Prosodic organization of formulaic expressions of sympathy in English

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Abstract
The paper is a complex study aimed at defining the prosodic organization of formulaic expressions of sympathy in English. The study is premised on the functional and communicative approaches paradigm, which enables investigating the specificity of phonetic means functions realizations as well as understanding the role of phonetic means in the realization of a speaker's intentions and emotions while expressing sympathy. Considering the complexity of the study, it was conducted in the scope of sociocultural and psychoenergetic aspects of utterances realization, incorporating the methods of linguistic synergetics. The analysis is grounded on existing definitions of sympathy and advanced approaches to the study of emotional utterances. In our research we took into account all the factors that appear in communication and which can influence the speaker's choice of verbal and prosodic means while expressing sympathy. Thus, it was found out that from the functional point of view, the most important feature which influences the choice of linguistic means in sympathy utterances actualization is pragmatic orientation: 1) sympathy proper (to sorrow), compassion (to understand), consolation (to console) and encouragement (to reassure). As a result, considering the pragmatic orientation of sympathy utterances makes it possible to describe the link between the prosodic means and the speaker's intentions. All the experimental utterances were classified in accordance with their pragmatic orientation and further classified, taking into account speakers' social statuses, their social and cultural levels, along with the levels of utterances' emotional and pragmatic potentials. This approach allowed us to identify formulaic expressions in each of the types of sympathy expressions and analyze their prosodic organization. During the auditory analysis stage, it was found that prosodic means play a crucial part in the proper decoding of sincerity or insincerity of English utterances of sympathy. The analysis of video data enabled us to describe the interplay of paralinguistic means with phonetic, lexical and grammatical ones. The acoustic analysis stage allowed us to verify the data obtained in the process of auditory analysis.
Key words: sympathy utterances, formulaic phrases, prosodic organization, invariant prosodic means

Introduction
Contemporary linguistic researches are marked by the constant integration of the results obtained by the adjacent linguistics fields (e.g. psychology, sociology, etc.), which enables comprehensive analysis of the individual's cognitive activities in generating and receiving verbal and non-verbal information. Therefore, questions connected with the identification of pragmatic and emotional factors' interplay are getting more and more relevant since they play an essential role in the process of emotional utterances production in general and utterances of sympathy in particular, as well as influence their prosodic organization.
Traditionally, many scholars agree that the concepts of sympathy and empathy partly overlap and define sympathy as an emotional response to the feelings of others (Epstein & Mehrabian, 1972; Decety & Chaminade, 2003). Such a definition of sympathy reflects how individuals interact with each other in everyday life. As a result, Ukrainian and foreign scholars (Debes, 2017; Hoffman, 2001; Zhuravliova, 2008), who focused their studies on empathy, paid sufficient attention to certain

aspects related to sympathy expression. Within these studies, sympathy is viewed as the ability of an individual to understand and sense another person's feelings. Latest studies of sympathy performed in these fields suggest that there exist some materialized forms of adjustment to the interlocutor's mood. This proves the hypothesis that sympathy doesn't necessarily require a full immersion in the emotional state of the other but rather indicates the decoding of the interlocutor's emotions. Accordingly, sympathy can be viewed as a specific mental response or emotional reaction to the negative experience of the other that provokes a corresponding behaviour, such as help, avoidance, refusal, etc. Following the ideas of the speech energetics theory, the natural reaction of the recipient to any perceived and recognized information in real-life communication inevitably generates the response utterance, which is usually a combination of different complexes of non-verbal means (Kalyta, 2016). In such a case, psycho-physiological energy, being the result of the psyche's drive, is materialized in the emotional and pragmatic potentials of the utterance. This shows that sympathy should be analysed not only from psychological or sociological points of view but from linguistic one as well since the right choice of verbal and non-verbal means while expressing sympathy is essential for a successful social interaction. Hence, some sympathy-related issues are reflected in a number of linguistic studies. For instance, in the research of Meiners (2013), issues related to verbal means of sympathy expression have acquired some degree of elaboration, whereas in the work of Sugiharto (2008), we can find data connected with the functional and pragmatic loading of sympathy in speech. Dolia (2013) analysed the gender aspect of sympathy realization in communication, while Tatsenko (2017) focused attention on defining common and distinctive features of utterances of sympathy. According to the fundamental principles of the communicative-and-functional paradigm justified in the works of Pierhambert (1993) and Tatham (1987) and more recently by Ukrainian scholars (Kalyta & Taranenko, 2006; Taranenko and Schaefer (2018), the researcher should take into account the human factor. Considering the aforementioned, when analysing emotional utterances in general and utterances of sympathy in particular, one has to investigate the link between the concept and its acoustic image, speech and speaker's psyche. At the same time, scientific sources lack a unified and broadly supported understanding of the phenomenon of sympathy, which could allow for identifying the communicative specificity of the prosodic organisation of utterances under analysis.

