

Emotional Prosody and Emotive Intonation

L. Piotrovskaya

Herzen's Russian State Pedagogical University, Saint Petersburg Russia,

E-mail: piotrov@pp11799.spb.edu

ABSTRACT

Two different terms presented in the title of this paper characterize our approach to the problem “intonation of emotions”. The emotional prosody has physiological nature and apply to language universals. The emotive intonation forms a language system with specific intonation patterns that are not identical in various languages. It is possible to differ emotional prosody and emotive intonation at the certain theoretical base that includes the linguistic and psychological classification of emotions and the principles of experimental phonetic research. The investigation of emotive intonation should be based on the semantic investigations of emotive meanings of lexical and grammatical means. It is also necessary to determine the principles for selection the structure patterns of utterances. It must be emotive speech acts with predominating emotive component in their semantic function. The syntax system of each national language has many different “exclamations” patterns.

1. “BORDERS OF LINGUISTICS IN THE FIELD OF EMOTINS”

The question about the “borders of linguistics in the field of emotions are not distinct” [1, p. 96]. The phonetic experiments results show on one hand the resemblance in different languages of the sentence intonations that express such emotions; e.g. astonishment is expressed in a rising and falling tone in a wide diapason. On the other hand the intonation decoding may be erroneous in case of speech perception on the foreign language, e.g. irony. The lack of isomorphism between the intonation profiles and definite emotions inside the national language itself makes it difficult to decide whether there are definite intonations for expressing emotions. On one hand the same intonation can mark the utterances expressing different emotions like happiness and unhappiness, and on the other hand the utterances expressing the same emotions can be marked with the different intonations.

Some researchers do not consider the intonation of emotions to be the object for linguistics since it is referred to the “natural” class. The advocates of this point of view note that the number of these intonation types is extremely large and affirm that it is impossible to describe the intonation system since it is difficult to define the prosodic signs of the emotions that would not be connected with the contrast voice and correlated with the basic emotions [11]. The second point of view is that all the intonations that

express emotions are nothing but the modifications of the “logical” ones [4]. In other words, there are two opposite visions of the same problem of systematical emotion intonation describing. There is the third theory that affirms the emotion intonation field to be unhomogeneous. The advocates of this theory suppose that besides the universal prosodic correlates of emotions each language possesses the specific intonation patterns, e.g. the intonational expression of one type of emotions is universal, but the other emotions have their specific intonations that can only be decoded if the correspondent language is spoken [6, p. 45; 13, p. 64–65]. This approach seems to be the proper one. The term “emotional prosody” I use for the universal prosodic emotion expression, and “the emotive intonation” – for the intonation emotion expressing that differs in national languages.

2. PSYCHOLOGICAL OR LINGUISTIC EMOTIONS CLASSIFICATION?

The basic point is to differ two types of emotions, the first one connected with the emotional prosody and the second one with the emotive intonation. So it is necessary to have some emotions classification as a basis. What type of classification it should be? On one hand emotions are the psychic phenomenon, so the emotion classification has to be one of the aims of psychology. On the other hand it is possible to work out the properly linguistic emotions classification. The choice between the psychological and the linguistic classification has both theoretical and practical value.

The theoretical point of this problem was raised in linguistics in connection with the definition of the general principles of the semantic classification. L. Bloomfield and U. Weinreich expressed opposite opinions on this problem. L. Bloomfield considered that “meanings as psychic states are inaccessible to observation, therefore descriptive semantics must wait until further progress in neurology will take them accessible” [2, p. 28]. U. Weinreich didn't accept this approach: “This messianic “reductionism” <...> is theoretically alien to lexicographic description. Fore even if we had neurological specifications of, say, the emotions, the semantic description of emotion terms could be continued independently, just as the semantic description of color terms can be highly independent the already known psychophysics of vision” [2, p. 28–29].

At the end of XX and the beginning of XXI centuries the earlier “or/or” principle for solving theoretical problems is

replaced by the “and/and” one. That is why the approaches of both U. Weinreich and L. Bloomfield no matter how different they are should be considered. That is to say the linguistic classification of emotions cannot be created without taking into account the basic theoretical elements of the emotion psychology.

