An analysis of Silent pauses in an episode of the sitcom "friends"

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Introduction

The aim of the research study in the present paper was to explore a selected phonetic aspect – silent pauses in the speech/dialogues of an episode of the sitcom *Friends* and to observe whether the prevalence of certain pause types contributes to the naturalness and perception of sitcom dialogue as a realistic representation of unprepared spontaneous speech. This phonetic feature was investigated since the occurrence of pauses appears to reflect the degree of spontaneity. In addition, it was assumed that a higher frequency of short duration pauses would make the speech/dialogue of a sitcom more concise. The research material was based on a sitcom due to several other reasons: the sitcom in question was widely popular and supposedly affected some L1 and L2 speakers´ oral productions in English.

Resulting from these assumptions the following research questions were raised: does the selected phonetic aspect contribute to the naturalness of sitcom speech/dialogue and make it similar to unprepared spontaneous oral production? With regard to teaching implications another question was raised: may thus sitcom be recommended and utilized as a supplementary teaching material in improving naturalness or spontaneity of L2 users´ oral production? Thus, the present preliminary paper seeks to answer the above research questions through illustrating the results of the measurements and subsequent analysis of silent pauses in an episode of the sitcom *Friends*.

1 Spontaneous verbal communication versus the discourse of sitcoms

The dominant language functions fulfilled by spontaneous verbal communication include the phatic (establishing and maintaining the social contact between the participants), expressive (showing attitudes and emotions) and conative functions (influencing the addressee's behaviour) (Bilá – Džambová – Kačmárová, 2011).

1.1 Chief characteristic features of spontaneous verbal communication

Verbal communication is based on sound signals. In "on the spot" production of speech (or spontaneous unprepared speech) there is little time for careful planning or revising of the utterance since while producing it the speaker has to bear in mind what has already been said, monitor the reception of this by the hearer and simultaneously plan further portions of an utterance. Therefore, scheduling of an utterance may lag behind the delivery and whenever this occurs, the flow of speech is broken up by a number of features referred to as features of "normal non-fluency". These features, however, are not perceived as deficiency since they are "common occurrences". What is more, in impromptu speech when it is produced under pressing circumstances, there is lack of time for careful selection of vocabulary and structured sentences. Thus unprepared spontaneous speech exhibits a number of characteristic features at all language levels. At the phonetic level these features include pauses (both silent and filled), false beginnings, repetitions (when a speaker refines or substitutes some expressions during speaking) and emphatic intonation contours; at the syntactic level they comprise: vague sentence boundaries, syntactic incompleteness (the use of elliptical sentences and minor sentences), preference for paratactic structures, positioning comment-clauses in end-position; and, finally, at the lexical level, clichés and use of vague or empty expressions. In addition, at the lexical level frequent use of interjections, intensifiers, slang, colloquial and idiomatic

expressions, a tendency towards monosyllabic words and a considerable degree of redundancy are manifested (Quian, 2004: 152 – 160).

1.2 Some typical features of the discourse of sitcoms

The sitcom (situational comedy) is a genre of comedy which introduces a group of characters who share a common environment (e.g. family, private life or workplace) and with a certain degree of overstatement they try to solve a number of issues related to their environment as well as their everyday life. The primary goal of a sitcom is to entertain the audience. Although it was originally introduced on the radio and only later on TV, in the latter media it currently occupies a dominant (*"backbone of American television"[1]*) position since its aim is to attract large audiences of a variety of age groups and interests and thus generate considerable profit (*cf* Bilá Džambová – Kačmárová, 2011). A sitcom may be recorded with the live audience but this effect may also be achieved through an additional sound track (accompanying laughter and applause).

A sitcom is generally given a limited broadcast time (approximately 20 min per an episode) thus leaving constrained comprehension time for the audience (Romero Fresco, 2009). What is more, it is produced under certain economic constraints pertaining to the given TV channel and advertising agencies.

A sitcom exhibits multiple authorship (a number of writers participate in script and dialogue writing), and has a very complex procedure of production. In order to make the dialogues more natural, planning extends over approximately two months, writing over 10 – 15 days, recording over a further 15 – 20 days and this course of action logically affects the final (Romero Fresco, 2009: 41).

