

PARTS OF SPEECH AND SPHERES OF MODALITY IN ENGLISH AND CZECH

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A brief survey of some Czechoslovak approaches to modality published in *Brno studies in English* 12 (Hladký 1976) concentrated on the works of Czechoslovak Bohemists and Slovakists.¹ To make the background to the present paper complete, mention must be made of the contributions of Czechoslovak Anglicists.

Poldauf (1963, 1964) has shown the main difference between English and Czech in the use of devices expressing modality. In English, modality is more frequently expressed by the verb, in the verbal nucleus, while in Czech particles (= adverbs) are used more often. In both languages, modal expressions are used in the same way as expressions of intellectual or emotional evaluation, i. e. as expressions of spheres bordering on modality, the transition between evaluation and modality being a smooth one. We hope to provide statistical evidence supporting Poldauf's conclusions and to further specify the area of modality where the above-mentioned differences apply.

There are also two Czechoslovak studies examining the meaning of English modal verbs. One has been written by Dušková (1972) and the other by Tárníková (1978). Dušková's paper compares the meanings of CAN, MAY, MUST with their Czech equivalents. The paper is based on a corpus taken from spoken and scientific English, both British and American. The author discusses the meanings of the English modals, comparing them with the Czech translations and taking into account the semantics of the notional verb (the infinitive). Although the author shows the difference between CAN and MAY in the sphere of possibility, she also finds instances of interchangeability, largely in scientific writing, in affirmative statements with an indefinite human agent. The prevalent meaning of CAN,

¹ Of the works quoted, ample use will be made here of Bauer and Grepl, especially their distinction between voluntative modality and modality of certainty. Bauer and Grepl also distinguish between adverbs and particles, modality being expressed by the latter. This distinction, however, is not observed here, preference being given to the traditional term 'adverb'.

however, is that of ability (about 90 per cent of Dušková's examples). The prevalent meaning of MAY is possibility (103 instances out of 107) and the more frequent meaning of MUST is that of necessity or obligation (about two thirds of the instances), the remaining examples of MUST expressing conclusion on the part of the speaker.

Tárnyiková's paper (1978) suggests a semantic analysis of English modal verbs, using CAN as an example of the procedures applied. Tárnyiková introduces a useful criterion: the distinction between the central and the peripheral semantic functions of the verbs, with gradual transition between them. Thus the 'centre' for CAN, i. e. its basic meaning, is ability and the 'periphery' is possibility. The centres of the modal verbs are reflected by the periphrastic constructions and do not overlap.

* * *

It has been shown by Poldauf (in the already mentioned papers) and by Schubiger (1965) that Czech and German resort to the use of adverbs more frequently than English when expressing modality. The English finite verb in the sentence *She must have known something* corresponds to an adverb in the Czech version of the same sentence: *Určitě něco věděla* [Surely something knew-she]. Modality, however, is not the only sphere where adverbs are less frequent in English than in other languages. In German, adverbs are used to convey temporal relations that are expressed by verbal forms in English, *gerade* corresponding to English continuous forms, *schon* corresponding to the English pre-present tense (see Leisi 1967.124, 133). In Czech, adverbs are generally found more frequently than in English (see Hladký 1981).

In the present study attention is to be paid not only to the relation of adverbs and verbs in expressing modality in English and Czech but also to the share of individual verbs in expressing various spheres of modality. Two different sources for obtaining a corpus will be used in the paper: (i) original English and original Czech texts, and (ii) texts translated from English into Czech.² The discussion of the original texts comes first.

² The decision to choose one method or the other may be influenced by the character of the phenomena to be studied and by the quantitative scope of the investigation. The use of translations has the advantage of offering examples referring to the same extra-linguistic reality and selected from stylistically equivalent texts with approximately the same inner organization (i. e., division into paragraphs, sentences and clauses). It may be objected against the use of translations that the translated text has been influenced by the original. This objection may be tempered by saying that translations from English into Czech are usually of a good quality, owing to a long translating tradition and competition among a number of translators. Translations from Czech into English, however, may be less reliable (see further on).

The other method, the use of two original texts, is valid only if we can find phenomena corresponding to other phenomena within the same text, e. g. a frequency count, the length of sentences, the ratios of parts of speech.

Both methods were used in an earlier investigation (Hladký 1961, based on Vachek 1955). Besides confirming the existence of stronger nominal tendencies in English as revealed by the traditional method analysing translations, the use of original English and Czech texts resulted in establishing the degree of condensation for fairy-tales, for narrative prose and for specialized texts for each of the two languages separately.

The texts for British English come from the year 1969. The corpus for written English was taken from 133 editorials appearing in 45 different issues of *The Times* (there are usually three different topics in *The Times* editorials every day). Although the majority of editorials cover domestic and international political and economic issues, there are a number of non-political points discussed as well, e. g. the organization of the health service, public transport in London, the condition of British prisons, weather forecasts, the freedom of the theatre, the authority of the Pope, the art of photography, the Petrosjan-Spassky duel, the purpose of museums and galleries, the relevance of costumes in a theatrical performance. Even with the wide variety of issues discussed (which probably also means that the editorials were written by a number of authors), the sample may be regarded as homogeneous because it is limited to one type of newspaper writing.

The corpus for spoken English is based on 12 recordings of the BBC *Any Questions* programme. To make the sample balanced, a second or third appearance of the same speaker has not been included, the length of the transcript of the regular chairman, David Jacobs, who appears in each programme, has been reduced to the average for a member of the panel, and the questions and other utterances of the members of the audience have not been included at all.

The twelve recordings include the following speakers: Kingsley Amis, John Arlott, Lady Barnett, John Betjeman, Russell Braddon, George Brown, Alastair Burnet, Peter Cook, Jo Douglas, Margaret Drabble, Jimmy Edwards, Paul Foot, Bryan Forbes, David Frost, Ray Gunter, Joe Hymen, Paul Johnson, Sir Henry Johnson, Geraldine Jones, C. A. Joyce, Bernard Levin, The Countess of Longford, John Mackintosh, Ann Mallalieu, Lord Mancroft, Jonathan Miller, Malcolm Muggeridge, Enoch Powell, Steve Race, Dr John Rae, Ivor Richard, Brian Rix, Emanuel Shinwell, Baroness Stocks, Lord Stokes, Sylvia Sims, Margaret Thatcher, Katherine Whitehorn, Lord Willis.

