

project description of the post-doctoral project
The Atypical Utterance Prosody of the Pomor Dialects of the White Sea, an Endangered Variety of Russian in a Language Contact Area

Pomor Prosody

by

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0 Summary, principle objective and subgoals of the project —> see application

1 Relevance of the project

1.0 Overview

Prosodic research is a linguistic discipline, which has been neglected, but, with recent technological and methodological developments, it is currently attracting more attention and has become a rapidly evolving field of research (§ 1.1). Russian dialects should be recorded before it is too late, using up-to-date technology (§ 1.2). The dialects of the White Sea region are of special relevance for several reasons (§ 1.3), one of which is their unique prosodic characteristics. The traditional Pomor dialects of the White Sea region show some prosodic peculiarities, which should be studied before they have disappeared (§ 1.3.3).

1.1 Why prosodic studies?

The Northern Russian dialects are known for their prosodic features, which deviate from the Central and Southern Russian dialects and from standard Russian, but the study of prosody is not unproblematic. The complexity of prosodic phenomena and the fact that they are part of spoken, and not of written language, have hindered prosodic research. The study of utterance prosody of spontaneous speech in particular is an underdeveloped area of linguistic research. Studies on utterance prosody in Russian spontaneous speech are largely superficial, impressionistic or based on inadequate methodology (cf. Odé 1992). New technology and methods to record and analyse living speech empirically have made prosodic research far more accessible. Newly developed systems for the

annotation of intonation and prominence in speech varieties (ToRI; IViE) will be applied to describe and classify the prosodic peculiarities of these dialect varieties (see § 2).

1.2 Why Russian dialects?

The rapidly disappearing traditional Russian dialectal features should be recorded before they have gone lost forever, using up-to-date technology. High-quality recordings of longer stretches of spontaneous Russian dialectal speech are almost non-existent, despite the fact that they are indispensable for several areas of linguistic research, such as discourse studies and prosody.

The position of dialects in general in Russia is very precarious. At this moment they are only spoken by the pre-war generations. Although the speech of younger members of the rural population might exhibit some regional traits in prosody, pronunciation and syntax, dialects in the narrow sense of the word are rapidly becoming extinct in Russia. In Russian dialectology, the gathering and storage of sound recordings have been given low priority. The few existing recordings of the dialects of the White Sea Region are mostly of inferior quality and as such cannot be used for acoustic analysis. In addition, they are usually obtained either by traditional elicitation methods or by asking the informant to tell fairy tales and fables, and seldom include longer samples of spontaneous speech. Recent developments in speech recording technology (minidisc, DAT- and CD-recorders) have made it feasible to make high-quality recordings with compact, easy-to-use equipment, which is not obtrusive to the informants (see § 2). The developments in computer technology have made it much easier to copy and distribute sound recordings to CD and internet, and speech analysis programs like *Praat* (see ref.) have made acoustic analysis freely available.

1.3 Why the White Sea Region?

1.3.1 Cultural and linguistic interest

The White Sea Region (WSR) in North-West Russia, consisting of the Kola Peninsula and the coasts of the Karelian Republic and the Archangel'sk District, is an ethnically and culturally diverse area, and has been so for a long time. The indigenous population consists of several Finno-Ugric peoples: Sámi, Karelians, Komi and Nenets. At a relatively early stage, from the early Middle Ages onwards, Russians started regularly visiting the WSR. Permanent Russian settlement started in the 13th century. The isolation from the Russian motherland, the proximity of a linguistic and cultural adstrate and the acquirement of a way of life which, never having been subject to serfdom, and with its reindeer husbandry and its close ties to the sea, strongly differs from the culture in most other parts of Russia, all helped to establish a local culture which is felt to be distinctive, both by the local Russian inhabitants, called *Pomor*, 'those that live on the sea coast', and by the other Russians.

