSITION is the position of the camera used. Thus a copy of photo-

graph shows a view of an entity (or entities) as seen from a particular camera position.

I will work on the premise that the formula here is also applicable to linguistic expression, although language, being comprised of symbolic expressions, contains other varieties of complications in both the OBJECT VIEWED and in the VIEWING POSITION. The OBJECT VIEWED in linguistic expression is either a situation[4] or an entity conceptualized in the speaker's mind. Importantly, those situations or entities the speaker portray as OBJECT VIEWED do not necessarily belong to the external (real) world; in some types of discourse they may belong to an imaginary (unreal) world.

In the next section, I will discuss in detail the VIEWING POSITION in linguistic expression. Here I will return to the previous examples and see how the basic assumption here will work in an account of English mood/modals. My proposal is that both "nonfactual" indicatives like (3) and (4) and hypotheticals like (5)-(7)/modal sentences like (8)-(10) involve a nonfactual situation of "everyone arrives on time" as an OBJECT VIEWED. However, the difference lies in the VIEWING POSITION. Nonfactual indicatives are issued from the Real World Position, whereas hypotheticals and modals are issued from the Unreal World Position. Simply put, the Real World Position (hereafter, the RWP) means a speaker's viewing position anchored in the real world, while in contrast the Unreal World Position (hereafter, the UWP) means a speaker's viewing position anchored in an unreal world. This proposal is represented in figure 2 below:

Figure 2: the conceptual structures of English Mood & Modals

OBJECT VIEWED:		[NONFACTUAL SITUATION]	
VIEWING	UWP	RWP	RWP
POSITION:			
(EXPRESSION:	'Indicative	'Hypothetical	'Modal Auxiliary')
	Mood'	Mood'	
Examples	(3) (4)	(5) (6) (7)	(8) (9) (10)

RWP: the Real World Position/UWP: the Unreal World Position

The figure here says that 'nonfactual' indicatives as in (3) and (4) are produced when the nonfactual situation in which everyone arrives on time (OBJECT VIEWED) is viewed from the Unreal World Position (VIEW-ING POSITION). Both hypotheticals as in (5)-(7) and modal sentences as in (8)-(10) are produced when the identical nonfactual situation (OBJECT VIEWED) is viewed from the Real World Position (VIEWING POSITION). The idea is that the speaker of (3) and (4) places himself in an unreal world of "daydream" or "his thought", from which perspective the particular nonfactual situation is viewed as if it were real (expressed in the indicative mood). By contrast, the speaker of (5)-(10) places himself in the real world; i.e. an 'ordinary' viewing position. In such a case, the identical nonfactual situation in which everyone arrives on time is processed as "unreal" precisely because the speaker views it from a realistic stance (or from outside the nonfactual world).[5]

Next, let us consider how we can differentiate between the indicative sentences in (1) and (2) and those in (3) and (4). My proposal is that in 'factual' indicatives as in (1) and (2), the OBJECT VIEWED is a factual situation, while the VIEWING POSITION is a Real World Position. Thus we obtain formula 3 below.

Figure 3: the conceptual structure of indicative mood

OBJECT VIEWED	[FACTUAL SITUATION]	[NONFACTUAL SITUATION]	
VIEWING	RWP	UWP	
POSITION			
(EXPRESSION:	'Indicative Mood'	'Indicative Mood'	)
	(1) and (2)	(3) and (4)	

What the formula here says is that the indicative mood occurs in two cases. It either occurs when a factual situation is viewed from the RWP or when a nonfactual situation is viewed from the UWP.

What is the merit of the proposals demonstrated in formulas 2 and 3 above? The framework allows for a neat account of the behavior of the indicative mood and the hypothetical mood/modal auxiliaries. It also explains the different behavior between 'factual' indicatives and 'nonfactual' indicatives. Let me point out that the indicative clause does not autonomously indicate irrealis. Only with some 'contextual' assist, can it indicate irrealis; without that, it prototypically indicates realis. In contrast, both hypothetical and modal auxiliary clauses do autonomously indicate irrealis. The figures fit in well with the contrastive behavior between the non-explicit marking of realis in indicative clauses and the explicit grammatical marking of irrealis in hypothetical and modal auxiliary clauses.[6] To clarify, what is happening in the real world is viewed as real from a viewing position in the real world (cf. examples (1) and (2)). What is happening in an unreal world is also viewed as "real" from a viewpoint in the unreal world (cf. examples (3) and (4)). In contrast, what is happening in an unreal world is invariably viewed as "unreal" from a viewpoint in the real world (cf. (5)–(10)).

We will discuss more about the proposed viewpoint distinction in the next subsection. To repeat the ideas shown in figures 2 and 3, the

indicative mood either designates a view of a factual situation as seen
from the Real World Position or a view of a nonfactual situation as seen
from an Unreal World Position.　Both the hypothetical mood and modal
auxiliaries represent a view of a nonfactual situation as seen from the
Real World Position.　Therefore the similarity between nonfactual indic-
atives and hypotheticals/modals can be ascribed to a nonfactual situation
viewed.　The difference can be ascribed to the difference in the viewer'
s position: the Unreal World Position in the former vs.　the Real World
Position in the latter.

1.2 the Real World/Unreal World Positions & Mental Spaces

What is the Real World Position and what is the Unreal World Position?
The proposed viewpoint distinction is importantly related to concepts
such as "Space Builders" and "Mental Spaces" (cf. Fauconner 1985) used
in analyses of similar "nonfactual" indicative sentences.

　　Consider a standard example in his theory:

(13) In the film Kevin Costner is a bodyguard.

Fauconnier proposed that the phrase 'in the film' in utterances like (13)
above plays the role of a Space Builder, a linguistic device which intro-
duces a nonfactual setting for the clause which immediately follows.
According to his theory, the interpretation of the sentence here requires
the postulated existence of two Mental Spaces, a factual Space and a
nonfactual (film) Space.　The entity 'Kevin Costner' in the nonfactual
Space can be only identified in relation to its corresponding entity in the
factual Space.　The Mental Space theory offers such an account to
explain the way in which one gets at the interpretation of a sentence such
as (13).

Let me explore the way in which the proposals in section 1.1, the RWP/UWP viewpoint distinction in particular, can be integrated with the Mental Space analysis of a sentence such as (13). First, we have found in 1.1 that indicative clauses may designate a nonfactual situation only with a contextual aid. Obviously, expressions called Space Builders can be regarded as a crucial factor for the nonfactual interpretation of indicative clauses (cf. section 4).

Second, Mental Space can be regarded as a construct which incorporates not only the various situations (OBJECT VIEWED) designated in clauses but also speaker viewpoint. In this treatment, the utterance of some clauses involve both the situation designated and its viewing position belonging to an identical Mental Space(whether factual or nonfactual). The utterance of other clauses involves the situation designated and its viewing position belonging to two distinct Mental Spaces —— factual and nonfactual. Indicative clauses represent the former case while Hypothetical and Modal auxiliary clauses represent the latter.

I consider the distinction between viewpoints OUTSIDE and INSIDE the film (i.e. the nonfactual Space)capable of being captured by the RWP vs. UWP dichotomy. That is, the viewpoint which allows the speaker to utter a phrase such as <u>in the film</u> is a viewpoint anchored in the factual space; the idea is that when speakers utter the phrase <u>in the film</u>, they perceive the "film" space from a position outside that Space; i. e. the RWP. In contrast, the viewpoint which allows the speaker to utter the clause describing the content of the film is a viewpoint anchored in the unreal Space. Speakers utter the clause <u>Kevin Costner is a bodyguard</u> in (13) from a viewpoint inside the "film" Space; i.e. the UWP.

According to Fauconnier, expressions such as <u>really, I know, in this office</u>, etc. build a factual Mental Space and expressions such as <u>maybe, He believes, in the film/picture</u>, etc. set up a nonfactual Mental Space.

Regardless of the type of 'Mental Space' evoked, I hypothesize that expressions called Space Builders are prototypically (but not necessarily[7]) issued from the Real World Position.

In section 3, I will give a fuller discussion of the relationship between Mental Spaces and Viewpoints. As I hope has been shown, the proposed viewpoint distinction between RWP and UWP is helpful in an account of two ways in which a speaker mentally contacts a fictitious world. I assume that the Real World Position is the unmarked viewpoint; the Unreal World Position is marked.[8] The assumption is that the choice of a marked viewpoint is a mental operation governed by a strict set of conditions/constraints, while the choice of an unmarked viewpoint is automatically made and generally goes unnoticed.

2. Other Viewpoints and the RWP/UWP

This section will look at viewpoint phenomena other than (IR) REALIS. In 2.1, I will classify three other basic viewpoint dimensions in language. In 2.2, I will explore a way of integrating all the viewpoint dimensions. In so doing I will use the term Cognitive Position in order to embrace all the viewpoint dimensions involved in utterances.

