

# Counterfactual Conditionals, Mental Spaces, and ESL Pedagogy

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## INTRODUCTION

English language teachers frequently turn to pedagogical or reference grammars and the information provided in textbooks to guide them through the teaching of grammar, with its often perilous woods full of tricky items like prepositionals or complicated constructions such as conditionals. Yet the available information is sometimes of limited usefulness, as it often takes a rather mechanical approach to the teaching of grammar. One notable exception is *The Grammar Book* by Celce-Murcia and Larsen-Freeman (1999), a respected ESL/EFL pedagogical grammar informed by a wide range of sources including descriptive reference grammars such as those of Quirk et al (1985) and Jespersen (1924), and varied linguistic research. It is an invaluable resource for its breadth of coverage and the importance given to the semantic and pragmatic considerations of understanding and teaching grammar. In contrast with pedagogical grammars, we find the work of Gilles Fauconnier, Eve Sweetser and other cognitive linguists working in a similar vein. While the work of these linguists examines how language functions, it is not intended as a grammar, although it might be considered as movement towards a cognitive grammar. Nevertheless, their work contains extraordinarily innovative and far-reaching insights into the nature of language, particularly regarding the construction of meaning in discourse.

What is evident to anyone with even a passing familiarity with these two areas of linguistics, and what the author finds to be a great pity, is the lack of exchange and interaction between the fields of ESL and cognitive linguistics. At present there is very little, save some scattered material on metaphor. This paper takes a small step towards the integration into ESL teaching of some ideas from cognitive linguistics, namely Fauconnier's theory of mental spaces and meaning construction (1997), with a focus on counterfactual conditionals. A survey of conditional typologies is presented, followed by a look at counterfactual conditionals, a brief examination of the mental spaces theory, and finally, possible application of the mental spaces theory to the teaching of counterfactual conditionals.

## PRINCIPAL TYPOLOGIES OF CONDITIONAL STRUCTURES

There are numerous different systems for classifying and describing conditional structures. Some principal schemes are summarized below.

## A. Formal Terminology—Traditional ESL

- (1) First conditional: *If I have the time, I'll take a break.*
- (2) Second conditional: *If I had the time, I would take a break.*
- (3) Third conditional: *If I had had the time, I would have taken a break.*

(Note: these are also known, respectively, as *the future*, *the present* and *the past* conditionals or as *the real/possible*, *the unreal/hypothetical*, and *the unreal/hypothetical past* conditionals.)

The oversimplified system presented in (A) is the most commonly known, and is frequently encountered in ESL textbooks and grammars. For example, the widely used *Understanding and Using English Grammar* by Azar (1989) uses this scheme for its basic classification. This model mainly is descriptive of patterns associated with time frames and not semantic values, a somewhat mechanical perspective. It is of limited value because of its inability to easily account for the wide range of tense, aspect, and modality (TAM) combinations found in conditional constructions.

## B. Semantic Terminology

I. Quirk et al. (1985):

- (4) Open conditions: *If I have the time, I'll take a break* (c.f. First conditional above).
- (5) Hypothetical conditions: *If I had had the time, I would have taken a break.*

(Note: Both the second and third conditionals above fall into this category).

II. Celce-Murcia & Larsen-Freeman (1999):

- (6) Factual conditionals: *If I have the time, I take a break.*

(Sub-categories: Timeless generic and habitual—(6) is the latter—time-bound implicit inference and explicit inference).

- (7) Future/Predictive: *If I have the time, I'll take a break.*

(Strong condition and result. The other sub-category here is degrees of weakened condition or result using modals—e.g.: “*If I should have the time I might take a break.*” )

- (8) Imaginative: a. *If I had the time I would take a break.*

(Hypothetical present. Hypothetical future is a second hypothetical type.)

- b. *If I had had the time I would have taken a break.*

(Counterfactual past. Counterfactual present is a second type.)

The terminology used for both systems appearing under (B) seeks to replace the traditional formal terms with semantically oriented terms. In Quirk et al. (1985) the focus is

on the meaning established by the speaker's intent relative to the truth value of the conditions expressed. The open vs. hypothetical distinction is one of neutral conditions in the open conditionals, which "leave unresolved the question of fulfillment or nonfulfillment of the condition, and hence also the truth of the proposition expressed by the matrix (result) clause" and hypothetical conditions, which convey "the speaker's belief that the condition will not be fulfilled" for either future, present, or past conditions, depending on the situation, "and hence the probable or certain falsity of the proposition expressed by the matrix clause" (p. 1091). This distinction is then linked to variations in verb forms, for example, the backshifting of tense seen in hypotheticals.