Although the issues discussed in *Any Questions* present a wider scale than those of *The Times* editorials and although *Any Questions* is primarily not meant to be a serious programme, there is a certain degree of similarity between the two sources as far as the contents are concerned, because a considerable part of *Any Questions* is devoted to political and economic problems.

The results of the statistical analysis of *The Times* editorials (TE, for short) and of *Any Questions* programmes (AQ, for short) are given in Table One (p. 90). For easier comparison, the size of the corpus is the same for both TE and AQ, i. e. 1424 instances.

The differences between the results for AQ and for TE can be attributed not only to the fact that AQ is a spoken text and TE is a written one, but also to the fact that the speakers in AQ usually put forward their own,

The statistical data in the paper indicated that translations from Czech into English are less reliable than translations from English into Czech. The source of the irregularities is either a wrong interpretation of the Czech original by the English translator or the transference of the Czech sentence structure or the Czech semantic extent of the lexical units into the English text by a Czech translator. The mistakes discovered in the works of English translators of Czech were mostly lexical ones.

	AQ	TE		AQ	TE
CAN	382	236	inevitably	1	2
COULD	87	155	indubitably	1	—
MAY	80	172	hardly	—	7
MIGHT	47	63			
HAVE TO (+ HAVE GOT TO)	169	62	adverbs	186	133
MUST	96	99	possible	17	33
SHOULD	146	129	likely	11	38
OUGHT TO	41	13	sure (AQ: I am)	26	2
BE TO	14	60	necessary	9	18
NEED (modal)	1	4	bound	8	10
			certain AQ: I am TE: it is	5	10
modal verbs	1063	993	permissible	3	—
			probable	—	2
seem	48	65	inevitable	1	1
able to	17	32			
allowed to	12	16	adjectives (in predication)	80	114
appear	1	11	doubt	8	19
shall	1	3	possibility	1	11
look like	—	3	ability	3	2
doubt	1	2	chance	—	5
is said	—	2	suspicion	—	4
dare	1	—	probability	—	4
			necessity	—	3
other verbs	81	134	likelihood	—	2
			position	1	—
perhaps	64	27	question	1	—
probably	36	35			
certainly	23	24	nouns	14	50
surely	15	7			
necessarily	13	5	SUMMARY		
maybe	12	—	verbs	1144	1127
presumably	8	10	adverbs	186	133
possibly	6	8	adjectives	80	114
doubtless	3	2	nouns	14	50
apparently	3	2			
undoubtedly	1	4	total	1424	1424

Table One

personal views, while in TE the writers formulate the attitude of the paper.

The first difference, the difference between a spoken and a written text, is at the basis of the higher frequency of *I'm sure, I'm certain* in AQ, as opposed to the impersonal *it is certain* in TE. The same explanation can be offered for the high occurrence of *surely* in AQ. (*Surely* is frequent in spoken utterances because 'it invites agreement from the person addressed', even though it does not collocate with *quite*, as *certainly* does — Greenbaum 1969.130, 228.) There is no instance of *maybe* in TE, as could be expected, since *maybe* is labelled as highly colloquial, casual (Greenbaum 1969.194).

The higher frequency of *to be to, likely, seem, possible, doubt* in TE may be explained on the grounds that these expressions either denote something that is planned to happen or convey a more reserved degree of certainty, both ideas being nearer to impersonal utterances. The lower frequency of *have to* in TE is also explainable by the character of editorial writing.

The most obvious difference between the two texts is in the frequency of CAN/COULD and MAY/MIGHT: CAN/COULD are more frequent in AQ (although COULD, by itself, is more frequent in TE), while MAY/MIGHT are more frequent in TE. This general comparison of the frequencies of the two verbs is in accordance with Lebrun's findings: the frequency of MAY is lower in colloquial texts (1965.76).

The above simple comparison of the frequency of CAN/COULD and MAY/MIGHT does not characterize the relationship between the two verbs, as no regard has been paid to the semantics of the verbs. Before any further comparison is made, the main meanings of the verbs have to be distinguished. For CAN/COULD three meanings will be used: ability (HABilitas), possibility (POSSibilitas) and permission (PERmissio). The distribution of these meanings in AQ and TE is shown in Table Two.

	AQ	TE
CAN: HAB	147	93
POSS	201	131
PERM	34	12
total	382	236
COULD: HAB	24	27
POSS	53 (= Pres.)	Pres 94
		Past 8
PERM	10	PerfInf 1
		7
total	87	155

Table Two

(A further distinction has been made with COULD to indicate whether the forms refer to the present time or the past or are followed by a perfect infinitive.)

The same distribution of instances has been determined for MAY/MIGHT, without the meaning HABILITAS:

	AQ	TE
MAY: POSS	62 Pres	172 Pres
PERM	PerfInf 56	PerfInf 166
	18	6
		—
total	80	172
MIGHT: POSS	47 Pres	63 Pres
PERM	PerfInf 42	PerfInf 50
	—	5
		—
total	47	63

Table Three

The table shows a very small number of instances of PERmissio. The recorded 18 cases in AQ are all the phrase *if I may* (CAN was also found in the same function). A higher representation of PERmissio instances is not to be expected in the corpuses, as permission presupposes a certain relationship between speakers.

If we combine the data from Tables Two and Three, without making any further specification of the POSSibilitas meaning for the moment, we find a certain degree of overlapping, all four forms expressing POSSibilitas in both corpuses (see Table Four).