2.1 Other Viewpoints
In section 1, I introduced the new viewpoint dimension of (IR) REALIS, distinguishing Real World Position from Unreal World Position. I have argued that this notion is useful in a coherent treatment of English mood/ modality. This subsection will classify and discuss three other dimensions of viewpoint; namely, SPATIALITY, OBJECTIVITY/SUBJEC- TIVITY and TEMPORALITY. We will apply the framework of this paper to a few representative phenomena in each viewpoint dimension.

2.11 SPATIALITY. In the vast majority of utterances, speakers view and portray situations they want to describe from their own perspective. That is, from their physical location at the utterance time. However, some utterances oblige speakers to switch from their own to some other entity's. I use the term, SPATIALITY, to cover such a (shift in) viewpoint dimension. Since locations with which speakers may identify are typically those of humans rather than inanimate objects, viewpoint phenomena in SPATIALITY prototypically involve a switching to the vantage point of a participant in sentences.

Viewpoint phenomena in SPATIALITY have been the central topic in a number of studies on the problem of 'viewpoint' in general (cf. Kuno-Kaburaki 1977, Black et al. 1979, Banfield 1982, Nigro & Neisser 1983, Kuno 1987, and many others). So I will restrict the discussions to only a few instances and examine the way in which the present approach will work. Let us pay attention to the quoted part I am looking for Mom and Dad in,

(14) I work at a resort inn. The other day I saw a little girl alone in the lobby. So I asked what she was doing. She said, "I am looking for Mom and Dad."

The surface linguistic forms of the clause in question send an explicit signal that the clause is told from the viewing position of the little girl, a participant in the discourse rather than the speaker. Thus I here refers to the little girl, but not the speaker. The present tense of the verb form am (and possibly the vocabulary items Mom and Dad) also suggest that the speaker occupies the viewing position of the child rather than him/herself.

Compare (14'):

(14′) She said she was looking for her parents.

In the indirect speech version here, the speaker occupies his/her own position throughout the entire utterance.

In the present framework, the relevant clause in (14) represents a situation in which a little girl is looking for her parents as viewed from the little girl's position. In contrast, the corresponding clause in (14′) represents the identical situation as viewed from the speaker's own position.

Two points must be mentioned here. First, viewpoint shifts in this dimension do not have to occur across clausal boundaries. For instance, in (14″),

(14″) She said she was looking for "Mommy and Daddy".

One senses a viewpoint shift in the phrase <u>Mommy and Daddy</u>. While the utterance <u>of She said she was looking for</u> is told entirely from the speaker's own standpoint, we feel that this particular vocabulary reflects the little girl's viewpoint. An example like (14″) suggests that a speaker shifts to a discourse participant's position at structural units smaller than a clause.

Second, the SPATIAL viewpoint is not necesssarily clear-cut. Viewpoint is not necessarily either the speaker or the other, as in the contrast between Direct Speech and Indirect Speech.

In (15),

(15)a Joanne entered the room.   The chandelier was beautiful.

   b Joanne saw the man.   He did not look like a repairman.

the second sentence sounds as if it were told through Joanne's eyes as much as the speaker's. However, these examples should not be conflated with examples of the speaker's total detachment from his/her self. If the second sentence in (15)b, for instance, were told entirely from Joanne's viewing position, it would yield a direct speech such as "He does not look like a repairman to me" in which me refers to Joanne[9]. Rather it would be reasonable to treat it as being spoken through Joanne's eyes as well as the speaker's. Therefore viewpoint in SPATIALITY can be ambivalent. Speakers might locate themselves somewhere between their own position and someone else's rather than simply one or the other.[10]

Let me use the term SPEAKER position to mean a viewing position in which speakers' mind is located at their own body in the external world at the utterance time. My assumption is that in the SPATIALITY dimension, the SPEAKER position is central and basic; hence unmarked. That is, unless otherwise conditioned, speakers locate themselves in the SPEAKER position in utterances. It follows then that a viewing position detached from this unmarked position will be considered marked.

2.12 OBJECTIVITY/SUBJECTIVITY. The second dimension of viewpoint I would like to bring up is less obvious but it is equally important. The viewpoint distinction in OBJECTIVITY/SUBJECTIVITY comes into awareness when speakers project their attitudinal feeling in the crudest form.

Look at the utterance in (16) below:

(16) Gee, I don't understand what you mean. Can you repeat it please?

Careful observation will reveal that each sentence in the utterance here is comprised of two radically different types of information. The clausal form I don't understand what you mean or Can you repeat it conveys

propositional information. In contrast, the exclamatory form <u>Gee</u> or the adverbial <u>please</u> conveys the speaker's attitude/feeling toward the overall situation designated or the addressee(s).

Compare:

(16′) I don't understand what you mean. Can you repeat it?

The version in (16′) is not indicative of the speaker's attitude in the way the version in (16) is; but it is only indicative of propositional information. We may regard the utterance in (16) as an instance of explicit marking, and the utterance in (16′) as an instance of zero marking, of speaker attitude.

Based on the premise that linguistic expression is basically composed of propositional information and speaker-attitudinal information, I hypothesize that the speaker is obliged to choose different viewpoints between when s/he issues the former and when s/he issues the latter. Let me call the viewpoint from which propositional expressions are issued the NONEGOCENTRIC position and the viewpoint from which items like <u>Gee</u> and <u>please</u> as adverbial are issued the EGOCENTRIC position. Therefore in the utterance of (16), a shift in viewing position is postulated to occur from EGOCENTRIC to NONEGOCENTRIC positions (between <u>Gee</u> and the rest of the sentence) and then from NONEGOCENTRIC to EGOCETRIC positions(between <u>Can you repeat it</u> and <u>please</u>). Such a viewpoint shift is postulated to occur whenever a speaker uses attitudinal expressions such as adverbials like <u>perhaps</u>/<u>maybe</u>, <u>please</u> or interjections such as <u>well</u>, <u>uhn</u> as well as exclamations such as <u>Thank God</u>, <u>Gee</u> and <u>Oh my goodness</u>.

To say that attitudinal items are postulated to occur from the EGOCENTRIC position does not imply that the expression of the

speaker's attitudinal feeling is necessarily restricted to the EGOCEN-
TRIC position. Suppose, for instance, that today is Friday and a person
has two days off ahead and s/he wants to express his/her feeling of relief
(or joy). In such a case, the person has two viewing positions available.
Taking the NONEGOCENTRIC position will bring a clausal expression
such as I'm glad. However, choosing the EGOCENTRIC position will
result in an exclamation such as Thank God:

(17)a I'm glad it's Friday.
(17)b Thank God! It's Friday.

We find from the pair in (17) that the speaker's inner feeling could be said
from NONEGOCENTRIC as well as EGOCENTRIC positions. Never-
theless, in the majority of utterances, the NONEGOCENTRIC viewing
position is not open to speakers when they attempt to express their
attitudinal feeling. To put it differently, speakers find it inappropriate
and practically difficult to objectify their attitudinal feeling and then
express it in a propositional form during the utterance. For instance, the
feeling/attitude expressed by oops, Gee, or Wow is difficult to express
otherwise. We may say that the more attitudinal the OBJECT a speaker
tries to express becomes, the harder it gets to speak from the
NONEGOCENTRIC position. I consider the NONEGOCENTRIC posi-
tion a relatively OBJECTIVE viewing position in the following two
respects. First, the expressions orignating with the NONEGOCENTRIC
position cover a far wider range of things/situations (both in real and
unreal worlds) as objects of representation; they may even deal with
speakers' attitude/feeling. Second, the NONEGOCENTRIC position
allows speakers to objectify their experience in one degree of another
(Compare the expression I'm glad with Thank God!). Consequently, I

consider the EGOCENTRIC position more SUBJECTIVE. Not only may the expressions associated with the EGOCENTRIC position cover an extremely restricted range of things/situations but also the EGOCEN-TRIC position does not allow speakers to objectify their experience to the extent in which the NONEGOCENTRIC position does.

Two important features of attitudinal items must be mentioned. First, these items do not constitute part of a propositional (clausal) message. Thus even when the subject is in the first person, these items cannot predicate the first-person subject in the way in which adjectives like surprised and happy predicate, as shown in (18) below:

(18) *I feel thank god/oh my goodness/oops/gee/wow/please/perhaps/ uh...

What the ungrammaticality of the examples in (18) show is that the italicized items cannot predicate any entity, not even the speaker; instead they only project the inner feeling/attitude on the part of the speaker.