The approach taken by Celce-Murcia and Larsen-Freeman (1999) is to use the semantic relationships expressed by conditionals to examine their function and use in discourse. Their tripartite classification on semantic principles—factual, predictive, and imaginative—are further divided in 10 sub-categories (listed in [B, II]). Each of these are discussed in terms of their meaning as generated in discourse and their most frequent TAM combinations. The analysis acknowledges a wide TAM range dependent as much on speaker intent as on *correct*, i.e. traditional, grammatical forms.

### **C. Cognitive domain terminology** (Sweetser, 1990).

- (9) Content domain: *If I have the time, I'll take a break.*
- (10) Epistemic domain: *If he had the time, then he took a break/must have taken a break.*
- (11) Speech-act domain: *If I may put it bluntly, I need a break.*

Sweetser's (1990) classification system is based on ideas of meaning construction developed in cognitive linguistics, and comes from an analysis of modals in which she demonstrates a metaphoric mapping across domains connecting modals' otherwise disparate epistemic sense—indicating necessity, probability, or possibility in reasoning—and their root (deontic) sense—indicating real-world obligation, permission, or ability. She proposes that "root modal meanings are extended to the epistemic domain precisely because we generally use the language of the external world to apply to the internal mental world, which is metaphorically structured as parallel to that external world" (p.50).

Extending this idea of cross domain connections to conditionals, Sweetser establishes the three types of conditionals seen in (C) above. In content domain conditionals, the realization of the event or state of affairs described in the protasis is a sufficient real world cause for the realization of the event or state of affairs described in the apodosis (p.115). In

other words, the link between clauses is one of cause and effect obtaining in objective reality, i.e. the content domain. By contrast, the epistemic domain conditional expresses the reasoning process in which the knowledge of the hypothetical premise in the protasis leads to the conclusion of the apodosis, similar to the formal-logical *if-then* structure analysis. Sweetser's third category, speech act conditionals, consists of an open condition dependent on the performance of an implicit speech act of the utterance. Knowledge of the context in which it is uttered is necessary to make sense of a speech act conditional, whose conditionality is in fact somewhat suspect, although an analysis of this point is beyond the scope of this paper.

## COUNTERFACTUAL CONDITIONALS

### Forms and Perspectives

Counterfactual conditionals express impossibilities with reference to either the present or the past. There are two basic TAM combinations for the present (12), (13) and one for the past (14):

(12) *If he were two feet taller, he could play in the NBA.*

protasis: present subjunctive; apodosis: modal (usually *would*)

(13) *If you lived here, you would be home right now.* (Sign outside an apartment complex).

protasis: simple past ; apodosis: modal (usually *would*)

(14) *If I had known the answer to that question, I wouldn't have asked you.*

protasis: present perfect; apodosis: modal perfect (usually *would*)

Although most accounts of counterfactuals present *would* as the verb form of the apodosis, there is no reason another modal cannot be used, as in (12), as long as an impossible state of affairs is being expressed. This is found in well-respected ESL grammar texts such as *Using English English: Your Second Language* (Danielson & Porter, 1990) grammars such as *The Grammar Book* (Celce-Murcia & Larsen-Freeman, 1999), and research articles such as *Varieties of Conditional Sentences* (Fillmore, 1986).

The term *counterfactual* to describe the constructions shown above is not universal. Many textbooks and grammars (Thewlis, 1997; Danielson & Porter; 1990, Azar, 1989; Close, 1962, 1992) dispense with it altogether, collapsing hypothetical and counterfactual conditionals together under the moniker of *hypotheticals*. Hypotheticals are generally identified as expressing "a negative expectation or assumption about the possibility of the condition" (Danielson & Porter p.143), with the added distinction for the past form (i.e. past

counterfactual) that the speaker is certain that the condition was not fulfilled, hence its impossibility. As noted, Quirk et al. (1985) include both probable and certain falsity of propositions under the type *hypothetical* (p.1091). In fact, the line between hypothetical (contrary to assumption) and counterfactual (contrary to fact) can become blurred, or may not always be considered a distinction of great importance, so that an *all hypothetical* simplification has semantic justification in addition to the advantage that there are fewer terms to sort out.

However, as pointed out by Celce-Murcia & Larsen-Freeman (1999), there is often a semantic distinction between present counterfactuals and present hypotheticals, which can display identical TAM combinations. Consider:

(15) *If Joe had the time, he would go to Mexico.*

(16) *If you had Triple A, and went to a phone, you could get a tow immediately.*

These examples demonstrate an interplay between assumption, possibility, and contrariness to fact that has nothing to do with grammatical form but much to do with context. In other words, the present time reference of the conditional does not simply signal “contrary to assumption” (Quirk et. al., 1985, p.1091). There is nothing inherent in either the content or the grammatical structure of (15) to indicate that Joe definitively will not have the time under a certain set of circumstances *known to the interlocutors through background knowledge*, unlikely though the speaker might consider it. In (16) the speaker knows that you do not in fact have Triple-A (background knowledge—there is no question of assumption or speculation here), so both propositions of this conditional are entirely counterfactual. Perhaps this hypothetical-counterfactual distinction is splitting semantic hairs, but it seems important to make distinctions where they exist, instead of formulating generalizations which may not fit all situations.