Considering this, the objective of the present paper is to define the patterns of prosodic organization of English formulaic utterances. To achieve this aim, it was necessary to resolve several tasks, which can be described as stages of the research. The first stage of the research included an analysis of the structural, semantic and functional characteristics of sympathy utterances. The next step was aimed at identifying verbal and non-verbal means typical for sympathy utterances realisations in a speech whose interplay alters depending on the role of various extralinguistic factors. Within the third stage, we identified formulaic realizations of sympathy utterances and, taking into consideration the results of the experimental utterances' auditory and acoustic analyses, described the specificity of their prosodic organization.

Within the first stage of our research, we analysed existing views on the notion of sympathy (Debes, 2017; Tatsenko, 2017), which allowed us to work out the definition of a sympathy utterance. Thus, a sympathy utterance is an expressive unit of speech actualised either orally or in writing as an emotional reaction to any negative or difficult situation of one of the interlocutors (Kutsenko & Taranenko, 2020). Sheler (2017) views sympathy as a complex process which involves emotional contagion, which in its turn, on the level of sub-consciousness, involves understanding the feelings of the interlocutor, parallelization and reconstruction of his/her emotional

state on the basis of the speaker's personal experience. As a result, the processes that take place in the speaker's psyche directly influence the pragmatic orientation of the utterance, the manner of the utterance's realisation in speech, the degree of its sincerity etc. Hence, the communicative aim, communicative situation and interlocutors' social and cultural statuses largely influence the choice of verbal and non-verbal means in the process of sympathy utterances' instantiation.

Analysis of scientific resources has proved (Meiners, 2013; Zhuravliova, 2008) that the main function of sympathy is to express sorrow, grief or distress about the negative situation with the aim to psychologically support the addressee. Thus, utterances' pragmatic orientation becomes the most important feature that influences the speaker's choice of the language means of all levels which enables us to trace the link between the speaker's intentions and his/her emotions conveyed in speech by prosodic means. Therefore, to achieve the purpose of our research and synthesizing the ideas of linguists that in communication different social and cultural factors can influence the utterances' realization in speech we used the substantiated classification of key linguistic features (Kutsenko & Taranenko, 2020) relevant to different types of sympathy utterances which impact the prosodic organization of sympathy utterances (see Fig.1)
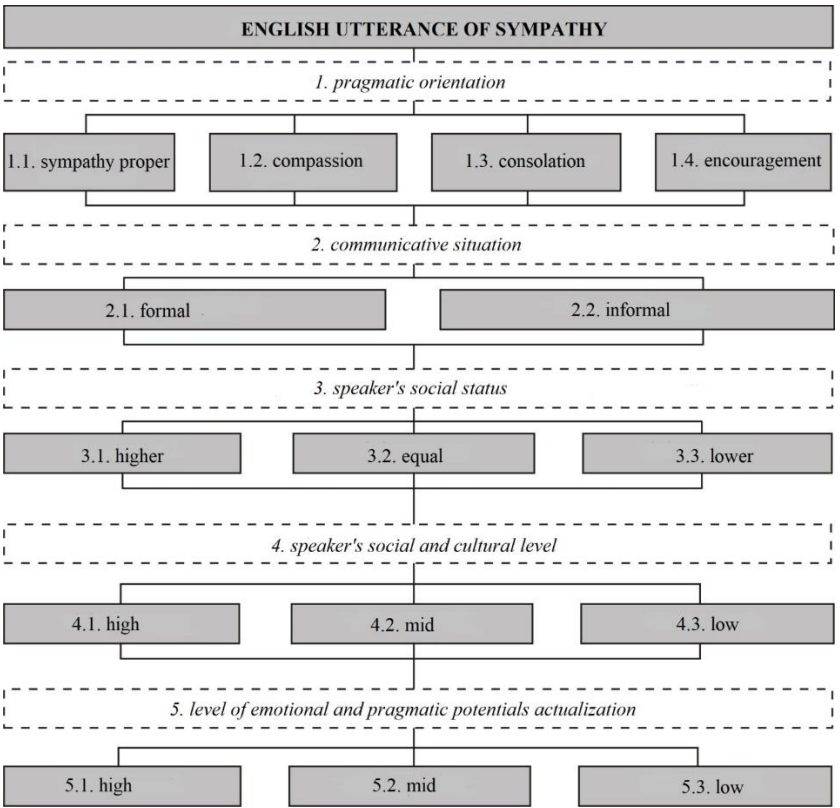

