# A Cognitive-Semantic Study of Deixis

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### 1. The ICM of Deixis

An important principle of "experientialism" (Lakoff, 1987) is that human knowledge is organized in terms of Idealized Cognitive Models (ICMs). These are complex conceptual structures in which any element of a cognitive model corresponds to a conceptual category. Concepts, then, are characterized relative to ICMs. When linguistic elements are associated with conceptual elements in ICMs, the result is a symbolic ICM or a gestalt. Thus, the meaning of a lexical item is represented as an element in an ICM.

In his extensive discussion of *there*-constructions, Lakoff (1987: 462-585) describes the experiential gestalt (the ICM) of the central deictic *there*-constructions in locational terms as follows:

It is assumed as a background that some entity exists and is present at some location in the speaker's visual field, that the speaker is directing his attention at it, and that the hearer is interested in its whereabouts but dose not have his attention focused on it and may not even know that it is present. The speaker then directs the hearer's attention to the location of the entity (perhaps accompanied by a pointing gesture) and brings it to the hearer's attention that the entity is at the specified location. Additionally (for older children and adults), if the entity is moving, the motion may be indicated. And the speaker may choose to describe the entity or its location. (Lakoff, 1987: 490)

Lakoff argues convincingly that the ICM of there-constructions gives rise to a

prototypical structure and motivates its various uses. It is clear from the above that *there*-constructions in English are based on the following inferences: firstly, there should be an existential presupposition of an entity in space; secondly, the speaker intends to direct the hearer's attention to the entity, and thirdly, the speaker's intention is fulfilled by the employment of the particular construction. It then is reasonable to assume that whatever definition is proposed for the deictic ICM, it should include these three essential aspects of *there*-constructions.

Fillmore (1982: 35) describes the participating role of interactants in a communicative situation, that is, their interchanging roles as speakers and addressees, their location in space and time. Hence, participants may also be viewed as specific entities in space, whereas their utterances are temporally defined.

Following these ideas, I argue that every utterance is spatio-temporally unique, spoken or written at a particular place and at a particular time. The actual situation of any utterance act may be specified by giving its spatio-temporal co-ordinates. We can say, for example, that a particular utterance was produced by X in Kumamoto at 12 noon on 1 January, 2008. The spatio-temporal co-ordinates are, however, only a component of the utterance situation. Other components are involved as well. For example, each of the participants is expected to know his/her role and status. Participants' roles derive from the fact that in normal language behavior the speaker addresses to the hearer co-present in a communicative situation. Social status is a culture-specific function established in a society and recognized by its members. Generally, the person-deictic role is the predominant determining factor in selection of pronouns, but there is a richly different set of terms of address which the speaker must manipulate if he/she is to produce an utterance appropriate to the situation. Hence, social status also determines selection of personal pronouns as well as associated components of grammatical structure of an utterance. In short, the participants must know not only where they are in space and time, but they must also know his/her status in relation to one another. Thus, the speaker needs to control and is able to correlate two different systems of reference: the normal deictic system created by an utterance act itself and a culture-specific system of status also represented by social deixis.

Based on the above analyses, I propose that our conceptualization in general be

formulated in terms of space. The center of this conceptualization is the authorized speaker. The conceptualization also involves an unfocused addressee, and a linguistic act of pointing by the speaker. Time is conceptualized in spatial terms and is considered a "fourth" dimension of space. Moreover, a "fifth" dimension, i.e. social deixis, emerges which is also conceptualized spatially. Significantly, the deictic center constantly shifts while a communicative interaction is in progress. Accordingly, the ICM of a deictic expression builds a mental "space" in which the speaker and the addressee are co-present, not only spatially, but in terms of temporal locations and social relationships as well.

#### 2. Mental Spaces

Mental spaces are "constructs distinct from linguistic structures but built up in any discourse according to guidelines provided by the linguistic expressions" (Fauconnier, 1985/1994: 16). They concern an understanding of any fixed or ongoing states of affairs such as an immediate reality, fictional or hypothetical situations, past or future situations, representations of situations as in pictures and photos, or abstract domains such as subject matters (economics, politics, cultures, sports, linguistics, etc.). Linguistic expressions functioning as space-builders include prepositional phrases such as "in the play", "in that film", adverbs such as "really", "probably", connectives such as "if...then", "either...or", and clauses of propositional attitude such as "Mary hopes/believes/claims...". Mental spaces are represented as sets of elements with relations holding between them. Elements in a space may have counterparts in different spaces. An element in one space may trigger another element (the target) in another space and there is a pragmatic function (the connector) holding between the two elements. One pragmatic function links authors with their works. Thus, reference to the author may trigger reference to his/her works, the connector holding the two being pragmatically determined. It is suggested that "connectors are part of ICMs, which are set up locally, culturally, or on general experiential or psychological grounds" (Fauconnier, 1985/1994: 10).