The simultaneous presence of acoustic and visual signs is typical for the genre of sitcom; verbal (dialogue) and some non-verbal (e.g. various sound effects) signs are transmitted through the auditory channel and further non-verbal signs through the visual channel (therefore it is also referred to as audio-visual text, *cf* Romero Fresco, 2009).

With regard to the structure of the sitcom it follows a conventionalised model (Romero Fresco, 2009) in that each episode comprises three plots enfolding within three acts (the duration of each being 2 – 3 min) consisting of one – two acts (the duration of each being 1 – 2 min). Consequently, such a compact structure contributes to the conciseness of a sitcom in which dialogues play a crucial role. They are supposed to be in accord with the speaker's personality and, what is more, to be funny and witty and naturally move the plot forward (Romero Fresco, 2009).

At the phonetic level (Romero Fresco, 2009: 46) the sitcom discourse may be characterised by correct standard pronunciation (within a certain accent), i.e. careful articulation, avoidance of prosodic ambiguity , inappropriate pauses as well as of an excessive occurrence of simultaneous speech of several characters, all of which represents an effort to achieve illocutionary transparency (Romero Fresco, 2009; *cf* Bilá – Džambová – Kačmárová, 2011);

At morphological and syntactic levels a lesser degree of syntactic incompleteness or fragmentation and deviation from norms may be observed than in spontaneous speech (Romero Fresco, 2009; *cf* Bilá–Džambová–Kačmárová, 2011);

And, finally, at the lexical level high information load, avoidance of excessive alteration of topics and redundancy may be observed (Romero Fresco, 2009; *cf* Bilá – Džambová – Kačmárová, 2011).

Speech/dialogues of characters in films (or in literary works) are described as stylized and thus cannot be regarded as word-for-word transcripts of real-life utterances/dialogues.

The reason of stylisation is obvious – transcripts of spontaneous unprepared speech with all its attributes of "normal non-fluency" would irritate the readers/audience and would distract them from following the plot; in films (and likewise in literary works) the utterances are expected to be more concise. Conversely, a high degree of stylisation would strike the audience as unnatural (Quian, 2004). Film utterances/dialogues as not being identical with spontaneous unprepared utterances may be referred to as "quasi-spontaneous" or "prepared spontaneous" utterances since they result from a very complex process of production and performance in which a team of script and dialogue writers and actors participate (*cf* Bilá–Džambová–Kačmárová, 2011).

The sitcom has also become an object of linguistic research since it appears to exhibit some features of resemblance with spontaneous oral production and, what is more, owing to its vast popularity, it seems to exercise considerable influence on both native and non-native speakers´ manner of expression (*"Their [characters´] catchphrases pepper our vernacular"*[2]). A number of research studies tried to establish the degree of similarity of sitcom dialogues/speech with spontaneous speech in various aspects (e.g. its naturalness was investigated by Romero Fresco, 2009).

2 Silent pauses in unprepared spontaneous utterances

Pauses result from certain constraints on speech production which fall into three categories – individual, temporal and situational (Zellner, 1994). (Speech activity as a motor activity is in essence an individual activity and therefore the occurrence of pauses in it is, to a large extent, dependent on an individual speaker, i.e. feeble respiration, low muscle tone and slow rate of articulation in general result in a higher frequency of pauses whereas rapid articulation and excellent respiratory capacity decrease the number of pauses. Temporal constraints are based on a hypothesis that a neurological device coordinates stimuli transmitted to articulatory muscles and thus controls the frequency, distribution and duration of pauses. Situational constraints pertain to the immediate context of situation which may affect speaker's oral production (e.g. speaking under pressure or in an emotional situation may increase the number of pauses) (Zellner, 1994).

In addition to pauses of physiological origin (respiratory pauses) pauses of a longer duration (above 200 ms) typically result from cognitive processes, i.e. from planning, programming and structuring the components of an utterance. These pauses give a speaker sufficient time for shaping the final version of their utterance. They are observable when speakers formulate a complex response and interrupt their speech or if they start responding immediately and spontaneously and then pause and rephrase their production (in which case speech production may overtake cognitive activity). Pauses, as one of the suprasegmentals are thus dependent on the degree of spontaneity and unpreparedness of oral productions (Zellner, 1994).