Figure 1. Classification of the key linguistic features of English utterances of sympathy

According to the classification, all the utterances of sympathy can be divided into four large groups (see level 1) based on the pragmatic orientation they convey (Kutsenko, 2017), namely: 1) sympathy proper, 2) compassion; 3) consolation; 4) encouragement.

The second level of the given classification differentiates the utterances according to communicative situation as follows: formal or informal. The third level of the classification reflects the speaker's social status with reference to the addressee's (higher, equal or lower). The fourth level distinguishes sympathy utterances on the basis of the speaker's social and cultural level (high, mid or low). As can be seen in Fig. 1, the fifth level allows taking into consideration the emotional and pragmatic potentials of the utterances (high, mid or low levels).

The present-day conceptual vision (Bak, 1996; Chalmers, 1996), which is grounded on the stochastic tenets of analysis of cognitive mechanisms of thinking and speech production, presupposes that any factors arising in the social and cultural domains in the process of thinking chaos self-development of a particular communicative situation can influence the aforementioned operations. With this in mind and summarizing the ideas of linguists concerning verbal and non-verbal means of interaction we used the substantiated and generalized model (Kutsenko & Taranenko, 2020) which outlines the complexes of communicative factors stochastic interplay and enables taking into consideration the factors that appear in social and cultural domains of any given communicative situation (see Fig. 2).
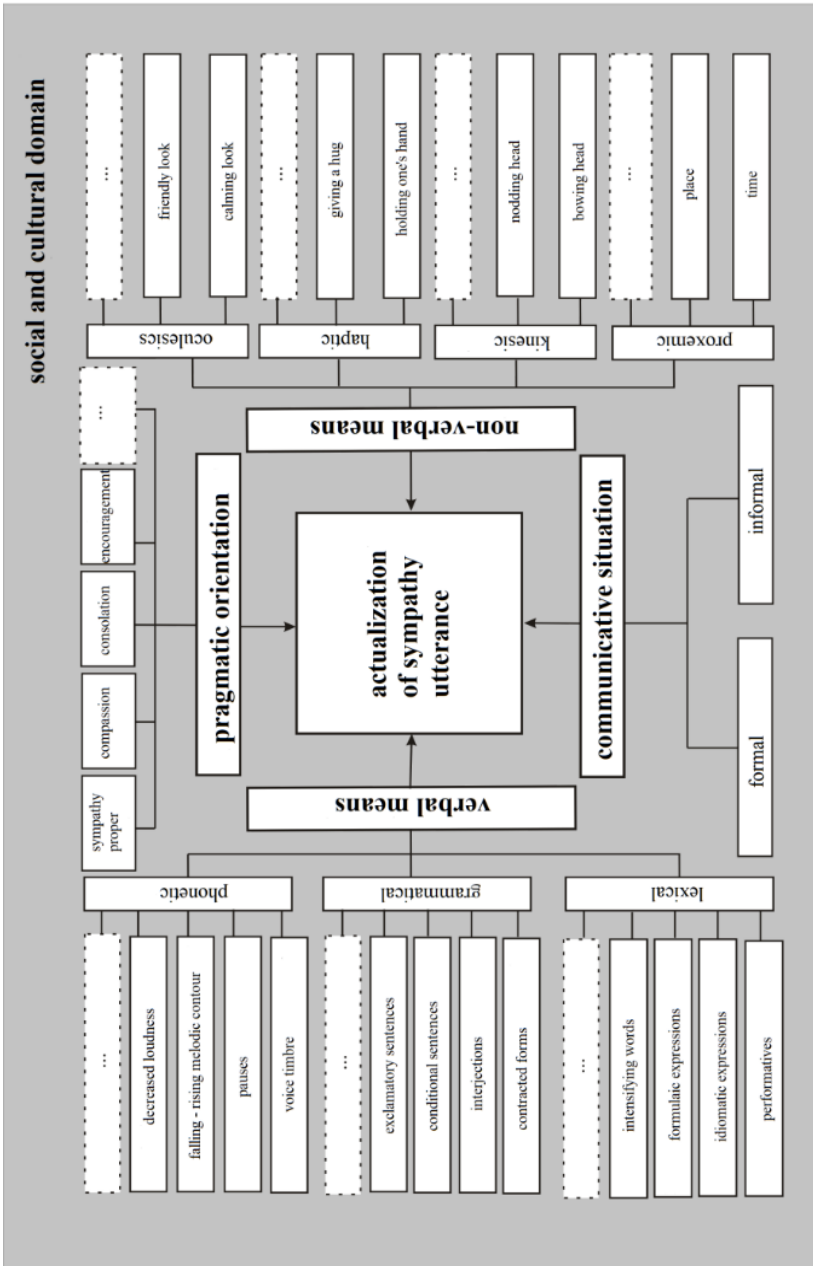
social and cultural domain

