

In Search of the Narrator

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Abstract: The paper proposes a semantic analysis of narrators in fiction. It addresses three main issues: (a) In fiction, we cannot rely on reality to determine the identity of the narrator, (b) there are linguistic items beyond pronouns to introduce a narrator, (c) narrators can be unreliable. I propose a way how narrators in fiction can be modelled by discourse referents (DR) in dynamic semantics. At the core of the analysis is the assumption that hearers derive the *subjective meaning* of an utterance by taking into account all contexts *c* that could possibly be the context they are in. Combined with dynamic semantics, this captures the intuition that a narrator can at the same time be unique (as a referent) and indefinite (as a person). Different types of narrator introduction are surveyed: Apart from first person pronouns, speaker-oriented items like exclamation marks, questions, (some) evidentials and more trigger the accommodation of a narrator DR. Other items *can* refer to the narrator DR but don't *have to*, among them predicates of personal taste. Finally, the analysis is extended to unreliable narrators and narrations about humanless worlds.

Key words: *dynamic semantics, indexicals, speaker-oriented items, world of fiction, subjective interpretation, context, unreliable narrator*

1. Aims and questions

Does every story of fiction have a narrator?

Two major answers have been proposed in the literature. Defendants of the *pan-narrator view* argue that tense relates the sentence content to an indexical time point. This time point is plausibly perceived as the *utterance time*. Therefore every tensed clause in a story refers to an utterance via tense. Where there is an utterance, there must be a speaker. This speaker can be construed as the narrator (Friedemann 1910, Kayser 1961, Stanzl 1989, Zipfel 2015; Zucchi, pres. vol.). Hence every story has a narrator. Further support for the pan-narrator view derives from the observation that every story, phrased in its own particular way, presupposes that someone chose those particular words to report on particular events in a particular way. While the actual word choice is, of course, the author's, it is inadequate to assume that the author is telling the story, even ficticiously. Most authors emphasize that they as individuals can not be held responsible for the feelings, opinions, and attitudes that are implied by the narrative, not even as play-acting. Hence, it is argued, there must always be some narrator who is the ficticious carrier of opinions and attitudes.

Defendants of the *optional-narrator view* point out that the presence of a narrator should be assumed only if the story indeed creates the fiction that someone is telling it. This fiction is obvious in the case of first person narrations but can also be supported by other textual features. Whenever a story does not support the narrator

fiction, we should abstain from stipulating a narrator the presence of which is not part of the fiction created (Hamburger 1957, Kania 2005, Wartenberg 2007, Köppe+Stühling 2011, 2015).

The present paper aims to provide a *semantic answer* to the question. Taking dynamic semantics as my starting point, I propose that to be part of a story is to be represented by a discourse referent in the story's discourse representation structure. The present paper integrates Kaplan's and Stalnaker's context theory with (a lean version of) dynamic semantics. This allows us to integrate narrator and story content (Kaplan 1989, Stalnaker 1999, 2002, 2014). Siding with the *optional-narrator* view, I argue that a narrator must be introduced by a linguistic expression. This can be the pronoun *I*, but suitable speaker-oriented items can also serve to introduce a narrator. The paper addresses the following issues:

- The fiction of a narrator: The narrator can be introduced by first person pronouns, but other expressions can likewise create the fiction of a narrator. Which ones do, and how do they introduce or refer to the narrator?
- The unknown narrator: Some stories introduce a narrator but leave his identity unresolved – many persons could figure as the possible narrator. How can we capture unknown narrators?
- The unreliable narrator: In some fiction, we don't simply equate the story told by the narrator with the content of the story. How can we account for this observation?

The paper is structured as follows. Section 2 provides a small and non-exhaustive sample of story types to illustrate the phenomena listed above. Section 3 introduces Kaplan's characters and discusses the meanings of utterances in situations where the speaker or addressee of an utterance are unknown. I introduce subjective utterance meanings to model the meaning of utterances *S for a hearer* who lacks full information about the situation. Subjective meanings in real life communication may look superfluous, as a theory of utterance meanings can always be cast in terms of objective meanings. However when we interpret sentences as parts of fiction, the interpretation can only be subjective, as no outer reality will determine the identity of the narrator. Therefore subjective meanings are mandatory in the interpretation of fiction. The present account models how the reader integrates the literal content of the story and the set of possible utterance contexts into a subjective semantic representation of the story. Section 4 develops a light version of dynamic semantics, and integrates subjective interpretation. This allows us to trace the introduction of a discourse referent for the narrator. The framework can be applied not only in discourse about the real world but also in the interpretation of fiction, as discussed in Section 5. Section 6 discusses in more detail how the narrator discourse referent is established and identified, and which items can refer back to the narrator referent.

