# "If you're hungry, there are cookies on the table": Semantic Cohesion in Speech Act Conditionals

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Speech act conditionals are utterances which have the apparent structure of conditionals but function semantically as speech acts (e.g., invitations, suggestions), as in the sentence *If you're hungry, there are cookies on the table*. Few authors have dedicated articles to their study (e.g., van der Auwera, Johan, in Traugott, ter Meulen, Reilly & Ferguson 1986: 197-214), although some have considered them within the larger category of conditionals (e.g., Dancygier & Sweetser, in Goldberg 1996: 83-98). Van der Auwera's article considers whether speech act conditionals are better viewed as *conditional speech acts* or as *speech acts about conditionals*, while Dancygier & Sweetser discuss the mental spaces which are created by conditionals of various types. The current article suggests new avenues of research, as it presents the findings of a study conducted in Portugal, Japan, Denmark and the U.S. examining speakers' recognition and acceptance of sentences of this type as appropriate speech acts. This project was inspired by a conference given by Eve Sweetser (1998) at the University of Copenhagen on "Linguistic Compositionality and Mental Spaces."

Sweetser's first example was *If you are hungry, there are cookies on the table*. This sentence is understood by native speakers of English as an invitation to eat some cookies. While the statement begins with "if", no condition is expressed; that is, whether or not the other is hungry, the cookies **are** on the table, and an invitation is made to eat them. Our ability to understand this as an invitation is a reflection of our pragmatic competence in English, and rarely does one even comment on the literal incongruity (as in "Oh, you mean if I am not hungry the

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cookies are NOT on the table?"). Indeed, such a response may even be considered impertinent, although less so than "Oh, you mean if I am not hungry I am not allowed to have a cookie?"

Another example was *If you need help, my name's Susan*. Native speakers of English understand this to mean, "If you need help, I can help you; you may call me; my name is Susan" or, more simply, "If you need help, feel free to call on me; my name is Susan." Whereas in the previous example the connection between the two principal elements (**hunger** and **cookies**) is strong, the two elements in this sentence do not form a logical pair: **a need for help** and **the name of the speaker**. Notwithstanding, this construction is heard so frequently in service encounters in the U.S., it sounds natural to Americans.

In contrasting speech act conditionals and other conditionals, Sweetser contends that in regular conditional sentences the condition is established through an *if...then* structure. In the case of speech act conditionals, no condition is set up, and therefore the word *then* is not a feature of these sentences. Therefore, according to her, speakers do not say, *If you are hungry*, *then* there are cookies on the table.<sup>2</sup>

Sweetser's presentation in Copenhagen led me to consider differences between American English and European Portuguese. While *Se está(s) com fome*, *há biscoitos na mesa* sounds acceptable to me (a fluent non-native speaker of Portuguese) and seems to imply an invitation to eat the cookies, *Se precisa(s) / precisar(es) de ajuda, chamo-me Susana* sounds illogical. I decided then to conduct a comparative study of European Portuguese and American English; subsequently, Japanese and Danish were included to broaden the scope of the study.

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<sup>&</sup>lt;sup>2</sup> Throughout this article, the word <u>then</u> is underlined, not to indicate any accentuation of the word in its spoken form, but merely to stress its presence in the sentence.

# **DESIGN OF THE STUDY**

One of the objectives of this study is to ascertain whether speech act conditionals of various types are equally recognizable and acceptable as speech acts, both across languages and within each language. If few differences exist, then further analysis can be simplified by focusing on how these sentences function in a single language, and the results can more reasonably be generalized to other languages. If, on the other hand, variation exists, language-specific and context-specific study must follow. Another aim of the study is to discover whether variation found can be attributed to the semantic distance between the **situation-setting clause**<sup>3</sup>, as set out in the if-clause, and the **resolution** (or **solution**) provided in the main clause.

Four hypotheses are examined: (1) that both intra-language and cross-language variation in the interpretation of these sentences as appropriate speech acts exist; (2) that variation found is related to the degree of semantic cohesion between the lexical elements of the two clauses; (3) that speakers of different languages may have different minimal requirements for semantic cohesion in order to understand these sentences as speech acts, as opposed to *non sequiturs*; and finally, (4) that the inclusion of the word *then* does not automatically negate a sentence's status as an appropriate speech act conditional.

The research instrument is a questionnaire of ten sentences representing four degrees of semantic cohesion between the nuclear elements of the two clauses (Level 0 - Level 3), with a single Level 0 sentence included to serve as the control:

# If you want anything, just ask.

This is referred to as **Level 0**, as the sentence is straightforward. No gap needs bridging in order to understand what is meant, and the speech act, the invitation, is clear and expressed.