Sweetser’s classification of conditionals neatly avoids these kinds of ambiguities by placing all non-cause and effect conditionals under the *epistemic* category, and approaching them individually based on their epistemic stance, i.e. how close or how far from reality is the expressed state of affairs in the knowledge/belief system of the speaker. In *if* conditionals this epistemic stance is expressed largely by TAM combinations (Fauconnier, 1997; Sweetser, 1996), which will be discussed later.

Sweetser’s analysis is based on a cognitive linguistic approach, while Comrie (1986) takes a pragmatics-semantics approach which considers speakers’ subjective evaluations informed by background knowledge and context rather than the truth conditional semantics

of the traditional. logical analysis. He argues that there are no counterfactual conditionals in English, positing that *all* conditionals express greater or lesser degrees of hypotheticality, an analysis built on the claim that “a conditional never expresses the factuality of either of its constituent propositions” (p.89). Rather, it expresses a logical relation between the constituents, a relation formed in the mind of the speaker; it is interpreted within a discourse context with a mental model using physical (real world) and social context. Particularly as regards the preeminence given to discourse context in creating meaning, this approach has some affinities with Sweetser’s analysis and the mental spaces model which will be looked at shortly.

### **Pedagogy**

What is the connection between these different accounts of counterfactual conditionals and ESL pedagogy? As suggested in the introduction, there is little apparent crossover between linguistic theory and classroom practice. Counterfactuals seem both to occupy theorists far more than they do teachers or textbook writers and not to receive any special status relative to other conditionals in pedagogical treatments.

Nevertheless, counterfactuals, the past form in particular, are anecdotally recognized by teachers as a particularly difficult construction for ESL learners. This is supported by at least one study (Berent, 1985) which found that of the traditional three conditionals, ESL students had the most difficulty comprehending the *past unreal*—i.e. past counterfactual—construction. Two studies (Snitzer Reilly, 1983, 1986) examining the acquisition order of conditionals by children (comprehension and production), showed that full counterfactual morphology appears last of all conditionals, although conclusions regarding ESL learning based on observations of native speaker child language development must be made cautiously. A survey of ESL teachers to identify the most serious teaching problems (Covitt, 1976, cited in Celce-Murcia & Larsen-Freeman, 1999), had conditionals ranked fifth (after, in order, articles, prepositions, phrasal verbs, and verbals).

Thus it is not surprising that a widely respected grammar-based textbook series in four volumes—*Grammar Dimensions*—reserves hypotheticals (counterfactuals are not treated as separate constructions) for the upper intermediate book (vol. 3)—the last treatment of conditionals as a separate topic in the series. Raimes’ (1990) grammar text *How English Works* has conditionals in the last of 27 units dealing with grammatical constructions.

The method of presentation in ESL texts of conditionals in general and of counterfactuals in particular varies. Three areas to consider in evaluating a text's value are context, explanation, and practice activities. Reference-cum-practice texts such as Azar (1989) and Murphy (1994) use the present-real, present/future-unreal, and past unreal distinction (with some expansion, it is only fair to note), provide virtually no context beyond a sentence or two, and give a short deductive explanation of which TAM combinations are associated with which time frames and what they "mean." Practice is generally mechanical: gap fills choosing the correct TAM form and some transformations. These types of texts exemplify decontextualized grammar practice.

Well-respected texts such as *How English Works* (Raimes, 1990) and *Using English* (Danielson & Porter, 1990) provide some degree of context in the form of sections of discourse in which to situate the structures, and then relate this to the explanations and practice activities, thereby integrating context, presentation, and practice. *How English Works* does this particularly well; it integrates authentic readings into the units, using them for context setting as well as source material for practice exercises, such as locating conditional sentences within a passage, although an important missed opportunity is speculation on conditional meaning in the context—i.e. which conditions obtain at present, which are implicit in the counterfactual, and so on. *Grammar Dimensions* provides relatively little discourse context, although in its favor it has lots of example sentences and a wide variety of practice activities which focus on semantic values. For example, a counterfactual is presented along with a choice of possible implied meanings from which the student must choose, or the student identifies whether a given sentence indicates statements of past possibility or counterfactuality. There is also a listening activity in which students hear conditionals including counterfactuals in the context of a conversation, and then answer questions to reflect correct understanding of the meaning of those conditionals.