Section 7 tackles the case of unreliable narrators and offers first thoughts about stories told about humanless worlds. Section 8 concludes.¹

2. A typology of stories

The most obvious case of a narrator is presented by first person narrators who also figure as a protagonist in the story. *Robinson Crusoe* is a textbook case of this type.

I was born in the year 1632, in the city of York, of a good family, though not of that country, my father being a foreigner of Bremen, who settled first at Hull. He got a good estate by merchandise, and leaving off his trade, lived afterwards at York, from whence he had married my mother, whose relations were named Robinson, a very good family in that country, and from whom I was called Robinson Kreutznaer; but, by the usual corruption of words in England, we are now called - nay we call ourselves and write our name - Crusoe; and so my companions always called me.

(Daniel Defoe: *Robinson Crusoe*. Chapter 1)

Defoe actually adopted the name and dates of a real person to bring the novel as closely to real world as possible. Nevertheless, it is clear that the novel is not about the real person Robinson Crusoe but about a fictitious individual, as argued by Lewis (1978). For instance, the fictitious Robinson writes a diary while the real person did not, and it would be inappropriate to say that “Defoe falsely claimed that RC wrote a diary”.

A slightly different constellation is exemplified in Erich Kästner’s *Lisa and Lottie*. A first person narrator introduces himself at the very beginning, yet is not part of the story.

Do you know Seebühl, by any chance? The mountain village Seebühl? Seebühl on-the-lake? No? Strange – nobody you ask happens to know Seebühl! Possibly, Seebühl is one of the places that is known only to people you never ask? I wouldn’t be surprised. Such things happen.

(Erich Kästner: *Lisa and Lottie*, transl. RE. Chapter 1)

As the narrator even addresses the reader “you”, both are part of the fictitious situation of story-telling. And as the book is supposed to talk to every possible reader alike, it is clear that there is no unique single addressee that could be intended by the text. The narrator takes a journalist stance; he describes cities, places, events and persons in ways that either fit reality (Munich, Vienna) or that could indeed plausibly have happened in the real world. Yet, the narrator cannot be an eye witness, as he

¹ The present paper builds on ideas that were first presented for an interdisciplinary readership in Eckardt 2015. The former paper lacks the formal analysis that is spelled out here.

offers detailed reports of cotemporal events in different locations. Finally, while the main plot is realistic there are also passages of poetic content that are obviously not supposed to be literally true in the world of fiction.

The moon glimpses into the dormitory through its big window and is staggered. Two little girls lie next to each other and do not dare look at each other, and the one who has just been crying is now shyly reaching for the caressing hand of the other. "Oh well," says the moon, "looks like I can set in peace." Which it then does.

(Erich Kästner, *Lisa and Lottie*, transl. RE. Chapter 2)

While fictional worlds with talking moons are not per se impossible, the world of *Lisa and Lottie* is not a world with magic or supernatural entities. To the contrary, it is very much a sober adult world in which the twin girls struggle to reunite their divorced parents. It is hence more plausible that the narrator is unreliable at such small points, as if to say: wouldn't it be consoling to *believe* that good ol' moon or other deities guarded little children, even though we all know they do not?

A much more inobtrusive narrator is exhibited in Knut Hamsun's *Growth of the Soil*. While no first person pronouns refer to the narrator, many passages reveal a commenting narrator who expresses attitudes about protagonists and events.

The long, long road over the moors and up into the forest — who trod it into being first of all? Man, a human being, the first that came here. There was no path before he came. Afterward, some beast or other, following the faint tracks over marsh and moorland, wearing them deeper; after these some Lapp gained scent of the path, and took that way from field to field, looking into his reindeer.

(Knut Hamsun: *Growth of the Soil*. Chapter 1)

(The main protagonist Isak has settled with a woman, Inger. After a small quarrel he wants to impress her.) *Isak came home in the evening, hauling a huge trunk by a rope. Oh that simple and innocent Isak, he made all the noise he could with his tree-trunk, and coughed and hemmed, all for her to come out and wonder at him. And sure enough: "Why, you're out of your senses," said Inger when she came out.*

(Knut Hamsun: *Growth of the Soil*. Chapter 1)

The questions at the very beginning of the book suggest that a narrator addresses readers, asking them to focus their imagination on small pathways into the wilderness. Even more clearly, the second passage illustrates how the narrator voices emotions with exclamatives ('*Oh that simple and innocent Isak*'), comments on behavior that the protagonist himself adopts instinctively in order to impress Inger ('*he made all the*

noise he could)² and expresses a feeling of success when Inger reacts to Isak's performance (*And sure enough ...*). The last sentence also proves that we do not see free indirect thought of Inger, as this reading would contradict her being impressed in the end.