Sentences at **Level 1** are those in which the lexical nucleus of the situation clause and that of the resolution clause are logically connected. An element is missing, however, and that is the overt statement of the speech act, so the connection between the two clauses is not "seamless." The **Level 1** sentences included in the study are:

If you are sleepy, the bed in the next room is made up.

(invitation, suggestion)

If you are sick, there is always a doctor on call. (suggestion)

If you want a ride to \_\_\_\_\_\_, I'm going at 4. (invitation)

<sup>&</sup>lt;sup>3</sup> This is referred to by Sweetser (in Goldberg, 1996:95) as "apodosis" [quotation marks hers], to distinguish it from the word as normally used in semantics to refer to the condition-setting clause. Apodosis is contrasted with protasis, the main clause. Here, as no true condition is set up, the word becomes ambiguous; "situation-setting clause" has been substituted.

Two other sentences of this level are included, in order to test use of the conjunction *then*:

If you are hungry, then there are cookies on the table. (invitation)
If you are in a hurry, then there are taxis on the corner. (suggestion)

Despite the missing element, the lexical connection is tight in each of these sentences: sleepy/bed, sick/doctor, ride/going, hunger/cookies, and hurry/taxis. That the missing element is the speech act becomes clear when the gap is bridged and the thoughts are "completed," as shown in these possible interpretations:

If you are...

sleepy the bed in the other room... I INVITE YOU TO USE IT FOR A NAP sleepy I SUGGEST A NAP the bed in the other room is made up sick I SUGGEST YOU CALL A DOCTOR there is always doctor on call hungry I INVITE YOU TO HAVE SOME COOKIES [some] are on the table hurry I SUGGEST YOU GO BY TAXI taxis are there on the corner [AND NOT WAIT FOR ME]

In the case of the first example, *If you are sleepy, the bed in the next room is made up*, the hearer might wonder whether the speaker's principal intention is to invite the hearer to use the bed, or to suggest that a nap is needed. However, even if the hearer believes the latter is the case, there still exists an implied invitation to use the bed for that purpose, so ultimately the degree of ambiguity is slight.

**Level 2** sentences, as those of **Level 1**, appear to lack only a single element, again the overt expression of the speech act. In these sentences, however, the relationship between the lexical core of each of the clauses is not as close as in the **Level 1** sentences:

If you are thirsty, there will be a break in 15 minutes.

(suggestion, invitation)

If you don't have anything to do this afternoon, there is a new film.

(invitation, suggestion)

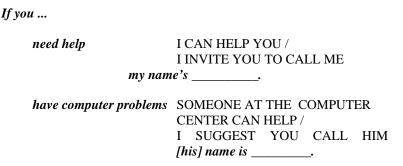
The relationship between the words *thirsty* and *break* is not as clear and unambiguous as that between *hunger* and *cookies*. The same can be said for *not having anything to do* and the fact that *there is a new film*. There is additional ambiguity for the hearer, who must determine whether the speech act is a suggestion or an invitation. Unlike the situation above, if the hearer interprets the speech act as a suggestion, there is no implied invitation, so the options are mutually exclusive.

If you	ı are					
thirsty	I WILL INVITI	E YOU FOR	A DRINK	a break i	in 15 min	utes
thirsty	a break in 1	5 minutes I	<b>SUGGEST</b>	YOU [WAI	T AND]	HAVE A
DRINK	THEN					
If you	ı do					
not have	anything to do	new	_ <i>film</i> I IN	VITE YOU T	O GO	
not have	anything to do	new	<i>film</i> I SI	JGGEST WE	[YOU?]	GO
			-			

**Level 3** sentences involve even greater distance. Not only is there omitted an overt expression of the speech act, there is a semantic gap which must be bridged. The **Level 3** sentences used in the study are:

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If you need help, my name's ______. (invitation)
If you are having problems with your computer, the Computer
Center guy's name is____.
(suggestion)
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In each of these sentences, the gap between **a need for help** and **the name of a person** is too wide for the two elements to form a logical pair. In addition to the unspoken speech act (an invitation or suggestion to contact a particular person for help), the relationship between the two lexical elements must be established. In these two examples, the missing link is the statement that the person referenced in the resolution clause is the one to be contacted for help.



A preliminary version of the questionnaire was pretested in Portugal, and comments by informants led to the reformulation of some of the items, resulting in the ones just presented. The final version was translated into Japanese, English and Danish (see Appendix). The sample consists of 150 participants, stratified along lines of age and gender, with 45 informants each in Portugal and Denmark, and 30 each in the U.S. and Japan.

