

# **EAPCogSci 2015**

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## **Pear Stories, 40 years later**

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This symposium is dedicated to the Pear Stories framework, started in mid-1970s in the University of California, Berkeley, by Wallace Chafe and his coworkers. In the course of this study, a silent film was created that was subsequently used for multiple linguistic, cognitive, and cross-cultural studies.

The monograph “The pear stories: Cognitive, cultural, and linguistic aspects of narrative production” (Chafe, 1980) is one of the major early publications that led to the formation of linguistic discourse analysis, as we know it now. This approach allows one to elicit comparable discourses in various languages and to look into the underlying cognitive processes of understanding, categorization, memorization, retrieval from memory, and

conversion of thought into talk.

Now the Pear Film is used by many researchers around the world as convenient stimulus material for collecting natural discourse. Participants of the symposium are going to discuss methodological and empirical questions associated with the Pear Film-based studies from its beginning to the present time. Researchers from the USA, Russia, Finland, and Japan report their Pear Film-based studies of a variety of languages, including, but not limited to, English, Finnish, Upper Sorbian, Russian, and Russian Sign Language. The participants are looking at a variety of phenomena, such as verbalization of experience, use of prosody and gesture in discourse, and influence of a speaker’s neurological state on produced discourse.

Overall, the Pear Film paradigm relives a new wave of interest and helps to open up novel directions of natural communication research in the 21<sup>st</sup> century.

## **The origin and subsequent use of the Pear Film** *Wallace Chafe*

Produced in 1975, the Pear Film was originally designed as a way of fulfilling the requirements of a grant received from the United States National Institutes of Mental Health in support of a project to investigate relations between language and human experience. The goal was to produce something close to the same experience in people in different parts of the world: people who belonged to diverse cultures and spoke a variety of languages.

It was decided that a film would be the most practical way to accomplish this goal, since its use would not be restricted to people in a single location. The seven-minute film we produced was designed to present viewers with a range of differing experiences, memories of which might be verbalized in diverse ways across a broad range of cultures and languages. Reasons for including certain objects and events within the film will be described in the paper.

Data were initially obtained from speakers of ten different languages scattered around the world. The original six participants in the project analyzed those data with a variety of results that were reported in Chafe (1980). Subsequent interest in the use of the film has exceeded expectations. The forty years since it was produced have witnessed a continuing stream of projects that have extended its use to a variety of other languages and cultures in pursuit of a variety of goals. I conclude by describing ways in which this film has influenced my own research.

## **Pear Film World Corpus: New directions for cross-linguistic research**

*John W. Du Bois*

On one level, it doesn't matter why the Pear Film works: it's enough that it just works. The Pear Film (Chafe, 1980) works in the sense that it successfully evokes a cognitive and interactional situation that frames a verbalization task which yields, in a relatively natural way, the simple act of using language to verbalize an experience, as one person tells a story to another. In this semi-controlled task environment, established by the interviewer's request to tell what happened in the film, speakers of languages all over the world have reliably responded by expressing themselves about a series of events they have witnessed, if only vicariously through the medium of film. The result is a set of elicited narratives with a number of valuable properties that allow this research protocol to support a wide variety of

inquiries, including cross-linguistic comparison on a global scale, while avoiding the problem of translation bias. Yet it is useful to take some time to consider just why the Pear Film has been so successful in meeting the needs of the researchers who have used it – if only to re-imagine how we might use it in the future.

In an influential position paper, a group of linguists pointed to the need for the field of linguistics to “break out of the current impasse of the arbitrariness of cross-linguistic categorizations”, by developing tools that allow “direct comparisons of (parallel) texts (allowing multiple values to surface in the one language, measured with respect to the statistical occurrence of different choices) as opposed to grammatical descriptions in which structures tend to be essentialized.” (Dediu et al., 2013: 317). From the beginning this has been precisely the *raison d'être* for the Pear Film and the methodologies that have developed around it: to gather parallel texts from the languages of the world representing the verbalization of a common experience, allowing cross-linguistic comparisons that would avoid the biases introduced by translation and other standard comparative methodologies.

This talk begins by presenting some of the ideas that went into creating the Pear Film, including details of how the script was written so as to elicit a wide variety of typologically interesting linguistic constructions. We then go on to explore what the Pear Film can offer to the next generation of researchers engaged in functional, cognitive, typological, and other linguistic research, as we harness new web-based technologies and corpus linguistic methodologies in a global collaborative effort to build a new Pear Film World Corpus.

## **Russian Pear Stories: Sign language, gesticulation, multimodality**

*Andrej A. Kibrik, Olga V. Fedorova, and Julia V. Nikolaeva*

Despite the iron curtain that existed between the Soviet Union and the West until the late 1980s, the Pear Stories project somehow was known to Moscow linguists back then.

The first Russian studies based on the Pear Film as stimulus material were devoted to Russian Sign Language: the diploma thesis Prozorova, 2006 and the dissertation Prozorova, 2009; see also Kibrik & Prozorova, 2007, Kibrik, 2011. RSL discourse was demonstrated to make extensive use of zero reference and consist of quanta, functionally parallel to prosodic units of spoken discourse.

The work of Nikolaeva (2014) addressed another visual-kinetic phenomenon — spontaneous co-speech gesticulation. On the basis of Russian retellings of the Pear Film she found that individual gestures are temporally coordinated with elementary discourse units. She also described the phenomenon of gesture assimilation, that is

series of gestures with repeated properties (catchment and inertia) and demonstrated that such series are coordinated with higher level discourse units, such as sentences and episodes.