Finally, there are stories that never show any trace of a narrating persona. While the complete absence of cues cannot be proved by a small passage, Evelyn Waugh's *The loved one* illustrates how protagonists and events are reported on almost like in a screenplay.

Sir Francis, in prime middle-age, was then the only knight in Hollywood, the doyen of English society, chief script-writer in Megalopolitan Pictures and President of the Cricket Club.

(Evelyn Waugh: *The loved one*. Chapter 1)

The novel continues to report on people and events in a way that never reveals any trace of a narrator's attitudes or emotions. The wording mimicks a screenplay's uninvolved instructions for actors on the set, and was in fact inspired by a stay at Hollywood in the company of script-writers.

The present paper investigates the semantic contribution of first person pronouns and other narrator cues to the meaning of assertive discourse and fiction.

3. Context and subjective interpretation

This section discusses the meaning of indexicals, specifically in situations where the interpreter/hearer doesn't know who is speaking. 3.1 recapitulates Kaplan's context theory and illustrates the interpretation of utterances with unknown speaker. 3.2 briefly discusses and dismisses *diagonalization* as a possible way to capture unknown speakers. 3.3 proposes that the subjective meaning of an utterance for reader R arises by forming the union over interpretations in all contexts c that R holds as possible. This core idea will be merged with dynamic semantics in Section 4 below.

3.1 Context in static semantics

Our point of departure is Kaplan's two-dimensional account of context-dependent meaning (Kaplan 1989, Zimmemann 2011, Schlenker 2011, 2018). We assume a set C of utterance contexts and functions sp , ad , loc , $time$, $world$ with domain C and the ranges D_e (the set of entities, including persons and places), D_{time} (the set of times), and D_s (the set of possible worlds), respectively. For all $c \in C$

$sp(c)$ = the speaker in c

$ad(c)$ = the addressee in c

$loc(c)$ = the place of c

$time(c)$ = the time of c

² Simple and innocent Isak, like many of Hamsun's protagonists, is anything but a cunning lover.

$world(c)$ = the world in which c is situated

I leave it open for now whether contexts are situations and as such parts of worlds (Stalnaker 2014: 14), whether they are centered worlds (Lewis 1980) or whether contexts should be equated with speech events (Eckardt 2015).

Kaplan proposes that sentences S denote a *character*, a function that maps each given context c to the proposition expressed by S as uttered in c . Following established practice in truth conditional semantics, propositions are modelled as sets of possible worlds.³ In order to understand the interpretation of narrator indexicals in fiction, we must first look at how hearers interpret sentences in a context that is not fully specified. Of particular interest are contexts where the speaker is unknown. Imagine a situation where hearer R receives a phone call and hears a voice utter (1).

(1) *I am the father or the brother of Peter.*

This is the character of (1), where P = Peter.

(2) $\lambda c \lambda w [\text{FATHER}(sp(c), P, w) \vee \text{BROTHER}(sp(c), P, w)]$

In the real world, the utterance context c is fully specified. Hence, if R knew this utterance context she could derive the proposition expressed. In a specific context c_5 , the speaker $sp(c_5)$ would be a fixed person and (1) would convey the following proposition.

(3) $\lambda w [\text{FATHER}(sp(c_5), P, w) \vee \text{BROTHER}(sp(c_5), P, w)]$

The proposition is about the fixed person $sp(c_5)$ and includes both worlds where $sp(c_5)$ is father or brother of Peter. These worlds must probably be pretty different in other respects: Peter's family history must be adjusted as well, to allow for the same person to be Peter's father, or Peter's brother. (E.g., Peter must have a very young father, or a very old sibling.)

Intuitively, however, the ambiguity of the described situation (1) doesn't concern the family history of Peter. R is ignorant as to who is calling but understands that $sp(c_5)$ is one of two real persons, the father of Peter or the brother of Peter. So we'd expect a proposition about two different people, which includes worlds where one or the other is speaking but which are otherwise fairly similar. At least they do not require any changes in Peter's family history. If we rest the interpretation of (1) on a single utterance context c_5 we predict the proposition in (3), but are unable to explain how (1) can be about two different persons.