The procedure was to note the demographic data (sex, age, educational level, profession, birthplace, the locality where the study was conducted and the number of years the informant has lived there) and present the four-point scale the informants were to use to evaluate each sentence:

- **4** = totally acceptable
- **3** = it does not sound very good, but it is probably correct
- 2 = it does not sound right, and it is probably incorrect
- **1** = totally unacceptable

Subsequently, no more than two or three minutes were spent on reading the sentences and registering the informant's responses. Each sentence was read rapidly in a neutral tone of voice; after each, the informant would respond with a number from 1 to 4. Informants were told to save all remarks for the end; once answers had been noted for all sentences, they were asked if there was anything they wished to add, and comments provided at that point were annotated on the form. As some informants wished to see the sentences, they were allowed to hold the paper and provide their own responses. They were, however, given the same instructions; whenever they hesitated or tried to change an answer, they were urged to respond quickly with their first impression and not spend more than two or three seconds on any sentence. Each informant was alone when responding to the questions, so as to avoid contamination of the data. Finally, no reference to semantic level was made to the informants, and the sentences were not grouped according to level.

#### THE RESULTS

The results of each individual language are presented first, so that the intralanguage patterns of acceptability can be explored.

# European Portuguese

Surprisingly, the range in Portuguese scores is the widest of the four languages (1.8 to 3.9), as evidenced in Table 1. With the sentences ranked according to the descending mean, the resulting order generally supports the hypothesis that sentences of greater semantic cohesion are more acceptable. The Level 0 sentence enjoys the highest degree of acceptability, as hypothesized, with a score of 3.9. The Level 1 responses generally fall within the 3.3 - 3.8 range, the Level 2 responses from 2.9 to 3.1, and the Level 3 responses are each 1.8. However, four sentences are positioned outside their hypothesized order: if the hypothesis regarding semantic cohesion is correct, either Level 1 sentences have dropped, or Level 2 sentences have "risen."

# Table 1 Portuguese Responses

Semantic Distance		Mean Score	"Totally Acceptable"
0	If you want anything else, just say so.	3.9	89%
1	If you want a ride to, I'm going at 4.	3.8	81%
1	If you are sleepy, the bed in the other room is made.	3.4	60%
1	If you are hungry, then there are cookies on the table.	3.3	38%
2	If you don't have anything to do this afternoon, there is a newfilm.	3.1	44%
1	If you are sick, there is always a doctor on call.	3.0	38%
2	If you are thirsty, there is [will be] a break in 15 minutes.	2.9	15%
1	If you are in a hurry, then the taxis are there on the corner.	2.8	30%
3	If you need help, my name is	1.8	22%
3	If you are having problems with your computer, the guy from the Computer Center's name is	1.8	25%

The Level 2 sentences, which hold an unexpected position, are *If you don't have anything to do this afternoon, there is a new \_\_\_\_\_ film* and *If you are thirsty, there is a break in 15 minutes*. In the first case, 44% of the informants find the sentence totally acceptable, which clearly justifies its position in Level 1 space (in which the percentages range from 30 to 81, with a mean of 49). The conclusion can be made, thus, that this sentence has "risen." However, with only 15% of respondents finding *If you are thirsty...* totally acceptable (by far the lowest percentage of all the sentences), the assumption must be made that its position is clearly below that of the Level 1 sentences and is therefore appropriately positioned.

If we accept those findings, then only one **Level 1** sentence is positioned outside the **Level 1** space: *If you are in a hurry, then the taxis are there on the corner*. Apparently many speakers agree with Sweetser's contention that the use of *then* is inappropriate. In fact, only 23% of respondents classify this sentence as totally acceptable, which places it in the neighborhood of the **Level 3** sentences.

## American English

The range of responses in this sample is the narrowest of all of the groups, spanning a one-point range between **2.7** and **3.7**. The two top-ranked American responses (with scores of **3.7** and **3.5**) indicate a slightly lower overall degree of acceptability than their Portuguese counterparts (**3.9** and **3.8**), which is surprising, given the American responses generally. The ranking of the sentences in the American sample is somewhat different than the Portuguese, but the results continue to suggest that sentences of greater semantic cohesion are ranked above those with greater distance. Here three sentences seem to fall outside their hypothesized order: *If you need help ..., If you are in a hurry...* and *If you don't have anything to do this afternoon ...* [See Table 2 on the next page]

The sentence *If you need help, my name is* \_\_\_\_\_ is ranked third in the American responses. This finding is not at all unexpected, as Americans in service positions frequently use this structure in service encounters:

A: "May I help you?"
B: "No, thank you."