From a descriptive aspect, two classifications of pauses are used – the former one being physical and linguistic and the latter one being psychological and psycholinguistic. Within the former classification some authorities differentiate intra-segmental (e.g. VOT for plosives), inter-lexical or intra-sentential and inter-sentential pauses (these pauses are physiologically predictable and typically occur at the end of tone-units and in turn-taking) (*cf* Sabol – Zimmermann, 1979; Zellner, 1994; Viola – Madureira, 2008). The latter classification deals with pauses in terms of their origin (individual physiological constraints or temporal constraints) and function (pauses as reflection of cognitive activity and situational constraints).

Pauses fulfil a crucial role in both the production and perception since they contribute to rhythmic patterning, segmenting of an utterance into semantic portions and thus drawing a listener's attention to the most significant sections of an utterance. In other words, segmentation by means of pausing breaks up an utterance into rhythmic and semantic units which are produced at a certain rate and at the same time delimited by pauses (*cf* Stock, 1996). The frequency of pauses is dependent on the style of an utterance being highest in unprepared spontaneous utterances of colloquial style (Sabol – Zimmermann, 1979, s. 54 – 55).

3 Research material and methods

Silent (and filled) pauses together with false starts, repetitions, and hesitation phenomena are collectively referred to as features of "normal non-fluency" and typify spontaneous utterances. Therefore, it was hypothesised that pause phenomena (comprising pause duration, distribution and frequency of certain pause types) in the sitcom dialogue/speech would be utilised in a manner that would follow the patterns of pausing in spontaneous speech (i.e. utilisation and higher frequency of short duration pauses, extremely rare occurrence and/or avoidance of pauses of normal/optimal and extended duration).

The research data were extracted from an episode of the sitcom Friends, namely "The One Where No One Proposes", part one, season nine (broadcast in 2002/03). In measuring intra-sentential pauses, software Steinberg, more specifically program Wave Lab 6, was used; the sound track was further adjusted (its dynamics, frequency and mastering), and burnt on a CD. Intra-sentential pauses in fifty utterances were measured (the total of 272 pauses) and these experimental measurements were supported by perceptual checks. Measurements (in ms) were obtained from the speech waveform (with graphic resolution of horizontal zoom of 5 ms); the pause intervals were localized visually by position markers (further supplemented by means of perceptual checks) and after subsequent horizontal zooming (1 ms) they were manually corrected. After processing the whole dialogue the marker list was displayed (with the time of the beginning and ending of the pauses), durations (in ms) were obtained after subtracting the start time from the end time. The measurements and subsequent evaluations were based on the linguistic typology of pauses as introduced by Sabol and Zimmermann (1984: 227 – 228) since their fine-drawn typology was well-suited for the present research study as it was hypothesized that pauses of shorter durations would be prevalent in the research material:

- Zero pause or extremely short pause (≤ 50 ms)
- Very short pause (50 ms – ≤ 100 ms)
- Short pause (100 ms – ≤ 300 ms)
- Normal/optimal (300 ms – ≤ 1350 ms)
- Long pause (1 350 ms – $\leq 2 200$ ms)
- Very long pause (2 200 ms – $\leq 2 800$ ms)
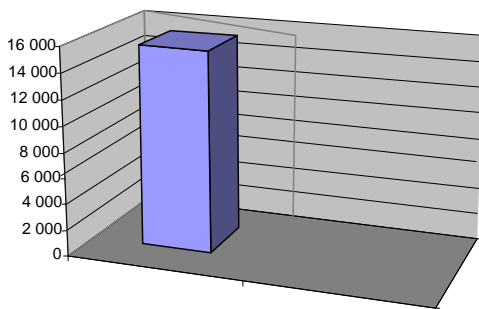- Extremely long pause (≥ 2800 ms).

4 Results

The following tables illustrate the frequency of individual pause types and the total pause duration time (*cf* Bilá – Džambová – Kačmárová (2011: 38 - 82).

Pause type	Number of pauses
Zero pause or extremely short pause (ES)	204
Very short pause (VS)	51
Short pause (S)	10
Normal or optimal pause (O)	6
Long pause (L)	1
Very long pause (VL)	0
Extremely long pause (EL)	0
TOTAL	272

Table 1: pause types and their numbers

Total pause duration in ms
15 547

Table 2: Total pause time

Graph 1: Total pause

The data were further processed by means of descriptive statistics methods (*cf* Bilá – Džambová – Kačmárová, 2011: 38 – 82). The following table introduces the total durations of extremely short (ES), very short (VS), short pause (S) and optimal/normal pauses (O) in individual utterances:

Character	Sequence	Pause type			
		ES	S	VS	O
R	2	44			
	4				
R	5	25		56	
R	5	8,33			
J	6			67	
J	7	103		151	
	7	17,17		75,5	
J	8	42		53	
Ro	8				
Ro	9	42		61	

J	10	231	102	130	
	10	25,67		65	
Ro	11	24		89	
	11				
Ro	12	104		130	730
	12	26		65	
R	13	42	105	162	
	13	14		81	
	14	118		75	
	14	23,6			
	15	77		52	
	15	38,5			
	16	50		94	
	16	25			
D	17	123		197	
	17	30,75		65,67	
C	18	14		116	
	18	14		58	
Ro	19	15	299		
	19	15			
M	20	16		134	
	20	16		67	
D	21	221		299	
	21	31,57		74,75	
C	22			84	
Ro	23	193	102	56	
	23	27,57			
Ro	24	185		351	588
	24	26,43		58,5	
J	25	199	218	134	
	25	28,43		67	
J	26	94		151	
	26	18,8		75,5	
P	27	144			
	27	20,57			
P	28	254		85	
	28	25,4			
D	29	21			
	29	10,5			
D	30	49		51	1
	30	16,33			
Ro	31	62			
	31	31			
D	32	202			524
	32	33,67			
P	34	55	237	90	679
	34	18,33			

Ro	35	165	115	188	
	35	18,33		62,67	
P	36		163	89	
	36				
P	37	115		236	563
	37	28,75		78,67	
P	38	309		88	
	38	25,75			
Ro	39	195		59	
	39	24,38			
P	40	122	132	19	
	40	17,43		59,5	
P	41	205			
	41	22,78			
P	42	218			
	42	24,22			
Ro	43	36	285	56	
	43	9			
J	44	134			
		26,8			
Ro	45	104			
	45	17,33			
C	46	213		66	
		23,67			

Table 3: Total duration of extremely short, very short, short and optimal/normal pauses in individual utterances (R – Racher, Ro – Ross, D – Dad, J – Joey, P – Phoebe, C – Chandler, M – Monica).

The following table (*cf* Bilá – Džambová – Kačmárová, 2011: 38 – 82) based on descriptive statistics methods (4) illustrates the total duration of all pauses within one sequence, minimal, maximal and average durations and the median of the four pause types (extremely short, very short, short and normal/optimal pause) within one sequence. An empty cell in the table indicates no occurrence of a certain pause type. The highest frequency was observed in extremely short pauses; very short and short pauses manifested a relatively high frequency. Normal/optimal pauses showed a considerably low frequency and longer duration pauses were absent. The shortest pause duration measured was 21 ms.

The last column of the table indicates the total duration of all pause types within a sequence. Its values were varied, which indicates the difference in the duration of individual sequences and the resulting pause time, as well as the number of pauses. The shortest total pause duration of 51 ms was measured.

Statistics on data indicate that the duration of a sequence is not automatically dependent on the maximum total pause duration. The maximum total pause duration was detected in the 38th sequence namely 309 ms.

	Pause type				
Seqence	ES	S	VS	O	Sum
2	44				**44**
4					**0**
5	25		56		**81**
6			67		**67**
7	103		151		**254**

	ES	VS	S	O	Total
8	42		53		**95**
9	42		61		**103**
10	231	102	130		**463**
11	24		89		**113**
12	104		130	730	**964**
13	42	105	162		**309**
14	118		75		**193**
15	77		52		**129**
16	50		94		**144**
17	123		197		**320**
18	66		116		**182**
19	207	299			**506**
20	150		134		**284**
21	221		299		**520**
22			84		**84**
23	193	102	56		**351**
24	185		351	588	**1124**
25	199	218	134		**551**
26	94		151		**245**
27	144				**144**
28	254		85		**339**
29	21				**21**
30	49		51	731	**831**
31	62				**62**
32	202			524	**726**
34	55	237	90	679	**1061**
35	165	115	188		**468**
36		163	89		**252**
37	115		236	563	**914**
38	309		88		**397**
39	195		59		**254**
40	122	2	119		**373**
41	205				**205**
42	218				**218**
43	36	5	56		**77**
44	134				**134**
45	104				**104**
46	213		66		**279**
Min	**21**	**102**	**51**	**524**	**0**
Max	**309**	**299**	**351**	**731**	**1124**
Aver	**129**	**180**	**123**	**634**	**342,4**
Med	**120**	**163**	**90**	**634**	**254**

Table 4: Total durations of all pauses; minimal, maximal and average durations; median of four pause types (extremely short – ES, very short – VS, short – S and normal/optimal – O pause) within one sequence.

