THE LANGUAGE OF PERSPECTIVE

Variations in Viewpoint Presentation: The ‘Pear Story’ as Told by People with a Schizophrenia Diagnosis

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In this study we explore linguistic viewpoint representation by language users diagnosed with schizophrenia, a heterogenic group theorized to diverge in the way they present, or choose, perspective in both language and cognition. We collected and analyzed retellings of the “Pear Story”, addressing the building of, and navigation between, separate but interconnected mental domains by focusing on the use of a broad range of linguistic and narrative phenomena: interactive framing, evaluations, story plot construction, causal connections, reference and speech and thought representations. The results point towards great complexities and varieties in viewpoint reports and navigation between subjects, thereby shedding light on perspective-taking abilities and possible difficulties in this group of people. These findings advance research into the diverse and complex ways in which viewpoint can be represented and navigated in stories, while gaining a better understanding of how cognitive and experiential viewpoint disturbances might be expressed in non-neurotypical populations.

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Introduction

The linguistic expression of perspective is highly diverse and manifests at the morphological, lexical, syntactic and discourse level. Research on the language of perspective has demonstrated how grammatical person (subject, direct object et cetera), verb tense, connectives and perceptual verbs, among other phenomena, determine the point of view from which objects, states and events are represented (Langacker, 1987; Dancygier and Sweetser, 2012; Dancygier, Lu and Verhagen, 2016; Ikeo, 2014; Sanders and Van Krieken, 2019; Van Krieken, 2018). Narrative discourse provides a viable context to examine such phenomena because stories are characterized by a complex interplay of multiple perspectives: the perspectives of narrator, characters and (actual or implied) addressee (Dancygier, 2012). Linguistic expressions of perspective regulate the degree to which these various viewpoints are aligned in presentations of the story world, in interaction with phenomena at the narrative level, such as patterns of speech and thought representation.

In conversational stories, here defined as narratives that are told spontaneously during social interaction, the alignment between the perspectives of the speaker and the hearer is crucial in order to achieve mutual understanding about the content of the story (Habermas, 2006). According to Tannen (1982), conversational storytelling aims to achieve a subjective knowing in the listener, created by audience involvement (i.e. by being moved), as opposed to an objective knowing, created by intellectual argument (i.e. by being convinced). The way in which speakers assume an interactive frame (Tannen, 1993), ‘dress up’ their story and illustrate their point through the use of ‘evaluations’ varies between speakers that take on an external position (stepping outside the narrative events to lexicalize the point) or an internal position (making clear from the presentation of narrative content what the speaker thinks about it, and consequently what the hearer is to think) (Tannen, 1982: 4). In this literature, internal evaluation is considered a typical oral strategy, which makes for compelling storytelling. Several studies analyzing the linguistic characteristics of conversational stories have found that audience involvement is created by personalization and internalization devices such as the use of first-person pronouns, direct quotation and reports of the speaker’s mental processes (for example, see Chafe, 1980 and Tannen,
These concepts have since been adopted, tested and further developed by the field of cognitive stylistics and cognitive narratology; indeed, empirical research has pointed towards various audience effects of such devices in terms of comprehension, experienced distance, identification and empathy (Coulson and Matlock, 2001; Matlock, 2004; Van Krieken and Sanders, 2017).

Although viewpoint alignment functions are developed up to various degrees in all adults, they may be hampered in persons with perspective-taking problems at the cognitive and experiential level. In particular, people diagnosed with schizophrenia are theorized to endure intersubjective difficulties that result in, among other things, problems with perspective-taking and metacognition (for examples, see Fuchs and Röhrich, 2017; Pienkos, 2015; Lysaker and Lysaker, 2017). More specifically, people with the diagnosis are, for example, hypothesized to experience problems with grasping common sense and conventionality, having an anomalous sense of empathy and openness in which they have difficulty distinguishing between their own mind and others’ minds, in addition to feelings of paranoia and centrality and having perceptions of devitalization of others (Sass and Pienkos, 2015). In addition, several studies have found evidence for Theory of Mind difficulties in this group of people (for example, see Brüne, 2005).

Taking this into account, cognitive and experiential perspective-taking in storytelling may pose a challenge to people with a schizophrenia diagnosis because the building and understanding of complex viewpoint structures in language requires that one has at least i) a bodily experience of one’s own present viewpoint and the ability see the other as a viewpointed being, in addition to ii) the ability to project one’s present viewpoint onto others’ viewpoints in the past and future while maintaining the ability to separate these viewpoints from one another, and iii) that one also has to be able to integrate projected viewpoint structures into the actual here-and-now (Van Schuppen, Van Krieken and Sanders, 2019; Sweetser, 2008). If the above-mentioned intersubjective anomalies are indeed present in people with

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1 A more detailed account of the way in which the intersubjective phenomenology of schizophrenia may give rise to specific narrative and linguistic perspective taking difficulties can be found in Van Schuppen, Van Krieken and Sanders (2019).
a schizophrenia diagnosis, the inherent complexity of viewpoint navigation may become manifest in their narratives. This study builds on this contention through an exploratory analysis of oral film retellings by people with a schizophrenia diagnosis.

**Linguistic viewpoint in a mental health context**

Research on oral stories in the domain of mental health points towards a variety of distinctive phenomena in the linguistic representation of perspective. A study on autobiographical narratives told in psychoanalytic therapy by patients suffering from 'neurotic illnesses', for example, demonstrated how linguistic phenomena such as tense shifts and mental verbs distance the current speaker’s perspective to a greater or lesser extent from the speaker’s past perspective (Habermas, 2006). This resulted in gaps in autobiographical narratives in terms of the narrator’s stating and inducing of perspectives, and a lack of alignment between speaker and hearer, as compared to narratives told by neurotypical people. Another study found differences between the life narratives of depressed patients and non-depressed controls. Specifically, people suffering from depression were found to deviate more strongly from a linear ordering of events and employed mostly a past rather than a present perspective in telling their life stories (Habermas et al., 2008).

Focusing specifically on people with a schizophrenia diagnosis, several studies have analyzed writing samples, first person illness narratives and (clinical) interviews. Such studies found anomalies in both language production as well as comprehension (for reviews, see DeLisi, 2001 and Kuperberg, 2010, for example). Several computational studies found that the language of people with a schizophrenia diagnosis displays lower sentence complexity and coherence (for example, see Willits et al., 2018; Elvevåg et al., 2007; Saavedra, Cubero and Crawford, 2009), as well as lower narrative coherence (Allé et al., 2015; Lysaker et al., 2002; Holm, Thomsen and Bliksted, 2016), compared to the language of neurotypical people. A study of interviews with youths with high risk for psychosis showed that it is possible to accurately predict the development of psychosis by assessing the semantic coherence and syntactic marking of speech complexity (Bedi et al., 2015).
Other studies have found anomalies in the use of pronouns and other referential expressions, which both play a crucial role in narrative viewpoint navigation and pragmatics (Van Krieken, Hoeken and Sanders, 2017). Patients with ‘Formal Thought Disorder’ (FTD), a term which refers to problems in the ability to sustain coherent discourse and is one of the diagnostic criteria for schizophrenia, were for example found to display significantly more instances of ‘unclear reference’ (Rochester and Martin, 1979; Harvey, 1983; Chaika and Lambe, 1989). Referential mistakes in the use of demonstrative and personal references were also found to correlate with FTD (Barch and Berenbaum, 1996). Remarkably, word counting studies of pronoun use in schizophrenia seem to show a hybrid picture: people with a schizophrenia diagnosis were found to make more (Hong et al., 2015; Buck & Penn, 2015) or rather less (Deutsch-Link, 2016) use of self-referential pronouns (‘I’) than people without the diagnosis. Other studies found more use of the pronoun ‘you’ by people with a schizophrenia diagnosis as compared to individuals without the diagnosis (e.g. Watson et al., 2012), whereas Buck et al. (2015) found that lower social cognition measures, which are theorized to be characteristic of schizophrenia (Brüne, 2005; Langdon and Ward, 2009), were significantly correlated with less second-person pronoun use, as well as the overall use of pronouns.