N.D. Svetozarova takes this position on formulating the general approach on the study of emotive function of intonation. The main point in her approach is the combination of properly linguistic criteria, the role and the place in the communication, and psychological ones, the conscience and control level: “The emotional states field is in general more universal, automatic; it can characterize rather considerable segments of speech and be independent from the context, showing itself in the general speech colour. The concrete emotional meanings have language specificity, are controlled by the speaker and are the reactions to the utterance or the situation.” [13, p. 65]. So she distinguishes “the general emotional state”, like fear, grief, anger, sadness, worry, happiness that are marked almost universally and “concrete emotional reactions” like doubt, assuredness, contempt, sorry or blame that are marked with the language specificity.

3. INTONATION EXPRESSION OF THE GENERAL EMOTIONAL STATE

The *emotional prosody* is characterized by the uncontrolled, unconscious *expression of the general emotional state* of the speaker in the considerably long text parts. Unconsciousness of these emotions is due to the fact that the reflection of the emotional state of the speaker in the moment of speech does not depend on his intention. The correspondent prosodic correlates modify all the intonation profiles. The subject of the phonetic study dedicated to the emotional prosody should be the distinction of the prosodic modifications of the “logical” intonations in different emotional states. That is why it is important to compare the intonations of one and the same text performed by one and the same speaker in different situations: in emotionally neutral state, in the troubled, fearful, grieved states and so on.

To study the emotional prosody it is important to take into account the principles for the emotion classification that were defined by W. Wundt: he delimited positive/negative emotions, the active/passive and the strong/weak ones. The specificity of the prosody modifications will not only depend on the type of the emotion but also on its being active or passive and on its intensity. N.V. Vsevolodsky-Gerngross pointed it out already in the early XX century: “The strong passive and the weak active emotions correspond the low gammas and the strong active and the weak passive ones correspond the high gammas” [5, p. 38-39].

Since the intonation is a complicated phenomenon it is necessary to clear up the question which components will be modified if the speaker is in the certain emotional state.

The phoneticians accept the importance of the melodic figuration and tone color in emotions expressing. To our mind the emotional modification of the intonation include all its components. For example, in the ecstasy state the intonation is characterized with the general register elevation, faster speed and strengthening of the general intensity level. On the contrary, in the depressed state the specificity of the intonation will be characterized by the lower register, lower speed and the decreasing of the intensity level. So it is necessary to analyze the modifications of the neutral intonation patterns including all its components because the “negative result” (i.e. the data that the speed or the general intensity remain intact within some emotional states) is also relevant.

4. INTONATION OF EMOTIVE UTTERANCES AS EMOTIVE INTONATION

Let us now consider the field of *emotive intonation* that has the language specificity and forms within the systems of different languages the fixed intonation profiles aimed to express the *concrete emotive meanings*. First of all it is important to define the specificity of these emotions as of controlled and conscious ones. From the properly linguistic point of view the emotion expressing will be conscious if it forms the dominating communication aim of the speaker. That is to say that the emotive intonation study has to be based on the utterance since it is the minimal communicative unit and not on the text.

The majority of the experimental phonetic studies of intonation emotions expressing is based on the utterances that are qualified in the grammar as the “exclamative”. But the classification of communicative functions is “reliable and complete” [1, p. 93]. So called “exclamative utterances” is not homogeneous group: it includes the emotionally colored interrogatives, causatives and the utterances that have their main communicative aim in expressing emotions. That is why the data of the experimental phonetic studies based on this material is contradictory and incomparable. Studying the intonation of the emotionally colored utterances the phoneticians get the intonation profile that expresses compound information: not only the corresponding emotion, but also the main communicative aim. To get the adequate data on the specifics of emotive intonation profiles that have the national specificity it is necessary to study intonation of the utterances forming the independent class of speech acts that I call emotive utterances [8]. They are dominated by the communication aim of expressing some emotions.

Since the choice of the material for the phonetic researches on emotive intonation is essential we shall enumerate the criteria for the definition of the emotive utterances (emotive speech acts). 1) These speech acts contain the semantic component that reflects their illocutionary force – expression but not description of emotions [3, pp. 330–339]. 2) They are characterized by the predominance of the emotional estimation over the

rational one (compare: emotive speech act *Какой ты молодец!* and the emotionally colored representative *Ты молодец!*). It can be proved by the fact that they cannot be used as a dependant proposition with the verb *to consider*: *What a wonderful housewife you are!* – **I consider what a wonderful housewife you are.* 3) To describe the illocutionary force of the emotive speech acts we use the semantic description. It includes the words that name certain emotions, the reason that caused it or the object of the emotional estimation and the indication on the speaker, e.g.: *What a strange manner of calling at nine in the morning!* – *'I am surprised and astonished the habit of calling at nine in the morning'*. This way of semantic description of the emotive utterances lets us define the speech intention of the speaker that consists in expressing his emotions and decide whether this utterance can be referred to the emotive class.