Fedorova & Pavlova (2014) employed the Bartlett's methodology of consecutive retelling: participants watched videorecorded retellings of the Pear Film, and later one retold it to still other participants. This corpus of secondary retellings helped to explore the role of protagonist as encoded in the verbal and the gestural channels. In another ongoing project within the same paradigm we look at still longer (up to ten) sequences of retellings.

Finally, in our recently commenced project "Language as is: Russian multimodal discourse" (*funded by the Russian Science Foundation, grant 14-18-03819*) we use the following procedure: two participants watch the Pear Film, and then one of them retells it to a third participant who has not seen the film. The second participant adds the details missed by the first participants, and then the third participant asks clarification questions to those who watched the film. In this project we create a multi-layer multimodal transcript of the discourse, including the verbal component, prosody, gesticulation, and eye gaze captured with the help of an eyeglasses-inbuilt eye tracker. The goal is to create a resource in which all components of natural multimodal interaction are registered and their interrelations and coordination can be explored.

### **Pear Stories by Russian speakers with aphasia**

*Mira B. Bergelson, Yulia S. Akinina, Mariya V. Khudyakova, Ekaterina V. Iskra, Olga V. Dragoy*

Aphasia is a language impairment associated with brain pathology (Ardila, 2014). Our project "Russian CLiPS" – Russian Clinical Pear Stories – aims at creating a corpus of narratives told by people with aphasia (PWA), other brain pathologies, and neurologically healthy people (NHP), using Pear Stories (Chafe, 1980) methodology adjusted for the purposes of the project. The corpus is being annotated for a number of micro- and macrolevel units critical for comprehensive linguistic and discourse analysis.

The data collection procedure consists of audio and video recordings of the Pear Film retellings. At present there are twenty-nine recordings of both types from NHP (total length 1:23:31) and twenty-three audio recorded narratives from PWA (ten fluent and thirteen non-fluent; total length 2:00:14), of which thirteen are also video recorded. Collection of narratives in other clinical cohorts is in progress.

The corpus is being annotated using ELAN software (<https://tla.mpi.nl/tools/tla-tools/elan/>) in separate tiers: quasi-phonetic transcription (orthographically transcribed text with pauses, abrupted and non-verbal output); lexical transcription (orthographically transcribed

text consisting of complete lexical items); glosses (lexical items with grammatical markers) in Russian and English; clause boundaries; c-units (Loburn, 1963); lexical errors of different types; and laughter. Sample narratives are also being annotated for rhetorical structure (Mann & Thompson, 1987), narrative elements (Labov, 2001), prosody-based elementary discourse units (Kibrik & Podlesskaya eds., 2009), and other linguistic parameters, for specific research purposes.

The ultimate goal of the project is making the multimedia "Russian CLiPS" available online for extensive linguistic analysis of speech samples and accompanying gestures in brain-damaged populations.

### **Revisiting empathy and grammar in Finnish Pear Stories**

*Jyrki Kalliokoski*

The studies of Wallace Chafe and his colleagues on the flow of discourse, emergence of syntactic units and preferred argument structure, partly originating from the Pear Stories project, have given inspiration and new insights to Finnish linguists during the past three decades. The Finnish Pear Stories were recorded by John Du Bois in the mid 1980's. Since then, the Pear Stories corpus has been used by Finnish scholars working on functional syntax and interactional linguistics. Just recently the Finnish Pear Stories data were 'restored', and the transcripts of the stories were checked and the whole corpus is now in digital form and easily accessible.

The focus of the presentation will be on the interface of pragmatics and grammar. I will explore the relationship between the speakers' linguistic choices and empathy (and irony) in the stories. The notions of involvement and detachment as introduced by Chafe (e.g. 1982, 1985) help us to understand the fluctuation of stances and their linguistic manifestations both within one story and across stories. The Pear Stories are produced in a form of a monologue, addressed to a (mostly) silent interviewer. Nevertheless, many of the stories can also be characterized as dialogic (Linell 2009, Du Bois 2014) as they echo voices from other genres and display different stances. The goal of the paper is to interpret the interplay between the linguistic choices and the speakers' multidirectional engagement (Du Bois 2011) during the act of narrating a Pear Story.

### **What can be added in a sentence when it is completed? - Evidence from Upper Sorbian Pear Stories**

*Ken Sasahara*

As far as I know, the Pear Film is designed for the research of "how people talk about things they have experienced and later recall" (Chafe, 1980: xi) and to collect the cross-

linguistic data for them. In this presentation I will exhibit a case study of an individual language, applying the Pear Stories in Upper Sorbian (Indo-European, West Slavonic).

In the language whose grammar determines (more or less) its word order, the speaker usually produces grammatically correct sentences (using the word order determined by grammar). But sometimes he utters a sentence which may or may not fulfill the grammatical order. One case is when some sentence elements appear after completing the sentence, thus violating the grammar. Examples are tag question (as in *You read this book by tomorrow, yes?*), afterthought, detailed explanation, paraphrasing, emphasizing and so on.

My contribution will typologize the sentence elements appearing after the completion of the sentence and will try to find which elements are more frequent. It will also be pointed out that the speaker utters elements that come to mind one after another, whether it is grammatically correct or not. This study helps to understand more deeply how the nature of the cognitive (and communicative) way of text production looks like and which correlation exists between grammar and text production.