All three of the texts mentioned in the preceding paragraph use fairly deductive explanations, although how these are presented to the students will vary according to a given teacher's approach, and greater or lesser degrees of inductive teaching are possible with all these texts before reaching the in-text explanations. *Grammar Dimensions* has above average explanations of hypothetical meaning (it does not use *counterfactual* as a term) in which a conditional is presented and contrasted with its *implied actual meaning*:

HYPOTHETICAL

IMPLIED

STATEMENTS

ACTUAL MEANING

EXPLANATIONS

If we were in Hawaii right now we wouldn't have to study grammar. We could be lying on the beach.	We're not in Hawaii—we're in English class. We can't lie on beach, because we're studying grammar.	Hypothetical statements describe conditions that aren't true or are impossible.
If you had done your homework, you would have gotten an A.	You didn't do your homework. You didn't get an A.	We use hypothetical statements to imply that the opposite situation is actually true.

**Table 1. Summary of conditional types presented in *Grammar Dimensions***

This approach has some shortcomings, but it is a step towards focusing on meaning creation, a process looked at in the next section of this paper.

**THE THEORY OF MENTAL SPACES**

*Mental spaces* is the central idea of Gilles Fauconnier's theory of meaning construction in discourse. While the actual application to discourse analysis of the mental spaces theory with all its attendant features is rather complex, the basic ideas, as they will be sketched out below, are quite simple. Mental spaces, or cognitive domains, are the conceptual spaces in which meaning is constructed during discourse; they are the small packets of meaning constructed as we think and then communicate ideas. Linguistic forms in conjunction with background knowledge (schemata) assign information to different domains and create connections between them, tying them together into a coherent whole. The basic spaces/domains are:

- I. Base: the space which represents current knowledge at a particular time and serves as the starting point for that stage of the discourse.
- II. Viewpoint: the space from which one or more mental spaces are accessed.
- III. Focus: the space on which attention is currently fixed, and where meaning is being constructed at that time.



The three spaces can overlap in any combination—for example, all three spaces can be present in a single space, or base and focus may be a single space and viewpoint another—or they may be three distinctly different spaces. Which space is host to focus and viewpoint may and often does change during discourse, so that a focus space may become the viewpoint for a new focus space set up by a subsequent, related development. A few examples will illustrate these concepts. A simple sentence in which all three spaces are merged in one is:

*San Francisco is a beautiful city.*

There is only one time reference—present—and a simple (subjective) statement of fact. Then, another space is set up with the addition of:

*I visited it last year.*

This past time event space now becomes the focus, viewed from the base space. As the ideas expressed become more complex, grammatical elements such as tense, aspect and modality, and space building words and phrases such as *if*, *actually*, *I believe that*, the copula *be*, and many others, establish different spaces and signal the relationships between them.

This process can be seen in the more complicated series:

*John is late to class. He is never late. He must have missed his train...or maybe the trains are running late again.*

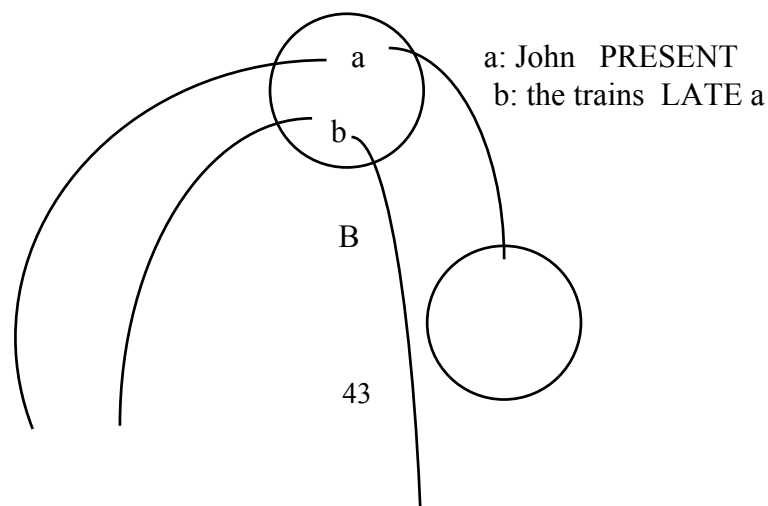
This bit of discourse sets up four distinct spaces, corresponding to the meaning expressed in each sentence, in which the essential space builders have been underlined. A simplified analysis follows below (see figure 1). B is the base, containing the information which serves as the present-time point of reference for the entire piece of discourse: *John is late to class*. *The trains* is represented as it is a vital element for later meaning construction in relation to the base information, although at this point it is simply part of the interlocutors' shared schemata. Base, focus and viewpoint are identical at this point. Next, *never* in *He is never late* signals the creation of a new space of timeless fact X, which becomes the focus space. This space then shifts to viewpoint as *He must have missed the train* creates a new focus space Y, one of belief, established by the epistemic value of *must* + the perfective. This TAM combination distances the event on which the belief space is built from the base space not only in time (past), but in epistemic distance: the speaker cannot be certain of this event as he can be of events in the base space, cannot associate himself with them as he can with those of the base space. Modals such as *must* are space builders, and the tense<sup>1</sup> (here