The sum of these findings suggests that linguistic manifestations of perspective in stories by people diagnosed with a mental disorder tend to show atypical patterns. From the linguistic phenomena it appears that there are generic deviances regarding perspectivization, but much remains unclear about their exact (cognitive) nature and origin. Studying these linguistic phenomena and their patterns is relevant for two reasons: first, it may further advance our understanding of the language of perspective by pinpointing in what different ways successful viewpoint building and navigation in stories is achieved, and how it might go wrong. Second, it may help to gain insight into the nature of schizophrenic symptoms of perspectivization by relating linguistic to cognitive and experiential aspects of perspective (see Van Schuppen, Van Krieken and Sanders, 2019). This study attempts to attain both of these aims by analyzing a variety of viewpoint phenomena in narratives of people.
diagnosed with schizophrenia. In doing so, we apply a qualitative methodology that may be used in future quantitative studies as well.

**Viewpoint navigation and the domains of storytelling**

Stories, or narratives, are fundamental to and ubiquitous in social interaction. In narratives, speakers present historical or imaginative events and situations from the viewpoint of a particular person: a narrative subject. Narrative discourse is characterized by the interplay between two contexts: the Speech Act Domain, representing the here-and-now of the speaker and the (actual or implied) addressee, and the Narrative Domain, representing the there-and-then of the story world and its characters (Sanders, Sanders and Sweetser, 2012). Both speaker and addressee are required to continuously navigate between these two domains to mentally construct the viewpoint from which the story at each given moment is to be represented.

The meaning of deictic elements, such as *this, there, then, I, you, here, there*, depends on whether they refer to persons or objects in the Speech Act Domain or in the Narrative Domain. Consider, for example, the following sentences: (1) Come here, I have to tell you something/(2) I was shopping in a new convenience store yesterday and, looking around, I wondered ‘why are there so many pillows over here’?/(3) I asked the cashier: “Do you know anything about these pillows?” The adverb ‘here’ in (1) is to be interpreted from the situational context of the conversation in which the story is told in the here-and-now, i.e. the Speech Act Domain, while in (2) the same adverb ‘here’ is to be interpreted from the situational context of the Narrative Domain, i.e. the store. Likewise, the pronoun ‘you’ in (3) does not refer to the addressee in the Speech Act Domain but to a character in the Narrative Domain. This can be explained through a process of origo shifting: the origo (a subject in its immediate

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2 Note that the cognitive linguistic concepts of storytelling domains, and cognitive linguistics concepts of narrative in general, often share similarities with concepts studied in narratology, although the terminology may vary. For example, the classical narratological difference between ‘narrating time’ and ‘narrated time’ (Müller 1968) is similar to the cognitive linguistic difference between ‘Speech Act Domain’ (which reflects the time and place of the narrating, i.e. the narrating time) and ‘Narrative Domain’ (which reflects the time and place of the narrative events, i.e. the narrated time). As the aim of our research is to explore the relation between linguistic and cognitive perspective-taking in schizophrenia, we employ the terminology that is common in the cognitive linguistic field of research.
environment; Bühler, 1934/1982) shifts from the here-and-now of the conversation to the there-and-then of the narrated event, anchoring all deictic expressions to the time and place to which the origo has shifted (Duchan, 1995).

Distinguishing between these domains of storytelling facilitates the analysis of (problems with) viewpoint navigation in stories. In particular, the current analysis of domains of storytelling in narratives by people with a schizophrenia diagnosis aims to elucidate how perspectivization issues might manifest i) in the construction of a Narrative Domain, ii) in the maintenance of the Speech Act Domain as basis for the conversation and iii) in the navigation between the two domains (Van Schuppen, Van Krieken & Sanders, 2019). The study has an exploratory aim, explicating a range of linguistic viewpoint phenomena in retellings of a short film by people with a schizophrenia diagnosis. In doing this, specific attention will be paid to diversity between subjects and to anomalies, emphasizing the implications of these forms of perspective-taking for the relation between speaker and hearer. The film retelling format enables us to scrutinize referential phenomena and embedded perspectives, and also viewpoint phenomena at the (meta)discourse level, such as interactive framing, evaluation, story plot construction and causal coherence (Chafe, 1980). Analyzing these viewpoint phenomena in people with hypothesized perspective-taking problems allows us to demonstrate how a large range of different linguistic and narrative phenomena can be brought together under the umbrella of viewpoint navigation, and might enable future studies to be more precise in their assertions about the cognitive perspective-taking abilities of people with certain mental health diagnoses.

**Method**

For this study, 11 people with a current schizophrenia diagnosis were requested to retell the frequently applied and analyzed narrative of the 'Pear Film' (Chafe, 1980). Applying a language-eliciting audio-visual stimulus allowed us to point out similarities and differences in the way viewpoint structures are constructed and navigated between subjects.

In what follows, we will detail the role of perspective throughout different linguistic and narrative layers of structure. To facilitate this data-driven analysis,
we used various well-documented expressions of perspective as starting points and anchors. These ranged from the use of semantic and grammatical tools expressing deictic structures, such as reference, verb tense and causal connections (Fillmore 1966), to the presence of story plot elements like evaluations and character introduction (Labov and Waletzky, 1967), interactive framing (Tannen, 1993), and the narrative voice and style of narration that was employed by the speaker (Van Krieken, Hoeken and Sanders, 2017).

**The Pear Film**

Wallace Chafe, who specialized in Native American languages, was particularly interested in variations between languages and social groups. To study such variations, he developed the Pear Film in order to elicit narratives from speakers from various parts of the world and different degrees of language acquisition and social backgrounds (for full description, see Chafe, 1980). The Pear Film was intended to cover universally recognizable events and situations, and starts from the idea that there is not one ‘accurate’ or ‘right’ way to tell a story. Since there is no objective standard for the narration of a particular set of events, any story is a construal that reflects the knowledge, expectations, cultural background and stance of the narrator.

The Pear Film depicts a plot about a man who is harvesting pears from a tree and a boy on a bicycle who steals a basket of his pears. The most dramatic moment in the film is when the boy, riding off with the basket, falls, consequently spilling the pears on the ground. The film ends with the pear-picking man’s discovery that one basket of pears is missing and his observation of three boys who walk by while eating his pears. The full colour film is about six minutes long, with sound effects but no speech. The film represents, roughly, the following events:

1. A man is in a tree picking pears
2. The man polishes a pear
3. A man walks by with a goat
4. A boy arrives on his bike
5. The boy takes one pear
6. The boy takes a basket of pears
7. A girl on a bike counters the boy
8. The boy’s hat falls off
9. The boy hits a rock with his bike
10. The boy falls
11. The pears fall on the ground
12. Three boys (one of whom is playing with a ping-pong toy) help the fallen boy pick up the pears
13. The boys find the hat
14. The boys return the hat to the boy on the bicycle
15. The boy gives the three boys a pear from the basket
16. The boy rides on
17. The pear picking man finds that a basket is missing
18. The three boys pass the pear picking man with each a pear in hand

Chafe’s film contains several elements that were intended to elicit particular language use:

- a man with a goat walks by without relation to the story plot, which prompts descriptions of a background event with no later significance (event 3);
- the boy losing his hat, hitting a rock, falling off the bike and spilling the pears, intended to elicit descriptions of cause and effect (events 7–11);
- the boys using a ping-pong toy, intended to elicit descriptions of an unfamiliar object (event 12);
- the pear picking man discovering his fruit is stolen, prompting descriptions of a re-introduced character as well as descriptions of emotions and morale (event 17–18).