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In using the time deictic adverbial "now", then, a mental space is built in discourse structured by the deictic ICM, and within this particular space, it is assumed, the speaker and the addressee are located at coding time. Similarly, the expression "this house" builds a mental space in which the co-presence of speaker and addressee is assumed at coding time. In both these examples, the mental spaces built by corresponding linguistic expressions are structured by all aspects of the deictic ICM: that is, the speaker, authorized by his own utterance, is represented as a definite entity in the space<sup>1</sup> which is temporally/socially shared by the addressee.

Let us now consider in detail the following well-known speech by Abraham Lincoln:

Four score and seven years ago our fathers brought forth on this continent, a new nation, conceived in liberty, and dedicated to the proposition that all men are created equal. Now we are engaged in a great civil war, testing whether *that* nation or any nation so conceived and so dedicated, can long endure [...]. We have come to dedicate a portion of the field, as a final resting place for those who here gave their lives that *that* nation might live. It is altogether fitting and proper that we should do this. [Italics mine]

Why, in the example above, did Abraham Lincoln address America as "that" nation? Traditional theories of deixis cannot give an adequate account of this. From a cognitive-semantic perspective, by contrast, the space builder "four score and seven years ago" constructs a new space which includes elements such as "our fathers" and "a new nation, conceived in liberty". This newly-created space belongs to the past, another space, and the latter is itself contained in its parent space, i.e. the reality space. Thus, the past space is "distal" in that it does not belong immediately to the present, parent space, and hence the deictic expression "that" is used here.

#### 3. Mental Spaces and Deictic Ambiguity

This section will attempt to explain how mental space theory works with regard to deictic expressions, focusing in particular on ambiguity between deictic and nondeictic usage. Let us examine place deictic expressions. Typically, with place deixis the position of the speaker at CT is regarded as the base to describe the location of a referent. In utterances that follow:

- (1) "The ball is in front of me."
- (2) "The ball is behind me."
- (3) "The ball is in front of the tree."
- (4) "The ball is behind the tree."

The "front" in (3), for example, refers to the area of the tree visible from where the speaker is at CT. Here, the "front" is used just as deictically as it is in (1) in that the location of the ball is identified indirectly, if not directly as in (1), with reference to the location of the speaker. But some objects, unlike trees, have intrinsic orientations (e.g. objects such as a car whose bottom remains the bottom even when the vehicle is overturned, and their front remains the front even if the car is going backwards), and this allows the speaker to regard these objects rather than himself/herself as reference points. As a result, both "front" and "behind" in the following utterances have lost their deictic functions:

- (5) "The ball is in front of the car."
- (6) "The ball is behind the car."

Unfortunately, the issue is not quite that simple, and an ambiguity may also arise when intrinsic properties of reference objects are involved in deixis. Suppose that there is a ball between the car and the speaker. In this situation, the location of the ball is identified as in front of the speaker with reference to the base (i.e. the speaker). In other words, "front" (as well as "behind") in this particular situation is restored to its deictic function. Hence, it is clear that some linguistic elements such as "front" and "behind" do have both deictic and non-deictic usages.

Why then are there two readings for (5) and (6)? Following the theory of mental spaces, I argue that "front" in (5) as well as "behind" in (6), build two separate mental spaces, one of which is constructed by the deictic ICM and in it the ball is directly determined by the position of the speaker. In the other case, however, a mental space is constructed by our knowledge of cars, and "the car" itself is regarded as the reference point. In the latter reading, it should be noted, a non-deictically constructed mental space is involved.

Now let us turn to an ambiguity found between deixis and anaphora and see how mental spaces can cope with this problem. Generally, third person reference is regarded as non-deictic in cases in which the speaker does not point gesturally at an entity referred to:

(7) "John came in. Then he lit a fire."