oculesics — friendly look, calming look, …

haptic — giving a hug, holding one's hand, …

kinesic — nodding head, bowing head, …

proxemic — place, time

non-verbal means

pragmatic orientation — sympathy proper, compassion, consolation, encouragement, …

actualization of sympathy utterance

communicative situation — formal, informal

verbal means

phonetic — decreased loudness, falling - rising melodic contour, pauses, voice timbre, …

grammatical — exclamatory sentences, conditional sentences, interjections, contracted forms, …

lexical — intensifying words, formulaic expressions, idiomatic expressions, performatives, …

Fig. 2 The generalized model of the complex of communicative factors' stochastic interplay in sympathy utterances actualization

As it can be seen, the model presents a scheme of stochastic interplay of various factors that influence the sympathy realization, namely: the pragmatic orientation of the utterance (sympathy proper, compassion, consolation, encouragement), communicative situation (formal/informal), a set of verbal (lexical, grammatical,

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phonetic) and non-verbal (body posture, gestures, facial expressions, etc.) means. The given model serves as a reliable methodological and structural basis for conducting an experimental research aimed at deepening scientific ideas about the oral actualization of the utterances of sympathy in general and its formulaic realizations in particular.

Methodology
To achieve the objective of our research it was necessary to complete several steps which allowed us to find out common and distinctive features of prosodic organization of formulaic expressions of sympathy. The first step was aimed at selecting experimental utterances and evaluating them. The utterances under analysis were assessed by native speakers and grouped in accord with classification criteria of key linguistic features of sympathy utterances. The next step included analysis by phoneticians who defined the regularities of prosodic means interplay on different types of sympathy. This way of research organization enabled us to identify the typical formulaic expressions present in all types of utterances under analysis, the nomenclature of their prosodic means in relation to the type of communicative situation, social statuses of speakers, their social and cultural levels and the utterance emotional and pragmatic potentials.

After the auditory step is complete we conducted the acoustic analysis of tonic, dynamic and temporal parameters of the spoken formulaic utterances of sympathy to verify the results of the auditory analysis. To measure acoustic parameters we used such speech synthesizing software as CoolEditPro (Syntrillium Software Corporation, 2002), SpectraLab (Sound Technology, Inc. 1997) and Praat (2018).

Discussion
Results of the analysis of experimental data showed that explicitly realized sympathy utterances have in their structure performative verbs, such as *to be sorry, to regret, to sympathize* etc. or nouns derived from these verbs.
*(1) You have ˈall my **sympathies**, ⇒ and ˎyour ˌgirls, ⇒ ˎtoo.* (a fragment from 'Premonition' movie, 2007)
The carried out auditory and acoustic analyses demonstrated that on prosodic level such perfomative verbs or nouns derived from them are intensified by a nuclear tone (falling, rising or falling-rising tone with a low or decreased rate of its movement) as well as by the special rise or utterance stress.
Results of the study also showed that formulaic expressions of sympathy are present in all four groups according to the pragmatic aim they convey. The frequency of usage of such typical phrases can be explained by their syntactic and semantic simplicity. Such simplicity allows the speaker to achieve his/her communicative aims much faster. However, in the course of our study, we found out that not all of the expressions of sympathy had a one-way interplay of their verbal and prosodic means that resulted in understanding the utterance as either sincere or insincere due to the leading role of prosody.