Approach

The Pear Story retellings were collected at the homes of the participants. Participants were asked to watch the six minute Pear Film and subsequently describe
the events in the movie to the researcher as though the latter was new to her (the researcher requested, 'please tell me about the events in the film as if I haven’t seen it'). With the informed consent of the participants, their verbal feedback was audiotaped and transcribed.

**Participants**

A total of 11 participants took part in the study. All were diagnosed with schizophrenia, but none were acutely psychotic at the time of the interview. Each participant was in contact with a treatment provider who was either a member of the Flexible Assertive Community Treatment (FACT)-team, a social psychiatric nurse, and/or a psychiatrist. All participants were native speakers of Dutch. Their ages ranged between 29 and 70 years old at the time of the interview, with an average age of 47 and a median of 50. Five of the 11 interviewees were female and six were male. The 11 participants lived in different parts of The Netherlands.

**Recruitment**

Participants were recruited via various routes. Five interviewees contacted the researcher in response to a call on a closed forum for people with a schizophrenia diagnosis, two participants were brought into contact through a mutual friend of the researcher, two participants expressed interest in taking part as a result of a public talk by the researcher, and two participants were recruited through the employee of a housing organization for protected living.

The care providers of the participants were requested to verify the diagnosis of schizophrenia in their client. This was done by sending a letter to the patient’s treatment provider(s), asking them to contact the researcher in case i) the assumed diagnosis was incorrect, ii) they were of the opinion that participation in the research would cause the participant discomfort or may worsen any symptoms, iii) they thought the participant unable to assess the consequences of their participation, iv) they were not the right person to contact in this context. None of the treatment providers objected to their client partaking in the research for any of the reasons stated above. The set of 11 interviews was a pilot to a larger interview study that will be reported in future publications. The recruitment of the participants in this study was conducted in line with a research protocol that was waived from being assessed under the Medical Research Involving Human Subjects Act (Wet Medisch-Wetenschappelijk Onderzoek met Mensen/WMO) by the Committee on Research Involving Human Subjects (Commissie Mensgebonden Onderzoek/CMO of region Arnhem-Nijmegen (file nr. 2017-4007). In addition, the protocol was ethically approved of by the Ethics Assessment Committee for the Humanities of Radboud University (file nr. 3625).
Data
After collection of the data, the audio files of the recorded Pear Stories were transcribed verbatim and divided into clauses. A clause was defined as consisting of at least one verb, together with any accompanying noun phrases connected to the verb. A few elliptic clauses had no verb, specifically in cases where the critical event of the protagonist falling on the ground and spilling the basket of pears was narrated: ‘en al die peren op de grond’ [and all those pears on the ground]. In Dutch it is possible (and not rare) to omit the use of a verb in such situational descriptions.

The subsequent analysis was conducted using the Dutch transcripts; the clauses were translated only for the purpose of reporting them in this article. In addition, all details in these clauses that could help to identify the participant as their source were omitted or altered. The 11 collected stories differed greatly in length, the shortest story consisting of 15 clauses and the longest consisting of 66 clauses. Many clauses began with the word ‘and’, and sometimes clauses began with ‘but’ or ‘so’. The retellings varied considerably in the level of detail, chronological structure, and the use of evaluative elements. All but two of the participants construed their story in the present tense. In the next sections, we will point out some of the elements that are particularly salient in terms of variations in viewpoint navigation.

1. Viewpoint construction in the retellings
In this section, we will present the findings of our analysis in terms of viewpoint construction guided by phenomena at the (meta)discourse level: interactive framing, evaluation, story plot construal and causal coherence.

Interactive Framing
Regarding the viewpoint on the narrative as a whole, some participants seemed to recount the Pear Film story in a factual, neutral manner, whereas others seemed to focus on telling the addressee an engaging narrative, containing assertions about the intentions and actions of the characters, and even personal evaluations and attempts to capture ‘the moral of the story’. These differences make sense from the perspective of the analysis of ‘interactive frames’, as introduced by Bateson (1972: 177–193) and later Goffman (1974; 1981), a term that refers to the kind of activity that people think they are engaging in when telling a story, for example, a memory
task, film review or narrating a tellable story. These frames reflect the narrator’s expectations of the interaction, the way in which she perceives her own role in the interaction and the way that she wishes to present herself, among other things. In her analysis of several Pear Stories, Tannen (1982, 1993) makes use of the concepts of the ‘film-viewer frame’ and the ‘storytelling frame’. She suggests that the participants who assume a ‘film-viewer frame’ approach the activity with the aim of correctly recounting the film as they perceived it, whereas other people take position from a viewpoint within the story, not making their role as a viewer or narrator/’recounter’ explicit, but presenting the story as an engaging narrative. This distinction between interactive frames seems at least in part culturally driven (Blackwell, 2009; Tannen and Wallat, 1987), but it is also shaped by individual preferences and backgrounds (Blackwell, 2009). In our collected stories, we made a similarly hybrid observation. Some participants seem to be occupied with providing an accurate reproduction of the events, mentioning more details, emphasizing camera angles, and thereby anchoring themselves actively to the Speech Act Domain during the entirety of the retelling (for example, see the story of participant 004 in the section ‘Illustration of interactive frames, evaluations, causal connections’), whereas others assume the here-and-now setting of the interaction to be common ground and position their narrator viewpoint more within the Narrative Domain, also including more (moral) evaluations and cultural referents (for example, see the story of participant 001 in the section ‘Illustration of interactive frames, evaluations, causal connections’) telling a story without talking about the film as a film.

**Evaluations**

With regards to viewpoint in terms of interpretations of the content of the narrative, it seems that participants greatly varied in their evaluation of specific situations and events in the Pear Film. Some of the participants deviated from the ‘facts’ in the story.\(^6\)

\(^6\) With deviating from the facts of the story, we do not wish to suggest that there is a ‘standard story’ that is the correct one. Every story is by definition a construal that is unique to the retelling’s time, place and participant. But this does not mean that there cannot be discrepancies between the events in the retold story and the film. In this paragraph we discuss those elements of the story that seem to factually be at a par with the film in such a way that a different ‘frame’ or ‘narrative voice’ does not seem able to account for the discrepancies.
For instance, several participants did not talk about pears, but about apples, and one of the participants told a story about oranges. There were also deviations regarding the description of the story events. One of the participants said, for example, that a girl was ‘looking for oranges’ (see the section ‘Story plot construction’ below for more details). In addition, there were some anomalies that were not ‘factual’, like variations in the chronology. In those cases, the narrators recounted an earlier event at a later point in the story, correcting themselves. Some participants omitted more events than others, in a few cases making it difficult for the hearer to follow the gist of the narrative.