5. EMOTIVE INTONATION AND EMOTIVE MEANINGS

Having defined the principle of delimitation of the two classes of emotions that are of a great importance for the emotional prosody and the emotive intonation we shall turn to the problem of detailed emotions classification.

We subscribe to the opinion of N.D. Svetozarova that says that to define the “list” of emotions that have a language specific intonation it is necessary to base it on the system of emotive meanings of lexical and grammar means. For example there is an interjection *увы* in Russian that expresses sorry, modal word *конечно*, expressing assuredness, a cliché *а как же!*, expressing provocation, so sorry, assuredness and provocation belong to the emotive meanings that have the language specific intonation expression [13, p. 65]. The theoretical point of this problem is the following. If we are considering the system of the conventional *language means for expressing emotions that is specific for the intonation system of the definite national language* it is important to study only the expression of emotions that constitute the emotive meanings of the language units. In other words, if some substance is a language meaning it is expressed only by the language means including the intonation. Since the syntactical models of the emotive utterances were established in the historical development of the national language their semantics analysis let us define the “list” of the emotive meanings. Here are some emotions that form the typical emotive meanings of different structural types of Russian emotive utterances: astonishment, pleasant/unpleasant astonishment, sorry, wonder, disappointment, offence, disapproval, blame, despite, arrogance, scoff, malevolence, emotional objection, irony and some others.

Considering the fact that the emotions are motivated by the human needs that are multivarious, a human being can have complex emotions including the ambiguous ones [12, p. 553]. According to our data the complex emotions are characteristic for the emotive utterance semantics. That is why it is necessary to discuss the results of the phonetic

studies considering the types of prosodic correlates of “simple” or “complex” emotions that were received in the experiment. Astonishment is the most frequent emotion to be combined with the others. It is due to the fact that astonishment is motivated with the contradiction of the situation and the anticipation of the speaker. The neutral astonishment is expressed if the contradiction of the situation and the prognosis of the speaker does not get into his interest sphere. This special feature of astonishment contributes to the fact that many emotions both positive and negative can be compounded by astonishment. It is a basic point for the experiments on perception when the auditors are to define the type of emotions expressed by the intonation. It is important to underline the possibility of expressing the complex emotions in the instructions.

The general affirmation of the psychological theory of emotions about the zone character of emotion expressing and the zone character of prosodic emotion expressing is also to be taken in consideration in the intonation emotion expression study. It affirms on one hand the fact that certain emotions have similar prosodic correlates and on the other hand some emotions can be hardly differed in case of intonation perception. One group (zone) is formed by the emotions that differ according to the intensity like 1) wonder, astonishment, amazement; 2) positive astonishment, admiration, delight; 3) blame, disapproval, dissatisfaction, irritation; 4) despite, anger, indignation, resentment; 5) disdain; arrogance; irony, acrimony, scoff, objection. It is traditionally considered that the correct decoding rate of emotion based on intonation only without the corresponding gestures, mimics and context is very low. According to our data the consideration of the affirmation of the zone character of emotions makes the adequate emotion decoding 70-80 % more successful.

6. VARIABILITY OF EMOTIONAL PROSODY AND EMOTIVE INTONATION

In conclusion we would like to get back to the problem of systematic description of the emotion prosodic correlations. There are specific and general reasons for the variability of the emotional prosody and emotive intonation.

The general reasons are the following: at first, all the emotions both in the general emotional status and in the status of the emotive component of meaning may differ according to the intensity, activity/passivity of feeling and expression. At second, as it was mentioned earlier, humans can have complex emotions.

The additional specific reason that determines the variability in the emotional prosody is the different emotionality of people. Next comes the brief characteristics of the three types of personalities that differ according to their emotional specialties based on the study by S.L. Rubinshtein: “The differences between the proper emotional, sentimental and passionate types are characterologically important and deep. The emotional

proper type people live their feelings letting the vibrations take them away, the sentimental type mostly watch their feelings and enjoy their glittering, the passionate type live their emotions turning it tension into action" [12, p. 584]. It is evident that the emotional specificity of a person is reflected in his intonation. Thus the perspective of emotional prosody study has its roots in the definition of specificity of prosodic correlates of the similar emotional states in speech of people defined as "emotional proper", "sentimental" and "passionate". Besides there is a subsystem in the emotional prosody sphere formed by the speech of people who are in the state of emotional overpressure that usually disorganizes human activity [7].