The dialect of the area reflects this 'exotic' character. It can be classed as both innovative and archaic. Among its innovative features is the expansion of the vocabulary with words that reflect the new environment that the Russian settlers encountered, such as words for different kinds of snow (Pétursdóttir 2001; 2003) and for new fishing, reindeer husbandry and clothing techniques (Pineda 2004). Many of these innovations can be attributed to the presence of substrate and adstrate Finno-Ugric languages. At the same time, the isolation of the dialect in respect to the Russian homeland has helped it preserve several features that have been lost in other places, including the original Novgorod homeland of the settlers, under the pressure of the central Russian language. Amongst these features are the old instrumental plural endings and pluperfect constructions. The distinct prosody of the WSR dialects (see below) can be explained both as the survival of archaic traits and as a result of language contact.

1.3.2 Neglected dialects

The WSR dialects have so far not received the attention they deserve, in particular the dialects of Kola Peninsula. The WSR was not included into the large Russian dialect atlas *DARJa*, nor in the All-Slavic Linguistic Atlas *OLA*. This is not due to a lack of interesting features or a late settlement period, but because the low population density and the dispersed character of the settlements made it difficult to draw isoglosses. This hiatus has only very partially been filled by the existing lexicographic projects in the Archangel'sk district (Gecova et al. 1980–), Karelia (Gerd et al. 1994–) and the Kola Peninsula (Merkur'ev 1997) and a few isolated articles on other subjects (e.g. Gecova 1997; Myznikov 2003). The villages have been visited regularly by dialectologists from the Pedagogical Universities in Murmansk and Petrozavodsk, but they rarely made tape recordings (of bad quality) and only asked specific questions about part of the lexicon (E. V. Demidova, p.c.). The area is often visited by folklorists and even by Norwegian radio (see refs.).

Recent research at the Russian Department of UiTø has improved the situation. Three field-work expeditions to the White Sea Coast of Kola Peninsula were carried out by staff and students from the University of Tromsø (UiTø), in cooperation with colleagues from Moscow and Bochum. These have resulted in a range of papers and articles, a Master's thesis and a doctoral dissertation, covering different fields of linguistics, such as prosody, morphology, particle studies, lexicon and language contact (Lënngrén 2001; Pétursdóttir 2001; 2003; Pineda 2001; 2003; 2002; 2004; Pineda & Post 2002; Post 2001; 2002; 2003; 2004; forthcoming), and presentations have been given in five different countries. A project for the recording and storage of the White Sea dialects has been started in cooperation with LiLab in Bochum, funded by NFR and DAAD (see application). However, almost all recordings were made in a single village, Varzuga. The proposed project aims at gathering recordings from other villages in the region as well, and record the rapidly disappearing traditional Russian dialectal features before they have gone lost forever. The studies of the dialect of Varzuga showed some uncommon dialectal features in morphology, lexicon and utterance prosody. The doctoral dissertation (Post, forthcoming) contains a long chapter on the dialectal features of the dialect of Varzuga, but its main focus is on the use of the typically Northern Russian discourse particle *dak*. Unlike in the previous research, the main focus of the new project will be on prosody.

1.3.3 Prosodic peculiarities of the dialects of the White Sea region

Studies of the traditional dialect of the village of Varzuga have shown that the dialect has typical Northern Russian prosodic peculiarities, including the following:

- 1) Absence of two-degree reduction of unstressed vowels, which is typical for standard Russian and all other Russian dialects (e.g. Al'muchamedova & Kul'sharipova 1980);
- 2) Vowels are short relative to consonants, as in some of the Northern Russian dialects. These two phenomena – the shortness of the vowels and the small differences in their duration – contribute to the perception of a 'staccato' rhythm (Vysotskij 1973);
- 3) In the Varzuga dialect, many non-question utterances end in a rising pitch movement, although both frequency, steepness and height of these utterance-final rises appear to be less extreme than in, for instance, some dialects of the Pinega region of the neighbouring Archangel'sk district (Kuznecov 1949; Kasatkina 1988; Knjazev et al. 1997; Ljubinskaja & Sappok 2000);
- 4) One of the possible intonation contours for yes/no-questions, besides well-known contours which are described for Standard Russian (Bryzgunova 1980; Odé 1989), is a rising-falling pattern with a very late fall (Post, forthcoming). The exact form and function of this contour await further investigation;