In addition to these discrepancies, some participants posited facts, sometimes with great confidence, that were not inferable from the film, for example about the story’s setting (e.g. ‘in Mexico’), but that were not altogether impossible (the story could have been set in Mexico). In addition, some participants verbalized what the people in the film were thinking at particular points in the story. This is another example of ‘dressing up’ the story rather than factual inaccuracy. The confidence with which these facts and thoughts were added to the story at times seems to indicate a lack of distance between the narrator as interpreter and the factual events in the film. Whereas some narrators emphasized their role as detached observer (‘then you see... happening’), described above as illustrative of a ‘film-viewer frame’, others seemed to deny their own role as observer, instead telling the story as if they were present when the events in the film happened, described above as illustrative of a, rather internal, ‘storytelling frame’. The latter seemed to make more use of evaluative expressions than the former (for an example, see the analysis of the stories of participants 001 and 004 in the section ‘Illustration of interactive frames, evaluations, causal connections’).

Participants also showed large differences in the use of quotation. Labov and Waletzky (1967) explain how evaluations in the form of represented speech and thought strengthen the emotional and moral impact of the narrated events and are, as such, an essential element of interactive storytelling. Note that in the wordless Pear Film, verbal evaluations are lacking in the sense that protagonists do not explicitly state their comments on the narrative events and the protagonists’ body postures and facial expressions are relatively neutral. Nonetheless, some participants
presented elaborate character evaluations of the events, in some cases taking up large parts of their narrative; in a few cases, participants inserted protagonists’ speech or thought in the direct mode. Such speech and thought reports require the construal of an embedded Speech Act Domain, nested within the Narrative Domain. Other participants, by contrast, used no evaluative devices at all.

Thus, participants showed great differences in the amount of viewpoint navigation between the Narrative and Speech Act Domains that was required in order to adequately interpret and evaluate their version of the events and their evaluations thereof. There seems to be a broad variability in the degree to which the narrators ‘adopted’ the narrative as their own, inserting their voice and their interpretative viewpoint into the story. The extent to which they did was largely intertwined with the interactive frame that they were assuming, for example with the ‘storytelling frame’ often coinciding with an increased use of evaluative devices. In the next section, we will focus on the event structure of the narrative and its relation to viewpoint representation.

**Story plot construal**

Regarding the viewpoint on the narrative’s constitutive elements, participants showed both differences and agreement on the Pear Film’s story plot. In recounting the film to the researcher, not all participants mentioned the same events. As described above, we distinguished 18 different events in the film.\(^7\) In order to categorize the elements in the narrative structure of the oral retellings, we present a Labovian analysis (Labov and Waletzky, 1967) of the film story in Table 1. Applying categories from the oral narrative basic structure, the story plot findings can be summarized as follows.

Generally, most Pear film retellings start with an orientation in which speakers clarify the setting of the story in terms of place and time (Chafe, 1980). In the data reported here, eight of the 11 narratives start with the introduction of the man who is

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7 This is one way of dividing the events of the film. These events were selected as being the most crucial for the story through a coarse-grained narratological and Labovian analysis by an experienced narrative researcher. For a different take, see Boudreau and Chapman (2000) for example, who divided the story into 55 separate events.
picking the pears, and two start with a description of the landscape. One person starts by giving an external evaluation: a comment about how there are no judgements in the movie and nobody speaks. The orientation is followed by a ‘triggering event’, in this case the boy stealing a basket of pears, after which a series of complicating actions leads to a critical event, the ‘crux’ around which the story revolves. The critical event is followed by a resolution, during which the problem at hand is dealt with, and a coda, rounding up the story and making a connection to the here-and-now of the storytelling context.

Interestingly, not all of the participants’ stories follow a Labovian plot structure, sometimes resulting in a story line that is slightly chaotic and difficult to follow. In some cases, the orientation is, for example, very brief, whereas in others there is

| No. | Event                                      | Labovian element       |
|-----|--------------------------------------------|------------------------|
| 1   | A man is picking pears                     | Orientation            |
| 2   | The man polishes a pear                    |                        |
| 3   | A man walks by with a goat                 |                        |
| 4   | A boy arrives on his bike                  | Triggering event       |
| 5   | The boy takes one pear                     |                        |
| 6   | The boy takes a basket of pears            |                        |
| 7   | A girl on a bike counters the boy          | Complicating action    |
| 8   | The boy’s hat falls off                    |                        |
| 9   | The boy hits a rock with his bike          |                        |
| 10  | The boy falls                              | Critical event         |
| 11  | The pears fall on the ground               |                        |
| 12  | Three boys help him                        | Resolution             |
| 13  | The boys find the hat                      |                        |
| 14  | The boys return the hat                    |                        |
| 15  | The boys receive a pear                    |                        |
| 16  | The boy rides on                           |                        |
| 17  | The man looks for his basket               | Coda                   |
| 18  | The boys walk past the man, eating pears   |                        |
an alternative narrative event structure, such as in the case of participant 007 who seems to make up a new story altogether. His Pear Story is relatively short, with 15 clauses, and the girl on the bike arrives only at the end of the story, ‘also looking for oranges.’ The three boys are introduced as two children, and at the end of the story, the participant seems to conflate one of the (originally) three with the protagonist boy on the bike, stating that ‘he remains with the other two boys’. In Table 2, an overview is presented of the participants’ mentioning of the various story plot events in their retellings.

From Table 2 it becomes clear that events close to event-boundaries (Sanders, 1990), such as events 4, 7, and 12, are mentioned relatively often, as well as event 18 (the coda), which is necessary for the transition between the Narrative Domain and the Speech Act Domain. In addition, all participants mention at least one part of the story's critical event (10–11 [the boy falls and the pears are on the ground]). Nine out of 11 of these descriptions are composed of an actively phrased description of the boy's fall in the present tense (also nine of 11), after which the pears lying on the ground is passively described. Apparently, the crucial event in the story plot is relatively resistant against variation in story retelling. Yet when comparing the representations of the critical event structure with narrative-internal viewpoints, variations in the construction of causal coherence between the crucial events come to the surface.

**Causal coherence**

Regarding the narrative-internal viewpoint, participants varied in their characterization of the causal connections between crucial events in the Pear Film story. According to Chafe (1980), the falling boy and spilled pears – in Labovian terms the story’s critical event – were included in the film in order to prompt causal descriptions of events by the narrators. In the film, the causal chain leading up to the critical event can be understood as follows: the boy with the stolen basket of pears on his bicycle rides away; a girl passes the boy, which causes the boy’s hat to fall off and him being distracted, resulting in the boy hitting a stone with his bike and falling, causing the pears to fall on the ground. In narrating this chain of events, the
Table 2: Occurrence of story plot events in participants’ retellings.

| Labov category | Orientation | Triggering event | Complicating action | Critical event | Resolution | Coda |
|----------------|-------------|------------------|---------------------|---------------|------------|------|
| Event          | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Participant    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 001            | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 002            | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 003            | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 004            | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 007            | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 101            | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 102            | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 103            | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 104            | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 105            | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 106            | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| Total % of mentions | 91 | 9 | 64 | 100 | 36 | 82 | 91 | 73 | 82 | 82 | 64 | 91 | 64 | 73 | 82 | 73 | 82 | 91 |
characters’ perspectives can be presented in the story in addition to the perspective of the narrator. Consequently, two causal event chains can be discerned, one from the boy’s personal viewpoint (being distracted by the girl and by the falling hat → hitting the stone); the other from an impersonal viewpoint that registers the three crucial events as cause-consequence constellations without any involved person’s conscious action (bike hitting the stone → the boy/bike falling → the pears falling). These two causal event chains make for a comparison that is relevant in the context of viewpoint navigation. Taking into account that causal connectives communicate information about the viewpoint from which the chain of events is construed (Pit, 2003; Verhagen, 2005; Sanders, Sanders and Sweetser, 2012), and considering the fact that the critical event is mentioned in some way by all participants, analyzing the ways in which participants construe the boy’s fall might elucidate the role of viewpoint in the construal of cause-consequence sequences in narrative.