Second, attitudinal items may not only occur between clauses but also within a clause, although the items prototypically occur between clauses. Consequently, a viewpoint shift in SUBJECTIVITY-OBJECTIVITY may be postulated to occur within a clause as well as between clauses, as we have postulated a viewpoint shift in the SPATIAL dimension within a clause as well as between clauses. In (19),

(19) Well, I hate to say that you're... uh... guilty of sexual harassment.

we find an attitudinal(hesitation)marker uh occurring in the middle of a clause.

So far we have witnessed instances in which the two distinct types

of information are transmitted by separate lexical items. However, we may find some lexical items being capable of dealing with each type of information —— propositional and attitudinal. Look at the pairs below, in which the identical lexical item conveys propositional information in the a versions but attitudinal information in the b versions:

(20)a She is difficult to <u>please</u>.

   b Can you repeat it <u>please</u>?

(21)a Dennise is a nice <u>boy</u>.

   b <u>Boy</u>, am I hungry!

(22)a I have a <u>brother</u>.

   b Oh, <u>brother</u>!.

(23)a Can you pass me the <u>honey</u>?

   b Come downstairs, <u>honey</u>! Dinner is ready.

In the approach explored here, the italicized words in the a versions occur from the NONEGOCENTRIC position while the same words in the b versions occur from the EGOCENTRIC position. From the observation of (20)-(23), we may say that these lexical items are capable of dealing with both SUBJECTIVITY and OBJECTIVITY involved in language.

I will assume that in the OBJECTIVITY/SUBJECTIVITY viewpoint dimension, the NONEGOCENTRIC position is central and basic; it represents the unmarked position. Hence the EGOCENTRIC position is marked. The idea is that the NONEGOCENTRIC position allows for the description of any entity including the speaker. The EGOCENTRIC position is regarded as marked on the ground that despite its importance, this viewpoint is limited in its scope of application; it can only handle the subjective projection of speaker attitude/feeling.

2.13 TEMPORALITY.   Viewpoint shifts in the TEMPORAL domain as well as those in the SPATIAL domain hardly need lengthy discussions. Numerous writers have discussed this dimension of viewpoint (cf. Langacker 1978, Comrie 1985, Cooper 1986, Randriamasimanana 1987, Declerck 1990, and many others).   Here I will simply demonstrate the way in which the framework of this paper will explain the central phenomena in this viewpoint dimension.   Needless to say, the viewpoint shifts in TEMPORALITY involves the speaker's switching to temporal points detached from the time of utterance (=present); that is, past or future times.

First, we will examine a viewpoint shift to a past time.   The phenomenon called "Historic Present" has been the center of attention in the discussion of TEMPORAL viewpoint shift.

Compare the two versions in the following pair:

(24)a   Yesterday I was walking in a nearby park. <u>Then a man approaches me and suddenly yells at me</u>.   I was really surprised. (Historic Present)

(24)b   Yesterday I was walking in a nearby park.   <u>Then a man approached me and suddenly yelled at me</u>.   I was really surprised.   (Past Tense)

In the present framework, the two texts can be treated as sharing a common OBJECT VIEWED.   It is a past factual situation in which a man is approaching the speaker and yelling at the speaker.   The difference can be ascribed to the VIEWING POSITION.   The Historic Present version in (24)a represents this particular situation in the past as viewed from a PAST position simultaneous with it, whereas the Past Tense version in (24)b represents the same situation as perceived from the

PRESENT position (the time of speaking).

It follows then that the utterance in (24)a involves two viewpoint shifts; from PRESENT to PAST positions between the first and second sentences and from PAST back to PRESENT positions between the second and third sentences. The utterance in (24)b does not involve such a shift in viewpoint.

Second, the pair in (25) suggests that speakers may shift to a FUTURE position as well:

(25)a I go to Russia next month.
(25)b I'll go to Russia next month.

The Present Tense in (25)a is sometimes called a "scheduled future" usage. Exactly like the pair in (24), the two versions in (25) can be handled as representing a shared situation as portrayed from two distinct temporal positions. (25)a designates this scheduled future situation of "Speaker is going to Russia" as perceived from the FUTURE position simultaneous with "next month" relative to the time of speaking. (25)b designates the same situation as perceived from the PRESENT position (=the time of speaking).

It follows then that (25)a involves a viewpoint shift from FUTURE to PRESENT between the clause I go to Russia and the temporal adverbial next month; (25)b does not involve such a viewpoint shift.

As we have observed, the PRESENT position is cotemporal with the viewing position where the speaker is TEMPORALLY anchored at the utterance time of the sentence. It is my assumption that the PRESENT position is the unmarked position in the TEMPORAL viewpoint. This treatment is reasonable in that in the vast majority of utterances, the speaker's mind is anchored to the time of speaking, regardless of the

temporal feature(pastness or futurity)of the situation s/he attempts to express. As a natural consequence, a choice of a temporal viewing position deviant from this unmarked position is considered the choice of a marked one.[11]

2.2 Cognitive Position: Integration of four viewpoint dimensions

In the foregoing discussions, I have distinguished four basic dimensions of viewpoint phenomena in language: namely, SPATIALITY, OBJECTIV-ITY/SUBJECTIVITY, TEMPORALITY and (IR) REALIS. My central proposal is that in actual utterances, these four viewpoint dimensions operate as an integrated whole.[12] I use the term Cognitive Position to embrace all these viewpoint dimensions. The notion of Cognitive Position is represented in (26) below.

(26): the concept of Cognitive Position

4 viewpoint axes	Unmarked⟩ ⟩ ⟩ ⟩ ⟩ marked
SPATIALITY	SPEAKER⟩ ⟩ ⟩ ⟩ ⟩ OTHER LOCATION
OBJECTIVITY/SUBJECTIVITY	NONEGOCENTRIC ⟩EGOCENTRIC
TEMPORALITY	PRESENT ⟩⟩⟩⟩⟩PAST/FUTURE
REALIS/IRREALIS	REAL WORLD ⟩⟩⟩UNREAL WORLD

The formula shows that 1) Cognitive Position consists of four viewpoint dimensions; 2) Each viewpoint involves both the unmarked and marked positions. 3) the unmarked Cognitive Position represents the Speaker/ Noncentric/Present/Real World position; and 4) a deviation from the unmarked viewpoint in any one of four dimensions brings a marked Cognitive Position, regardless of the number of the marked viewpoint.

The notion of Cognitive Position outlined here is unique in its

composite and utterance-based nature. I will elaborate upon this "utterance-based" feature in the next section. In what follows, I will concentrate upon the composite aspect of Cognitive Position and explain how the framework outlined here will work.

Consider the following sentence:

(27) I am looking for Mom and Dad.

Suppose that this sentence is used by a little girl alone in a motel lobby, in response to a question like 'What are you doing here?'. In such a case, the thing designated by the sentence is a present, factual situation of "Speaker is looking for parents". The Cognitive Position can be considered unmarked; that is, the Speaker/Nonegocentric/Present/Real World position, as shown below.

Figure 4: the OBJECT VIEWED & the COGNITIVE POSITION of
sentence (27)

OBJECT VIEWED: the present, factual situation of 'Speaker's looking for parents'

COGNITIVE POSITION: UNMARKED:
Speaker/Nonegocentric
Present/Real World

EXPRESSION: 'I am looking for Mom and Dad'

First, the first-person form I is produced when the speaker of this sentence is viewed from the SPEAKER position (SPATIALITY). Second, the clausal structure of the sentence is produced when the situation is viewed from the NONEGOCENTRIC position (OBJECTIVITY/SUBJECTIVITY). Third, the present-tense verb am appears because a

current situation is viewed from the PRESENT position (TEMPORAL-ITY).   Finally, the indicative mood <u>am looking</u> appears when a factual situation is viewed from the RWP (an instance of the prototypical indicative proposed in section 1).

Next, we will see two instances in which exactly the identical sentence form in (27) represents different situations as processed from different COGNITIVE POSITIONs.

Consider:

(28) These days I dream the same dream over and over again.   In this dream <u>I am looking for Mom and Dad.</u>

We can note that both the OBJECT VIEWED and the VIEWING POSI-TION of the clause <u>I am looking for Mom and Dad</u> in (28) differ from those in (27).   The OBJECT VIEWED, "Speaker's looking for parents", in (28) is a <u>nonfactual</u> situation, as opposed to a factual situation, although the situation is also in the present.   The viewpoint in (IR) REALIS is marked; that is, the UWP, although viewpoints in other three dimensions are unmarked.   That is, the speaker's mind is anchored in the world of "a dream" so that the speaker's search for his/her parents is described in the indicative mood.   Thus we obtain the formula outlined in figure 5:

Figure 5: the OBJECT VIEWED & the COGNITIVE POSITION of sentence (27) in the utterance of (28)

OBJECT VIEWED: the present, <u>nonfactual</u> situation of "Speaker is looking for parents"

COGNITIVE POSITION: marked:

<div align="center">

Speaker/Nonegocentric

Present/<u>Unreal World</u>

</div>

EXPRESSION: "I am looking for Mom and Dad"

What figure 5 shows is that the relevant clause in (28) represents a past, factual situation of "Speaker is looking for parents" as viewed from the Speaker/Nonegocentric/Present/<u>Unreal world</u> position.