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The pronoun "he" in (7) is non-deictic, i.e. anaphoric, because it does not make reference to any entity relative to the speaker but refers back to the referent picked out by "John" in the preceding utterance. As is well known, deixis depends directly on extralinguistic contexts for establishing referents, whereas anaphora depends on previously established entities for its proper binding. We may conclude from this that deixis and anaphoricity are prototypically independent phenomena. However, sometimes it is perfectly possible that a deictic term may be used both anaphorically and deictically. Take "there" in (8) for an instance:

(8) "I was born in London and have lived there ever since."

The "there" in (8) anaphorically refers to the place "London", but it is simultaneously discourse-deictic: put in other terms, "there" is a deictic reference to "London" unless otherwise indicated. Under the deictic reading of (8), a mental space is constructed by the deictic ICM whereas under the anaphoric reading a new mental space is constructed by elements in prior discourse, i.e. "born in London".

#### 4. Blending Theory and Deictic Center Projection

Now, let us start by considering the following example:

(9) "I'm coming right away."

(9) is normally interpreted to mean that the speaker leaves his/her own location (the deictic center) and moves toward the addressee. Hence, according to the definitions of motion verbs, (9) should select "go" rather than" come" as in Japanese, in which one normally utters the equivalent of "Ima 'iku' yo" ("I will go"). Levinson (1983: 83) contends that the use of "come" in (9) arises from a polite deictic shift to the addressee's point of view: to use "come" would be to convey participation and cooperation. Lakoff (1973: 298) also gives an explanation that the verb "come" in this example is used to make the addressee feel good.<sup>2</sup> I agree with both Lakoff and Levinson with regard to the above observations, but these interpretations obviously have not explained the process in which this sentence is generated and they are little more than descriptions of extralinguistic circumstances where (9) is uttered.<sup>3</sup>

Why does the speaker use "come" instead of "go" in English examples such as (9) to refer to the location where the addressee is at utterance time (CT)? This cannot be explained, I argue, within the scope of traditional theory of deixis. However, the idea of "dialogic space" propounded by Yamaguchi (2000), in conjunction with blending theory, is very promising and is likely to offer a cogent account of the use of "come" in (9).

Based on Yamaguchi (2000), I argue that each of the participants (A and B) has their own mental space before a conversation takes place. Once the conversation starts, these two separate spaces will be fused by the very fact that each participant takes the role of speaker/addressee, and will thus create a common mental space shared by both speaker and addressee. Yamaguchi calls this common space a "dialogic space" (see: Fig.1). In this dialogic space there are a number of elements such as "T" (the speaker), "you" (the addressee), verbs, time and place adverbs, and others. Consider (10) for an example: (10) Mother: "Mike, dinner is ready!" Son: "I'm *coming* right away."

In the dialogic space of (10) there are several elements such as "Mike", "I", "come", and "right away". Yamaguchi claims that the usage of motion verbs is intimately related to a dialogic space itself. That is, the use of "come" is restricted to movements within or into this space, but he is not very persuasive in accounting for

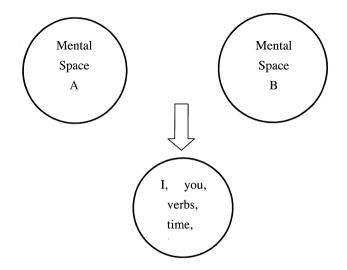


Fig.1 The dialogic space

why the dialogic space is involved in the occurrence of "come".

I maintain that the dialogic space thus built up contains two input spaces which in turn fuse together to form a blended space, and that it is precisely the verb "come" that triggers this blending. In order to cast a new light on the use of "come" in (9), let us first have a look at a classical example of blending:

(11) If Napoleon had been the son of Alexander, he would have won the battle of Waterloo. (Fauconnier & Turner 1996)

In (11), a counterfactual space (i. e. a blended space) is created from two different

input spaces (see: Fig.2). The two input spaces are (a) Napoleon, who was defeated by Wellington at Waterloo and (b) Alexander the Great, king of Macedonia who ruled over a huge empire including Greece, Egypt, and Asian countries. To construct a blended space, we map elements from each of the two spaces into a new space, i.e. a blended space.

The new space thus created takes the role of Napoleon from input space (a), and from input space (b) it takes the role of son of Alexander the Great. Now in the blended space, Napoleon is the son of Alexander and wins the battle at Waterloo, which is obviously contrary to fact.