In our sample, approximately half of the participants make the causal connection between events explicit by the use of a causal connective like ‘door dat’ (‘because of the fact that’), ‘waardoor’ (which caused’), ‘dus’ (‘so’) or ‘omdat’ (‘because’), whereas the other half only describes the events chronologically without making explicit causal claims. Notably, Dutch causal connectives distinguish the causal relationship between factors in a more fine-grained way than the English language provides for. Rather than an overall causal marker like ‘because’, Dutch has a subgroup of causal connectives that construe the causal relationship as being objective, relating to the external world, like ‘door dat’ and ‘daardoor’, and a subgroup of connectives that indicate more subjective relationships like ‘want’, ‘dus’ and ‘omdat’, relating to the world of thought. The latter group of connectives might indicate that there is a certain reason for what is happening and that something is part of, or the outcome of, an epistemic or intentional process, rather than a cause-consequence chain involving an external force as explanation. Subjective and objective connectives often cannot be switched randomly without changing the meaning of what is being expressed (Pit, 2003; Verhagen, 2005; Sanders, Sanders and Sweetser, 2012), the former group locating the truth-criteria for an expression within a subject, the latter in the
relationship between objects. In what follows, we will explore some examples of the role that causal connections play in the construal of the critical event.

2. Viewpoint Representation and Speech Act Maintenance

In this section, it will be illustrated how linguistic viewpoint is represented in the Narrative Domain while maintaining the connection with the Speech Act Space. To this end, the interactive framing, evaluation and causal connections are discussed in an exploratory analysis of three story fragments from our corpus, after which we will proceed to focus on the phenomena of reference and embedded perspectives.

Consider the following excerpt of the critical event description by one of the participants.

Participant 004

a. en dan – ehm – zie je – het jongetje zie je fietsen
   and then – erm – you see – you see the boy biking
b. en dan op een gegeven moment zie je – eh een meisje op de fiets komen
   and then, at a certain point you see – er a girl coming by bike
c. en eh – die jongen en ’t meisje passeren mekaar
   and er – that boy and the girl pass each other
d. en die jongen die fietst eh eh met zijn fiets tegen een steen
   and that boy he bikes er er with his bike against a rock
e. enneh daardoor valt ’ie om
   and er because of that he falls (over)
f. enneh nou al die peren op de grond
   and er well all those pears on the ground

In this Pear Story, the narrator assumes the ‘film-viewer frame’, positioning himself as a ‘neutral’ onlooker, detached from the story world. This is notable in a few different ways. In retelling the critical event, he does not explicitly consider the viewpoint of any one of the characters, thereby ignoring the causal link between the boy and girl passing each other, the boy getting distracted by it and the boy hitting the rock. He does mention the ‘objective’ causal link between the hitting of the rock and the
boy’s fall and his pears spilling, by the use of ‘doordat’. This objective construal of causation aligns with the way in which this participant emphasizes his and the hearer’s role as distant observer through multiple uses of the phrase ‘(then) you see’ (a-b). The second person pronoun, which might simultaneously refer to his own perspective, the addressee’s perspective, and a generic perspective (Sanders, Sanders and Sweetser, 2012), signals that the speaker maintains a here-and-now viewpoint in the Speech Act Domain, grounding the story in the current interaction with the interviewer. In addition, the narrator construes the narrative in a relatively factual and detailed way, for example by mentioning the toy that one of the boys is playing with even though it has no narrative function. In this and the rest of the story, he also refrains from using any explicit evaluations or laden lexical choices like ‘stolen’. This narrator does not use epistemic modals, verbs of perception or cognition, and makes no use of direct speech or thought. He is also the only participant who, at the beginning of his narrative, explicitly mentions the position of the camera (‘eh gaat de camera naar een ander shot’/’er the camera moves to another shot’).

Another participant’s description of the same episode shows how the use of moral and non-moral evaluations, interpretations and descriptions results in a different type of story:

Participant 001

a. en daar komt een naar kennelijk een naar iemand van dezelfde leeftijd een naar persoon tegenover
   and there comes a nasty apparently a nasty someone of the same age a nasty person across
b. en eeh gooit zijn hoed d’r af
   and er throws his hat off

c. hij eh wordt daadoor afgeleid
   he er gets distracted because of that
d. rijdt tegen een steen
   rides against a rock
e. de mand met peren valt om
   the basket with pears topples
f. en eh hij krijgt daar ’n bultje of een schrammetje op z’n eh been
   and er he gets a bump there or a scratch on his er leg

g. ennn dan komen er eh –
   Annnnd then come er -

h. en die mand met peren ligt ehm omgevallen op de grond
   And that basket with pears lies erm fallen down on the ground

Note that in the retellings, speakers can insert evaluations in two respects: evaluations that they, as speakers, have regarding the film in the Speech Act Domain, and evaluations they mentalize as the narrative actor’s thoughts or utterances within the Narrative Domain of the film story. Looking at the narrative of speaker 001 as a whole, he explicitly positions himself in the Speech Act Domain by comparing the boy to a movie character in the beginning of his Pear Story, and reflects with external evaluations on the fact that the film is wordless (‘het bijzondere wat – vond ik – dat het allemaal met een soort existentiële stilte gebeurt’/’the remarkable that – I found – that it all happens in some kind of existential silence’), after which he continues narrating the story events. He also openly speculates, using internal evaluations, on the relation between the farmer and the boy, the character’s intentions and on the ‘moral of the story’ (‘en er zijn dus kennelijk nare mensen en goede mensen’/’and so there are apparently nasty people and good people’). Interestingly, this participant explicates the way in which the story supports his evaluations in a later part of the narrative and refers back to his evaluation while telling the story, intertwining his subjective viewpoint with the storyline. This narrator seems to depart from a ‘storytelling frame’ more than the narrator of the previous example. At no point in the story does he emphasize his role as a ‘viewer’ or use phrases like ‘you see’, and he does not mention any film details that have no narrative function, such as the man with the goat or the ping-pong toy.

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8 Mentalizing or mentalization is a crucial concept in developmental and clinical psychology, where it is defined as the fundamental human capacity to understand behavior in relation to mental states such as thoughts and feelings (Allen, Fonagy, and Bateman 2008). From there, it is applied in neurocognitive studies of cognitive empathy (Schnell et al. 2011).
Focusing on the construal of the critical event, we see this evaluative stance in the description of the girl as ‘naar’/’nasty’ (a). The narrator ‘fills in’ the intention of the little girl as ‘throwing off the hat’, whereas the film itself does not suggest any malicious intent on her part. This participant makes explicit that the boy hits the rock because he gets distracted, thereby making the viewpoint of the boy explicit, while construing the basket’s fall as performed by the basket itself, rather than the boy (‘de mand met peren valt om’/’the basket with pears topples’). Note that this event is construed objectively, as reflected by the objective causal connective ‘daardoor’, although he does mention that the boy is distracted. If the speaker had used ‘omdat’ or ‘want’ instead of ‘daardoor’, an internal viewpoint construal of the narrative character would have been presented (i.e., a volitional causal relation rather than a purely objectified cause).