5) In order to identify intonation contours in Russian, one has to know the position of the lexically stressed syllables, because they are the carriers of pitch accents. However, in the Varzuga dialect, in many words, more than one syllable is prominent, which makes it difficult to determine the location of lexical stress. It appears that almost all cases of the unclear stress position can be explained by a specific type of utterance prosody, which will be the main focus of the research project:

6) Many Varzuga utterances show a repeating rising-falling pitch pattern on each phonological word. Each word has a pitch peak on the first syllable (h/H), regardless of the position of lexical stress (which is marked by an acute accent and by capital letters, L or H). Both the first syllable and the lexically stressed syllable are perceptually and acoustically prominent:

A pòtóm zàmešáju-to gústó dak tògdá-to i pòdnimáetsja xòrošó.

h L h L H l h L h L h L

“And then I mix it, it’s thick so then it raises well.” (about dough)

This pattern is combined with a relatively high intensity level and duration on the first syllable. Together, these features lend the first syllable high prominence (marked by a grave accent), and can therefore obscure the position of the centre of the pitch accent and of lexical stress, which must be identified on the basis of different prosodic contexts (Post; forthcoming). The pre-accentual pitch peak is reminiscent of the so-called *zanos* in standard Russian (Kuznecova 1960). This tendency to mark each phonological word in an utterance is common in Northern Russian dialects, but the form of the pitch movement in Varzuga is uncommon (Kasatkina 1988, 1991). Many utterances also lack a clearly expressed intonational centre (alternatively called sentence stress, final pitch accent, nucleus, focus or rheme). Vihanta et al. (1990) remarked a similar difference in utterance prosody between Swedish spoken in Sweden and Swedish spoken in Finland: Sweden-Swedish utterances usually have a dominant intonation centre, while in Finland-Swedish utterances, prominence is more equally distributed over several minor units, a structure which is similar to Finnish prosody. Finno-Ugric influence on Northern Russian prosody is not improbable. However, an example utterance from a speaker from Varzuga of a Northern Russian dialect who was raised in inland Karelia and had Karelian as her mother tongue shows that, although the prosodic structure of the utterance might be shared with a language like Karelian, its form is not. The utterance has the same word-by-word prosodic structure as in the Varzuga dialect, but the pitch peak occurs on the syllable which carries lexical stress, and not necessarily on the first syllable, but. Each phonological word has a pitch peak on the lexically stressed syllable (H), which each time is surrounded by non-prominence lending low pitch levels (l):

Já otkúda ródinoj já iz Karélii.

H l H l H l H l

“(As to) where I am from, I was born Karelia.”

Unlike in the Varzuga dialect, each word has only one prominent syllable. In the following figures of the F0-traces, which were made in *Praat* and reflect the pitch movements, the word boundaries are marked by dotted lines and the accented, lexically stressed vowels are marked in a rectangle:

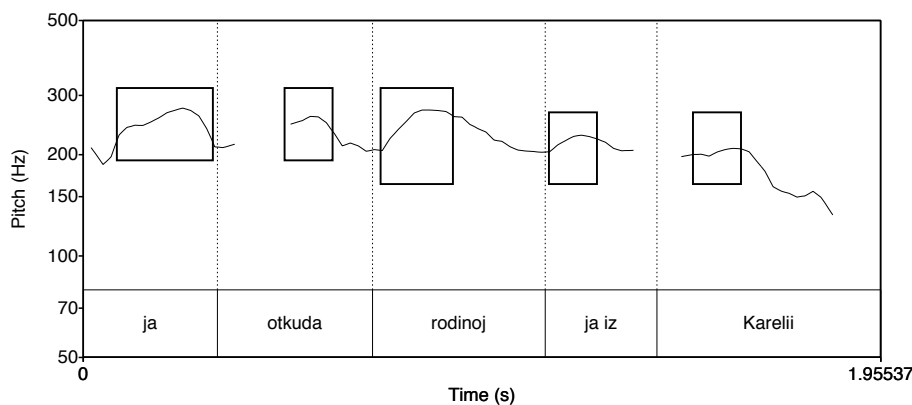
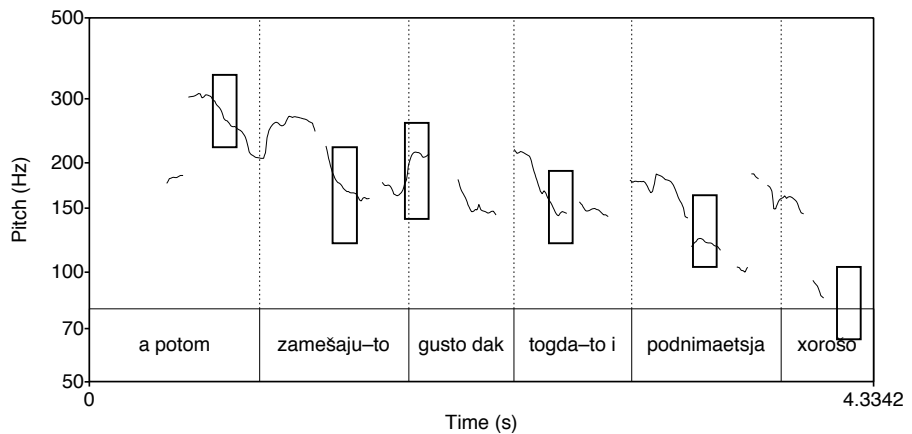


Figure 1/2. Fundamental frequency traces (F0) of the example utterances, made in Praat. The vertical axe gives the F0 on a logarithmic scale; the horizontal axe gives the time in seconds. The rectangles indicate grossly the position of the lexically stressed vowels after (fig. 1) and on (fig. 2) the pitch peak respectively.

2 Plan

The research project aims at providing empirical evidence for the observed prosodic phenomena, in particular for the form, distribution and meaning of the repetitive pitch pattern (feature nr. 6 above). The dialect of Varzuga will be compared with the speech of several other villages in the White Sea area, which are considered to form a single dialect, but show minor differences in the phonetic realisation of the prosodic structure. This impression is given by the recordings from the village of Gridino (Karelian Coast), which were made by slavists at the University of Joensuu, who provided us with copies. Unfortunately, the poor quality of these copies does not allow acoustic measurements. The differences between the villages might be due a different degree of contact with Karelian, Sámi and Komi. The fact that the Northern Russian dialects share many features in all areas of language with the neighbouring Finno-Ugric languages strongly suggests extensive mutual influence (Veenker 1967; Kiparsky 1969; Sarhimaa 1999). In parts of the White Sea region, like in the villages Gridino and Lovozero, these languages are in close contact up to the present day.

The prosodic features will be annotated and analysed with the help of the newly developed tools ToRI and a variant of IViE. ToRI is a manual transcription system for Russian which is currently being developed by Odé, based on ToBI and TODI, which are transcriptions systems for English and Dutch. ToRI is designed in such a way that it can be used not only for standard speech, but also as a research tool for (field)work on Russian dialects and intonational contact phenomena of Russian dialects with local languages in Russia, and for comparative and language typology

studies (Odé 2003a). IViE is a tool for the transcription of varieties of English; a similar system is currently being developed for French, IViF (Grabe et al. 1998; Post; ms.). IViE allows the annotation of both phonetic and phonological information, which will make the taxonomic differences between varieties of the same language apparent (Ladd 1996), such as differences in the phonetic realisation of intonation contours, the distribution of prominent syllables in the utterance and in the phonological inventory of intonation contours. The phonetic tier is most useful in the first stage, when the hypotheses about phonological contrasts in the dialects have not been exhaustively analysed. Later, when the inventory of contours has been established, they can be marked on the phonological tier.