1. Sympathy proper
Analyzing the utterances of sympathy with the pragmatic orientation of sympathy proper, we noticed that the phrase "I'm so sorry" is of the highest frequency. The one-way interplay of verbal and prosodic means typical of this type of expressions results in conveying a sincere expression of sympathy, as in example:
(2) POLICE OFFICER: I'll have to accompany you around while you pick up your things. || I'm ǀso ˎsorry, ǀEllie. || (a fragment from 'Broadchurch' TV series, 2015)
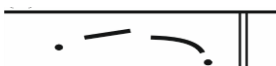
In the fragment above the sympathy proper is expressed explicitly. At the prosodic level it is actualized with the help of a widened negative interval between the head and a nuclear tone which demonstrates the speaker's soft manners and empathic feelings. A mid-falling nuclear tone of a narrow range accentuates the general sensitivity of the situation and the speaker's sympathizing attitude to the negative situation in which the interlocutor is, in our case Ellie. In addition, the interplay of a long pause preceding the expression with its moderate tempo and loudness emphasizes the understanding and sharing of the interlocutor's negative experience.

However, even though expressed explicitly as sympathy, the utterance can be perceived as insincere one due to a specific combination of prosodic means which can change the utterance meaning up to the opposite one. On the study's auditory stage, the connection between the speaker's tempo and the degree of sincerity was found. Research results show that utterances of sympathy which were actualized with moderate tempo regardless of the communicative situation and social statuses of interlocutors were perceived as sincere ones. In contrast, those which were actualized with accelerated tempo were considered insincere, which can be explained by the requirements of the communicative situation, the need to express sympathy because of the influence of the culture of macro-society, etc. Quantitative results of the role of tempo in decoding the utterance as sincere or insincere sympathy are shown in Table 1.

Table 1. Frequency of tempo realization in utterances of sympathy with pragmatic orientation 'sympathy proper' (%)

Type of utterance	Frequency of tempo realization in utterances of sympathy				
	rapid	accelerated	moderate	decelerated	slow
sincere	1,54	**24,62**	**56,92**	16,92	0,00
insincere	0,00	**63,64**	**30,30**	6,06	0,00

As can be seen from the Table, some insincere utterances are actualized with moderate tempo, which can be explained by the deliberate wish of the speaker to sound sincere in order to gain the trust of the addressee. The result of such a prominent role of the prosodic means can be seen in the example below.

*(3) CLAIRE: -I'm |so \sorry. //* (a fragment from 'Broadchurch' TV series, 2015)

In the fragment above, the speaker tries to express sympathy to the addressee who lost his daughter. But, a narrowed negative interval between the head and a nuclear tone together with the accelerated tempo demonstrate that the speaker feels nervous, uncertain, frightened and thus mark the utterance as insincere one. Additionally, we have to mention the role of non-verbal means (gestures, mimics, the distance between the speakers, etc.) which are also important in proper decoding of the information expressed by the speaker.

2. Compassion

Among the most frequently used phrases of sympathy classified into the group of 'compassion' are the utterances like 'I know', 'I understand' or the combination of

both. Within this group of utterances of sympathy, prosodic means show the degree of the speaker's immersion in the emotional state of the addressee. For example:

(4) ANDREW: I \know the \feeling //. (a fragment from 'Peter Benchley's Amazon' TV series, 1999)
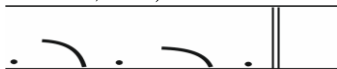
In this fragment, the speaker shows his understanding of the interlocutor's feelings as they are in the middle of the biggest tropical rainforest, and their relatives think they are not alive. The functioning of two falling nuclear tones within one intonation group demonstrates the frankness of the speaker and understanding of his friend's feelings. The first mid-high falling nuclear tone with a moderate rate of its movement emphasizes truthful and friendly intentions, whereas the second low falling nuclear tone with a slow rate of its movement promotes the understanding and projection of the addressee's feelings onto the speaker's personal emotional state.