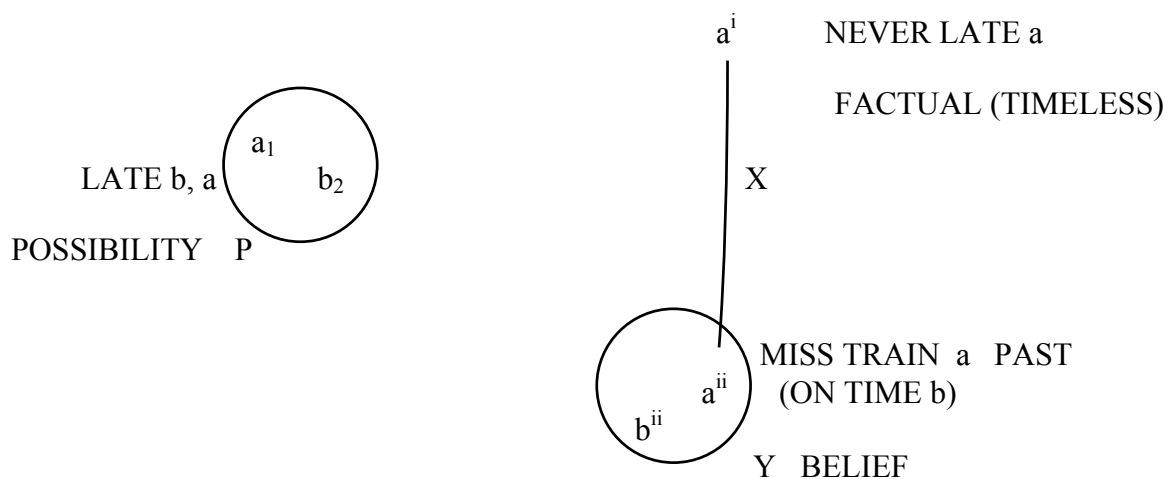
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<sup>1</sup> Here *must* functions in its historical past tense, indeed, unlike other modals, it has no present counterpart.

plus perfect aspect) activates what Turner (1996) calls the grammaticalization of focus and viewpoint.

The next sentence, *Maybe the trains are running late again*, hedges this statement of belief somewhat, using the space builder *maybe*. The new space P, one of possibility, can only be viewed from the base, since structure from this space is not compatible with structure from the other spaces, and so the base once again becomes the viewpoint, while P is the focus. At this point the discourse could take any number of turns, opening new spaces, with concomitant shifts of focus and viewpoint (*Mary takes the same train and she isn't here either* would be a new focus space, with P as the new viewpoint, and so on). A key element allowing connections between the spaces to knit together meaning is the *Access Principle* which states that “an expression that names or describes an element in one mental space can be used to *access* a counterpart of that element in another mental space” (Fauconnier, 1997, p.41). In this example *John* has counterparts  $a^i$ ,  $a^{ii}$ , and  $a_I$  in different spaces, which are targets for mapping meaning originating from the base space. Not all spaces will have counterparts for all participants; the semantic demands of the space will determine the counterparts. Thus, *the trains* has no counterpart in X, as the semantic context of the space precludes it, but it does have counterparts in Y and P as it is a necessary participant for meaning creation in those spaces.





**Figure 1. A Graphical representation of Mental Spaces for the example: *John is late to class. He is never late. He must have missed his train...or maybe the trains are running late again.***

## **MENTAL SPACES, COUNTERFACTUALS, AND PEDAGOGY**

One of the values of examining communication from the mental spaces perspective is that it provides a great deal of insight into the process of meaning creation, something that isn't always in evidence in ESL pedagogy. And although it doesn't seem likely that the detailed theoretical constructs and complex diagrams of Fauconnier (1997) could be used in the ESL classroom, aspects of the theory certainly can be used, as will be shown below.