A: "Well, if you need any help, my name is \_\_\_\_\_."

The parallel sentence, *If you are having problems with your computer...*, has not become a formula; thus, its ranking in ninth place is not remarkable.

As in the Portuguese sample, the sentence *If you are in a hurry*, <u>then</u> there are taxis on the corner drops into Level 2 space, with a mean score of 2.8; further, only 23% of the informants find the sentence totally acceptable. In contrast, its pair, *If you are hungry*, <u>then</u> there are cookies on the table is ranked much higher.

# Table 2 American English Responses

Semantic Distance		Mean Score	"Totally Acceptable"
0	If you want anything else, just say so.	3.7	77%
1	If you are sick, there is always a doctor on call.	3.5	55%
3	If you need help, my name is	3.3	59%
1	If you want a ride to, I'm going at 4.	3.1	45%
1	If you are sleepy, the bed in the other room is made.	3.1	45%
1	If you are hungry, then there are cookies on the table.	3.0	32%
2	If you are thirsty, there is [will be] a break in 15 minutes.	3.0	41%
1	If you are in a hurry, then the taxis are there on the corner.	2.8	23%
3	If you are having problems with your computer, the guy from the Computer Center's name is	2.8	23%
2	If you don't have anything to do this afternoon, there is a newfilm.	2.7	27%

Further research may determine whether the dissimilar rankings are due to the semantic difference (the link between **hunger** and **cookies** being closer than **hurry** and **taxis**), or to a pragmatic difference between an *invitation* (to eat cookies) and a *suggestion* (to take a taxi).

The sentence *If you don't have anything to do this afternoon* ... is ranked in final position. The two informants who consider this "totally unacceptable" were consulted; they responded that while they understand what is meant, they feel the construction is not logical but do not offer further explanation. Curiously, both classify the sentence about computer problems with a 3, perhaps believing that with the presence of the word "computer" in both clauses, a logical connection is established.

## Japanese

The overall acceptability of speech act conditionals is much lower in Japanese than in the other languages, with the scores ranging from **2.1** to **3.5**. Even the **Level 0** sentence, *If you want anything, just ask*, is ranked totally acceptable by only 62% of the speakers. [See table 3 on the next page]

The actual ranking of the sentences offers no surprises, unless it is that the responses of the Japanese informants most closely pattern the hypotheses proposed. The sentences *If you are hungry*, then there are cookies on the table and *If you are thirsty*, there will be a break in 15 minutes appear to be switched. In fact, there is a temptation to suggest that the Level 1 sentence has fallen, due to the inclusion of the word then. On the other hand, slightly more than twice the number of respondents find the Level 1 sentence wholly acceptable, as compared with the Level 2 sentence. Further, the mean score differential is very small (0.2). Therefore, this apparent anomaly may reflect a sampling bias.

#### Danish

Overall, the Danish speakers attribute a high degree of acceptability to these sentences, second to the Americans, with scores ranging **2.5** to **3.9**. As with the other languages, the relationship between the mean scores of acceptability and the degree of semantic cohesion seems to have been established, as indicated in Table 4. [See table 4 on page 106]

# Table 3 Japanese Responses

Semantic Distance		Mean Score	"Totally Acceptable"
0	If you want anything else, just say so.	3.5	62%
1	If you are sleepy, the bed in the other room is made.	3.1	34%
1	If you are in a hurry, then the taxis are there on the corner.	3.1	24%
1	If you are sick, there is always a doctor on call.	3.0	28%
1	If you want a ride to, I'm going at 4.	2.7	10%
2	If you are thirsty, there is [will be] a break in 15 minutes.	2.7	10%
1	If you are hungry, then there are cookies on the table.	2.5	21%
2	If you don't have anything to do this afternoon, there is a newfilm.	2.1	14%
3	If you need help, my name is	2.1	7%
3	If you are having problems with your computer, the guy from the Computer Center's name is	2.1	3%

# Table 4 Danish Responses

Semantic Distance		Mean Score	"Totally Acceptable"
0	If you want anything else, just say so.	3.9	91%
1	If you want a ride to, I'm going at 4.	3.7	83%
1	If you are hungry, then there are cookies on the table.	3.3	48%
1	If you are sleepy, the bed in the other room is made.	3.3	48%
2	If you don't have anything to do this afternoon, there is a newfilm.	3.0	48%
1	If you are in a hurry, then the taxis are there on the corner.	3.0	35%
2	If you are thirsty, there is [will be] a break in 15 minutes.	2.9	30%
3	If you are having problems with your computer, the guy from the Computer Center's name is	2.9	17%
1	If you are sick, there is always a doctor on call.	2.8	43%
3	If you need help, my name is	2.5	39%