	AQ	TE
POSS: CAN	201	131
COULD	53	121
MAY	62	172
MIGHT	47	63
total	363	487

Table Four

Besides the higher frequency of MAY in TE and the higher frequency of CAN in AQ, already briefly commented upon on p. 91, the most obvious difference between the two sources of material is the higher frequency of COULD in TE. But the comparison is still purely formal and too general. The first step in making the statistical results more revealing is to distinguish between tense and time. If instances of CAN and MAY followed by perfect infinitives are subtracted from the total number of CAN/MAY occurrences and instances of COULD and MIGHT referring to the present (or future) added, the following results are obtained for expressing POSSibilities in the present:

	AQ	TE
CAN	201	131
pres. COULD	53	94
MAY	56	166
pres. MIGHT	42	50
total	352	441

Table Five

There is still a difference in the total number of instances of POSSibilities in the two corpuses and there is still a higher representation of COULD, MAY and MIGHT in TE, and a higher representation of CAN in AQ. A partial explanation for the higher frequency of COULD and MIGHT can be sought in the more reserved manner of expression mentioned above.

So far the difference between CAN and MAY in the sphere of POSSibilities has been presented from a very simplified point of view. But CAN and MAY should not be regarded as synonymous when expressing possibility: CAN expresses theoretical possibility (*The road can be blocked* — It is possible to block the road), while MAY expresses factual possibility (*The road may be blocked* — It is possible that the road is blocked; Leech 1971.75, Quirk 1972.97).³ This difference between CAN and MAY determines their use in questions and negative statements: as MAY conveys factual possibility, its negative form conveys a negative fact (*He may be serious* — It is possible that he is serious vs. *He may not be serious* — It is possible that he is not serious), while CAN, conveying theoretical possibility, directs the negation not to the fact but to the possibility itself (*He cannot be serious* — It is not possible that he is serious).

The distinction between factual and theoretical possibility is also reflected in the distribution of CAN and MAY in certain contexts. CAN is found

³ The corresponding terms in Lebrun would be 'moral possibility' for 'theoretical' and 'logical possibility' for 'factual' possibility.

in clauses with *whether* (*Whether it can be commercially successful is dependent on many factors*), with *if* (*If our partners want the W. E. U. to resume its work, they can let us know of their intention*), in phrases such as *it could be expected, there can be no question that . . . , there can be little doubt that . . . , it can easily be forgotten*. MAY, on the other hand, is used in concessive clauses and in various combinations with *well* (*may well be, might well be, might as well be*).

If the number of clauses of the types mentioned in the previous paragraph, together with negative clauses and questions, is deducted from the totals in Table Five, we get the following representation of CAN and MAY in the two corpora:

	AQ	TE
CAN	121	65
pres. COULD	44	26
MAY	24	166
pres. MIGHT	33	50
total	222	307

Table Six

In order to verify the meanings of CAN and MAY (and of COULD and MIGHT), small samples (20 instances each) were selected from each corpus for each verb form and the meanings were decided on the basis of the paraphrases used by Leech and Quirk.⁴

The following examples 1 to 4 show English paraphrases and Czech translations (with English morpheme-by-morpheme translations) indicating theoretical possibility for CAN and factual possibility for MAY, in both AQ and TE.

1. I really don't think my worst enemy *can* call me a racist. AQ
 ... it is *possible* for my ... to call me...
 (... je možné, aby...)
 [... is possible that (= INF)⁵]

⁴ The paraphrasing was checked by a native speaker, Mr. T. D. Sparling, B. A., from the Brno Department of English and American studies. There are two exceptions to the size of the samples: COULD in TE with 13 instances and MAY in AQ with 18 instances only. The reason for this reduction was to avoid repetition of phrases such as *it could be argued, it may be that . . .*

⁵ In the Czech translations the difference between theoretical and factual possibility is indicated by conjunctions: *aby*, replaceable by an infinitive, opens a clause indicating theoretical possibility and *že* opens a clause expressing factual possibility. Further on in the present paper, the difference between *aby* and *že* will be used to distinguish the volutative modality (*aby*) and the modality of certainty (*že*) according to Grepl 1980. It should be stressed that the Czech translations, prepared by the present author, are not used as a criterion for deciding the meaning of the English verbs. The criterion is in the paraphrases and the translations serve as supporting evidence.

2. There *can* be no doubt... TE
It is not *possible to* have any doubt...
(Není možné mít...)
[Is-not possible have-to...]
3. It *may* help a bit but I don't know. AQ
It is *possible that* it will help...
(Je možné, že...)
[Is possible that...]
4. But the Italians *may* think that... TE
But it is *possible that* the Italians think...
(Je možné, že...)
[Is possible that...]

All the paraphrases of CAN in AQ and TE indicate theoretical possibility and all the paraphrases of MAY indicate factual possibility, findings corresponding with the description of usage given in grammar books.

COULD, according to Leech (1971) and Quirk (1972), conveys either theoretical or factual possibility. Let us adduce examples from AQ and TE.

5. ... and one *could* rephrase the question, you know, ... AQ
... it is *possible to* rephrase...
(... je možno jinak formulovat...)
[... is possible otherwise formulate-to...]
6. They are eligible for parole, so their release *could* theoretically be effected in that way. TE
... it is theoretically *possible to* effect...
(... je teoreticky možné zařídit...)
[... is theoretically possible effect-to...]
7. They *could* refer (according to the text) to ... TE
It is *possible that* they refer...
(Je možné, že...)
[Is possible that...]

There is some difference here between AQ and TE. In the spoken texts (AQ) COULD does not differ much from CAN, both expressing theoretical possibility (with three exceptions, the paraphrases of COULD indicate this). In the written texts, however, both types of possibility are equally represented (half the paraphrases indicate theoretical possibility, half the paraphrases indicate factual possibility).

Like COULD, MIGHT has also been interpreted in the studied material as conveying either theoretical or factual possibility.

8. ... unless there are some very good causes and these causes *might* equally be bad management. AQ
... it is *possible that* those causes are...
(... je možné, že...)
[... is possible that...]
9. More dependants *might* arrive over the next five years. TE
It is *possible that* more dependants will...
(Je možné, že...)
[Is possible, that...]
10. It is only somehow in the mind of politicians that one *might* repatriate black people, ... AQ
... it is *possible to* repatriate...
(... je možné repatriovat...)
[... is possible repatriate-to...]