In order to compute the information conveyed by sentences S in situations like (1), authors propose to resort to *diagonalization* (Stalnaker 1978, Zimmermann 1991, 2012, Haas-Spohn 1995). Specifically, Zimmermann assumes that we equate the

³ A set of worlds p will be equated with its characteristic function $D_p \rightarrow \{0,1\}$ which maps a world w to 1 iff $w \in p$. Propositions are thus of type $\langle s,t \rangle$, as truth value semantics standardly assumes.

context c with the world about which the sentence is asserted ($world(c)$). The information of (1) in unknown context c can then be rendered as in (4).

$$(4) \quad \lambda c [\text{FATHER}(sp(c), P, c) \vee \text{BROTHER}(sp(c), P, c)]$$

This can be paraphrased as “we are in a context/world where the speaker is the father of Peter in that context/world or the brother of Peter in that context/world”. The proposed identification of context and world may look surprising, but is in fact necessitated in order to maintain the basic assumptions that (a) all propositions are of the same logical type and (b) are sets of possible worlds. The parameter c in (4) plays a double role; it both serves as context (and thus defines the speaker) as well as a possible world (and thus defines a proposition).⁴

3.2 *Diagonalization: good, but not good enough*

Diagonalization can explain the trivial readings of utterances like ‘I am here now’, in the sense of “the speaker is at the place of utterance at the time of utterance”. It is however open whether diagonals are a suitable means to capture the content of extended texts, be it assertive or fictional. The present section takes a closer look at how diagonals and propositions can be reconciled. After restating the basic problem, I report on von Stechow+Zimmermann’s (2005) ideas to solve this problem and point out potential problems.

Here is the basic problem again. Kaplan’s two-dimensional semantics keeps the domain of contexts C distinct from the domain of possible worlds D_s . When we make use of diagonalization, we predict that utterance meanings are sets of contexts, instead of sets of possible worlds. We therefore have to explicate how the set of contexts can be part of the set of worlds, i.e., $C \subset D_s$.

Several authors assume that propositions should be modelled as sets of indices rather than sets of worlds. Indices are more fine-grained than worlds (von Stechow+Zimmermann 2005, Ninan 2010, Stalnaker 2014). For our purposes, indices should be isomorphic to tuples $\langle s, a, l, t, w \rangle$ of speaker, addressee, location, time and worlds. Propositions, then, could be viewed as sets of indices and are thus tantamount to sets of tuples $\{ \langle s, a, l, t, w \rangle : \dots \}$. The denotation of a sentence S could then be modelled as the set of all $\langle s, a, l, t, w \rangle$ such that S is true, if uttered in that world by the speaker to the addressee at the given time and place. Sentence (4) would turn out as follows, where ι ranges over indices.

$$(5) \quad \lambda \iota [\text{FATHER}(sp(\iota), P, world(\iota)) \vee \text{BROTHER}(sp(\iota), P, world(\iota))]$$

⁴ A reviewer suggests to use $\lambda c [\text{FATHER}(sp(c), P, world(c)) \vee \text{BROTHER}(sp(c), P, world(c))]$ instead. This would make it necessary to rethink the basic assumptions of formal semantics and consider two types of propositions, those that are sets of worlds, and those that are sets of contexts. The proposal was never discussed in the literature and I believe that authors aimed to avoid this complication.

This set of indices ι can include those with Peter's actual father as the speaker, as well as those with Peter's actual brother as the speaker. We thus can capture the intuition that (1) is about two possible speakers, not about one person who might stand in different family relations to Peter.

However, this strategy gives rise to new issues. Imagine that (1) is uttered to different hearers R1 and R2. Assume that both correctly understand that they are the addressee. We'd then predict that the subjective interpretation of (1) as in (5) consists of different sets of indices for R1 and R2: For R1, the proposition expressed consists of tuples $\langle s, \mathbf{R1}, l, t, w \rangle$ whereas for R2, the proposition expressed consists of tuples $\langle s, \mathbf{R2}, l, t, w \rangle$. The same utterance, addressed to different hearers, means different things. In Kaplan's two-dimensional analysis, different hearers did not change the content of the utterance (unless the utterance includes *you*). If we rest our analysis on diagonals and make the meanings of propositions more fine-grained accordingly, we predict that the content of a sentence is never the same for any two hearers. This prediction is problematic and would have to be remedied by further assumptions.