According to our data the specific reasons of the emotive intonation variability are the following. At first, one and the same emotion may have different motivation. Three emotive Russian utterances expressing disdain may illustrate the case: (1) *Вот так герой!* – (2) *Подумаешь, герой!* – (3) *Да какой ты (он, она) герой!* The difference in the motivation aspect can be explained in this way: (1) 'True heroes never act like that'; (2) 'A certain person may be a hero but I do not find it important'; (3) 'A certain person is certainly not a hero though some think him to be the one' [for more details see: 8, p. 95–107]. At second, one and the same emotions can be expressed with the different intonation profiles depending on the syntactic model of the emotive utterance. The comparison of the emotive utterances with the interrogative and demonstrative pronoun words makes this case evident. For example, the utterances *Что за история?* и *Вот так встреча!* when surprise is expressed or the utterances *Что за край!* и *Вот так коробочки!* when expressing admiration have different intonation profile [see also: 10]. This is the explanation for the existence of the synonymous intonation profiles within the national language system. Taking it into consideration the emotive intonation can be described as a system.

7. CONCLUSIONS

Thus it is important to differ the emotional prosody and the emotive intonation within the sphere of intonation emotions expression to make the intonation emotive function study close. Emotional prosody is the zone of expressing uncontrolled and unconscious general emotional state of the person. The sphere of application of the emotional prosody is the text. Emotive intonation is the zone of expressing emotions that can compound the emotive meanings of different language units. The sphere of application of the emotive prosody lies within the utterance field, primarily emotive utterances (emotive speech acts) with the emotions expressing as its predominating illocutionary force. Anyway we realize that there is no evident demarcation between them. The good example is the intonation of emotive and emotionally colored utterances expressing the same emotion [9]. For correct research both emotional prosody and emotive intonation it is necessary to compare the experimental data from many languages, but this problem can be solved only

if the data are comparable. It is important for the phoneticians who make their researches on different languages to base on the same principles. In this article we tried to formulate the general approach that can serve as the basis for this type of studies.

REFERENCES

- [1] F. Daneš, "Intonace v textu (promluvě)," *Slovo a slovesnost*, № 2, pp. 83–100, 1982.
- [2] U. Weinreich, "Lexicographic definition in descriptive semantics," *International Journal of American Linguistics*, vol. 28, № 2, pp. 25–43, 1962.
- [3] A. Wierzbicka, *Lingua mentalis: The semantics of natural language*, Sydney etc.: Academic press, 1980.
- [4] Е.А. Брызгунова, *Эмоционально-стилистические различия русской звучащей речи*, Москва: Изд-во МГУ, 1984.
- [5] В.Н. Всеволодский-Гернгросс, *Теория русской речевой интонации*, Петербург: Государственное изд-во, 1922.
- [6] Т.М. Николаева, *Фразовая интонация славянских языков*, Москва: Наука, 1972.
- [7] Э.Л. Носенко, *Эмоциональное состояние и речь*, Киев: Вища школа, 1981.
- [8] Л.А. Пиотровская, *Эмотивные высказывания как объект лингвистического исследования*, С.-Петербург: Изд-во филологич. фак-та С.-Петерб. ун-та, 1994.
- [9] Л.А. Пиотровская, "Роль интонации в противопоставлении эмотивных и вопросительных высказываний," in *Язык. Функции. Жизнь: Сб. статей в честь проф. А.В. Бондарко*, В.Д. Черняк, Ed., pp. 115–124. С.-Петербург: Изд-во РГПУ, 2000.
- [10] Л.А. Пиотровская, "Проблема системного описания эмотивных типов интонации: принципы создания взаимообратимой классификации," in *Проблемы и методы экспериментально-фонетических исследований: К 70-летию проф. кафедры фонетики и методики преподавания иностранных языков Л.В. Бондарко*, Н.Б. Вольская, Н.Д. Светозарова, Eds., pp. 215–223. С.-Петербург: Изд-во филологич. фак-та С.-Петерб. ун-та, 2002.
- [11] Р.К. Потапова, *Коннотативная паралингвистика*, Москва: Триада, 1997.
- [12] С.Л. Рубинштейн, *Основы общей психологии*, С.-Петербург: Питер Ком, 1999.
- [13] Н.Д. Светозарова, *Интонация в художественном тексте*, С.-Петербург: Изд-во С.-Петерб. ун-та, 2000.