Almost all participants make use of ‘doordat’, ‘daarom’ or ‘waardoor’, indicating that they deem an external force responsible for the causal chain that results in the pears falling. The following excerpt shows the only case of our corpus in which a speaker uses ‘omdat’/’because’ in his construal of the critical event (see clause d), which reflects that this speaker represents the chain of events from the inside viewpoint of the character.

Participant 007

a. dan komt eh dan komt eh een jongetje op de fiets langs
   then comes er then comes er a boy on a bike
b. ehhmm die moet een mandje op z’n fiets
   errmm he must have [meaning: is obliged to have] a basket on his bike
c. en dan valt ‘ie
   and then he falls
d. **omdat** ‘ie tegen een steen rijdt
   **because** he hits a rock
e. dan komt de hulp van twee andere kinderen
   then comes the help of two other children

In clause (d) ‘because he hits a rock’, ‘because’ signals that the explanation for his fall is epistemic in nature, i.e., it originates in the mind of the subject within the
Narrative Domain, reflecting a subjective construal of the causal chain. In contrast to ‘omdat’/‘because’, the use of ‘dus’/‘so’ does not signal a representation from a viewpoint within the Narrative Domain, but it signals a chain of reasoning in the mind of the speaker in the Speech Act Domain. This is exemplified in the following excerpt:

Participant 003

a. en ehh hij rijdt met zijn fiets langs een ehh vriend- een ehh meisje
   and err he rides with his bike past a err friend- a err girl
b. kijkt ie ook naar om
   he also turns to look
c. en ehh, en in zijn onoplettendheid ehh – en in zijn onoplettendheid ehh
   and err, in his inattentiveness err – and in his inattentiveness err -
d. hij heeft die eh mand voorop zijn fiets staan
   he has that basket placed on front of his bike -
e. rijdt ie tegen een steen een kei aan op de straat
   he rides against a rock a boulder on the street -
f. het is een onverharde straat
   it is an unpaved street
g. en hij komt ten val
   and he falls ['comes to fall", archaic]
h. en daar gaan al zijn peren gaan – zijn peren
   and there go all his pears go – his pears
i. die eigenlijk niet van hem zijn misschien
   that are actually not his maybe
j. en ehh die neemt ie mee
   and err he takes them with
k. die raapt ie –
   he picks them up -
l. die komen dus op straat te liggen
   so they come to lie on the street

At the end of this excerpt (h–l), the narrator shows hesitation in deciding how to continue the story, starting three different ‘trains of thought’, in clauses i–j–k,
eventually deciding in (l) ‘so they come to lie on the street’) that he needs to take
time to explain the situation before he can continue the story. At this point, he
briefly halts the expression (and experience) of passing time in the Narrative Domain
by describing the result of the causal events in the Speech Act Domain instead of
moving to the successive narrative event: picking up the pears. Catching his train of
thought, the narrator concludes the causal episode by use of the causal connective
‘dus’/‘so’, passively construing the result of the events from his own subjective
viewpoint. He can use the description of this situation as an orientation for the next
episode of the story, in which the three boys appear to help pick up the pears.

3. Viewpoint navigation between mental domains

The previous section demonstrated how different linguistic expressions of narrative
viewpoint, particularly interactive framing, evaluation, story plot construal, and
causal coherence work together in building and navigating viewpoint structures
in narrative while maintaining the connection with the Speech Act Space. Whereas
these phenomena manifest largely on a lexical level of analysis, we will now focus
specifically on the way in which reference and embedded perspectives show a variety
of patterns in viewpoint navigation between mental domains.

Reference: introducing and shifting character viewpoints

The Pear Film revolves around four central characters, or rather, narrative subjects:
the pear-picking man, the boy on the bicycle, the girl crossing on a bicycle, and the
three walking children (essentially acting as one character). In most retellings, the
introduction of these characters is – as expected (Ariel, 1991) – established by means
of an indefinite reference (“a man”, “a boy”), in some cases accompanied by descriptive
details (“a man with a moustache”). The girl, who merely passes by in the film, seems
to represent a more problematic introduction, since two narrators do not mention her
at all. In addition, four participants introduce her not as a girl but as “a nasty person”
(001), “someone else” (002), “an Indian” (007) or “someone coming the other way” (105).

The re-introduction of the boy on the bike after the other boys find his hat stands
out as well. In two cases, a reference is missing (for example in 106: “a few boys who
helped him took the apples, and eh – rode on”), whereas in three other cases, a
pronoun is used while a full noun would have been more appropriate (105: “then there were three children in the neighbourhood who helped him pick up his stuff and his bike and hat and then he gave them three pears”) (Prince, 1981; Ariel, 1991). Note, in addition, how the use of ‘dan/then’ expresses a temporal connection that enables the introduction of a new character; this can be seen in clauses (a) and (e) of the excerpt from 007 that was discussed above, where then demarcates the entrance of ‘a boy’, and ‘two other children’, respectively:

Participant 007

a. dan komt eh dan komt eh een jongetje op de fiets langs
then comes er then comes er a boy on a bike
b. ehhmm die moet een mandje op z’n fiets
errmm he must have [meaning: is obliged to have] a basket on his bike
c. en dan valt ‘ie
and then he falls
d. omdat ie tegen een steen rijdt
because he hits a rock
e. dan komt de hulp van twee andere kinderen
then comes the help of two other children

The temporal connective puts more emphasis on the succession of events than on the causal connectivity between them, and in fact represents an episode shift which indicates a shift in narrative time, place and/or person which often coincides with a viewpoint shift (Duchan, Meth and Waltzman, 1992; Sanders, 1990).

It is important that the speaker teases apart the different subjects in the sentence, to whom different actions and acts of direct speech or thought can be anchored. In re-telling the Pear Story, one of the most complicated parts with regards to the differentiation of the characters is a part where three boys help the protagonist to pick up the pears that fell out of the basket on his bike after a fall. Eight out of 11 of the participants are able to do this, making use of then, singular and plural construal and (possessive) pronouns, sometimes alternated with the introductory terms in order to clarify. Consider for example the following excerpt:
Participant 101

a. en eh hij gevallen
   *and er he fell [literally: ‘fallen’]*

b. en er waren *dan* drie jongens
   *And then there were three boys*

c. en die hielpen hem overeind
   *And they helped him up*

d. en die deden de peren er weer in de mand
   *And they put the pears *eh back into the basket*

e. en *toen* ehm reed ‘ie weer verder op z’n fiets
   *And then* erm he drove on on *his bike*

f. en toen floten ze hem terug
   *And then they whistled at him to come back*

g. en *toen zeiden* ze van
   *And then* they *said* like

h. je hoed ligt hier
   *Your hat lies here*

i. en *toen* gaven ze die hoed terug
   *And then* they *returned that hat*

j. en *toen* kregen die drie jongens *eh* ieder een peer van hem
   *And then* the three boys *er each received a pear from him*

k. en *toen* ging hij weer verder
   *And then* he went on

This is an example of successful navigation between multiple narrative subjects through the use of additive temporal connections (‘and’ & ‘then’), as well as plural versus singular references. Note that the viewpoint in this re-telling lies within the Narrative Domain, skillfully enlivened with a narrative-internal evaluation in (h) in the form of a reconstructed direct speech representation.