11. The 'new images' ... *might* serve as example. TE
 It is *possible* for ... to ...
 (Je možné, aby ...)
 [Is possible, that (= INF) ...]

Once again, there is some difference between AQ and TE. In AQ the two types of possibility are equally represented while in TE factual possibility accounts for about two thirds of the instances.

The results of the analysis of CAN, MAY, COULD, and MIGHT in the sphere of possibility are summed up in Diagram A, where F stands for 'factual' and T for 'theoretical' possibility.

	AQ	TE				
CAN	T	T				
COULD	T	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; text-align: center; width: 50%;">T</td> <td style="border: 1px solid black; text-align: center; width: 50%;">F</td> </tr> </table>	T	F		
T	F					
MAY	F	F				
MIGHT	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; text-align: center; width: 50%;">T</td> <td style="border: 1px solid black; text-align: center; width: 50%;">F</td> </tr> </table>	T	F	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; text-align: center; width: 50%;">T</td> <td style="border: 1px solid black; text-align: center; width: 50%;">F</td> </tr> </table>	T	F
T	F					
T	F					

In the sphere of permission, comparatively rare in the corpuses, the distribution between CAN, COULD and MAY is shown in Table Seven. The absence of MIGHT is not surprising as its rare occurrence in this meaning is known, cf. Quirk 1972:98.

	AQ	TE
CAN	34	12
COULD	10	7
MAY	18	—
MIGHT	—	—
total	62	19

Table Seven

Two further figures in Table One need specification: the number of

instances of **MUST** and of **HAVE TO**. In **MUST**, two basic meanings will be distinguished: necessity (Ex 12) and certainty (Ex 13).⁶

12. Private life *must* be respected but I have a terrible horror in the world which is growing up now ... AQ
13. Well, anachronistic as I suppose the words *must* now be, I still think it's rather nice from time to time just to wallow in sentiment. AQ

The 169 instances of **HAVE TO** in AQ include 54 instances of **HAVE GOT TO** (all in the meaning of necessity). There is one example of **HAVE TO** with the meaning of certainty:

14. ... as one gets ... older, ... one thinks that youth is wasted on the young. ... Every time I see a young bird of twenty-one, here I am nearing twenty-two, I feel extremely resentful, but I suppose they *have to* enjoy it. AQ

The distribution of the meanings of **MUST** and **HAVE TO** in AQ and TE is given in Table Eight.

	AQ	TE
MUST: necessity (Grepl)	80	79
certainty (Grepl)	16	20
total	96	99
HAVE TO: necessity (Grepl)	114	62
certainty (Grepl)	1	—
HAVE GOT TO: necessity (Grepl)	54	—
total	169	62

Table Eight

In the following paragraphs a summary of the analysis of two Czech corpuses is presented.

The material for the Czech corpus of spoken texts does not correspond to *Any Questions* in every aspect. As the available radio or television programmes are either read from a written text or rely heavily on detailed scenarios, the material was excerpted from theatre, television and radio plays.⁷ The different character of the texts, mostly dialogues between

⁶ In Leech's terminology, Ex 12 would be classified as obligation or compulsion imposed on by the speaker and Ex 13 as logical necessity (1971.71-2). Here, however, Grepl's terminology is used.

⁷ Jiří Hubač, *Zítřka a pozítří*, Drahoslav Makovička, *Zámek pro Barborku*, Jaroslav Dietl, *Tři chlapi v chalupě* (part 15), Pavel Hajný, *Domácí víno*, Jiří Šotola, *Příběh o životě a smrti*, all published in *Televizní hry* [Television plays], (Prague, 1966); Jiří Suchý, *Hry* (Prague, 1964); Josef Topol, *Jejich den* (Prague, 1962).

closely related people, will lead to some differences in the sphere of modality. These differences will be taken into account when the results are summarized.

The Czech material corresponding to *The Times* editorials has been taken from editorials and commentaries in three Czech dailies (*Rudé právo*, *Rovnost*, *Mladá fronta* from January, February and March 1980). The texts were written by a number of different authors, but they are less varied in content than the English ones and there is a strong element of appeal in them.

A detailed list of all Czech devices of expressing modality found in the corpuses is given in Table Nine. The total number of instances is the same as in the English corpuses, i. e. 1424.⁸

Some of the differences between the Czech spoken and the Czech written texts are analogical to those in English, e. g., a higher frequency of MOCI [can] and MUSIT [must] in the spoken texts. The newspaper editorials have a markedly lower proportion of finite verb forms than the plays. If the predicatives, mostly LZE [it is possible], are added to the

	CZPL	CZNE		CZPL	CZNE
MOCI [can]	546	384	nepochybně [undoubtedly]	—	8
MUSIT [must]	364	236	nutně [necessarily]	—	6
MIT [should]	160	222	nesporně [indisputably]	—	4
SMĚT [may]	38	14	zjistě [certainly]	—	2
DÁT SE [can]	30	18	bezpochyby [no doubt]	—	2
ZDÁT SE [seem]	12	12	patrně [probably]	—	2
			toseví [surely]	2	
verbs	1150	886	kdoví [perhaps]	2	
lze [possible]	4	182	adverbs	256	202
možno, -é [possible]	10	76			
nutno, -é [necessary]	—	54	možnost [possibility]	4	10
			nutnost [necessity]	—	6
predicatives & adjectives	14	312	jistota [certainty]	—	6
			s určitostí [with certainty]	—	2
jistě [certainly]	26	50	nouns	4	24
asi [perhaps]	56	10			
snad [perhaps]	46	18	SUMMARY		
prý [is said]	20	34			
třeba [perhaps]	40	6	verbs	1150	886
určitě [certainly]	38	6	predicatives & adjectives	14	312
možná [perhaps]	24	16	adverbs	256	202
zřejmě [obviously]	2	28	nouns	4	24
bezsporu [doubtlessly]	—	10			
			total	1424	1424

Table Nine

⁸ The actual number of excerpts was only half that amount, 712. This simplification should not influence the final comparison because only the general and numerically well represented phenomena are to be compared.

finite verb forms, the figures for both corpuses are roughly the same: 1164 in CZPL and 1198 in CZNE.

