Ethnolinguistic Audio-visual Atlas of the Cultural Food Heritage of Bacău County – Elements of methodology

Petronela Savin
Vasile Alecsandri University of Bacău
Department of Romanian Language and Literature and Communication Sciences
Spiru Haret str., No. 8, Bacau, Romania, Tel.: +4 0234 542 411
savin.petronela@ub.ro

Diana Trandabăț
Faculty of Computer Science, Alexandru Ioan Cuza University of Iasi, Romania
General Berthelot 16, Iasi, Romania, Tel.: +4 0232 201 090
dtrandabat@info.uaic.ro

Abstract
This paper aims to present the methodology behind the platform “Ethnolinguistic audio-visual atlas of the cultural food heritage of Bacău County – eCULTFOOD Atlas”. eCULTFOOD Atlas platform is a comprehensive linguistic resource, containing the results of field research and scientific documentation on local cultural food traditions. It includes a representative corpus of audio-visual documents recording the traditional food cultural heritage based on surveys involving in special the older generation from the rural county of Bacău, Romania.

The methodological challenges of this project include: (1) adapting existing data collecting methods to preserve as much as possible the authenticity of food preparing, (2) organizing collected materials in order to allow various levels of data filtering and (3) presenting the obtained materials in a user-friendly manner.

The eCULTFOOD Atlas meets the aspirations of EU policies that regard the digitization of cultural resources as a key factor that would contribute to improving accessibility and undivided flow of information in a knowledge economy. Once transposed into electronic format, the cultural food heritage of Bacău County may become a resource for a broad spectrum of activities impacting sectors such as education, economy and tourism.

Keywords: methodology, food heritage, digitization, audio-visual atlas

1. Introduction
The eCULTFOOD Atlas is developed within the frame of the project PN-III-P2-2.1-BG-2016-0390 The Digitization of the Cultural Food Heritage. The Region of Bacău – eCULTFOOD, project coordinated by “Vasile Alecsandri” University of Bacău, in partnership with the “Alexandru Ioan Cuza” University of Iași and the Cultural Association “Art-Traditions-Heritage without Borders”. The project runs between 1.10.2016-30.10.2018, being funded by the Executive Agency for Financing Higher Education, Research, Development and Innovation (UEFISCDI) through the National Plan for Research-Development and Innovation for the period 2015-2020 (PNCDI III) through direction P2 – Increasing the competitiveness of the Romanian economy through CDI, line 1 – Transfer of knowledge to the economic agent.

The eCULTFOOD project has as area of intervention the intangible cultural heritage of traditional food, fulfilling the function of protection (research, promotion) and dissemination (diffusion, including via new models developed in the on-line environment) supporting, first and foremost, education as cultural intervention. Its main aim is to preserve, in cartographic and computerized form, a representative corpus of audio-visual documents recording the traditional food cultural heritage based on surveys involving the older generation from the rural county of Bacău.
Approaching the middle of the implementation of the project, we consider that the most important methodological aspects related to the establishment of the database have been validated, therefore, they should be presented to the interested public.

The philosophy of this project has started from the premise that in the area of food cultural heritage, more than in any other field, each community has historically accumulated layers of popular knowledge as a result of the interaction with the environment and living conditions, many of these having a proven scientific basis (Bergflødt et al, 2012). Thanks to cultural inter-generation transmission, traditional knowledge acquires its character of historical continuity in resource use practice. Their rediscovery does not contradict the idea of progress, but, on the contrary, it includes it (Cannarella and Piccioni 2011, Handayani and Prawito 2009).

Throughout the world, the interest in food cultural heritage has increased, having as consequence the promotion of popular food knowledge. The interest in returning to organic farming and habits of traditional food culture is evident at the level of European economic policies. The registration of food in quality schemes at national and European level, such as traditional products, protected designation of origin or protected geographical indication, is a proof in this direction 10.

The e-CULTFOOD project aims to rediscover this heritage, reflected by the knowledge about traditional food, by preserving in a cartographic and computerized form a representative body of audiovisual documents recording the food cultural heritage taken over through inquiry in special from the older generation in Bacău County. The result of this will be the creation of an Ethno-linguistic audiovisual atlas of the cultural food heritage of Bacău County, in the form of a complex database containing the results of field research and scientific documentation on food traditions in the region.