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* This kind of omission of the finite verb is common in Dutch speech.
However, in other cases, such navigation did not go well; sometimes, *then* is not helpful in demarcating episode and viewpoint shifts. Consider for example the following clauses:

Participant 001

a. en eh *dan vinden die jongens*
   *and er then those boys find*

b. terwijl *die jongetje* wegfiets
   *while that little boy bikes away*

c. *vindt die* z’n hoed nog
   *also he finds* his hat

d. *geeft* die hoed
   *gives that hat*

e. eh *geven die hoed terug*
   *er give that hat back*

f. en in ruil *krijgen ze* ieder een peer eh als dankjewel
   *and in return they each get a pear as a thank you*

Typical in this excerpt is that the speaker has difficulty in navigating between subjective viewpoints within the narrative. He mistakenly states that the boy *finds* his hat (clause c), and *gives* the hat (clause d). Having arrived at that point in the retelling, the participant realizes that it is the *group* of boys who return the hat, which leads to the correction *give* the hat (clause e, lit.: *give back* the hat). Subsequently it is *they* who *receive* a pear (clause f), thus completing the now successful viewpoint transfer to another narrative subject.

Problems in navigating between subjective viewpoints are even more severe in the following excerpt:

Participant 002

a. ehhhh op een gegeven moment eh komt er *een jongetje* langs
   *errr at some point er a little boy passes by*

b. en *die* gaat *volgens mij* ook met een mand met peren eh op de fiets
   *and he goes I think also with a basket with pears er on the bike*
c. en d'r komt een ander tegen – een ander iemand met de fiets
   *and there meets another – another someone with the bike*

d. en z’n – z’n hoed eh wordt
   *and his – his hat er gets*

e. door- doordat iemand langs komt rijden
   *because of the fact that someone comes riding by*

f. wordt z’n hoed wordt – gaat af – valt af
   *gets his hat gets – gets off – falls of*

g. en die ander die eh valt daardoor op de grond met al z’n peren
   *and that other that er falls because of that on the ground with all his pears*

h. en eh of hij valt dan op de grond met al z’n peren
   *and er or he then falls on the ground with all his pears*

i. dat jongetje helpt hem weer om alles bij elkaar te doen
   *that little boy helps him put everything together again*

j. nee..eh ja.. d'r komen nog wat andere kinderen inderdaad
   *no.. er yes.. there come some other children indeed*

k. ehhhh – ja die andere kinderen helpen hem volgens mij – een groepje
   *ehhh – yes those other children help him I think – a group of children – to er
   move on again*

l. en op een gegeven moment komt het groepje weer langs die man die aan ‘t
   *and at some point the small group passes by that man again who is picking pears*

In (a), a boy passes by (viewpoint lies with pear picking man); in (b–c) the viewpoint
lies with the boy on the bike, who meets someone else; in (e) again someone comes
passing by, the viewpoint is again with the boy on the bike. In (f), the speaker
finds it difficult to express causality in the falling of the hat, it is (thrown off?)
– goes off – falls off; in (g) the viewpoint is, by indicating the boy on the bike as
“this other (one)”, positioned with the person passing by; which is repaired in (h)
by “er or he is falling”, indicating that the speaker realizes that the boy on the bike
should be perspectivizing subject at the critical event. In (i), again the speaker has
difficulty in differentiating between the various characters and their viewpoints:
“that little boy” is not the boy on the bike, but one of the group of boys. This is repaired in (j-k). The problems in manifesting and representing viewpoints are explicitly addressed in the Speech Act Domain: “I think” (lit. according to me) in clauses (b) and (k), and by confirmation of the referential repair in (j): “indeed”.

**Embedded perspectives**

Because the Pear Story is a wordless movie that has no voice-over or any other form of verbal cues, viewers completely rely on their inferences – fed by nonverbal cues, bodily posture, and common knowledge – about the mental states of the characters in order to understand their intentions and actions. Indeed, the retellings of the Pear Story show that narrators sometimes include several of such inferences. Often they are presented in the form of embedded perspectives that explain the story plot to the unknowing conversational partner. These embedded perspectives are interesting because they are not (explicitly) part of the story itself but created in the mind of the narrator and added to the story during the retelling. As such, these perspectives provide insight into the process of aligning the viewpoints of narrator, characters, and addressee. Consider for example the following excerpt, in which the participant narrates about the boy stealing the pears:

Participant 101

a. en die **ziert** die peren daar
   
   *and he sees those pears over there*

b. terwijl hij in die boom zit
   
   *while he is sitting in that tree*

c. en dan neemt ie eh... eh...
   
   *and then he takes er... er...*

d. eerst **dacht** ‘ie
   
   *first he thought*

e. *ik neem er eentje mee
   
   *I take one*

f. en toen **dacht** ‘ie
   
   *and then he thought*

g. *nah nee ik neem de hele mand mee
   
   *nah no I take the entire basket*
In (a), the narrator embeds the perspective of the boy through the use of the perceptual verb *sees*. He aligns his viewpoint with the character’s viewpoint, and thus invites the addressee to take on this viewpoint as well, which is substantiated by the distal demonstrative *those* and the distal spatial adverb *over there*. The narrator then moves on to describe the pear theft from an external perspective (c) but restarts this description from an internal perspective in (d). This internal perspective is established by two consecutive direct thoughts (e and g). Note that in (b), the pronoun *he* (hij) refers to the man while in (c, d and f), the pronoun *he* (Dutch: ‘*ie*’, a reduced conversational form of *he*) refers to the boy. Use of the same pronominal reference to refer to two different referents causes ambiguity (for examples, see Ariel, 1988; Ariel, 1991); in this specific case, it can be considered as a lack of clear viewpoint distinction within the Narrative Domain.

The following excerpt shows a similar narration strategy, in which the narrator first embeds the character’s perspective by means of the perceptual verb *sees* (a) in combination with the distal spatial adverb *there*. Note that in this case the character’s perspective is further elaborated by inclusion of the adjective *nice*.

Participant 003

1. en die *zie*t daar ehh lekker fruit staan
   *and he sees err nice fruit over there*
2. en die neemt niet een eh peertje d’r van
   *and he does not take er one little pear of it*
3. maar die *denkt van*
   *but he thinks like*
4. *ik kan wel die hele mand*
   *I can [...] the entire basket*
5. *want* er staan drie manden – twee manden – volle manden met peren – en nog een lege mand
   *because [for] there are three baskets – two baskets, baskets full with pears – and another empty basket*
6. en die eh *probeer*t ie ehh te gappen
   *and er which he *tries* to er steal*
The direct thought in (d) is incomplete: a main verb is missing. In Dutch, this verb would be the final word of the sentence, so it appears that the narrator does not finish the sentence in order to explain the content of the direct thought (d) in the subsequent sentence (e). Thus, the narrator adds an element to the story that is not part of the original story and then realizes that this addition requires an explanation for the addressee to understand it. Notably, in providing this explanation, the narrator switches from the internal perspective of the boy within the Narrative Domain to his own perspective in the Speech Act Domain, which is indicated by the subjective connective want (‘because’; see Sanders, Sanders and Sweetser, 2012).