The English and the Czech corpuses are compared in Table Ten, where parts of speech for each text are summarized. The Table shows a higher percentage of adverbs in the Czech corpuses, especially if the instances

	AQ	TE	CZPL	CZNE
verbs	1144	1127	1150	886
predicatives & adjectives in predication	80	114	14	312
adverbs	186	144	256	202
nouns	14	39	4	24
total	1424	1424	1424	1424

Table Ten

in the two spoken and those of the two written texts are compared (i. e., if AQ is compared to CZPL and TE to CZNE). The comparison, however, is too general and does not take into account the differences mentioned above in the use of the means of expressing modality existing between individual authors/speakers, between different types of text and between the two languages. To make a comparison of comparable data, we will make a distinction between various spheres of modality and then compare the percentage (not the actual number) of various means of expressing a sphere of modality in the individual corpuses.

The distinction of the spheres of modality is based on Bauer and Grepl (1980), with a slight modification. In the sphere of voluntative modality only two shades, possibility and necessity, are to be distinguished, the third shade, intention, being left aside as a border-line area of modality (from the present author's point of view). In the sphere of modality of certainty, a distinction will be made between the shade of certainty proper and that of probability.

The means of expressing modality listed for the four corpuses have been distributed into the four shades of modality in the following way:

POSSIBILITY

E: can, could, might, possible, possibility, position;

Cz: moci, dát se, lze, možno,-é, možnost;

NECESSITY

E: must, have to, may, should, ought to, be to, need, shall, necessary, necessity;

Cz: musit, mít, nesmět, nutno, nutné, nutnost;

PROBABILITY

E: may, might, could, seem, appear, look like, doubt, is said, perhaps, probably, necessarily, presumably, possibly, apparently, hardly, possible, likely, probable, doubt, possibility, chance, suspicion, probability, likelihood, question;

Cz: mít, moci, zdát se, možné, zřejmé, asi, snad, možná, pravděpodobně, patrně, zřejmě, přý, třeba;

CERTAINTY

E: must, certainly, surely, doubtless, undoubtedly, inevitably, indubitably, sure, certain, bound, inevitable;

Cz: musit, určitě, jistě, nepochybně, bezesporu, nesporně, zajisté, bezpochyby, jistota, určitost.⁹

The ratios of the four shades of modality in the four corpuses are given in Table Eleven and represented graphically in Diagram B (the sizes of the frames indicate percentages).¹⁰ The table and the diagram show that both

SPHERES OF MODALITY	possibility	necessity	probability	certainty	TOTAL
No. of AQ instances per cent	359 29.1	464 37.6	309 25.1	101 8.2	1233 100
TE	313 24.7	371 29.2	503 39.6	82 6.5	1269 100
CZPL	590 42.3	498 35.7	216 15.5	92 6.5	1396 100
CZNE	644 45.3	512 36.0	170 12.0	96 6.7	1422 100

Table Eleven

English corpuses have a lower representation of possibility and of necessity and a higher representation of probability than the Czech corpuses, the difference being particularly evident in the newspaper editorials. Such a difference between English and Czech confirms that a comparison of the ways of conveying modality in the two languages cannot be based on the corpuses in their entirety but should operate with means employed to convey only a certain sphere of modality (or a certain shade within the sphere). Therefore, two further tables (Twelve and Thirteen) and another diagram (C, p. 103) show the proportion of parts of speech conveying

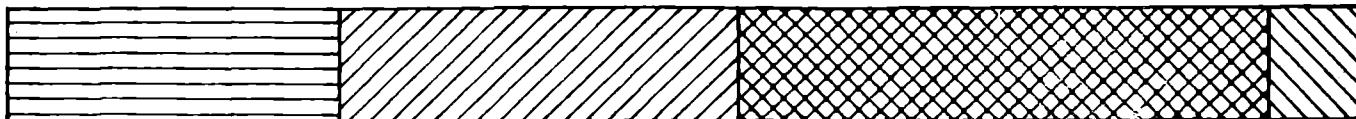
⁹ The lists are based on the four corpuses only, so that they do not contain all possible means of expressing modality. Some of the expressions, e. g. may, must, are listed under two separate headings, in accordance with the analysis given here on pp. 92,97.

¹⁰ For none of the corpuses is the total number of instances 1424, as was the case in the lists of expressions (Table One and Table Ten). The lists were made mechanically by recording every instance of CAN, be able, etc. Ability, however, is not regarded here as belonging to modality proper. The exclusion of ability from modality is also found in other authors: Boyd and Thorne (1969), Halliday (1969), Poldauf (1959).

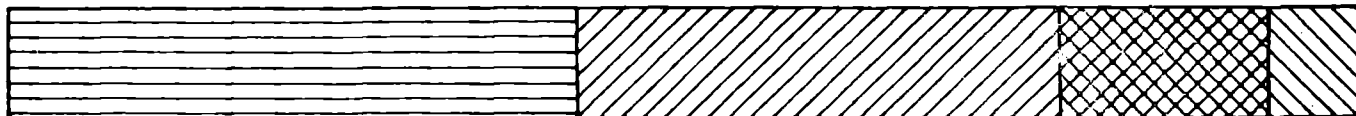
ANY QUESTIONS



THE TIMES EDITORIALS



CZECH PLAYS



CZECH EDITORIALS

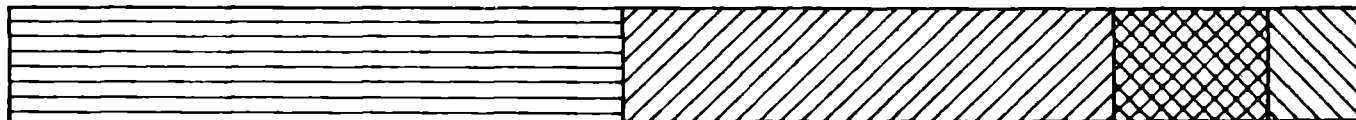


DIAGRAM B

a certain sphere of modality, irrespective of the ratio of that sphere in the whole corpus.