In 2009, the Council of the European Union laid the foundations for a strategic framework for education and training cooperation, ET 2020, in which culture is seen as an essential tool in delivering educational services, through the development of creativity and an innovative approach to all age groups. Transformed into an educational resource, the main product of this project, the Ethno-linguistic audiovisual atlas of the cultural food heritage of Bacău County, emphasizes this educational component of traditional culture, designed to connect the more experienced and younger generations with tools that capitalize on creative and experiential learning. Thus, one of the main directions of long-term development, valorization and diversification of the cultural consumption of young people is exploited by using the methods of stimulating creativity and innovation with the help of the new technologies.

2. Ethnolinguistic audio-visual atlas of the cultural food heritage of Bacău County – technical projection

The platform eCULTFOOD Atlas is projected as a comprehensive database containing the results of field research and scientific documentation on cultural local food traditions. It includes a representative corpus of audio-visual documents recording the cultural food heritage based on surveys involving in special the older generation from the rural county of Bacău.

2.1. Data collection methodology

The proposed research methodology is an interdisciplinary one combining the methods of socio-human sciences with those of information technology. The main method used to value food heritage items is that of the field survey, conducted on the basis of the ethnological experiment, of the semi-direct thematic interview and participant observation (O’Reilly 2005: 84-112). The semi-structured interview has the advantage of providing the interviewee with a certain freedom of communication in relation to a topic controlled by a researcher (Geraud, Leservoisiër, Pottier 2001: 10). However, in Romania, the interest for developing this segment is still small. According to the statistics provided by the Ministry of Agriculture and Sustainable Development, 526 products were registered in the National Register of Traditional Products (RNPT) during the period 2005-2016, of which only 1 product was registered at European level in the Protected Geographical Indication category (PGI). In the same category, Italy registered 114 products, France, 127 products, Spain, 91, and Germany, 86.
42). To elaborate the semi-structured interviews, there was designed an interview guide with 50 theme-related topics on the recording of knowledge and practices of traditional food, cooking techniques and recipes. The list of thematic subjects was based on the organization of the immaterial heritage elements made by Narcisa Ştiucă (2009: 133-140)\(^{11}\) in the collective work *Patrimoniul cultural imaterial din România. Repertoriu I / Immaterial Cultural Heritage in Romania. Repertory I*, to which there were added elements identified as a result of documentation and field survey.

The planned field investigations aimed at recording the traditional menus, codes and eating habits of the inhabitants of Bacău County. Between November 2016 and July 2017, all the 32 localities planned to be surveyed on the criterion of representativeness for the geocultural diversity of the region were investigated during at least one visit there. There have already been archived audiovisual documents that have recorded real communication situations in the form of dialogue with 82 informants from the 32 localities in Bacău County, which we here present in the chronological order of the visits: Frumuşelu (Glăvăneşti), Glăvăneşti (Glăvăneşti), Muncelu (Glăvăneşti), Ludaşi (Balcani), Balcani (Balcani), Răţeni (Balcani), Buda (Blăgeşti), Apa Asău (Asău), Valea Mică (Roşiori), Gioseni (Gioseni), Galbeni (Nicolae Bălcescu), Bălăneasa (Livezi), Mănăstirea Caşin (Caşin), Caşin (Caşin), Blidari (Căuţi), Pârjol (Pârjol), Bereştii (Sascut), Somușa (Cleja), Țărdenei Mici (Blăgeşti), Chetriș (Tamași), Pârjol (Pârjol), Faraoni (Faraoni), Pustiana (Pârjol), Mălosu (Lipova), Dumbrava (Gura Văii), Vâlcele (Târgu-Ocna), Râchițiuș (Ghimeș-Făget), Berzuaniții (Berzuaniții), Scurta (Orbeni), Pâncești (Pâncești), Răstoaca (Răcăciuni), Oituz (Oituz).

For collecting immaterial heritage items, video and photo techniques were used. Two types of movies were obtained:

- Procedural videos: These types of videos are recording of the actual, on-the-spot realization by informants of a dish, considered representative of local food culture.
- Evocative videos: this type of recording contains evocative discourse about traditional dishes, with informants recalling from memory and presenting recipes, habits, dietary codes, but not actually making the dish.

Videos were manually annotated to include transcripts of the interview.

Additionally, a set of photos were taken before and during the interviews, which were classified in different categories:

- panoramic views of the investigated locality,
- images of the informant's household,
- initial, intermediary and final steps of food preparation, including dishes in the final form
- storage facilities food preparation tools and installations,
- images of the informant in different communication situations.