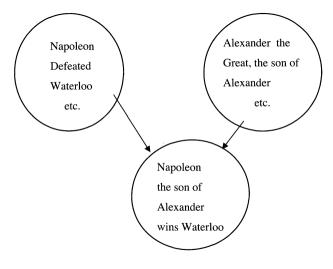


Fig.2 The blending

Let us now turn back to the verb "come" in (9). According to the principles of blending (Fauconnier, 1985/1994), a set of conditions must be satisfied when two input spaces are blended. First, elements in one input space have their counterparts in the other space. Put differently, the relations between the spaces are those of mapping. Second, because there are sufficient mapping relations between the two input spaces, the spaces may build a third space, i.e. a generic space. The generic space reflects some common structure and organization shared by the two input spaces. For the utterance "I'm *coming* right away", I hold that one of the two input

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spaces (input space 1) represents the addressee's viewpoint. It constitutes the ICM of "come" which involves the deictic center, i.e. the location of the addressee, a referential entity, i.e. the speaker, and a description of the entity moving towards the deictic center, i.e. the verb "come". Hence, from the viewpoint of input space 1, the situation is depicted as: "The speaker is *coming*". The other input space (input space 2) is special in that here the speaker is at once the deictic center and the moving entity. This frequently gives rise to an interesting phenomenon: we make a mistake in the perception of an event. Since the speaker himself/herself is moving, he/she very often confuses the fact that he/she is moving with the fact that the other interlocutor is. In other words, the speaker does not perceive his/her own movement; what the speaker actually sees is the addressee "moving" towards him/her. This also happens when we ride on a bus: we do not normally feel the movement of the bus

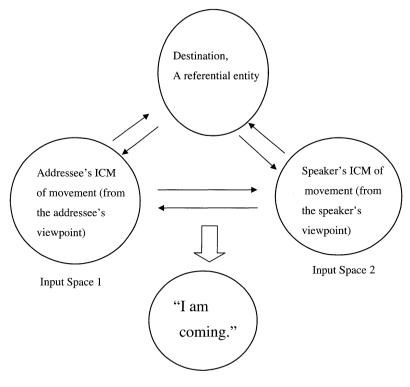


Fig.3 "I am coming."

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but instead see the movement of the landscape outside. Hence, from the standpoint of input space 2, the situation is described as "The addressee is *coming*." (see: Fig.3).

Importantly, these two input spaces share a frame structure: that is, there is a destination to which a referential entity is approaching. Linguistically, this is represented by the verb "come". This shared feature provides for a third space, i.e. a generic space connecting both input spaces. The generic space in turn enables the input spaces to be blended.

The verb "come" is the element that fuses the two input spaces in sentences such as (9). This fusion has an important consequence. The viewpoints of two interlocutors merge into one. Put in different terms, the speaker is adopting the addressee's point of view. Incidentally, with the Japanese utterance "Ima 'iku' yo", there is only one space with the ICM of "iku" (go) and this leads to an interpretation on which the situation in question is viewed solely from the speaker's viewpoint.<sup>4</sup>

#### Notes

<sup>1</sup> Here, I must point out that this mental space is a domain built up as we talk. For example, the drama ICM introduces and structures the mental space of a play. Because we understand a drama as a make-up piece of literary discourse, we also understand that a murder in a play does not actually cause the physical death of an actor.

<sup>2</sup> The theory of empathy (Kuno & Kaburaki: 1977) claims that this peculiar use of "come" in (9) is explained in terms of shifts in viewpoint: when the referent of a third person dative object ("to you") is someone/something closely affiliated with the speaker, the speaker expresses his/her highest degree of empathy and totally identifies himself/herself with the referent. The total identification of speaker and addressee results in a fusion of their viewpoints.

<sup>3</sup> Bolinger (1968: 327) describes the utterance "I'm going to your party" as "perfunctory if not rude". Yet, this explanation still conflicts with the pragmatic function of the Japanese verb "iku" which implies no such connotation.

<sup>4</sup> Brown & Levinson (1987) have given their idea about the selection of politeness strategies in language. They argue that switching into the addressee's viewpoint is a basic politeness phenomenon, and they call it positive politeness, i.e. a force of politeness that

makes two objects move toward each other. By contrast, if the speaker distances himself/herself as an individual from the addressee, it is regarded as negative politeness, conveying distance and less participation. Hence, I submit that "iku" here would presumably be regarded as an example of negative politeness.

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