The route towards diagonalization will be problematic for the present project for yet another reason: Let us assume for a moment that we can circumvent the above problem and model sentence meanings by sets of indices ι that are isomorphic to tuples $\langle s, a, l, t, w \rangle$, i.e., contexts. The good thing about such an account could be that sentence meanings can include different speakers, and thus account for interpretation in situations where the speaker is unknown (in real life) or undetermined (in fiction). Problematic, in terms of my agenda, would be the fact that the speaker s is always part of the semantic representation of sentences. The resulting representations don't reflect whether the sentence or text uses a first person pronoun (*'I was born in the year 1632, in the city of York'*), a speaker-oriented item (*'Oh that simple and innocent Isak...'*) or no speaker cue at all. Using sets of fine-grained indices in propositions leads us to predict that the speaker is always part of the semantic representation. In other words, we'd run into a *pan-narrator* theory, missing the chance to take linguistic cues for the presence of speakers seriously.

Rather than defining further *ad hoc* terms that capture whether the speaker s has been introduced in the text, we take dynamic semantics as baseline for a theory of narrators in fiction. This established framework is designed to trace and record discourse referents in texts, and this feature can be put to use to trace the introduction of a narrator, as well.

3.3 *Subjective meanings as summation over contexts*

The present section returns to subjective meanings. I propose that the subjective meaning of an utterance S must take into account all contexts c that the hearer R in the situation holds possible. Let us take a look at the character of sentence (1).

$$(6) \quad \lambda c \lambda w [\text{FATHER}(sp(c), P, w) \vee \text{BROTHER}(sp(c), P, w)]$$

The hearer R in the described situation knows perfectly well what *I am the father or the brother of Peter* means, she just doesn't know in what context she is. The set C_R of contexts that R holds possible (in w) is defined as follows, where $\text{Epi.Alt}(R, w)$ is the set of worlds that are compatible with R's knowledge (R's epistemic alternatives in w).

- (7) $C_R = \{ c_o \mid \text{world}(c_o) \in \text{Epi.Alt}(R, w) \}$
 “the set of contexts that are compatible with R's knowledge about the world”

Under normal circumstances, we may assume that R knows some parameters of c_o . For instance, R normally knows that she is the addressee (when an utterance addresses R) and she often also knows the time t and place l of the utterance. In this case, the set C_R looks more specific.

- (8) $C_R = \{ c_o \mid \text{ad}(c_o) = R \wedge \text{time}(c_o) = t \wedge \text{loc}(c_o) = p \wedge \text{world}(c_o) \in \text{Epi.Alt}(R) \}$
 “the set of contexts that are compatible with R's knowledge about the world, specifically where R is the addressee at time t and place p .”

This is how R interprets sentence (1) against this set of contexts.

- (9) Subjective meaning of (1) for R against C_R (static version):
 $\bigcup_{c \in C_R} \lambda w [\text{FATHER}(sp(c), P, w) \vee \text{BROTHER}(sp(c), P, w)]$
- (10) Subjective meaning of utterance S for hearer R:
 $[[S]]-\text{for-}R = \bigcup_{c \in C_R} [[S]]^c$
 ‘the disjunction of all utterance meanings in contexts c that, according to what R knows, could be R's context.’⁵

The denotation derived in (9) can be paraphrased as ‘there is someone who is the father or brother of Peter’. The proposition does not talk about any specific person – which is appropriate, given that the hearer R doesn't know who is talking. It correctly locates R's lack of knowledge at the level of utterance contexts. The logical object in (9), however, doesn't define any person at all and thus misses out on the intuition that R understands well that someone is speaking, she just doesn't know who. While the envisaged sets of indices in (5) coded *too much* speakers, the static denotations as in (9) capture *too little*. In the next section we will resort to the use of discourse references to remedy this shortcoming.

Summarizing, the present section argued that the meanings of utterances, interpreted in unknown utterance contexts, should not be routinely modelled by diagonals. Instead, the subjective meaning of utterance S for R is defined as the sum of all possible meanings in contexts c where R thinks *she could be*. Different dimensions of uncertainty have to be kept apart. The hearer/reader R knows that there is at most *one* speaker or narrator but at the same time is uncertain about his identity. Dynamic semantics offers a framework that captures this mix of uncertainty and information. It thus seems promising to couch the analysis of narrators in dynamic semantics.

⁵ A similar proposal is argued for in Köpping (2018).