Next to direct thought reports, several direct speech reports are included in the story retellings. Consider for example the following excerpts:

Participant 101

a. en toen zeiden ze van
   *and then they said like*

b. je hoed ligt hier
   *your hat lies here*

c. en toen gaven ze die hoed terug
   *and then they gave that hat back*

Participant 106

a. en die meneer zei
   *and that man said*

b. waar [zijn?] me appels
   *where [are?] my apples*

c. en ehm die jongens liepen gewoon langs
   *and erm those boys just walked by*

d. en de appels en de mand was weg
   *and the apples and basket were [literally 'was'] gone*

In both cases quoted above, the main function of the embedded direct speech reports appears to be to enliven the story; the information expressed in the speech
reports is not essential to the plot of the story and to the explanation of the plot to the addressee, and the quoted words are never actually uttered in the wordless film.

This function of enlivening by evaluations is also seen in the following excerpt, which includes a hypothetical speech report, i.e., speech that the narrator says could have been uttered in the story, but was not actually uttered:

Participant 001

a. Het is een beetje een truttig filmpje
   *It is a bit of a dowdy movie*

b. Eh de moraal van het verhaal is
   *The story's moral is*

c. Goede daden worden beloond
   *Good deeds will be rewarded*

d. Maar kunnen ook uit zichzelf voortkomen
   *But they can also can come about out of themselves*

e. Zonder dat daar een beloning tegenover staat
   *Without that being rewarded in return*

f. dus die drie jongens hebben niet gevraagd
   *so those three boys have not asked*

   mogen wij een peer
   *can we have a pear*

h. omdat we je geholpen hebben
   *because we have helped you*

i. Persoonlijk gewin was niet hun uitgangspunt
   *Personal gain was not their point of departure*

j. En er zijn dus kennelijk nare mensen en goede mensen
   *And so there are apparently nasty people and good people*

k. En goede mensen helpen elkaar
   *And good people help each other*

l. En nare mensen zitten elkaar dwars
   *And nasty people bother each other*

m. Dat is de moraal van het verhaal- zoiets
   *That is the moral of the story – something like that*
In this specific case, however, the speech report (evaluations in clauses g–h) also functions to explain the behaviour of the boys within the Narrative Domain to the addressee, and thus contributes to the evaluations about the movie and its message (clauses a–e). Here, the rhetoric message of the speaker is elaborated from the viewpoint within the Speech Act Domain, signalled by the subjective connective *dus* in clause (f), summarized in an narrative-internal evaluation from the viewpoint of the boys in clause (i) (“Personal gain was not their point of departure”), skilfully closed, as a coda, with a conclusion on the film story’s morale in clauses (j–m) from the viewpoint in the Speech Act Domain which is signalled again by the subjective connective *dus* (‘so’).

**Conclusion**

In this study, we explored the language of perspective in a large range of narrative and linguistic phenomena in story retellings by people diagnosed with schizophrenia. We have scrutinized the role of perspective throughout different linguistic and narrative layers of analysis with the help of a conceptual viewpoint model that allows for the analysis of referential structure through a distinction between a Speech Act Domain and a Narrative Domain. In-depth analyses of interactive framing, evaluations, story plot construction, causal connections, reference, and embedded speech and thought reports showed that the ways in which viewpoints are represented vary greatly between the subjects in this group of participants, although the crucial event in the story plot appeared rather resistant against variation in both event structure and in narrative-internal viewpoint.

The participants showed substantial variety in the interactive frames they assumed, indicating differences in the expectations they had of the interaction and the distance at which they positioned themselves as a narrator with regards to the film. There were also differences in the number of shifts between Narrative Domain and Speech Act Domain. Whereas some participants hardly gave any comment or evaluation from their subjective here-and-now viewpoint, others extensively elaborated on their vision on the movie as medium and as a message-carrier, smoothly navigating between Narrative and Speech Act Domains. The great variety in the use of linguistic and narrative devices such as causal and temporal connectives,
references, and speech and thought reports illustrate the diverse ways in which the participants navigate between these domains.

This navigation was shown to be more or less successful, both across and within participants. In some cases, for example, the construal of the story plot made the narrative hard to follow for the hearer. Moreover, it was found that speakers were not always able to successfully distinguish between the viewpoints of the various narrative characters in the Narrative Domain. This might reflect a specific kind of Narrative Domain projection disturbance (Van Schuppen, Van Krieken and Sanders, 2019), in which a speaker has difficulty in representing there-and-then viewpoints and separating those viewpoints from one another as well as from here-and-now viewpoints. Such a disturbance might in some cases indicate a cognitive problem with one's ability to acknowledge other people's perspectives and experience them as 'minded' (see Goldie, 2007).

At the same time, distinguishing between the perspectives of speaker and hearer in the Speech Act Domain was found to be unproblematic for the participants, signalling an unhampered ability to distinguish between their own viewpoint and that of other physically present persons. As such, our analysis sheds some light on the potential nature of perspective-taking difficulties in people diagnosed with schizophrenia: such difficulties may arise while imagining the (for example past or imagined) perspectives of absent others, but need not arise while taking the perspectives of present others. This suggestion offers refined input for future studies testing the cognitive perspective-taking abilities of people diagnosed with schizophrenia.

In conclusion, our analysis shows that the distinction between storytelling domains enables us to describe and distinguish viewpoint navigations in (non-neurotypical) narrative language use, which might help future studies to shed light on perspective-taking problems in relevant populations. In addition, we showed how viewpoint phenomena work together throughout different linguistic layers of analysis in narrative discourse, enabling the successful presentation of complex constellations of perspective in stories. As a result, the use of linguistic and narrative viewpoint analysis demonstrates the richness and variety of viewpoint phenomena, offering a set of leads towards the development of a typology of anomalous or hampered perspective-taking abilities.
Future quantitative studies employing similar analyses might be able to identify patterns and difficulties in viewpoint navigation through comparisons between the (guided) narratives of people with and without a schizophrenia diagnosis. Current phenomenological theory on schizophrenia hypothesizes that disturbances in perspective-taking, Theory of Mind (ToM) and/or metacognition are foundational for the disorder (for examples, see Fuchs and Röhrich, 2017; Pienkos, 2015), giving rise to delusions, hallucinations and other symptoms. This hypothesis is supported by empirical evidence (see Brüne, 2005; Langdon and Ward, 2009), although there are also indications that these intersubjective processes might be more peripheral to the disorder (see Cardella, 2017: 53–63, for example). A systematic analysis of viewpoint in guided stories might be able to tell us more about this dispute, since viewpoint in language is thought to be indicative of viewpoint in cognition as well (Zimmerer et al., 2017; Hinzen and Rosselló, 2015). Research in this direction has the potential to clarify whether storytelling difficulties can, for example, be explained by problems in navigating between characters as subjects in a story, in verbalizing the speaker’s own narrative viewpoints in a re-telling, or in taking into account the perspective of the physically present hearer, pointing towards possibly different modes of perspective-taking (Van Schuppen, Van Krieken and Sanders, 2019). Following this line of reasoning, these kind of studies might help to develop empirical tests or theories on perspective-taking in general, and maybe even shed some light on the current debate in the philosophy of mind on the pluralistic nature of Theory of Mind and the amount of explicit and implicit perspective-taking that it involves (see Gallagher, 2015 and Andrews, 2008, among others). In this way, we anticipate that a fine-grained and systematic analysis of the diversity and richness of viewpoint phenomena in the language of stories might help to emphasize the subtle and diverse nature of perspective-taking and linguistic intersubjective processes.

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Competing Interests
The authors have no competing interests to declare.

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