### **The importance of context**

A good place to begin when considering the application of mental spaces to ESL pedagogy is the fundamental idea that an understanding of meaning is arrived at within a discourse context. This seems terribly obvious but many grammar books still present sentences in isolation, particularly in practice exercises, as mentioned earlier. Sentential-level analysis can provide only limited insight into the construction of meaning. Some observations by Petrovitz (1997, p.203) regarding the teaching of verb tenses in context apply equally to conditionals: gap-fill and other exercises involving only selection of the correct TAM combinations, based on repeated exposure to certain models, can give students the impression that the use of a particular TAM combination is dependent on a purely formal co-occurrence relationship between certain verb tenses and certain expressions or grammatical forms, and not on the intended meaning of the speaker. Thus, for example, different TAM

combinations in conditional constructions might be seen as a system of rules dependent on syntactic parameters instead of on semantic considerations.

Take a sentence such as the following:

(20) *If you had read today's assignment you would have understood the question.*

When a sentence like (20) is presented along with a group of similar sentences and the explanation is given that this combination of tense, aspect and modality indicates an unreal/hypothetical past, i.e. a condition which was not met in the past, and is then followed by gap-fill or transformations practice, it cannot do much more than serve as a model to be memorized along with its given semantic value. The student will not have any better understanding of *how* that meaning is arrived at in discourse every day, on the fly, and is unlikely to be able to use such constructions in a natural environment. A mental spaces approach avoids this shortcoming by showing grammatical forms as part of a *process* of meaning construction instead of as the constituents of some kind of linguistic determinism.

Native speakers of a language have an unconscious knowledge of their language system acquired over many years. Such knowledge allows an effortless understanding of complex constructions such as past counterfactuals, even when encountered in isolation. For example, whether or not there was any context for (20) a native speaker would have no problem at all understanding that neither the assignment was read nor the question understood. Yet there is an enormous cognitive burden involved in automatically making this kind of judgment of meaning, an ability which cannot be acquired by a non-native speaker simply by practicing forms. It may not be that using a mental spaces-based approach would create any more of an ability to automatically process the meaning of such constructions, but I feel that it would at least be a step in the direction of teaching natural language processes rather than abstract principles of grammar.

### **Applying ideas from the mental spaces theory to ESL pedagogy**

Two possible approaches to using concepts from mental spaces in teaching the counterfactual conditional will be presented below. One is more complex than the other (the two versions are referred to, respectively, as *complex* and *simple*), but both use the same basic principles of space building found in Mental Spaces theory looked at earlier. The difference of approach lies in the degree of detail used in presenting to the students the steps described in each version, which constitute an outline of how to present the idea of meaning creation in counterfactual constructions using concepts from mental spaces theory.

### ***A complex version***

The steps, outlined:

1. Present a short piece of discourse which includes the conditional structure being studied.
2. Establish the base space, which is the situation now, informed by the interlocutors schemata and context of the discourse.
3. Indicate that *if* signals the construction of an alternative situation, i.e. a new mental space being created.
4. Indicate how structure is projected from the base space to other spaces and from one space to another, i.e. the mappings between the spaces.
5. Indicate that the TAM combination of the conditional creates a negative epistemic stance relative to the viewpoint space.

The steps in detail:

#### Step 1

As seen earlier, the construction of meaning in discourse takes place using the basic notions of base, viewpoint, and focus spaces, along with mappings between these spaces. Except in extremely simple utterances where base, viewpoint and focus are all present in one space, a discourse context is necessary to activate this model. Accordingly, the first step is to fashion a discourse context for the grammatical construction to be presented and practiced. Even a few sentences are sufficient to create a matrix in which to activate mental spaces and show their interrelations via mappings. Thus one could present a number of short pieces of discourse one of which might be:

(21) *This semester I am taking 5 courses and working part time. Last Monday I had a big test in my English class. I worked all weekend, so I didn't have time to study hard. I didn't pass the test. If I had studied hard I would have passed the test.*

Of course, this is a somewhat contrived bit of discourse designed to easily illustrate the spaces and mappings concept, but I think this is acceptable for an introductory approach. Later, once the students have become familiar with the concepts, the teacher can provide authentic pieces of discourse in which the implied reality space is not expressed as directly as it is above (*did not study hard, did not pass the test*), so the students can supply it themselves from the semantics expressed by the counterfactual in its context.

#### Step 2

Even though the reality spaces with which the counterfactual space contrasts are past spaces distinct from the present base space, it is relative to the base space that all other spaces are set up; the base space provides an anchor for the other spaces, and so it is needs to be represented.

### Step 3

This is quite straightforward, as students are most likely already aware that *if* signals a relationship between clauses. It should be sufficient to indicate that where there is *if* there are at least two different mental spaces being conceived of in the mind of the speaker at that moment, and the focus is shifting to the *if* space.