Two Level 1 sentences have rankings which distance them from the others: If you are in a hurry, then the taxis are there on the corner and If you are sick, there is always a doctor on call. In the case of the first, the answer seems obvious: the inclusion of the word then has affected the sentence's acceptability. With regard to the sentence If you are sick, there is always a doctor on call, it is only in the Danish sample that this Level 1 sentence is positioned so low. The answer almost certainly rests in the translation of the sentence, as pointed out by a medical student. The sentence was translated as Hvis du er syg, er der altid en læge på vagt. The problem lies in the expression på vagt, which would be more appropriate to a watchman standing on a corner, rather than a doctor on call. It is impossible to verify whether the responses of other informants are due to this imprecise translation or to something else, for they are polarized: while the mean score is only 2.8, nearly half of the informants (43%) accept the sentence fully.

# Cross-Language Comparisons

The findings relative to each of the languages have indicated the importance of semantic cohesion. Nevertheless, in appreciating the difficulties which speech act conditionals can bring to intercultural communication, a cross-language comparison of results is necessary. Three types of analyses provide useful information: mean values for each sentence, mode values for each sentence (presenting the response cited most frequently by respondents), and percentages of respondents who fully accepted each sentence. Each of these methods will be used to identify the sentences which merit closer examination in situations of cross-cultural communication.

The first cross-language analysis involves the degree of consensus found in the attribution of acceptability of the sentences, based on mean score. As is shown in Table 5, the sentences of greatest consensus have a mean differential of only **0.3**, while the greatest differential is **1.5**. Nevertheless, a differential of **1.0** has been chosen as the measure for comparison for the sentences of least consensus, as this represents a full degree of difference on the four-point scale. [See table 5 on the next page]

Three sentences are shown to have the greatest cross-language consensus. This seems to indicate that in situations of cross-cultural communication speakers of each language share expectations regarding the acceptability of these sentences. This is presumably not the case with the four sentences of least consensus. In fact, the divergence in mean level of acceptability is great. In every instance, the Japanese mean scores are at least one full point below the highest mean values, and

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<sup>&</sup>lt;sup>4</sup> Hvis du er syg, er det muligt at tilkalde den vagthavende læge, or Hvis du er syg, er det muligt at tilkalde vagtlægen were suggested as possible corrections.

# Table 5

**Cross-Language Consensus:**Denmark, Japan, Portugal, United States

# **Mean Values**

Semantic		DK	JP	PT	US
Distance					
Sentences with Consensus					
1	If you are sleepy, the bed in the other room is made.	3.3	3.1	3.4	3.1
1	If you are in a hurry, then the taxis are there on the corner.	3.0	3.1	2.8	2.8
2	If you are thirsty, there will be a break in 15 minutes.	2.9	2.7	2.9	3.0
	Sentence with the least cross-language Consensus (more than 1.0 differential):				
1	If you want a ride to, I'm going at 4.	3.7	2.7	3.8	3.1
2	If you don't have anything to do this afternoon, there is a newfilm.	3.0	2.1	3.3	2.7
3	If you need help, my name is	2.5	2.1	1.8	3.3
3	If you are having problems with your computer, the guy from the Computer Center's name is	2.9	2.1	1.8	2.8

in the last two sentences (both representing **Level 3**), the Portuguese speakers have scores even lower than those of the Japanese.

While the mean responses provide an overall estimation of the degree of acceptability of each of the sentences, analysis of the mode provides information for each sentence as to the responses most frequently provided by the informants. The results indicate that overall, Danes and Americans claim a higher degree of acceptance of these sentences (with average mode scores of **3.6** each) than do speakers of Portuguese (**3.0**) and Japanese (**2.7**). As in the mean score analyses, the analysis of mode also identifies four sentences with disparate values across languages (i.e., with a differential of at least **2.0** between the highest and lowest values). Further, the control sentence is the only one whose mode is **4** in each language.

More illuminating, however, is the analysis of respondents who found each sentence fully acceptable, as displayed in Table 6 on the next page. The control sentence, ranked first in each language, as hypothesized, is the only sentence whose ranking is the same in each of the four languages of the study. The inter-language ranking differential for the other nine sentences ranges from two positions to seven.