The following table illustrates the average durations, minimal, maximal and median values of the two most frequently occurring pause types (extremely short – ES and very short pause – VS) (*cf* Bilá – Džambová – Kačmárová, 2011: 38 – 82):

Sequence	Extremely short	Very short
5	8,33	
7	17,17	75,5
8		
10	25,67	65
11		
12	26	65
13	14	81
14	23,6	
15	38,5	
16	25	
17	30,75	65,67
18	16,5	58
19	29,57	
20	25	67
21	31,57	74,75
23	27,57	
24	26,43	58,5
25	28,43	67
26	18,8	75,5
27	20,57	
28	25,4	
29	10,5	
30	16,33	
31	31	
32	33,67	
34	18,33	
35	18,33	62,67
36		
37	28,75	78,67
38	25,75	
39	24,38	
40	17,43	59,5
41	22,78	
42	24,22	
43	9	
44	26,8	
45	17,33	
46	23,67	
Min	**8,33**	**58**
Max	**38,5**	**81**
Average	**23,06**	**68,13**
Med	**24,38**	**66,34**

Table 5: Average durations, minimal, maximal and median of the two most frequently occurring pause types (extremely short – ES, and very short pause – VS) within a sequence.

5 Discussion

Dialogue gives a film a realistic flavour since it aims to represent the everyday exchanges in which people engage, in other words, it strives for naturalness of communication. In addition, a film dialogue fulfils a number of other functions; it enables the viewer to identify the fictional location ("*by providing ´realistic´ verbal wallpaper*"[3]) and characters, i.e. it "*anchors a narrative*[4]" in a place and time. Dialogue unfolds plot-turning events or serves as a driving force of the plot as often an unexpected verbal account, a speech act, can itself be a crucial point in developing it. In addition, dialogue reveals the characters (therefore script writers insert various idiosyncrasies into the characters´ speech which typify them, e.g. slang, dialect expressions, catchphrases, etc.). "*Since in the real world we become acquainted with other people better by talking to them and listening to them*[5]"; apparently, dialogues help viewers comprehend the characters' personal traits and motivation to act in a certain manner. Further, script writers use dialogues to guide the viewer in that dialogue, control the overall atmosphere and through the characters´ speech/dialogue the scriptwriters address the audience. What is more, dialogues exploit the boundless potential and rich resources of language in terms of puns, jokes, witticisms, metaphors, etc[6]. As has already been pointed out, dialogues cannot be regarded as word-for-word transcription of real-life communication (QIAN, 2006: 165 – 170) including all the features of "normal non-fluency", otherwise they would not be able to fulfil a number of the above-given roles; meaning a certain degree of stylisation is inevitable. Yet they have to strive for naturalness in order to present the characters as realistic and resembling real-life individuals.

With regard to the explored phonetic feature the occurrence of silent pauses and the frequency of silent pause types, it is possible to conclude that extremely short and very short silent pauses were detected even in very brief exchanges, which apparently contributed to the naturalness of the dialogue, contributed to its conciseness and to its compact structure. High prevalence of short duration pauses typical for everyday colloquial speech was also found in the investigated film dialogues. Thus, with regard to the selected phonetic feature the investigated film dialogues may be described as "quasi-spontaneous" and "semi-natural" in spite of the fact that they are a prepared multi-author product resulting from a lengthy process.

In order to confirm the above-given findings, it appears to be necessary to extend the research data, explore the collaboration of several language levels (phonetic, syntactic and pragmatic) and provide statistics in order to quantify the obtained results. Thus, it will be possible to more objectively assess the degree of naturalness in investigated film dialogues.

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Resumé

Predkladaná štúdia analyzuje výskyt a typológiu tichých páuz vo vybranej časti epizódy sitkomu Priatelia. Štúdia vychádza z hypotézy, podľa ktorej prevaha určitých typov tichej pauzy prispieva k prirodzenosti dialógu sitkomu, ktorý potom divák vníma ako realistickú reprezentáciu spontánneho rečového prejavu.

The present paper comprises 25 958 characters.