Next, consider the following example:

(29) Yesterday I dreamed a strange dream. In this dream I met a little girl alone in the yard of my house, so I asked what she was doing. She said, '<u>I am looking for Mom and Dad</u>.'

In this case, the OBJECT viewed from the relevant clause is a past, nonfactual situation of "Little girl is looking for parents." Notice that the COGNITIVE POSITION is marked in three viewpoint dimensions. The speaker takes the little girl's position, as opposed to his/her own. S/he takes a past position, as opposed to the present. S/he takes an Unread World position, as opposed to the Real World. The only dimension in which the viewpoint is not deviate is in OBJECTIVITY/SUBJECTIVITY, since it is a clausal (propositional) as opposed to speaker-attitudinal, message. Thus we may obtain the formula in figure 6:

Figure 6: the OBJECT VIEWED & the COGNITIVE POSITION of the sentence form of (27) in the utterance of (29)

OBJECT VIEWED: a past, nonfactual situation of 'Little girl is looking
for parents'

COGNITIVE POSITION: marked:

Little Girl/Nonegocentric

Past/Unreal World

EXPRESSION: "I am looking for Mom and Dad"

What figure 6 shows is something like the following.   The first-person form I designates the little girl (a participant) as viewed from the little girl's viewing position (as opposed to the speaker's).   The clausal structure designates the entire situation as portrayed solely from the NONEGOCENTRIC position.   The present-tense verb am looking represents a past situation as perceived from a past viewing position coincidental with the time of the situation designated.   Indicative mood appears despite the fictitious nature of the utterance because the clause represents a nonfactual situation as viewed from an UWP.

The formulas shown in figures 4, 5 and 6 provide a clear picture of the ways in which one sentence form may represent different OBJECTs as processed from different VIEWING POSITIONs, conveying distinct contextual, as opposed to grammatical, meanings.   It is true to say that a clause or sentence which appears in one discourse may contain several kinds of information that it does not contain in another discourse.   The notion of Cognitive Position permits us to capture such contextual meanings a clause/sentence form may carry in different utterances.

In this section focus has been placed upon the cluster concept of viewpoint in language.   In the next section, I will introduce an Utterance Processing model, and in so doing I will attempt to explicate "utterance-

based" aspect, the other crucial feature of Cognitive Position.

3. Utterance Processing Model

In this section, I will introduce an Utterance Processing model by proposing that Utterance Processing be analyzed in terms of three components: Mental Space, Cognitive Position and Cognitive Shift. I will explain in 3.1 why these three components should be viewed as essential to Utterance Processing. In 3.2 I will examine the extent to which the model will be applicable to discourse dealing with (IR)REALIS.

3.1 Mental Space, Cognitive Position & Cognitive Shift

When clauses follow each other in a stretch of discourse, the situations which they describe are semantically related to one another in a variety of ways.

Consider:

(30) Cancel the class; students will be delighted.

The two clauses in (30) represent two situations, which are semantically related with each other in a particular way; the second situation is conditional upon the first situation. The entire sequence says that "IF you cancel the class, THEN students will be delighted". Let me portray the meaning relationship of the two clauses in (30) as follows:

(30′) [situation (1) [situation (2)]]

The bold square indicates a nonfactual (hypothetical) situation, while the plain square indicates a factual situation. The idea of (30′) is that the

second situation is 'factual' only INSIDE the first hypothetical situation. I consider such a clausal relation as one of <u>inclusion</u> in the sense that the first situation semantically includes the second situation in itself.

Compare:

(31) Cancel the class; you'll be busy tomorrow.

Note first that the surface sentence structure of (31) is completely parallel to that of (30). However, the meaning relationship between the two clauses here is different in an important respect. In (31), the second situation is NOT conditional upon the first situation in the way it is in (30). What the sequence says is that "I SUGGEST YOU cancel the class, BECAUSE you will be busy tomorrow". Crucialy distinct here is the fact that the speaker of (31) takes the situation that the addressee will be busy tomorrow as true in the external world —— independent of whether or not the class is actually cancelled. Let me illustrate such a clausal meaning relationship in the manner shown below:

(31′) [situation (1)] [situation (2)]

I consider such a clausal relationship as one of <u>parataxis</u>. That is, the first (hypothetical) situation does not semantically include the second situation in itself in the way it does in (30′)

The Utterance Processing model I am exploring is an attempt to capture such a difference in meaning relationship clauses may establish with one another in a sentence/discourse. Needless to say, the exact nature of utterance processing is still far from completely known. However, recent studies in linguistics and cognitive psychology have revealed some important properties of the ways in which a human lan-

guage is spoken and interpreted. Among these properties are the involvement of "Mental Spaces" (Fauconnier 1985), "point of view" (cf. Cantrall 1974, Kuno-Kaburaki 1977, Black et al. 1979, Kuno 1987, Langacker 1987 and many others) and "on-line interactivity" (cf. Marslen-Wilson et al. 1980, Garrod & Sanford 1985, etc.).

We have already discussed the first two notions at some length. A Mental Space is regarded as a construct which incorporates a situation or a set of situations which the speaker wishes to portray as the OBJECT VIEWED in utterances. Viewpoint (or Cognitive Position) is a location from which the speaker makes mental contact with that particular situation (including entities). To the extent that a linguistic expression is a product of both the OBJECT VIEWED and the VIEWING POSITION, the concepts of Mental Space and Viewpoint are no doubt of central importance to Utterance Processing. However, the two notions alone still do not adequately capture the fundamental nature of Utterance Processing. Experimental studies like Marslen-Wilson et al. (1980) and Garrod & Sanford (1985) have indicated that active interpretation of the input takes place 'on-line'. It begins as soon as the sentence starts, and the listener does not wait until a clausal unit has been completed. The fact that interpretation takes place in real-time suggests that in linguistic communication we perceive and interpret exactly in the order in which phrases, clauses, and sentences are arranged.

In such a case, an Utterance Processing model must be equipped with a device which allows the speaker/listener to adjust (or shift) in viewpoint so that they may properly keep track of the situations designated as discourse progresses. Hereafter I will call such adjustments (shifts) in viewpoint Cognitive Shift.

Taking into account what we have found out in the above discussions, let me propose the following Utterance Processing model, shown in

figure 7 below.

Figure 7: an Utterance Processing model[13]

MS:	[Situation (1)]	[Situation (2)]	......	[Situation (n)]
CP/CS:	CP (1)	CP (2)	......	CP (n)
(E:	clause (1)	clause (2)		clause (n))

MS=Mental Space
CP=Cognitive Position
CS=Cognitive Shift
E=Expression

Figure 7 shows that **Utterance Processing** is comprised of three components, **Mental Space, Cognitive Position** and **Cognitive Shift.** Each component plays its distinct as well as interrelated roles, and these components function together to perform sentence production/comprehension in discourse.

The Mental Space component consists of a situation or a set of situations. One situation is designated by one clause, and each situation thus designated is characterized in terms of TEMPORALITY and (IR) REALIS. When clauses follow each other in a discourse, the meaning relationship between the clauses is either one of inclusion as in (30) or one of parataxis as in (31′).

The Cognitive Position component consists of a Cognitive Position or a set of Cognitive Positions, which is/are prototypically assigned in parallel with the utterance of each clause in a discourse. Cognitive Position is a perspective from which speakers make utterances. It is a location from which speakers/addressees make mental contact with (and keep track of) the situations designated in the Mental Space component.

Every linguistic element in a sentence/discourse is postulated to occur from a particular Cognitive Position. Every Cognitive Position taken in Utterance Processing is characterized in terms of four viewpoint dimensions, SPATIALITY, OBJECTIVITY-SUBJECTIVITY, TEMPORAL-ITY and (IR)REALIS. The unmarked Cognitive Position involves the Speaker/Nonegocentric/Present/Real World position; the marked Cognitive Position involves a detachment from any one of these unmarked viewpoints in Cognitive Position. One Cognitive Position prototypically, but not necessarily, corresponds to one clause (or one situation).

We speak of Cognitive Shift when the Cognitive Position adopted at the utterance time differs from the previous Cognitive Position or when CP (n) differs from CP (n-1) in figure 7.[14] Cognitive Shifts in the TEMPORAL and (IR)REALIS dimensions occur only between clauses or between a phrase and a clause. However, Cognitive shifts in SPATIAL and SUBJECTIVE-OBJECTIVITY dimensions may occur within a clause as well as between clauses.