The final representation for each thematic subject includes a set of videos, images and texts representing the literal transcription of the video. While at the moment all information is in Romanian language, we foresee the translation of a limited number of highly specific topics, accompanied by a box of additional information (cultural, ethnographic, linguistic references on the subject).

\(^{11}\) Narcisa Ştiucă organized the immaterial heritage elements according to the following criteria: 1) the functional criterion, meaning the context of the preparation and of the consumption (the festive time – community and family – and the everyday/ordinary time) as well as the symbolic valences of the dishes; 2) the area of distribution (general, zonal, local) and the current frequency of preparation and consumption respectively; 3) representativeness and identity value (degree of occupational and ethnic specificity); 4) traditional technique (recipe-type) and execution style (local and regional cooking and consumption variants, as well as their designations); 5) the age of documentary attestation, storage, replacement or disposal of food ingredients or dishes (Ştiucă 2009: 132).
2.2. Content digitization methodology

The project transfers the latest achievements in the field of geolinguistics (Sprachatlas des Dolomitenladinischen und angrenzender Dialekte\(^\text{12}\), Atlas linguistique audiovisuel du Valais romand\(^\text{13}\), Atlas lingvistic audiovizual al Bucovinei\(^\text{14}\)) into the research of immaterial patrimony. At the same time, it capitalizes on the experience of the digitization team, who has worked on highly complex projects such as the computerization of the Dicţionarul Tezaur al Limbii Române and Noul Atlas al Limbii Române. Moldova şi Bucovina, and of the team responsible with the collection, research and organization of immaterial heritage elements that have already completed complex activities of collecting and researching the cultural and linguistic heritage of the region of Moldavia.

The interface for the linguistic resource supporting the Atlas will be developed based on the interoperability of operating systems and Internet browsing programs. Data will be accessed from any operating system, desktop or mobile, via a web browser (Firefox, Google Chrome, Safari, etc.).

The interface made available to users will be an interactive one and will allow them to have access to relevant ethnolinguistic materials from the entire network of geographical points, in the context in which it was obtained, structured into two broad categories: (1) the answers to the thematic subjects in the form of ethno- and socio-texts recorded by each informant, doubled by (2) researchers’ notes on the respective subject, resulting from the research of various sources of documentation. Each thematic subject will benefit from images and video recordings of the food heritage items taken from the field during investigations.

Three major categories of content were obtained: a repertoire of recipes, a repertoire of codes and food behaviours, and a set of information about the investigation circumstances.

The first category, the repertoire of recipes collected through inquiry from an elderly generation from Bacău County, will be organized under the title DISHES FROM THE ELDERS and will include videos, photos and texts. The collected data has been organized into a taxonomy with various feature, allowing customized searches according to different criteria:

- **Name of dish**
- **General category** (preparations based on cereals, meat, eggs, milk, plants, beverages),
- **Basic ingredient** (wheat, corn, hemp, pork, lamb etc.),

\(^\text{12}\) https://www.sbg.ac.at/rom/people/proj/ald/allgemwillkomm.htm
\(^\text{13}\) http://www2.unine.ch/islc/page-35066.html
\(^\text{14}\) http://www.philippide.ro/alab/
- **The stage of processing of the main ingredient** (husked beans, crushed grains, flour, cob etc.),
- **Preparation tools** (grinding mortar, kneading pot, triturator, sieve, wooden cutting pad, roller etc.),
- **Presence of the transforming agent** (yeast, baking powder, leaven, rennet etc),
- **Secondary ingredients** (honey, sugar, salt, nuts, eggs, milk etc.),
- **With filling** (with or without filling),
- **The process of preparation** (boiling, roasting, frying, heating, baking, salting etc.),
- **The preparation agent** (fire, salt, brine, vinegar),
- **The preparation mediator** (water, air, smoke, milk, fat etc.),
- **Preparation tools** (pot, kettle, griddle, sieve etc.),
- **Installations** (hob, oven, trivet, drying rack etc.),
- **Number of stages**, 
- **Slow/fast character**, 
- **Fasting/feasting food**, 
- **Ritualistic food** (everyday, ritual), 
- **Religious cult** (Orthodox, Catholic), 
- **Context of preparation** (family cycle, calendar cycle), 
- **Documentary reference** (attestation of recipe in monographs, e.g. Lupescu 2000, Pamfile 1910 etc.), 
- **Definition** (extracted from dictionaries),
- **Presence in phraseologisms** (idioms, phrases, proverbs, sayings etc.).