VOLUNTATIVE MODALITY	verbs	predicatives	adjectives	nouns	TOTAL
No. of AQ instances per cent	800 97.2	— —	21 2.55	2 0.25	823 100
TE	641 93.7	— —	35 5.1	8 1.2	684 100
CZPL	1070 98.3	14 1.3	— —	4 0.4	1088 100
CZNE	838 72.5	302 26.1	— —	16 1.4	1156 100

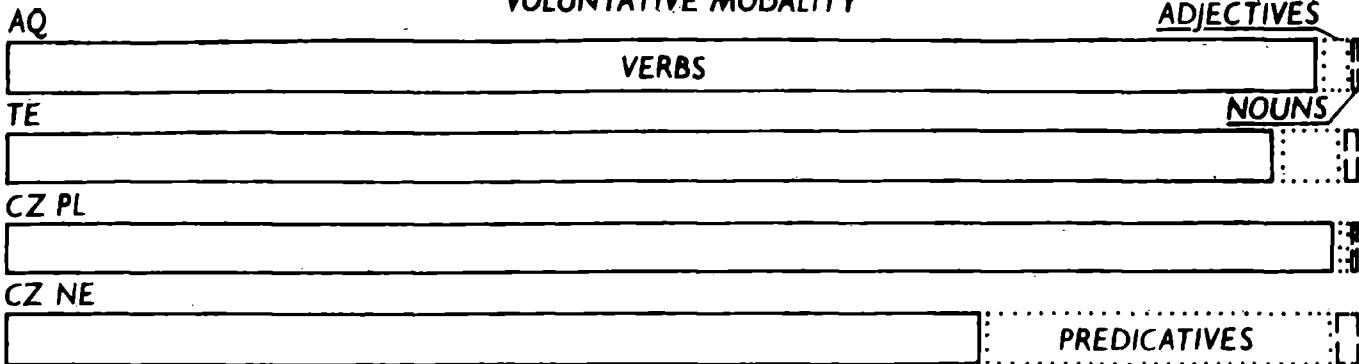
Table Twelve

MODALITY OF CERTAINTY	verbs	adverbs	adjectives	nouns	TOTAL
No. of AQ instances per cent	156 38.0	186 45.4	56 14.4	9 2.2	410 100
TE	333 56.9	133 22.7	79 13.5	40 6.9	585 100
CZPL	52 16.9	256 83.1	— —	— —	308 100
CZNE	46 17.3	202 75.9	10 3.8	8 3.0	266 100

Table Thirteen

Table Thirteen and Diagram C show that in both languages the occurrence of adverbs is virtually limited to modality of certainty. Within this sphere, there is a marked difference between English and Czech. In English the percentage of adverbs is only 45.4 for AQ and 22.7 for TE, while in Czech it is 83.1 for CZPL and 75.9 for CZNE.

VOLUNTATIVE MODALITY



MODALITY OF CERTAINTY

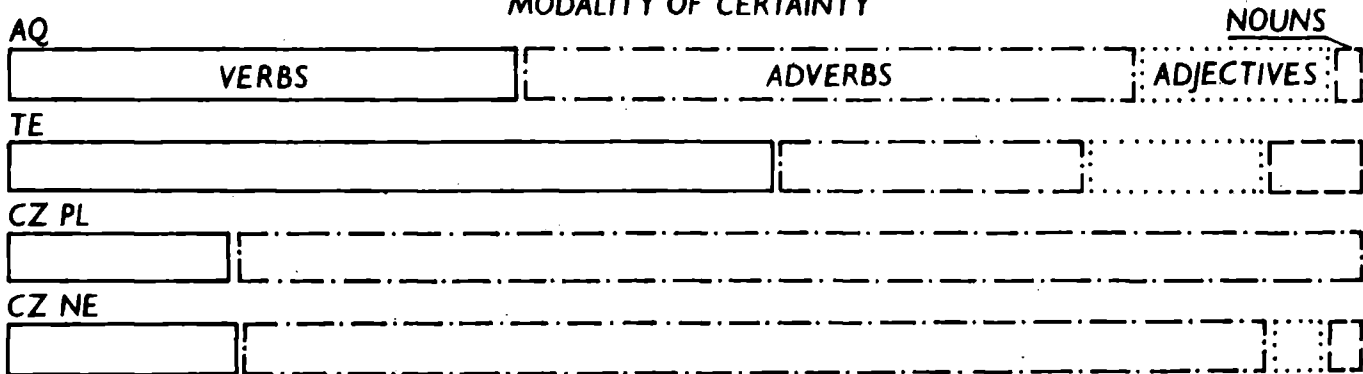


DIAGRAM C

Table Twelve and Diagram C indicate that further division of voluntative modality into possibility and necessity, as in Table Eleven and Diagram B, cannot bring any substantial changes in the representation of parts of speech, because the verbs form a very high proportion of the corpuses (97.2 per cent for AQ, etc., cf. Table Twelve; division into the two shades results in the following percentages of verbs: possibility — 96.9, 92.9, 96.9, 98.4 [incl. predicatives], necessity — 97.4, 94.3, 100, 98.8 [incl. predicatives]).

PROBABILITY	verbs	adverbs	adjectives	nouns	TOTAL
No. of AQ instances per cent	139 45.0	142 46.0	19 6.1	9 2.9	309 100
TE	313 62.2	94 18.7	56 11.1	40 8.0	503 100
CZPL	26 12.0	190 88.0	— —	— —	216 100
CZNE	46 27.1	114 67.0	10 5.9	— —	170 100

Table Fourteen

CERTAINTY PROPER	verbs	adverbs	adjectives	nouns	TOTAL
No. of AQ instances per cent	17 16.8	44 43.6	40 39.6	— —	101 100
TE	20 24.4	39 47.6	23 28.0	— —	82 100
CZPL	26 28.3	66 71.7	— —	— —	92 100
CZNE	— —	88 91.7	— —	8 8.3	96 100