Let us see how the Utterance Processing model outlined here will work in examples (30) and (31). In (30), the first clause is an imperative. Recall that an imperative was postulated to designate a nonfactual (hypothetical) situation as perceived from the RWP. Then we may treat the clause in question as representing a (future) nonfactual situation of "the addressee is cancelling the class" as perceived from the RWP. The second clause represents a future, nonfactual, situation of "students are delighted" as portrayed from the UWP, a case which represents a non-prototypical instance of indicatives (cf. section 1); hence the occurrence of a Cognitive Shift. Thus we may come up with an Utterance Processing model like the following.

Figure 8: the Utterance Processing model of sentence (30)

	Future nonfactual	
MS:	[situation (1)	[situation (2)]]
CP/CS:	CP (1): unmarked	CP (2): marked
	Speaker/Nonego	-----/-----
	Present/RWP	-----/UWP
(E:	Cancel the class;	students will be delighted.

In figure 8 and hereafter, the dashed line in CP/CS indicates a viewpoint identical to the preceding unmarked viewpoint.

In (31), the first clause represents a future nonfactual situation as processed from the RWP, exactly as in (30). The second clause, however, cannot be treated in the way it is treated in (30). It refers to a situation in the real world; it is postulated to represent a future _factual_ situation as viewed from a Cognitive Position identical to the preceding position.[15] Hence no Cognitive Shift. The Utterance Processing of this sentence would be then represented as in the following.

Figure 9: the Utterance Processing of sentence (31)

	Future nonfactual	Future factual
MS:	[situation (1)]	[situation (2)]
CP/CS	CP (1): unmarked	CP (2): unmarked
	Speaker/Nonego	-----/-----
	Present/RWP	-----/-----
(E:	Cancel the class;	you'll be busy tomorrow.

As the two figures above indicated, the idea of the Utterance Processing model is to look at a sentence/discourse in terms of continuous interaction between a new situation (OBJECT VIEWED) and a

Cognitive Position (VIEWPOINT) chosen to interpret that situation and to capture meaning relationships between clauses in the dynamic aspect of sentence production/comprehension.

3.2 Application

Given an Utterance Processing model, we are in a position to examine how the framework will work in the discourses in (28) and (29) treated in the preceding section.

First, consider (32).

(32) (=28) These days I dream the same dream over and over again. In this dream I am looking for Mom and Dad.

We note that the utterance of (32) consists of two sentences. The first sentence refers to a present, factual, situation of "Speaker is dreaming". The second sentence, in contrast, gives a description of the content of such a dream. It designates a present but nonfactual situation in which the speaker is looking for parents. Obviously, the first sentence and the prepositional phrase in the second sentence combine to function as a nonfactual Space Builder with respect to the clause I am looking for Mom and Dad. Therefore the meaning relationship between the two situations is one of inclusion, as illustrated below:

(32') [situation (1) [situation (2)]]

In this case, the first (factual) situation includes the second (nonfactual) situation in itself. In light of this configuration, I postulate that the first sentence occurs from the RWP. In contrast, the utterance of the second sentence requires a Cognitive Shift from RWP to UWP. The Space Building phrase 'In this dream' occurs from the RWP, whereas the rest of the sentence occurs from the 'marked' position, the UWP. Thus we obtain an Utterance Processing model like the following.

Figure 10: the Utterance Processing model of example (32)

the utterance of S1

MS: Present Factual situation Present Nonfactual situation

      [situation (1)   Space Builder   [situation (2)]   ]

CP/CS: CP (1): unmarked   CP (2): unmarked CP (2'): marked

      Speaker/Nonego   ----/----   ----/----

      Present/RWP   ----/----   ----/UWP

(E: These days   In this dream   I am...Mom and Dad)

      I dream... again.

The proposed model here can be read as follows. The speaker of this discourse initiates his/her utterance with the unmarked Cognitive Position and maintains this position until s/he issues the second clause <u>I am looking for Mom and Dad</u>. Here the speaker switches in Cognitive Position to the UWP between the utterances of <u>in this dream</u> and what immediately follows.

    Next, let us offer an Utterance Processing model of the discourse in (33).

(33) (=29) Yesterday I dreamed a strange dream. In this dream I met a little girl alone in the yard of my home. So I asked what she was doing. She said, "I am looking for Mom and Dad."

Note first that the discourse here is comprised of six clauses. Exactly as in (32) above, the first sentence and the prepositional phrase <u>in this dream</u> in the second fit together as a nonfactual Space Builder; the remainder of the discourse is interpreted as designating the content of the dream. In such a case, the meaning relationship clauses establish with one another can be shown below:

(33') [situation (1) [situa. (2) situa. (3) situa. (4) situa. (5) situa. (6)]]

Given the configuration above, we may obtain an Utterance Processing of the discourse in (33).

Figure 1 1: the Utterance Processing of (33)

the utterance of the first two sentences

MS:	Past Factual		Past nonfactual
	[situation (1)	Space Builder	[situation (2)
CP/CS:	CP (1): unmarked	CP (2): U	CP (2'): Marked
	Speaker/Nonego	----/----	----/----
	Present/Real World	----/----	----/UWP
(E:	Yesterday I dreamed... a dream.	In this fantasy	I met... home.

the utterance of the last two sentences

MS:	Past nonfactual			
	situation (3)	situation (4)	situation (5)	situation (6)]]
CP/CS:	CP (3): M	CP (4): M	CP (5): M	CP (6): M
	----/----	----/----	----/----	Girl/----
	----/UWP	----/UWP	----/UWP	Past/UWP
(E:	So I asked	what...doing.	She said,	"I am looking... Dad."")

M: marked viewpoint/U: unmarked viewpoint

We can read the model in the following manner. The speaker of the discourse in (33) initiates his/her utterance with the unmarked Cognitive Position until s/he issues the clause I met a little girl alone...In this clause s/he switches to an Unreal World Position inside his dream. S/he maintains this marked position until s/he utters the final clause I am

looking for Mom and Dad. In this quoted speech, the speaker chooses two new marked viewpoints in SPATIALITY and TEMPORALITY and speaks from a Cognitive Position marked in three viewpoint dimensions.

As can easily be observed, Cognitive shift is postulated to occur two times in the utterance of (33). First, between CP (2) and CP (2′) in (IR) REALIS; and second between CP (5) and CP (6) in SPATIALITY and TEMPORALITY.

Suppose that the discourse in (33) continues with a sentence such as "So I asked what happened to them". In such a case, the speaker is postulated to shift back to a Cognitive Position marked only in (IR) REALIS. However, if the discourse continues with a sentence such as "I don't understand why I had such a dream" instead, the speaker is postulated to shift back to the unmarked Cognitive Position in all the four viewpoint dimensions.

In this section I have demonstrated the way in which the concept of Cognitive Shift explains the real-time nature of semantic interpretation of a sentence/discourse. I believe that the analysis outlined here offers a natural and psychologically plausible basis for capturing meaning relationships between clauses in a discourse.

Cognitive Shifts in every viewpoint dimension are not expected to be arbitrary. Rather they are subject to conditions. The next section will specify the condition(s) underlying the Cognitive Shift in (IR) REALIS.

4. Condition for Cognitive Shift

The term Cognitive Shift is used in this paper to refer to viewpoint switching in one or more than one viewpoint dimensions as outlined in section 2. This section will concentrate on Cognitive Shifts in (IR)

REALIS, and it will examine patterns governing the choice of RWP/ UWP. We will first discuss under what patterns speakers shift from RWP to UWP, and then we will discuss under what patterns speakers maintain the UWP.

First, we will look at all the previous examples where the RWP-to-UWP shift is postulated to occur.

(3) In the daydream everyone arrives on time.

(4) He thinks everyone arrives on time.

(13) In the film Kevin Costner is a bodyguard.

(28′) In this dream I am looking for Mom and Dad.

(29′) In this dream I met a little girl alone in the yard of my house.

Evidently, the Cognitive Shift in question in each example is triggered by the sentence-initial phrases called "Space Builders", a type of expression which causes the clause which immediately follows to refer to an unreal world. Let us call this special type of Space Builders, 'nonfactual Space Builders'. As a first approximation, we may propose the following:

(34) Tentative Condition for RWP-to-UWP shift:
    the presence of a nonfactual Space Builder, an expression which introduces a Mental Space distinct from the real world.

It is important that the term "nonfactual Space Builder" be understood in a broad sense. It includes any expression capable of introducing a nonfactual situation: it might be phrases such as in the film/movie/ play/dream/picture, etc. It could be clauses such as I/you think(believe), Tom thinks/imagines, etc; an imperative could be a nonfactual Space Builder (example 30). The conjunction if and adverbials such as hope-

<u>fully</u> can also be such Space Builders. A nonfactual Space Builder does not have to be a single phrasal expression or clause; nor does it have to be one sentence. In many actual examples, combined expressions play the role of a nonfactual Space Builder, as demonstrated in the examples below:

(33) <u>Yesterday I dreamed a strange dream.</u> <u>In this dream</u> I met a girl alone in the yard of my house. So I asked what she was doing. She said, "I am looking for Mom and Dad."