With ten positions in the ranking scale, rank differential values greater than 5 necessarily indicate a significant difference. Three sentences fall into this category:

# Rank Differential

If you need help, my name is \_\_\_\_\_. 7 positions
If you are in a hurry, then the taxis are on the corner. 5.5 positions
If you want a ride to \_\_\_\_, I'm going at 4. 5.5 positions

Two sentences have a rank differential of four positions each. In the case of *If* you are thirsty, there is [will be...] a break in 15 minutes, the range is from 6 to 10, which indicates a generally disfavorable assessment across languages. On the other hand, *If* you don't have anything to do this afternoon, there is a new \_\_\_\_\_\_film shows a range of 4 to 8, which means the ranking straddles the midpoint.

Curiously, while the sentence *If you are in a hurry, then the taxis are on the corner* is problematic (i.e., non-consensual), *If you are hungry, then there are cookies on the table* is not. As mentioned above, these two sentences are included in the survey to determine whether Sweetser's theoretical position regarding use of

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<sup>&</sup>lt;sup>5</sup> As speakers of these latter two languages place great importance on register and the appropriate use of address forms, a study is underway to examine multiple formulations of the "same" speech act conditional. For instance, in Portuguese, in addition to including sentences using different address forms, syntactic manipulation is also relevant (use of the present indicative vs. the future subjunctive in the situation-setting clause).

# Table 6

# Cross-Language Comparison of Acceptability: Denmark, Japan, Portugal, United States

# Ranking by "Totally Acceptable" Responses [1 = Highest]

Semantic distance	Sentences	DK	JP	PT	US
0	If you want anything else, just say so.	1	1	1	1
1	If you are hungry, then there are cookies on the table.	4	5	5	7
1	If you are sick, there is always a doctor on call.	6	3	6	3
2	If you want a ride to, I'm going at 4.	2	7.5	2	4.5
2	If you are sleepy, the bed in the other room is made.	4	2	3	4.5
2	If you don't have anything to do this afternoon, there is a newfilm.	4	6	4	8
2	If you are thirsty, there is [will be] a break in 15 minutes.	9	7.5	10	6
2	If you are in a hurry, then the taxis are there on the corner.	8	4	7	9.5
3	If you need help, my name is	7	9	9	2
3	If you are having problems with your computer, the guy from the Computer Center's name is	10	10	8	9.5

<u>then</u> can be substantiated. In fact, the data indicate that in every language studied, at least one of those two sentences has a composite score of **3.0** or more, which means that on average informants found them to be at least "probably correct." Moreover, significant numbers of informants classify these sentences as totally acceptable, as seen in Table 7.

# Table 7

# **Cross-Language Comparison of Acceptability:**

Denmark, Japan, Portugal, United States

"Totally Acceptable" Responses (% of Speakers Responding "4") and Respective Ranking

		ry, <u>then</u> there are 1 the table.	If you are in a hurry, then the taxis are at the corner.		
Denmark	48 %	Ranked 3 <sup>rd</sup>	35 %	Ranked 6 <sup>th</sup>	
Japan	21 %	Ranked 7 <sup>th</sup>	24 %	Ranked 3 <sup>rd</sup>	
Portugal	38 %	Ranked 5 <sup>th</sup>	30 %	Ranked 8 <sup>th</sup>	
USA	59 %	Ranked 6 <sup>th</sup>	23 %	Ranked 9 <sup>th</sup>	

In fact, although the overall acceptability of the sentences is low in Japanese, the responses regarding the sentence *If you are in a hurry...* are surprisingly high (ranked third), so the word *then* does not seem to hinder that sentence's acceptability. In fact, Japanese speakers are the only ones who rank this sentence higher than the invitation to eat cookies (ranked seventh). The explanation may well be cultural or pragmatic, rather than grammatical. In Japanese culture, the preparation and display of food is very important; by saying *If you're hungry, there are cookies on the table*, a speaker may appear flippant and even insincere rather than simply informal.

Given Sweetser's claim that  $\underline{then}$  is not used in speech act conditionals because they are not true conditional sentences, an explanation needs to be found to

account for the large number of people who have found these sentences entirely acceptable. Whether we say:

- (a) If you are hungry, there are cookies on the table or
- (b) If you are hungry, then there are cookies on the table

These sentences offer a solution to the problem of hunger (an invitation to eat cookies). However, whereas in (a) the focus seems to be on the invitation, in (b) the focus may be on the fact that a solution is offered (in the remainder of the main clause). Thus, the sentence *If you are hungry*, then there are cookies on the table might be viewed as the elliptical form of *If you are hungry*, then [I have the solution, which is that] there are cookies on the table, as in:

If you are hungry,

then I HAVE THE SOLUTION the cookies are on the table.