### Step 4

How structure is projected from one space to another could be shown with diagrams similar to Figure 2, below. However, representing all the spaces and all the mappings for a piece of discourse even as simple as (21), in which focus and viewpoint shift several times, would likely be overwhelming for the students. I believe it best to use a simplified diagram, such as Figure 3, below, in which the spaces and mappings do not conform to Fauconnier's model, but which nonetheless gives an indication of domains and the connections between them. Furthermore, one would not use terminology such as *mappings* with ESL students, but a non-technical term with a similar enough meaning, such as *connections*.

### Step 5

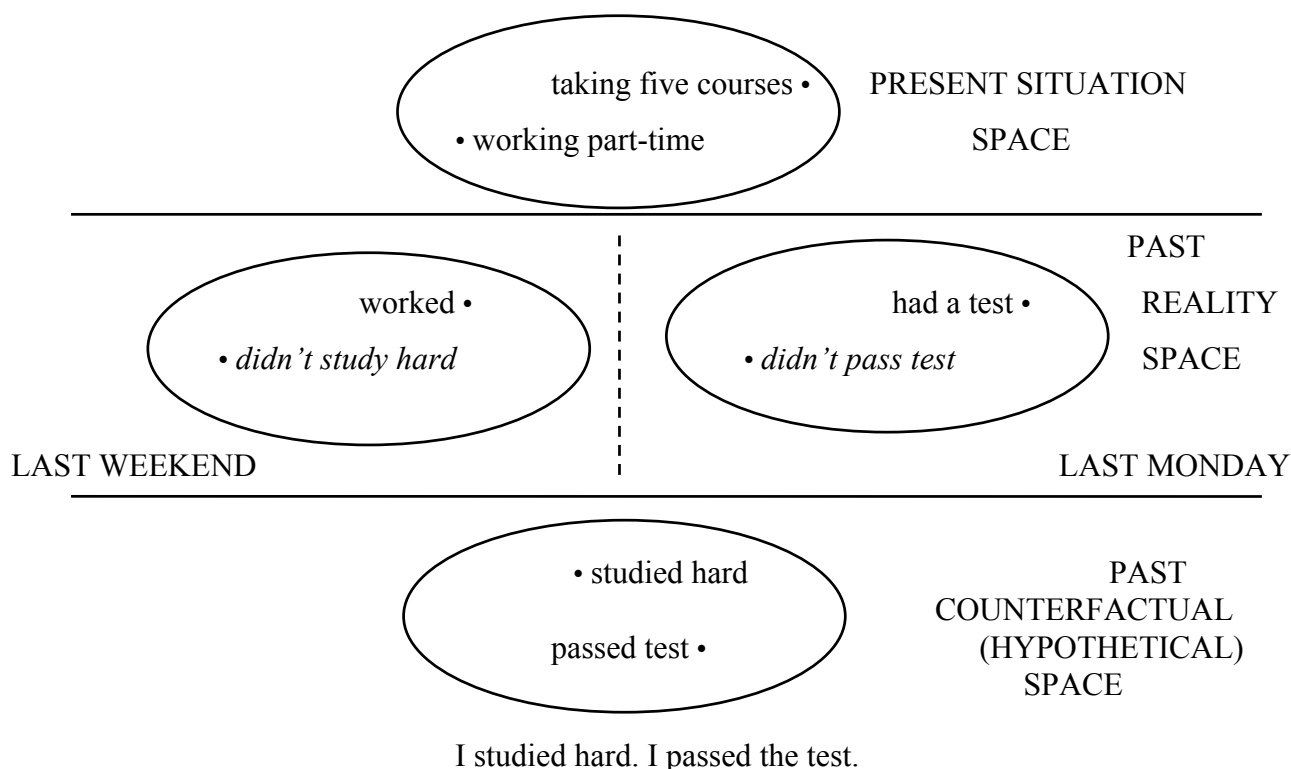
This is a crucial step for showing how the meaning of the past counterfactual is being created. As mentioned earlier, variations in tense, aspect and modality are key to signaling both the opening of new spaces and their semantic value.

In this example the past tense of *Last Monday, I had a big test* has already set the event back one level from the base space—creating distance in time from the base space, a concept which is going to be familiar to almost any ESL student beyond the low-intermediate level.

Then another distancing takes place through the TAM combination which creates the counterfactual space of the conditional sentence, an epistemic distancing. The past tense plus perfect aspect following *if* in the protasis and the modal perfect in the apodosis pushes the focus space back in epistemic distance—a negative stance, i.e. contrary to fact/reality—a concept the students most likely are not as familiar with, since this is not the *usual* function of the perfect aspect or the past modal.

Again, this will not be communicated in exactly this language, but the teacher would indicate that the TAM combination, in conjunction with *if*, and in relation to the present base and past time viewpoint spaces, indicates the event did not take place.