The second category of content is represented by a repertoire of texts about codes and food behaviours under the title of **CELEBRATIONS AND EVES**.

Also for this category, we have to deal with the three types of files, video, photo and text resulting from transcribing the interview from the film. These contents will also be accessed by filters such as: **Ritual/daily character**, **Religious cult** (Orthodox or Catholic), **Context of performance** (calendar or family cycle), **Evoked event** (calendar feast: New Year, Christmas, Epiphany, etc., holy days; family event: wedding, baptism, funeral).

The third category of contents, which is called **PEOPLE AND TASTES**, consists of a set of metadata about the interview, organized as follows: **Locality code**, **Locality**, **Commune**, **Date of investigation**, **House**, **Kitchen**, **Other preparation and storage areas**, **Informants**, **Year of birth**, **Researchers**, **Person-mediator**, **Investigation group**.

All contents will be made available to the users of the site, allowing both the general public and the specialized user to access the data collection, according to their knowledge interests.

### 3. Conclusions

The most important novelty of this database is that the material collected is, first of all, the discourse related to the elements of food heritage. Moreover, the realization of this new type of intangible patrimony would respond to a methodological desideratum, in the midst of recent theoretical debates, namely the transition from the material sampling survey to the form of communication inquiry, much more appropriate to the reproduction of the cultural specificity of an ethnographic area (Dumistrăcel et alii 1997).

Corroborating an interview guide appropriate to documenting traditional food culture elements with a syncretic digital technique (audio-video/photo) to collect ethno-linguistic and ethnographic material will enable the creation of interactive multimedia document databases that will eventually turn the **Ethno-linguistic audio-visual atlas of the cultural food heritage of Bacău County** into a virtual museum, capable of facilitating innovative approaches in the field of education, economics and linguistic and ethnographic research.
For the natural language processing field, the linguistic resource developed through this project is a valuable collection, with multiple possible further extensions. On one side, the transcriptions of contemporary rural spoken language, summing to about 100 hours, can be used to train a speech to text converter for the Romania language. On another side, the collection of recipes, in textual form, can be used to refine existing text mining tools, or develop new ones, based on extraction of opinions, sentiments or events.

Following the implementation of the project PN-III-P2-2.1-BG-2016-0390 The Digitization of food cultural heritage. The Bacau Region – eCUltFOOD, there will remain the platform Ethnolinguisitc audiovisual atlas of the cultural food heritage of Bacău County, a community of users linked by professional interests and common learning experiences, and a community of researchers and practitioners with research expertise in the field of generating research products with socioeconomic utility. The training process will be continued in the virtual environment by using the traditional digitized food treasure of Bacău county as a patrimonial resource designed to connect the experienced generations with the young ones through tools that capitalize on creative and experiential learning. Human resources and accumulated know-how will make it possible, through the exchange of best practices, to replicate the project at national level as well.

References


Lupescu, Mihai (2000). *Din bucătăria tăranului român*. București, Editura Paideia


Acknowledgements

This work was supported by a grant of the Romanian National Authority for Scientific Research and Innovation, CNCS/CCCDI – UEFISCDI, project number PN-III-P2-2.1-BG-2016-0390, within PNCDI III.
Petronela Savin is a lecturer in Linguistics at Faculty of Letters, Vasile Alecsandri University of Bacau, Romania. Between 2010 and 2013 she was a postdoctoral researcher in Alexandru Ioan Cuza University of Iasi, Romania. Petronela Savin’s research interest is on pointing out some characteristics of Romanian food terminology, by explaining and inventorying a series of terms and expressions that give the specificity of Romanian cuisine.

Diana Trandabat graduated the Faculty of Linguistics at the University "Al. I. Cuza" of Iasi, Romania. After graduating the MSc program in Computational Linguistics, she was PhD Student at the Faculty of Computer Science, University "Al. I. Cuza" of Iasi, Romania, under the supervision of Prof. Dan Cristea. Her PhD Thesis focused on Semantic Role Labelling (SRL): creating a SRL resource for Romanian, developing a language independent SRL tool, and applying it to several NLP processes. I obtained my PhD in March 2010. Diana Trandabat is also Research Assistant at the Institute for Computer Science, Romanian Academy, since May 2005. Her work at the Institute for Computer Science started with analysing the structure of the Verbal Group for Romanian. In parallel, she worked on developing the web page Archive for the Romanian Sounds.