Table Fifteen

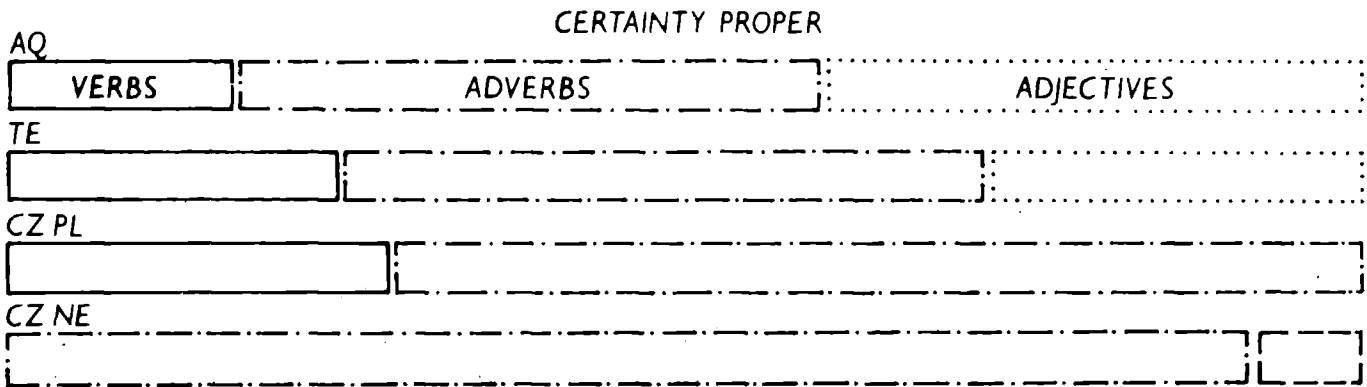
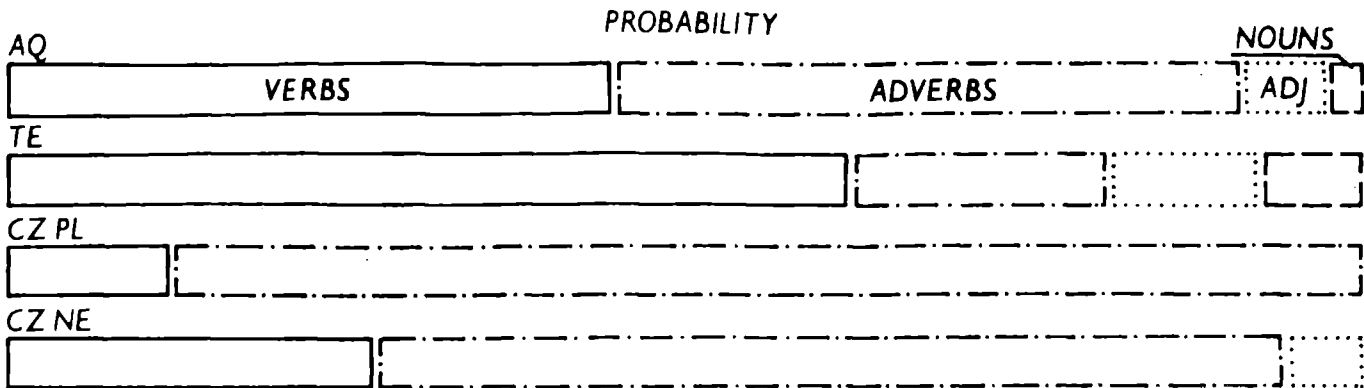


DIAGRAM D

The ratios of parts of speech in modality of certainty are more varied than those in voluntative modality, so that further division may be justified. Tables Fourteen and Fifteen and Diagram D reveal that the division has resulted in some shift in percentages: in probability, we find a higher proportion of verbs in TE, and in certainty proper, we find some changes in the proportion of verbs and adjectives in AQ and of adverbs in CZPL and CZNE (when compared with Table Thirteen and Diagram C). Even though the results for certainty proper have to be taken as approximate, owing to the low number of instances, the main outline found for the whole sphere of modality of certainty has been preserved after the division into the shades of probability and certainty proper: adverbs are the most numerous part of speech (except in TE) and their percentage in the Czech texts is always higher than that in the English texts.

+ + +

Up to now we have operated with four corpuses, two for English and two for Czech, obtained from original English and Czech texts. The following examples of the differences between the two languages in the sphere of modality of certainty have been chosen from an English original and its Czech translation.¹¹

- | | |
|-----------------------|--|
| ASI
[perhaps] | 1. 'If I'd had to make L. M.'s decision, I think I <i>might</i> have done the same.' (28)
„Kdybych já se musel rozhodovat na místě L. M., myslím, že bych <i>asi</i> udělal totéž.“ (27)
[... think-I that would-I <i>perhaps</i> did the-same.] |
| | 2. 'It <i>must</i> be my extreme stupidity, ...' (24)
„Jsem <i>asi</i> hrozně hloupý, ...“ (23)
[Am-I perhaps terribly stupid ...] |
| MOŽNÁ
[perhaps] | 3. '... I'm inclined to think that Dr. Jago <i>may</i> be wrong.' (28)
„... domnívám se, že dr. Jago <i>možná</i> nemá pravdu.“ (27)
[Dr. Jago <i>perhaps</i> not-has truth] |
| SNAD
[perhaps] | 4. He <i>could</i> have been a moody man ... (36)
<i>Snad</i> byl náladový, ... (35)
[<i>Perhaps</i> was-he moody, ...] |
| TŘEBA
[perhaps] | 5. 'I <i>may</i> be voting for Jago, ...' (70)
„Budu <i>třeba</i> hlasovat pro Jaga, ...“ (71)
[Will-I <i>perhaps</i> vote-to ...] |
| JISTĚ
[certainly] | 6. 'He <i>must</i> be quite well off, of course.' (35)
„ <i>Jistě</i> je na tom dobře, to je samozřejmě.“ (34)
[<i>Certainly</i> is ...] |
| | 7. 'You <i>will</i> understand that I am already acting as I ask you to act.' (18)
„ <i>Jistě</i> chápete, že já už se chovám tak, jak to žádám na vás.“ (16)
[<i>Certainly</i> understand-you, that I ...] |
| URČITĚ
[certainly] | 8. 'He <i>must</i> be only person on this earth who ...' (84)
„Je to <i>určitě</i> jediná osoba na světě, která ...“ (85)
[Is it <i>certainly</i> only person ...] |

The above examples form part of a corpus drawn from *The Masters*

¹¹ The examples have been drawn from C. P. Snow's *The Masters* (Penguin Books, Harmondsworth, 1964) and its Czech translation *Profesoři* by Eliška Hornátová (Prague, 1963).