(35) <u>You want to get Capone? Here's how you get him.</u> He pulls a knife, you pull a gun. He sends one of yours to the hospital, you send one of his to the morgue.

Here the italicized expressions combine to introduce a Mental Space detached from reality.

The statement in (34) explains why apparently similar indicative clauses in utterances such as (1), (2) or (36) do not involve the postulated RWP-to-UWP Shift:

(1) In this office <u>everyone arrives on time</u>.

(2) I know that <u>everyone arrives on time</u>.

(36) I'm lost. <u>I am looking for Mom and Dad.</u>

The expressions <u>in this office</u>, <u>I know</u> and <u>I'm lost</u> are incapable of introducing a situation in an unreal world. Their role in these utterances is introducing a particular situation existent in the real world instead.

However, observe the following pairs:

(37)a In the picture <u>a girl is dancing</u>.

 b In the picture there is a dot/hole.[16]

(38)a (=30) Cancel the class; students will be delighted.

 b (=31) Cancel the class; you'll be pretty busy tomorrow.

Note that both the prepositional phrase in the film and the imperative cancel the class qualify as nonfactual Space Builders. According to the condition given in (34), therefore, any clause which immediately follows should refer to a nonfactual world. In fact this is the case with (37)a or (38)a. However, neither in (37)b nor in (38)b does the rest of the sentence designate a nonfactual situation as portrayed from the UWP; rather each italicized clause is interpreted in terms of RWP instead.

Obviously from the examination of these examples, the condition in (34) does not capture the whole picture of what is involved in the choice between RWP and UWP. That is, the presence of a nonfactual Builder alone does not guarantee the RWP-to-UWP shift. We have found from the above observation that some clauses like the ones in (37)a and (38)a make a preceding nonfactual Space Builder actually operate as a Space Builder whereas others, as in (37)b or (38)b, do not. That is, in order for the RWP-to-UWP shift to occur, a nonfactual Space Builder must not only be present but also be actually used as a Space Builder. The question is then what factor makes a Space Builder actually operate.

I suggest that the key factor hinges on encyclopaedic knowledge/ everyday reasoning we resort to when we interpret a particular clause in relation to the overall context of utterance. To take an instance of (37) a, a situation in which a girl is dancing is far more likely to occur in the picture conceived as a nonfactual (artistic) space than as a factual (physical) space in the external world. In contrast, a situation in which there exists a dot/hole (in (37)b) is likely to occur in the "picture" conceived as a factual space, but the same situation is quite unlikely to occur within the

"picture" construed as a nonfactual space, according to our encylopaedic knowledge/cultural assumptions.

Similarly in (38)a, as far as our encyclopaedic knowledge/everyday reasoning is concerned, the situation in which students are happy might consequentially follow, as a natural course of events, the situation in which a class is cancelled. However, the situation in (38)b, where the addressee is busy, does not consequentially follow the identical preceding situation, according to our everyday reasoning.

Taking into account the above observations, let me propose the following.

(34′) Revised Conditions for RWP-to-UWP shift:

 A) the presence of a nonfactual Space Builder.

 B) the actual use of the nonfactual Space Builder as a Space Builder in the sense that according to our encyclopaedic knowledge/everyday reasoning, the situation designated in the remainder of the clause/sentence NATURALLY TAKES PLACE IN/CONSEQUENTIAL-LY FOLLOWS the situation designated by the nonfactual Space Builder.

The revised version here is intended to block the RWP-to-UWP shift in examples (37)b and (38)b as well as necessitating it in examples (3), (4), (13), (28′), (29′), (37)a and (38)a.

The statements offered in (34′) applies to the pair in (39) below, in which the viewpoint shift in question is postulated to occur in (33)a but not in (39)b, although the two sentences share an identical nonfactual Space Builder:

(39)a In the film <u>Kevin Costner is a bodyguard.</u>

b In the film I see nothing new or exciting.

According to our encyclopaedic knowledge/everyday reasoning, a situation such as the one in which a person referred to as "Kevin Costner" is a bodyguard is fully compatible with the content of the film conceived as a nonfactual space. In constrast, a situation in which the speaker is making an evaluative statement, is hardly compatible with the content of the film conceived as a nonfactual space. Exactly this aspect of the situation designated in (39)b prevents us from reasoning that what is described in the italicized clause is taking place within the film construed as a nonfactual space. In a nutshell, the decisive factor is whether the meaning of the clause in question has an adequately tight logical bond with the meaning of the preceding Space Builder.

I would like to stress here that the conditions in (34′) are not rigidly predictive; rather they are of flexible nature. The whole issue depends on personal knowledge/everyday reasoning available to communicators in the process of interpreting a particular clause in relation to the meaning of a Space Builder. Equally important is the fact that the postulated shift between the two viewpoints is also not predictive from the structural patterns of the construction, either. In (38)b, for instance, we saw an instance in which the future-tense clause you'll be busy tomorrow refers to a factual world even when it is immediately preceded by a nonfactual Space Builder. Nevertheless, we have no difficulty in finding an instance in which the situation represented in the identical future-tense clause is readily interpreted to OCCUR IN/CONSEQUENTIALLY FOLLOW a nonfactual situation designated by a Space Builder, as in,

(40) Speaker A: How about my finishing up all the interviews by Friday?

Speaker B: If you interview fifty applicants, you' ll be busy tomor-

<u>row.</u>

We may say that the grammatical construction itself is consistent with both the hypothetical and actual viewpoints; one grammatical structure may incorporate these different viewing positions in (IR)REALIS.

As expected, we may also find cases in which one grammatical structure actually tolerates the two opposing viewing positions under discussion in a stretch of discourse. Look at (41) below:

(41) Sit down on the sofa and <u>I'll mix you a drink</u>.

The utterance of (41) is ambiguous between paratactic and inclusion readings. The primary one is a paratactic reading, although the inclusion reading is also possible. What is distinct about the utterance here is that the logical bond between the two events represented is much less tight than that in the utterance of (38)a or that in the utterance by Speaker B in (40). Thus the second situation here is not unambiguously consequential upon the first situation. On the other hand, the two events are not totally detached from each other to the extent that the entire utterance unambiguously guarantees a paratactic reading. We may say that an example such as (41) serves as an instance in which the meaning of a clause in relation to its "potential" Space Builder is indeterminate with respect to the conditions in (34′).

The principles in (34′) also give us a clue as to the pattern under which the UWP once taken may be maintained throughout an utterance. Observe the following pair, paying special attention to the underlined part in each discourse:

(42)a These days I dream a strange dream over and over again. In this

dream I meet a little girl alone in the yard of my house.   So I ask
what she is doing.   She says, "I am looking for Mom and Dad."   I
ask again how come she got in there.   But this time she doesn' t
say anything and suddenly disappears.

(42)b   These days I dream a strange dream over and over again.   In this
dreamI meet a little girl alone in the yard of my house.   So I ask
what she is doing.   She says, "I am looking for Mom and Dad."   I
don't understand why I repeatedly dream such a dream.   The girl
in the dream does not resemble any little girl I know.

Let us note first that in each utterance, the first sentence and the
prepositional phrase in the second sentence combine to play the role of a
nonfactual Space Builder.   However, the two discourses above show a
sharp contrast in behavior in the final statements.   The italicized part in
(42)a designates a situation in the dream (nonfactual situation), whereas
the corresponding part in (42)b refers to a situation outside the dream
(factual situation).   In the present framework, the revelant sentences in
(42)a represent a nonfactual situation as perceived from the UWP, while
those in (42)b represent a factual situation as perceived from the RWP.

To put it differently, once the UWP is taken, the UWP is
maintained throughout the utterance of (42)a, whereas it is not maintained
in (42)b; the UWP-RWP shift occurs.   Here again the different Utterance
Processing derives from the different semantic nature of the sentences in
question in each discourse.   The relevant sentences in (42)a elaborate,
develop and expand the description of that particular dream.   That is,
the sentences designate situations whose contents function to keep the
nonfactual Space Builder actually working, because the situations are
expected to readily occur in the particular Mental Space.   On the other
hand, those in (42)b describe the speaker' s speculation as to why s/he had

such a dream. In other words, the sentences designate situations whose contents cause the Space Builder to cease to be a Space Builder in that the situations are hardly expected to take place in the current nonfactual Space.

Taking into account the above analysis, we may propose the following.

(43) Condition for the maintenance of the UWP:

the continued use of the nonfactual Space Builder in the sense that according to our encyclopaedic knowledge/everyday reasoning, the situation designated in the relevant clause/sentence NATURALLY TAKES PLACE IN/CONSEQUENTIALLY FOLLOWS the situation within the current nonfactual Mental Space.