Analyzing formulaic expressions of sympathy belonging to the group of 'compassion' we noted that the key prosodic feature that stresses the degree of emotional immersion of the speaker in the emotional state of the addressee is the rate of the nuclear tone movement. The following example shows the functioning of this feature.

(5) ELDER COLE: || /I \know your /grief //. (a fragment from 'Peter Benchley's Amazon' TV series, 1999)
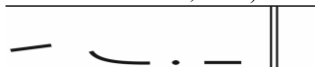

The example demonstrates the situation in which the elder of the Amazon tribe expresses sympathy to one of the survivors in the plane crash in which the addressee lost her husband. On the level of prosody, compassion is pronounced with a decelerated tempo, decreased loudness and a low concave falling nuclear tone with a slow rate of its movement, which in combination create a comforting, understanding and caring expression of sympathy.

Results of the auditory and acoustic analysis of this group of formulaic expressions revealed prosodic means typical of insincere utterances. As with sympathy utterances expressing the pragmatic orientation of sympathy proper, utterances which express compassion realized explicitly and prosodic means play a key role in decoding the degree of sincerity. Thus, insincere utterances are marked by a short pause before the utterance, functioning of a negative narrowed pitch interval in combination with a high rate of a nuclear tone movement as well as accelerated tempo.

3. Consolation

The analysis of sympathy utterances having the pragmatic orientation of 'consolation' revealed that this group is usually represented by such phrases as *'Come here', 'It's all right', 'It's gonna be all right', 'It's okay', 'You're OK', 'It's not your fault'.* Moreover, the analyzed formulaic phrases are characterized by a parallelism of their syntactic structure and prosodic organization, which is related to the automatic nature of human beings to help and respond to negative situations of the other. For example:

(6) LINDA: || –Oh, \God, ⇒ /come \here. || /Come \here. || Just /hold \onto me. || It's /gonna be /okay. || It's /gonna be \okay. || \Come \here. || It's /gonna be ↑all \right. || /Everything's •gonna be ↑all right. || /Everything's •gonna be ↑all \right. // (a fragment from 'Premonition', 2007)
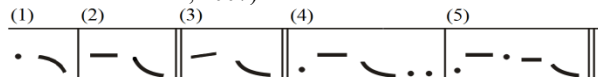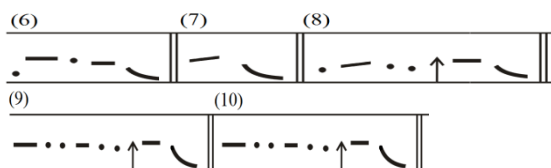
The fragment above shows a typical model of consolation realized by a mother who wants to comfort her daughter. A syntactic organization together with prosodic means, including concave mid-low and low falling nuclear tones with moderate rate of its movement, extra short pauses between sentences, convey a caring and comforting attitude for the addressee.

Formulaic expressions of consolation are characterized by the use of interjections which in combination with paralinguistic means (e.g. look into the eyes, touch the hand of a person) which in its turn allow the speaker to draw attention of the addressee, for example:

(7) KAREN: // Hey, hey, hey. // |Look at ₁me. // (1) ⁻You're O₁K. // (2) |Let's •go ₁back. // (3) O₁kay. // (4) (a fragment from 'Peter Benchley's Amazon' TV series, 1999)
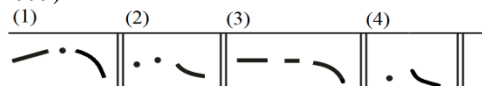

On the prosodic level, the consolation itself, 'You're OK', is distinguished from other parts of the utterance by an inter-utterance silent pause. The instantiation of the falling nuclear tone with a high rate of its movement makes it possible for the speaker to sound certain and convincing.