The conjunction <u>then</u> serves as a trace element of the missing clause. In the example <u>If you are in a hurry, then</u> the taxis are there on the corner, the word <u>then</u> may be introducing an ellipted clause such as "then I have a suggestion of what you might do." The statement that the taxis are on the corner, with an implied suggestion to find one, completes the main clause. In this case, the solution offered is a suggestion for possible action. The commonality between these two examples is the idea that the speaker is offering a solution (through <u>invitation</u> or <u>suggestion</u>); therefore, the premise that the sentence is a speech act is not violated, and use of <u>then</u> is logical in these non-conditional sentences.

### **CONCLUSIONS**

This multinational study presents data regarding the ability of speakers to identify and accept speech act conditionals as speech acts, seeking answers to four hypotheses. The first hypothesis is that variation exists in the way the speech conditionals are accepted. The findings are incontrovertible: both inter-language and intra-language variation exist. Only three of the 150 participants worldwide rank all ten sentences as equally acceptable: two informants consider all sentences as being entirely acceptable [4], while one accepts each sentence as "probably correct" [3]. None of the sentences is considered either "totally acceptable" or "totally unacceptable" by every informant. The analysis of mode values demonstrates variation in the central tendency of response for each sentence; finally, the analyses of "totally acceptable" responses indicate that only the ranking of the control sentence is consensual, and intra-language rankings differ as much as seven positions.

The second hypothesis centers on the concept of semantic cohesion: that the variation found is related to the relationship between the nuclear elements of the

two clauses of each sentence, defined both in terms of lexical ties and logical connectors. The data indicate that within each language studied, when the sentences are ranked according to the mean score attributed to their acceptability, they are generally ordered according to the degree of semantic cohesion as proposed, although the sentence-by-sentence ranking is different in each of the languages. Explanations have been advanced for instances in which the ranking of a sentence distances it from the others of the same Level.

The third hypothesis focuses on whether some minimal degree of semantic cohesion must be present in order for the sentences to be accepted and understood as appropriate speech acts, as opposed to illogical sentences. The findings suggest that any minimal requirements may ultimately lie in the individual; nevertheless, the lower degree of acceptability attributed by Japanese speakers overall leads us to conclude, tentatively, that Japanese speakers may require greater semantic cohesion than speakers of other languages. Additional research in collaboration with Japanese colleagues is underway to determine whether other factors are responsible for these figures.

The final hypothesis deals with Sweetser's contention that speakers do not incorporate then in speech act conditionals. The results indicate that this may be false, as large numbers of informants do not immediately reject sentences with then. On average, speakers of Danish and Japanese consider the sentence If you are in a hurry, then the taxis are there on the corner as being at least "probably correct," and English and Portuguese speakers evaluate the sentence as only slightly less acceptable. In fact, approximately one-third of the Danes and Portuguese, and nearly one-quarter of the Japanese and Americans, judged this sentence to be wholly acceptable. With respect to If you are hungry, then there are cookies on the table, nearly half of the Danes are entirely satisfied with this sentence, as are more than one-third of the Portuguese, nearly one-third of the Americans, and onefifth of the Japanese. These findings clearly confirm the hypothesis that the inclusion of then does not necessarily render a sentence unacceptable. The explanation offered here is that in these sentences then serves as the trace of an ellipted clause in which the speaker claims to offer a solution to the problem expressed in the situation-setting clause.

This study has also sought to determine whether further study into speech act conditionals will prove scientifically interesting. The findings suggest that additional semantic and pragmatic analyses will provide important insights into the role these sentences play in the communicative process. Within the area of semantics, next steps include further examination of Fouconnier's and Sweetser's perspectives on mental spaces to determine whether the **Level 1, 2** and **3** sentences proposed here, and others, are represented by different mental maps, as is suggested by these findings. The interpretation of these sentences by speakers is another aspect to be explored; for example, how speakers decipher sentences whose semantic cohesion is looser and whether they are interpreting these sentences as

speech acts, as opposed to other conditionals. The boundary between acceptability and non-acceptability in each language also merits further analysis. While general consensus exists in the degree of acceptability in **Level 1** (proximity) and **Level 3** (distance)—affirmation for **Level 1** sentences, negation for **Level 3** sentences, evaluation of **Level 2** sentences proves not to be consensual. As several informants spoke of the "ambiguity" of the sentences they classified as being totally **un**acceptable, additional work is needed to identify why speakers find the sentences problematic. Analyses of the correlation between specific demographic features and the minimal degree of semantic distance required for acceptability may also provide useful information.