ENGLISH		CZECH					
	no of instances	translated by					not translated
		modal verb	modal adverb	modal adj.	modal noun	non-modal expression	
can	510	450	2	—	—	12	46
may	198	132	64	—	—	—	—
may	198	132	64	—	—	2	—
must	152	126	20	—	—	6	—
have to	106	100	2	—	—	2	2
seem	88	80	4	—	—	2	2
should	50	50	—	—	—	—	—
ought to	46	44	2	—	—	—	—
other verbs	42	24	16	—	—	—	2
verbs	1192	1006	110	—	—	24	52
perhaps	32	—	32	—	—	—	—
certainly	22	—	22	—	—	—	—
possibly	16	—	6	—	—	—	10
surely	14	2	10	—	—	—	2
probably	14	—	14	—	—	—	—
other adv.	16	—	16	—	—	—	—
adverbs	114	2	100	—	—	—	12
sure	22	—	2	14	—	6	—
likely	22	—	16	—	—	6	—
certain	14	2	2	8	—	2	—
bound	14	10	4	—	—	—	—
other adj.	4	2	2	—	—	—	—
adjectives	76	14	26	22	—	14	—
certainty	2	—	—	2	—	—	—
possibility	2	—	—	—	2	—	—
liberty	2	2	—	—	—	—	—
doubt	4	4	—	—	—	—	—
nouns		6	—	2	2	—	—

Table Sixteen

and from *Lucky Jim* by Kingsley Amis and their Czech translations.¹² The summary of the statistical analysis of the corpus is given in Table Sixteen. The table shows that 10.9 per cent of the English modal verbs have been translated by Czech modal adverbs, nearly all the verbs in the 10.9 per cent conveying modality of certainty. Thus the same results have been arrived at as in the analysis of the non-translated texts.¹³

Let us now sum up the whole discussion.

In order to find out differences in the ways English and Czech express modality, six texts have been excerpted. Four of these were original texts (a transcript of the radio discussion programme *Any Questions*, a number of editorials from *The Times*, a corpus taken from Czech theatre, television and radio plays, and Czech newspaper editorials) and the remaining two were excerpts from English prose fiction and their Czech translation. The analysis of the four original texts confirmed that the proportion of the various spheres of modality in the texts varies. There are texts with a higher or a lower ratio of necessity, probability, etc. There are differences between English and Czech in that in the English texts the percentage of means expressing probability is higher than that in Czech. Therefore, a comparison of English and Czech has to be based on an analysis of modal expressions for a certain sphere of modality only, not for modality in general.

The analysis of the four original texts has shown that the main difference between English and Czech is to be found in the sphere of modality of certainty, where the percentage of Czech adverbs is higher than the percentage of English adverbs, the Czech adverbs corresponding to English modal verbs. These findings have been corroborated by an analysis of a corpus from English prose fiction and its Czech translation.

¹² Two thirds of the instances were taken from *The Masters* and one third from *Lucky Jim* by Kingsley Amis (Penguin Books, Harmondsworth, 1964) and its Czech translation *Šťastný Jim* by Jiří Mucha (Prague, 1959). The procedure was similar to that used for the Czech corpora CZPL and CZNE: the actual number of instances excerpted was 712.

¹³ The 10.9 per cent can be compared with the totals for AQ, TE, CZPL, and CZNE as given in Table Ten. Such a comparison, however, is not fully justified because Table Ten covers all the expressions for all the spheres of modality (which means a higher ratio of probability and thus a higher percentage of adverbs in the English texts). With this proviso in mind we can say that the total number of adverbs in the English texts (186 in AQ plus 144 in TE) is equal to 14.5 per cent of the total number of verbs in the same texts (1144 in AQ plus 1127 in TE), while in the Czech texts the corresponding percentage of adverbs is 22.42. The difference between the English and the Czech corpora in Table Ten then is 8.1 per cent, a figure comparable with the above 10.9 per cent, if the circumstances mentioned earlier are taken into account.

Table Sixteen also offers further evidence for a higher frequency of adjectives in English in comparison with Czech: about a third of English adjectives have been rendered by Czech adverbs. For more detailed discussion see Hladký 1981.

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SLOVNÍ DRUHY A OBLASTI MODALITY V ANGLIČTINĚ A ČEŠTINĚ

Ke zjištění rozdílů ve vyjadřování modalit v angličtině a češtině bylo zpracováno šest textů. Čtyři z nich byly texty originální (přepis anglického rozhlasového diskusního pořadu, anglické novinové úvodníky, české divadelní, televizní a rozhlasové hry, české novinové úvodníky) a zbývající dva tvořily úryvky z anglické literární prózy a jejich český překlad. Rozbor čtyř originálních textů potvrdil, že zastoupení jednotlivých oblastí modalit v textech je různé. V některém textu je vyšší procento prostředků vyjadřujících nutnost, v jiném textu nacházíme vyšší zastoupení prostředků vyjadřujících pravděpodobnost. V anglických textech je podíl prostředků vyjadřujících pravděpodobnost obecně vyšší než v textech českých. Srovnání angličtiny a češtiny musí tedy být založeno na rozboru prostředků pro jednotlivé oblasti modalit (možnost, nutnost atd.).

Rozbor čtyř originálních textů prokázal, že hlavní rozdíl mezi angličtinou a češtinou je v oblasti modalit jistoty, kde v českých textech nacházíme vyšší procento adverbů než v textech anglických a části českých adverbů odpovídají anglická modální slovesa. Ke stejnému zjištění se dochází i rozбором anglického originálního textu a českého překladu.