4. Encouragement

Sympathy utterances with the pragmatic orientation of 'encouragement' show a difference in formulaic phrases depending on the communicative situation. For formal situations, the phrase 'Well done' is among the most typical ones, whereas for informal situations, the phrase *'Come on'* is more common. However, it should be mentioned that the phrase 'Well done' is not typically used to communicate with high officials as this formulaic phrase belongs to the spoken class and can be referred to one person rather than to a group of people. Thus, prosodic means play, in this case, an intensifying and specifying role in the proper decoding of the speaker's intentions. For example:

(8) ELLIE: |Well \done. // (a fragment from 'Broadchurch' TV series, 2015)
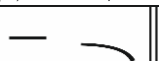

In the situation under analysis, a detective sergeant is interviewing a victim, and in order not to sound clichéd, she prefers to use the informal phrase, *'Well done'*. It is actualized with a negative interval between the head and a nuclear tone, a mid-low falling nuclear tone with a low rate of its movement together with a short pause preceding the utterance and the utterance stress on the adjective *'well'*. These prosodic means allow the speaker to sound friendlier and more caring. A similar pattern of prosodic organization can be traced in the formulaic phrase *'Come on'* typical of informal situations. For example:

(9) ANDREW: |Come →on. || |Let's \go. // (a fragment from 'Peter Benchley's Amazon' TV series, 1999)

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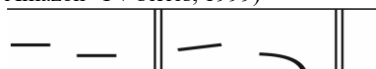
In this example, the verb of movement *'come'* is under stress, which gives the addressee the feeling of motivation and inspiration to start changing his mind about the situation. Additionally, a low-level nuclear tone in combination with the intensified verbs *'come'* and *'let'* make the utterance sound optimistic and encouraging. A drive to change the view on the situation and distract a little bit from problems is achieved with the help of a falling-rising nuclear tone with a low rate of its movement which gives the utterance a calling sound, as in the example:

(10) JIMMY: –Come \on /man, | |chin \up. || (a fragment from 'Peter Benchley's Amazon' TV series, 1999)
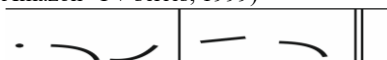
Conclusions

On the basis of the study results, we found out that the key feature that influences the choice of language means of all levels in sympathy actualization is its pragmatic orientation. Prosodic means play a crucial role in the proper decoding of the speaker's intentions and emotions. In addition, certain prosodic means complexes allow identifying the level of formality and sincerity of the utterance expressed. As a result of the auditory and acoustic analyses, we identified a set of common intonation parameters typical for sincere and insincere utterances of sympathy expressed in different communicative situations, including the pitch of the utterance beginning, voice range, types of melodic contours, the pitch of the nuclear tone beginning and the rate of its movement, configuration of the nuclear tone, presence of pauses and tempo. The results of acoustic analysis objectified the data we obtained during the auditory stage, which, in turn, enabled us to identify common and distinctive features of formulaic expressions of sympathy in English.

The results of the experimental study prove that in oral communication, formulaic expressions of sympathy can acquire different prosodic actualization depending on the aims of the speaker, the communicative situation and his/her social status, including pauses, tempo, configuration of the nuclear tone and rate of its movement. Moreover, the results of the study show that depending on prosodic organization, formulaic utterances of sympathy can acquire either sincere or insincere meanings. Thus, on the perceptual level, sincere formulaic utterances of sympathy proper and compassion are characterized by the utterance's beginning actualization within a mid-low voice range, mid-low or low falling nuclear tone with a moderate rate of its movement, moderate tempo and loudness, regular rhythm and comforting voice timbre. Insincere formulaic utterances of sympathy proper are distinguished by the accelerated tempo, whereas for formulaic expressions of compassion, a negative narrowed pitch interval in combination with a high rate of a nuclear tone movement and accelerated tempo are typical. Formulaic expressions of consolation are characterized by the parallelism of their syntactic structure and prosodic organization. Unlike expressions of sympathy and compassion, expressions of consolation are frequently realized in speech with the help of interjections, which are used to draw the addressee's attention. On the level of prosody, such interjections are marked by a mid-low convex falling tone. Formulaic expressions of sympathy with the pragmatic orientation of encouragement are characterized by the use of the adjective 'well' and the verb of movement 'come', which, in turn, on the level of prosody marked by utterance stress on the adjective. Therefore, the experimental study proves that prosodic means play a prominent role in the proper decoding of the speaker's intentions, perform an intensifying function of the verbal means, and specify function in cases of implicit realization of sympathy.

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Words: 4690
Characters: 32 030 (18 standard pages)

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