Note that the italicized sentences in (42)a follow the condition in (43) while those in (42)b don't. Significantly, when the condition for maintenance of the UWP is satisfied, it triggers a Cognitive Shift from UWP back to RWP. This is how the "back" shift (a shift from UWP to RWP) is postulated to occur in (42)b.

5. Hypothesis 2

In section 1, I hypothesized that Subjunctives, Infinitives and Imperatives as well as modal-auxiliary sentences represent a nonfactual situation as perceived from the Real World Position. This section will examine instances which do not follow this pattern. We will look at hypotheticals/modals which should be treated as occurring from the UWP rather than the RWP. In order to handle such counterexamples, I will make another hypothesis.

First, compare the italicized clause in the following two utterances:

(44) You can go to the football game.

(45) Tom thinks you can go to the football game.

The sentence in (44) demonstrates a standard instance, in which the can (modal auxiliary) clause designates a nonfactual situation as portrayed from the RWP. From the realistic perspective of the speaker of (44), it is possible for the addressee(s) to go to the football game. However, the identical clause in (45) cannot be treated in this way. From the realistic viewpoint of the speaker of (45), it is uncertain whether it is possible for the addressee(s) to go to the football game; it is only possible in Tom's thought as opposed to the speaker's. Obviously, the difference comes from the fact that the can clause in (45) is preceded by the main clause Tom thinks, a nonfactual Space Builder. Such a difference in information the identical clause conveys in a different utterance can be best explained by examining its Utterance Processing.

Let me point out first that the clausal relationship in (45) is one of inclusion. What is distinct in this instance, however, is that while the first clause introduces a nonfactual space for the clause which immediately follows, the second, can, clause autonomously designates a nonfactual situation —— without the assist of a nonfactual Space Builder (cf. section 1). It follows then that the can clause in this particular utterance designates a nonfactual situation set up within a nonfactual setting.

Let me portray such meaning relationship of the two clauses in the following manner:

(45′) the clausal relationship of (45)

[situation (1) [[situation (2)]]]

Importantly, the two-fold bold brackets here indicate a nonfactual situa-

tion autonomously designated in a nonfactual setting as opposed to a nonfactual situation designated with the help of a nonfactual Space Builder.

It goes without saying that the nonfactual Space Builder here is not only present but is also operative as a Space Builder; the can clause describes the content of Tom's thought. This means that the utterance in (45) meets the condition in (34'). Thus it is reasonable to postulate the RWP-to-UWP shift. Therefore the Utterance Processing would be something like the following.

Figure 1 2: the UP of (45)

	Present Factual	Future Nonfactual
MS:	[situation (1)	[[situation(2)]]]
CP/CS:	CP (1): unmarked	CP (2): marked
	Speaker/Nonego	----/----
	Present/RWP	----/UWP
(E:	'Tom thinks	you can go to... game')

Noticeable is the fact that the can clause here represents a non-factual situation as processed from the UWP instead of the RWP. The idea behind this treatment is that the speaker takes the UWP as a base from which s/he portrays a nonfactual situation projected within a nonfactual setting established by a preceding Space Builder.

The identical can clause in an utterance like (46) below can also be interpreted in terms of UWP, as opposed to RWP.

(46) Cancel the class; then you can go to the football game.

First, the utterance of (46) receives the IF-THEN reading; it says that "IF YOU cancel the class, THEN you can go to the football game". The first, imperative, clause serves as a nonfactual Space Builder as well as

autonomously designating a nonfactual situation. As has already been proposed, the <u>can</u> clause represents a nonfactual situation in itself. In other words, here we have another instance of a nonfactual situation built within a nonfactual setting. The fact that the second clause is semantically controlled by the first shows that the condition for the RWP-UWP shift is satisfied. The Utterance Processing would be then represented as something like the following.

Figure 13: the UP of (46)

	Future Nonfactual	Future Nonfactual
MS:	[situation(1)	[situation(2)]]
CP/CS:	CP(1): unmarked	CP(2): marked
	Speaker/Nonego	----/----
	Present/RWP	----/UWP
(E:	Cancel the class;	Then you can go...game)

Let us see that the Utterance Processings offered above apply to a clause in the hypothetical mood in some utterances. Compare the hypothetical clause in a and b versions in (47)–(49):

(47) Infinitive

  a I want you to <u>go to the football game</u>.

  b She thinks I want you to <u>go to the football game</u>.

(48) Subjunctive

  a The boss suggests that <u>you go to the football game</u>.

  b She thinks the boss suggested that <u>you go to the football game</u>.

(49) Imperative

  a <u>Go to the football game</u>.

  b Cancel the class, and <u>go to the football game</u>.

All the a versions illustrate a prototypical instance of hypothetical mood; the clauses designate a nonfactual situation as perceived from the RWP. However, the same clause in b versions cannot be analyzed in this way. Exactly like the examples in (45) and (46), the clauses in question autonomously designate a nonfactual situation in a nonfactual setting introduced by the nonfactual Space Builder, She thinks in (47)b/(48)b or Cancel the class in (49)b.[17] That is, the hypothetical clauses in these particular utterances are also postulated to designate a nonfactual situation as perceived from the UWP instead of the RWP. As we have already observed, once the speaker adopts the UWP, s/he may tentatively use the UWP as a basic viewpoint to interpret a nonfactual situation independently built in a nonfactual Mental Space.

Obviously, the modal auxiliary clause in (45)–(46) and hypothetical clauses in (47)b, (48)b an (49)b serve as counterexamples to the previous proposal that both hypotheticals and modal-auxiliary sentences occur from the RWP. The question is under what condition speakers choose between RWP and UWP when they issue Hypotheticals/Modals.

Given the conditions for Cognitive Shift outlined in the previous section, we may propose the following:

(50) the conceptual structure of English mood/modal

i) Prototypically, speakers adopt the RWP in the utterance of a hypo-thetical/modal-auxiliary clause unless a nonfactual Space Builder is both present and actually used as a Space Builder.

ii) Nonprototypically, speakers adopt the UWP in the utterance of a hypotheticals/modal-auxiliary clause iff a nonfactual Space Builder is both present and actually used as a Space Builder.

The proposals in (50) permit us a clear account of why some hypotheticals

and modals occur from the RWP while others occur from the UWP. The statement in (50)i captures prototypical cases such as (44), (47)a, (48)a and (49)a, while the statement in (50)ii captures nonprototypical examples such as (45), (46), (47)b, (48)b and (49)b.

It would be easy to see that the Cognitive Shift from RWP to UWP postulated in the Utterance Processings of (45), (46), (47)b, (48)b and (49)b are governed by the conditions stipulated in (34′) in section 4. The crux of the matter is whether or not the "potential" nonfactual Space Builder in the utterance is activated as a Space Builder regarding the sentence which immediately follows.

Consider the following:

(51)a Cancel the class. You can skip the staff meeting.

   b Cancel the class, and skip the staff meeting.

It can easily be noted that the surface construction of each discourse in (51) is identical to that of (46) and (49)b, respectively. Both the auxiliary clause in (51)a and the imperative clause in (51)b appear immediately after an imperative Cancel the class, a potential Space Builder. However, what the two discourses say under the most natural reading is that "I SUGGEST THAT you cancel the class and I ALSO SUGGEST THAT you skip the staff meeting". Each discourse enumerates two independent suggestions. One typical context would be that "Mike, you look pale. You must be sick. Cancel the class. You can skip the staff meeting". The clausal relation is one of parataxis as opposed to inclusion. If this interpretation is correct, the imperative (the first clause) does not function as a Space Builder with respect to the second clause either in (51)a or (51)b, although an imperative is potentially a nonfactual Space Builder. In other words, the two utterances do not meet the condition for the

RWP-to-UWP shift. In such a case, we may assume that the second clause in each discourse represents a nonfactual situation as perceived from the RWP.

Conclusion

This paper approaches the problem of meaning relationships between clauses/sentences in discourse from the perspective of Utterance Processing. The main aim of such an analysis is to explore a way of examining linguistic structure from communicative, psychological and discourse perspectives. In so doing, I have shown the necessity and importance of introducing two new theoretical concepts, Cognitive Position and Cognitive Shift, in order to capture "viewpoint" and "on-line inter-activity" in linguistic processing and explain meaning relationships between clauses in discourse.

By integrating these new concepts with the concept of Mental Space, I have set forth an Utterance Processing model of language, which permits unified treatments of various types of sentence/discourse constructions which in particular deal with (IR) REALIS.

The main points I have attempted to make are the following:

A) Utterance Processing can be analyzed in terms of three components, Mental Space (OBJECT VIEWED), Cognitive Position (VIEW-POINT) and Cognitive Shift (switching in viewpoint).