The post-doc will spend the first half of 2006 in Amsterdam with Cecilia Odé, to expand her knowledge of prosodic analysis of non-written language varieties, including the design of experiments with the dialect speakers to test hypotheses, a field in which Cecilia Odé has long experience (see e.g. Odé 1989; 1992; 2002). A stay of nine months is applied for, but it would be highly beneficial for the research if the last of these months were spent with prof. Sappok at his LiLab in Bochum. Both Sappok, who is an experienced dialectologist and prosodist, and Odé have recently studied the relation between prominence, stress and accentuation in Northern Russian dialects (Odé 2003b; Krause, Sappok & Yokoyama 2003).

Provided funding is found, the post-doc will carry out fieldwork together with students and staff from Tromsø and with colleagues from other countries. From our contacts with E. V. Demidova in Murmansk we know which villages are interesting from a dialectologist's point of view, for instance Kalgalakša, Sumskij Posad, Lovozero and Krasnoščel'e. The number of villages where recordings can be made will depend on the material and human resources available. We will focus on the conservative dialect speech of the older generations; however, the speech of younger generations, that contains some dialect characteristics, as well as possible code-switching and language interference in bilingual areas like Karelia and Sámi villages on the Kola Peninsula is also relevant, especially to prosodic studies. For the recordings it is necessary to use compact, digital equipment with small microphones, which offer high-quality, digital recordings that can easily be imported into speech analysis programs. Their small size means that the informants are less intimidated, and this adds to the spontaneity of the recorded speech and to the use of dialectal features. This is enhanced by not using questionnaires, but encouraging the informants to speak about their own life. Recordings that are obtained in this way are very much suited for the research of prosodic features and discourse analysis. For these expeditions it is best to travel in Spring or early Summer, in each of the project's three years. Most researchers agree that the use of DAT-equipment is to be preferred above minidisc recorders, which use a lossy data compression method called Atrac, which means that part of the sound signal is filtered out to save disc space (Van Son; to appear).

The few available existing recordings from the area will be analysed if their quality is sufficient. LiLab has recordings of a village east in the area (Zimnjaja Zolotica), the University of Helsinki of central villages on Kola Peninsula and some old recordings are stored in the Sound Archive of the Karelian Academy of Sciences in Petrozavodsk in Karelia. These recordings are of poor quality and contain mainly folkloristic material, but they can give a diachronic view of the WSR dialects. The visit to Petrozavodsk is scheduled together with the expedition to the WSR in 2006, the visit to Helsinki in the Spring of 2008.

After the expeditions, relevant parts of the recordings will be transcribed and annotated, and analysed as described in § 2. A workshop about the dialects of the WSR is planned in 2007 at the Norwegian Centre in St. Petersburg and a conference in Tromsø in 2008. The post-doc will write a monograph on the prosodic peculiarities of the dialects and she will present her research on at least one international conference in linguistics (see § 4 and the milestones in the application).

Apart from fieldwork expeditions, visits are planned to our partners in Amsterdam, Bochum, Petrozavodsk, Helsinki, Moscow and Saint-Petersburg, where a seminar on Northern Russian

dialectology is planned at the Norwegian Centre. The dialectologists based in Tromsø plan to have a regular dialectological seminar. A detailed timetable is given in the application and the role of the partners at these institutes is explained in the next section.