Pragmatic concerns are as important as the semantic aspects suggested. The very high degree of acceptability in English of the sentence *If you need help, my name is* \_\_\_\_\_ is due to speakers' pragmatic knowledge that an invitation has been extended. Consequently, additional research is needed to discover other instances in which semantic gaps are mitigated through pragmatic norms. The fact that both inter-language and intra-language variation in speech act conditionals exists has clear implications for cross-cultural communication and foreign language training. Studies of speech act conditionals in natural conversation will provide information on the relative frequency of the various types of these sentences, allowing for the identification of the pragmatic norms governing their use within each culture. Subsequent cross-cultural analyses, in shedding light on how these speech acts are used by speakers of various cultures, may help define categories of speech act conditionals that are most likely to result in intercultural miscommunication.

In sum, this study has not only provided several insights on speech act conditionals, but it has also suggested some of the appropriate next steps for understanding how speech act conditionals work. The results presented here suggest a general hypothesis for the next stage of research: that the broader distinctions in acceptability are due to differences in the degree of semantic cohesion between the clauses, while the finer distinctions arise from differences in their pragmatic use.

### **APPENDIX**

The final versions of the questionnaires are as follows. Contextual differences exist (e.g., names of the people, destination).

#### **Danish**

- 1. Hvis du er sulten, så er der småkager på bordet.
- 2. Hvis du vil køre med til Århus, kører jeg kl. 4.
- 3. Hvis du er søvnig, er der redt en seng op inde ved siden af.
- 4. Hvis du er syg, er der altid en læge på vagt.
- 5. Hvis du har brug for hjælp, hedder jeg Susanne.
- 6. Hvis du har brug for noget, kan du bare spørge.
- 7. Hvis du ikke skal noget her i eftermiddag, går der en ny film med Paprika Steen og Niels Olsen.
- 8. Hvis du har travlt, så er der taxaer på hjørnet.
- 9. Hvis du har problemer med din computer, hedder Computer-Center-fyren Peter.
- 10. Hvis du er tørstig, holder vi altså en pause om 15 minutter.

### Japanese

- 1. kufuku desitara, sono toki wa table ni okasi ga arimasu.
- 2. Tokyo made dojo suru no nara, yoji ni demasu.
- 3. numutai no nara, hoka no heya ni toko o siite orimasu.
- 4. byoki desitara, itudemo isha ga kite kuremasu.
- 5. otetudai ga iriyo desitara, otazune kudasai.
- 6. nani ka iriyo desitara, otazune kudasai.
- 7. gogo ni isogasiku nakattara, ima yoga ga joen sareteimasu.
- 8. oisogi no yo desitara, sono toki wa kado ni taxi ga orimasu.
- computer ni mondai ga arimasitara, computer'center no hito no namae ga tosi desu.
- 10. nodo ga kawaiteiru yo desitara, juugo fun ded kyukei simasu.

### Portuguese:

- 1. Se estás com fome, então há biscoitos na mesa.
- 2. Se quiseres boleia até Lisboa, vou às 16h.
- 3. Se estiveres com sono, a cama está feita na outra sala.
- 4. Se estás doente, há sempre um médico de serviço.
- 5. Se precisares de ajuda, chamo-me Susana.
- 6. Se quiseres outra coisa, é só dizeres.
- Se não tens nada para fazer esta tarde, há um novo filme com Tom Hanks e Meg Ryan.
- 8. Se estás com pressa, então os táxis estão ali à esquina.

- Se tens problemas com o computador, o rapaz do Centro de Informática chamase Miguel.
- 10. Se estás com sede, temos intervalo daqui a 15 minutos.

# U.S. English

- 1. If you are hungry, then there are cookies on the table.
- 2. If you want a ride to Los Angeles, I'm going at 4.
- 3. If you are sleepy, a bed is made up in the other room
- 4. If you are sick, there is always a doctor on call.
- 5. If you need help, my name's Susan.
- 6. If you want anything, just ask.
- 7. If you aren't doing anything this afternoon, there is a new Tom Hanks and Meg Ryan film.
- 8. If you are in a hurry, then there are taxis on the corner.
- 9. If you are having problems with your computer, the Computer Center guy's name is Peter.
- 10. If you are thirsty, we are having a break in 15 minutes.

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