B) Cognitive Position is best viewed as both a composite and utterance-based concept. It is comprised of four viewpoint dimensions, including a new dimension of the Real World Position (unmarked) vs. Unreal World Position (marked). Each viewpoint dimension involves both marked and unmarked positions. Cognitive Position is

intimately associated with the utterance time of each clause in discourse.

C) Cognitive Shift in TEMPORAL and (IR) REALIS viewpoint dimensions occurs between clauses. Cognitive Shift in SPATIAL and OBJECTIVITY-SUBJECTIVITY dimensions may occur within a clause as well as across clauses.

D) Cognitive Shift includes switching in any one of the four viewpoints which constitute Cognitive Position. Cognitive Shift concerning the RWP/UWP (a shift in (IR) REALIS) is subject to clearly definable conditions. That is, the actual usage of a nonfactual Space Builder with respect to the clause currently uttered.

Advantages of the present approach can be summarized in the following ways. First, it provides a unified account of English mood/ modals. In particular, it can deal with the potential ambiguity of indicatives concerning (ir) realis. Second, it captures the difference between indicatives and hypotheticals/modals. Third, the framework is potentially capable of giving a comprehensive treatment of viewpoint phenomena in general. Finally, and most importantly, it permits an account of the way in which people produce and understand sentences in discourse, in its dynamic aspect.

Notes

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[2]Following the classification in studies such as Jacobs (1981), I use the term "Hypothetical Mood" to refer to subjunctives, imperatives and infinitives. Except for the obligatory nature of the subject of the subjunctive, the common basic verb form that these three clause types share are strongly suggestive of their occurrence from a common cognitive source. The hypothetical nature in meaning of these clauses is pointed out in numerous studies including Bolinger (1977), Jacob's (1981) and Takahashi (in preparation).

[3]To describe modal auxiliaries as nonfactual is not to imply that each modal auxiliary indicates an equal degree of nonfactuality. According to Langacker 1991: 246), the nonfactuality indicated in a modal is a matter of degree; a must clause, for instance, places a designated situation closer to reality than a may clause does.

Here I separate will from other modal auxiliaries on the ground that at least in some utterances, will, or its shortened form in particular, is not indicative of nonfactuality but rather is used as a (factual) future-tense marker, as demonstrated in examples such as "Do you know the exact time when the train will leave?" or "There'll be no class today; the professor is out of town."

[4]Like Comrie (1985), Lyons (1977), Declerck (1990) and many others, I will use the term "situation" as a general term for the variety of content that can be expressed in a clause (viz. events, states, processes, etc.).

[5]I believe that the proposal shown in formula 3 is compatible with the general framework of "elaborated epistemic model" (Langacker 1991:

242), in which reality is divided into immediate reality and known reality while irreality is divided into unknown reality and nonreality.

[6]Recall that while Subjunctive and Imperative have been traditionally regarded as thought-mood and will-mood respectively, Indicative has been sometimes treated as fact-mood, although Indicative is capable of designating a variety of contrary-to-fact situations (cf. Jespersen 1924: 313).

[7]A nonprototypical instance in which a Space Builder is postulated to occur from the UWP is demonstrated in sentences like the following:

(i)   In this fairy tale, if you tell a lie, you will be turned into a beast.

Note that two different Space Builders precede the utterance.   Therefore we may analyze the second Builder if as occurring from the UWP, because the expression occurs in a nonfactual Mental Space established by the preceding Space Builder, in this fairy tale.

[8]Langacker observes that "the conceptual world we recognize as reality is... distinguished from others and accorded a privileged status" (1987: 113).   In the same vein, I believe that the RWP, the speaker's realistic stance, can be appropriately regarded as central and basic in comparison with the UWP, an unrealistic stance.

[9]While it is important to acknowledge the possibility of an ambivalent SPATIAL viewpoint in some utterances, the "all or nothing" treatment (in the sense used in Kuno 1987) seems to die hard.   For instance, Emanatian (1991: 354-355) explains that the italicized clauses in the sentences with the verb come as in (i)-(ii) below instantiate a shift in viewpoint from speaker's to a participant's:

(i)   She called Alvie in the middle of the night to come over and kill a

spider.

(ii) Mark's probably thinkin' the package'll never come.

Although such an account appears to be plausible, it is in fact inaccurate. If the perspective of a participant (the main-clause subject) were taken in the relevant clauses and if that is all the viewpoint involves,

(i)′ * She (i) called Alvie in the middle of the night to come over to me (i) and kill a spider.

(ii)′ * Mark (i) 's probably thinkin' the package'll never come to me (i).

sentences (i)′ and (ii)′ should be grammatical, with me coreferential with She or with me coreferential with Mark. The ungrammaticality of sentences (i)′ and (ii)′ strongly suggests that the speaker not only maintains his/her own position but also the speaker position is primary over the participant position.

Similarly, Declerck (1990) treats an instance of Free Indirect Speech as the adoption of the viewpoint of a participant in the discourse:

(iii) (One day) Mary's father asked her about her plans for the future. What did she intend to do after the summer holidays? Would she be going to university? He and Mother had always hoped she would go to oxford.

        (underlines original)

He explains that "The speaker has withdrawn from the picture, so that the situations are no longer represented from his point of view, but from the point of view of a participant's in the situations. However, this shift of point of view has no effect whatever on the tense forms. The tense

forms are still the relative tense forms..." (Declerck 1990: 90).

Despite Declerck, it is far more reasonable to analyze the viewpoint in Free Indirect Speech as "Speaker > Participant (Mary's Father)" position as opposed to "participant" position. The Speaker portion, the primary one, explains the usage of the relative tense as well as the designation of <u>Mary</u> and <u>Mary's father</u> in the third person. The Participant portion explains the direct question form, which originates with the viewpoint of a participant rather than the narrator.

[10]Although specifying the condition for a shift in SPATIALITY is outside the scope of this paper, it would be worthwhile to mention that sentences with a dynamic verb do not seem to involve a shift in perspective:

(i)a Joanne entered the room. The chandelier caught her eye.

b Joanne saw the man. He walked away.

Thus stative predicates in examples (15)a and b seem to be one decisive factor in the involvement of a shift in viewpoint.

[11]While rightly pointing out the usage of the underlined present tense in the examples below as instances of a "shift in perspective",

(i)a John says that the train arrives at 5.47.

b If you behave like that tomorrow, you lose your pocket money.

c One more step and you are a dead man.

d Laugh and the world laughs with you; frown and you'll wrinkle your face.

Declerck (1990: 67-68) treats the phenomena as "a shift of perspective from the past-present (future) to the present", explaining that "semantically,... the situation is dragged into the present".

In the framework of the present paper, the shift is postulated to occur <u>from the present to the post-present (future)</u>. To my knowledge, no independent support is available from experimental studies either for

Declerck's analysis or for mine. However, if one rejects, as Declerck does, the possibility of "displaced time of orientation" or "two times of orientation" (i.e. the time of speaking and the time of detached perspective), one will have serious difficulty in giving a consistent treatment of viewpoint phenomena in different dimensions such as SPATIALITY. As we have already observed, the adoption of a viewpoint detached from the location of the speaker is widely recognized as one of the important cognitive abilities speakers exert in linguistic expression.

[12]The notion of "ground" (Langacker 1987, 1990 and others) may be regarded as an attempt to capture the viewpoint which is basic to utterances, although the term embraces factors other than viewpoint. "Ground" refers to "the speech event, its participants, and its immediate circumstances (such as the time and place of speaking)" (Langacker 1990: 9). The concept integrates the unmarked viewpoints in SPATIALITY and TEMPORALITY.

[13]For the sake of simplicity, the Mental Space component in the figure here demonstrates an example of the paratactic relation of situations. The model is simplified in the following two respects as well. First, it does not take into account a viewpoint shift within a clause. Second, it does not consider a case in which mental spaces do not coincide with clauses, as demonstrated in a classic example such as Bill thinks he is smarter than he is. I am grateful to Ronald W. Langacker for reminding me of this fact.

[14]I believe that the notion of Cognitive Shift defined here is more precise than the notions of viewpoint shift generally considered. Linguists speak of viewpoint shift when "a situation which belongs to a particular absolute sector is represented as if it belonged to another" (Declerck 1990: 68). Cognitive Shift means viewpoint shifts between unmarked and marked positions (not simply from unmarked to marked)

and also between two marked positions.

[15]Here I am considering <u>will</u> as a pure future-tense marker; I am not considering the volitional usage of <u>will</u>, in which case the situation represented in the clause will be characterized as Nonfactual Future.

[16]I am grateful to Gilles Fauconnier for offering this example.

[17]The sentence in (39)b allows for the paratactic reading as well. However, under at least one reading, the inclusion reading is possible.

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