3 Qualifications and cooperation

The proposed post-doctoral researcher is experienced in Russian dialectology, she has obtained a good knowledge of the area and established contacts with the specialists in the field. The research project will build on her previous research, but the prosody project will broaden her competence in linguistics, by including dialects from other villages and focussing on prosodic studies, which she has had little opportunity to do before. Several colleagues and students at UiTø and a range of partners abroad have promised their participation in the project for the description of the dialects of the WSR.

- The University of Tromsø is an excellent environment for the realisation of this project. As mentioned, the department has built up know-how in this area and has started a fruitful cooperation with LiLab in Bochum. At the Russian Department of UiTø, Russian dialectology is an obligatory part of the curriculum for advanced students (at *hovedfag* and Master's level). Several students wrote their Master's thesis on a Russian dialect, based on data from fieldwork expeditions in which they took part (Nilsen 1998; Bygjordet 1999; Sæterdal 1999; Pétursdóttir 2003), and in 1997-98, Margje Post received a grant from NFR and Nuffic to study a Russian dialect, which resulted in a paper and an article (Post 1998). The strong focus of UiTø on the Barents Region and its indigenous languages offers a good environment for the study of WSR dialects, which have been influenced by the indigenous languages of the region and by contacts with Scandinavia. The post-doc will gain from the expertise at the Sámi, Finnish and Nordic departments. The presence of the centre of excellence CASTL (Center for Advanced Study in Theoretical Linguistics) at the Faculty of Humanities in Tromsø provides an inspiring environment of a large group of enthusiastic and highly qualified linguists. One of the ongoing projects at CASTL concerns prosody, including prosodic hierarchy, the relation between prominence and phonological phenomena and the phonetic correlates of stress (see <http://uit.no/castl/4514/9>).

Several colleagues and students at UiTø have expressed their intention to get involved in the project, provided funding is found:

- The experienced researcher drs. David Pineda, who is an active participant in the project with Bochum, participated in two of the previous fieldwork expeditions, took part in storage, transcription and the website and he has written articles and given talks. He plans to continue his involvement in Russian dialectology, if time and money will permit, in combination with his teaching obligations at the Russian Department of UiTø and his study of the Sámi language. His involvement would advance the research greatly, because his participation in the fieldwork would lead to more recordings and he could take upon him part of the necessary transcription and storage work. If possible, he will continue his research on the analysis of the morphology of the dialects and on language contact;
- Master's students will be engaged in the project. They will participate in the fieldwork and the seminar, contribute in the transcription and storage, write their Master's thesis on a topic in Russian dialectology and, if funding can be found, be given the opportunity to present their research at the workshop and the conference assist in their organisation. A number of students who plan to take their Master's degree in Russian Linguistics during the project have already expressed their interest;
- Dr. Tamara Lönngren, who has long experience in the field of dialectology and has supervised a range of Master's students and a doctoral project in the field, will be engaged as the director of the Norwegian Centre in Saint-Petersburg from 2005-2008. She will take part in the fieldwork,

study a lexicological topic and take part in the organisation of the workshop in Saint-Petersburg, the conference in Tromsø and take part in the supervision of the PhD and Master's students;

- Dr. Tore Nasset, professor in Russian linguistics at our faculty, plans to take part in one of the expeditions and study the morphology of verbal stems in the WSR dialects.

The cooperation with LiLab in Bochum will be continued. Prof. dr. Christian Sappok will participate in the fieldwork, concentrating on younger generations of informants, and host the post-doc in Bochum (see attachment). Dr. Cecilia Odé and the Institute of Phonetics in Amsterdam will host the post-doc at her institute in 2006. Provided funding is available, Odé will participate in the workshop and in one of the fieldwork expeditions (see attachment). Other partners will contribute to the project by collecting data and carrying out research on the WSR dialects in the following subjects, which will be presented in the workshop in Saint-Petersburg or the conference in Tromsø, provided funding is found:

- Murmansk Pedagogical University (cand. philol. E. V. Demidova and A. V. Bachtijarova): lexical topics (see attachment);
- Petrozavodsk Pedagogical University (I. A. Kjuršunova; L. P. Mixajlova; A. V. Priobraženskij): historical and modern lexicon, ethnolinguistics and lexicography;
- The Departments of Dialectology and Phonetics of the Institute of the Russian Language of the Russian Academy of Sciences in Moscow (prof. dr. L. L. Kasatkin; dr. R. F. Kasatkina; cand. philol. O. E. Karmakova; I. A. Bukrinskaja): segmental phonology, the category of (in)definiteness and lexical topics (see attachment);
- Dr. Marja Leinonen (Department of General linguistics, University of Helsinki) will focus on the mutual influence between Komi and the Northern Russian dialects (see attachment);
- Prof. dr. Anneli Sarhimaa (Department of English and Linguistics, Johannes Gutenberg-Universität Mainz), who made the previously mentioned recordings in Gridino, will study the second-language varieties of Russian in the linguistic repertoire of present-day Karelians (see attachment).

The post-doc is welcome to visit the universities of Amsterdam, Bochum, Petrozavodsk, Helsinki and the Institute of the Russian Language in Moscow (see attachments).

4 Publications and means of dissemination

The following publications and other means of dissemination are planned:

- 1) A monograph;
- 2) A peer reviewed article in *Scando-Slavica* and one in *Russian linguistics* or another international journal;
- 3) Papers at international conferences in linguistics;
- 4) Update of the website on the research of the WSR dialects at UiTø, featuring information, pictures and sound clips with accompanying transcriptions, translations and commentaries. This site will help to generate a general interest in the region among the public and popularise dialectology in general and speech databases in particular;
- 5) A talk about the Russian dialects of the WSR at the popular-scientific “lørdagsseminar” at Driv, Tromsø;
- 6) A short article about the project in *Russisk i Tromsø*;
- 7) Spread information about the dialectology project and the Master's course in Russian dialectology at universities in Norway and across Europe, in order to attract international students.

The slavic dialectologists at UiTø hope to find the human and material resources to realise the following tasks, which cannot be obtained by the post-doc herself inside the frame of the project, but which would be highly beneficial for the post-doctoral project, for international cooperation and for the enhancement of the value of the obtained recordings:

- 8) To organise one or two workshops on the WSR dialects, preferably in Saint-Petersburg;
- 9) To publish the proceedings of these workshops, for instance in *Poljarnyj Vestnik*;
- 10) To compile an anthology of the dialects, published in the series *BFF* at LiLab, with an accompanying CD;
- 11) To make the sound database of the WSR dialects easily accessible to other researchers and laymen by copying it to CD's, annotate it and transcribe parts of it. Proper transcription and storage in such a way that it is accessible and valuable for other research is a time-consuming task, but it will greatly enhance the value of the recordings. This will prevent the sound archive from getting 'covered by dust' like so many other recordings. This database will promote the making of high quality sound recordings and their accessible storage, especially in Russia, where this has been seldom the case, not only of the Russian dialects, but of endangered languages in general;
- 12) To promote our dialectology project and the Master's course in Russian dialectology at universities across Europe, in order to attract international students.

5 Time table and milestones; publication plan, budget and finance plan —> see application

6 References and abbreviations

- BFF* — *Bjulleten' Fonetičeskogo Fonda russkogo jazyka. Priloženija*. Series of anthologies of speech recordings, published at LiLab; see <http://www.ruhr-uni-bochum.de/LiLab/www-bff/Index.htm>.
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- DARJa* — *Dialektologičeskij atlas russkogo jazyka (Centr evropejskoj časti Rossii)*. *Karty. Kommentarii k kartam*. Moskva - Minsk 1986-2004.
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- IViE* — *Intonational Variation in English*; see Grabe et al. 1998 and www.phon.ox.ac.uk/~esther/ivyweb/.
- IViF* — Post, Brechtje (ms.). *IViF: A transcription system for Intonational Variation in French*. Cambridge.
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