*If I had studied hard, I would have passed the test.*

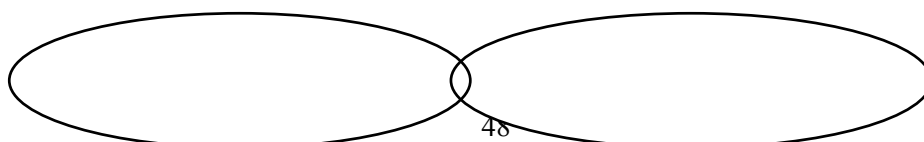


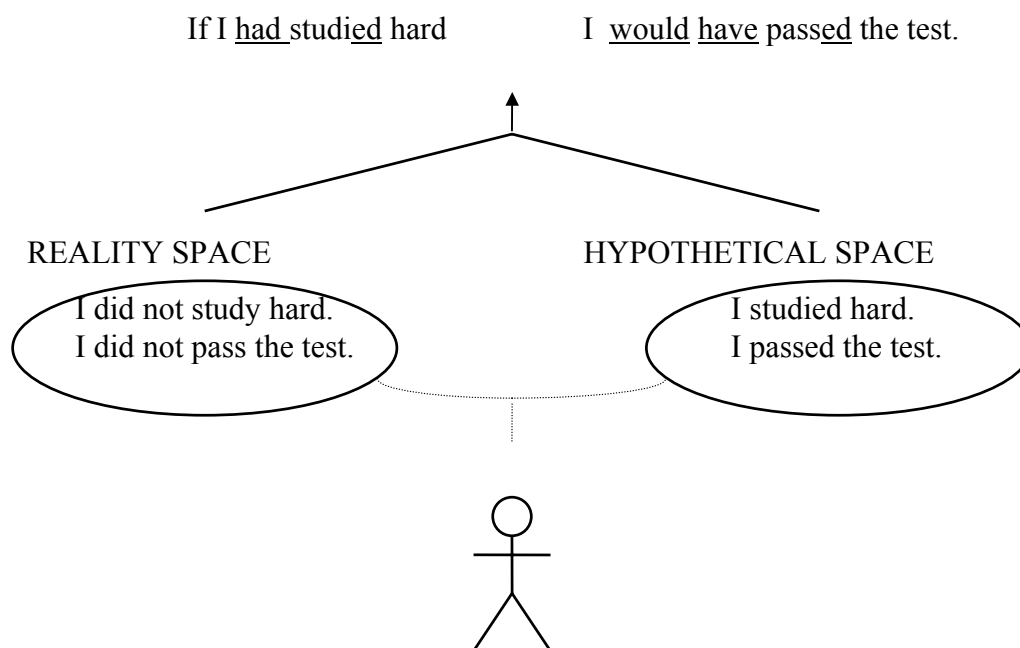
**Figure 2. A graphical representation of the complex version of teaching conditionals using concepts from mental spaces**

***A simple version***

The above may sound very complicated, more so than it actually is. A simple version of using mental spaces, would be presented with something like fig. 4 below. Here the point is simply to show that there are two basic spaces involved in creating the meaning of a past counterfactual conditional such as the one from example (21) above. There is the reality space *I did not study hard, I did not pass the test*, and the hypothetical/counterfactual space *I studied hard, I passed the test*.

This can be represented on the board, working from bottom to top, as:





**Figure 3. A graphical representation of the simple version of teaching conditionals using concepts from mental spaces**

Of course this is more in the spirit of mental spaces than anything else, although it does show that a past counterfactual conditional is a semantic blend of two spaces, that the process of meaning construction is one of integrating ideas from two mental spaces to create a new blended space, here an impossible space, but one that is fully understandable nonetheless.

## CONCLUSION

This has been an exploratory look at how to apply to ESL pedagogy some of the basic ideas from the mental spaces theory of meaning construction. The approach presented here is not meant to be comprehensive, but should demonstrate how advances in cognitive linguistics may be able to contribute to the teaching some of the more difficult constructions in English. Although conditionals were the focus here, any number of forms and functions—prepositions, modals, adverbs, (many of which are space builders), and verb tenses—could be presented using ideas from mental spaces and other ideas from cognitive linguistics research which were mentioned only in passing, such as image schema and blending. For example, Sweetser’s (1990) analysis of modals based on force dynamics image schema could be an excellent way to approach teaching the wide variety of functions represented by modals, which often confuses ESL learners.



Insights from cognitive linguistics could easily fill some of the gaps in the crossover of fresh ideas from linguistic research to ESL teaching. While it is unlikely that the teaching of ESL grammar will be redefined in terms of mental spaces, basic elements of the theory, if carefully chosen and adapted, could be employed in ESL pedagogy to the benefit of teachers and students alike, as has been suggested here.

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