Verbs in aphasic discourse: data from the Russian Clinical Pear Stories Corpus

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Introduction

Film retelling is one of the stimulus-elicited methods of discourse sample collection.
The current study presents interim results of the verb use analysis in two aphasic groups (fluent vs non-fluent) in Russian Clinical Pear Stories Corpus (Russian CliPS)

Russian Clinical Pear Stories Corpus

Russian CliPS is a corpus of Russian "Pear stories" movie (Chafe, 1980) retellings in clinical populations.
Current state:

- 43 narratives by people with aphasia;
- 3 narratives by people with right hemisphere damage;
- 30 narratives by adult neurologically healthy controls;
- 1:26 – 18:28 min (mean ~ 5 min)
- ELAN annotation layers: transcription, lemmas, parts of speech, elementary discourse units, errors etc. – to be continued

Analysis

The two groups of people with aphasia are compared by:

- Length of narratives in minutes;
- Words per minute;

Content verb use:

- *Light* or *heavy* (Berndt et al., 1997);
- Semantic categories (Halliday, 1985): *material*, *mental*, *relational*, *verbal*, *behavioral*, or *existential*;
- Verbs referring to the *narrative plane* (the content of the film) or *narration plane* (the situation of retelling, including the interaction with the collocutor): "*I think he just stole them*" - "think" is narration, "stole" is narrative (Bergelson et al., 2014);
- Type token ratio (TTR) and verb lemma frequency (Lyashevskaya & Sharov, 2009) for all verbs, all verb lemmas, all narrative verbs and all narrative verb lemmas;
- Overall and unique verb usages are taken into account.

Participants & Procedure

- 17 participants with aphasia, 2 groups: 8 fluent (mean age = 53.4; 6 females), 9 non-fluent (mean age = 52.2; 4 females); no significant differences in severity;
- "We are investigating the ways people tell what they've seen. Please watch a short film and then retell everything you can remember, in detail";
- The participant watches the "Pear stories film";
- The second experimenter is invited;
- "This person hasn't seen the film. Please retell it in as much detail as possible, so that he could also retell the film".

Results & Conclusions

- Non-fluent group produced significantly longer (U = 9.50, p = .008) narratives with less words per minute (U = 13.00, p = .027);
- No significant differences for verb ratio per words, verb lemma frequency, TTR or light and heavy verb proportions;
- Negative correlation between TTR and verb lemma frequency for all participants, both for all (r = -.560, p = .019) and unique (r = -.592, p = .012) verb usages;
- The significance of the correlation increased when narration plane verb usages were excluded from analysis (r = -.711, p = .001 for all usages, r = .720, p = .001 for unique usages);
- No significant differences in semantic category use, although tendency for fluent group (U = 20.00, p = .056) to use more verbal predicates when *narration plane* verb usages were excluded from analysis.

1. Less verb diversity => more frequent verbs in narratives of people with aphasia, and not just due to the repetition of the high frequency verbs;
2. Differentiation between narrative and narration planes may be useful for discourse analysis in clinical populations.

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