4 Dynamic Semantics light

In dynamic semantics, the meaning of a sentence S codes discourse referents in addition to truth conditional meaning. The first dynamic semantic frameworks were Discourse Representation Theory (Kamp, 1981) and File Change Semantics (Heim, 1982). They were developed independently at almost the same time, but after their publication it was clear that the two frameworks, although very different in notation, implemented very similar semantic theories. Since then, several further implementations have been proposed, each with a focus on features or phenomena that had been neglected by earlier versions. While DRT as in (Kamp + Reyle 1993) was notationally attractively simple, it leaves the intensional dimension implicit and thus makes it difficult to think about propositions as sentence meanings. When thinking about fiction, however, it is essential to capture the intensional dimension of meaning, because sentences cannot be simply matched with the real world. Therefore I refrain from using DRT. Intensionality is in focus in file change semantics (Heim 1982) as well as an intensional version of DRT (Frank+Kamp 1997) but these frameworks are burdened with additional structure to capture modality and propositional attitudes. Groenendijk+Stokhof (1990) developed Dynamic Montague Grammar (DMG) to demonstrate how Kamp's semantic interpretation in DRT can be translated into a fully compositional framework and thus adheres to the semantic desideratum of compositionality. DMG proved that some seemingly *ad-hoc* assumptions, used in Kamp's definition of DRT, are not a structural shortcoming of dynamic semantics but can be avoided. Ten years later, van Leusen+Muskens (2003) provided an elegant type-logical implementation of dynamic semantics that integrates the essential insights of the preceding decade. Unfortunately, as the theoretical debates slowed down the linguistic community agreed on DRT as the easiest-to-use notation for dynamic semantics and therefore, van Leusen+Muskens's system never seems to have gained ground.

The debates were, however, fruitful as they brought to light the common core of dynamic semantic theories. Even though frameworks vary considerably at the notational level, they share the underlying core assumption that the meanings of sentences are represented by sets of variable assignments. The domains of variable assignments code the set of active discourse referents (DR). Each variable stands for one DR and is mapped to entities, persons, events, ... the DR could stand for. Subsequent sentences can contribute further restrictions on given variables, which allows to model anaphoric reference as well as dynamic existential quantification. Our task will be to integrate context dependence and to model summation over contexts (10).

4.1 The basic ideas

For the present purpose I define a minimal version of dynamic semantics that allows us to focus on our main theme without burdening notation. The meaning of sentences and texts is represented by *sets of assignments*.

Let $Var_e = \{x_i; i = 1, 2, \dots\}$ be the variables that range over D_e .

Let $Var_s = \{w_i; i = 1, 2, \dots\}$ be variables over D_s

Let f, g, h, \dots be variable assignments that map finite subsets of $Var_e \cup Var_s$ into the respective domains.⁶ For each variable assignment f , let $dom(f) = \{x_{i1}, x_{i2}, \dots, x_{in}\}$ be the set of variables that f is defined for. We will also say that f is defined for the discourse referents x_{i1}, \dots, x_{in} .

I follow Kamp+Reyle's assumption that indices for discourse referents are provided at LF. Noun phrases, verbs, tense heads and relations come with number indices that code which DR they talk about. (Groenendijk+Stokhof's 1990 Dynamic Montague Grammar translates this *ad hoc* seeming numbering system into functional application). The meaning of a sentence thus talks about a finite set of variables $\{x_{i1}, x_{i2}, \dots, x_{in}\}$ and its content restricts their respective values: Variable assignments are limited to those where $f(x_i)$ has the respective properties in $f(w)$. The more we learn about protagonist DR_i , the more restricted our choice of $f(x_i), f(w)$ will be. Example (11) illustrates this.

$$(11) \quad \llbracket A\ man_1\ loves\ a\ woman_2 \rrbracket \approx \text{MAN}(x_1, w) \wedge \text{WOMAN}(x_2, w) \wedge \text{LOVE}(x_1, x_2, w)$$

The sentence in (11) is translated into a term with open variables. The sentence meaning consists in the set of assignments on $\{x_1, x_2, w\}$ that map these on suitable objects and worlds.

$$(12) \quad \llbracket A\ man_1\ loves\ a\ woman_2 \rrbracket^{f,c} = 1 \text{ iff} \\ \text{MAN}(f(x_1), f(w)) \wedge \text{WOMAN}(f(x_2), f(w)) \wedge \text{LOVE}(f(x_1), f(x_2), f(w)) \text{ holds true.}$$

The meaning of (12) is represented by the set of assignment functions that render the formula true. (12) defines the following set of assignments.

$$(13) \quad \llbracket A\ man_1\ loves\ a\ woman_2 \rrbracket^c = \\ \{f \mid (\text{MAN}(f(x_1), f(w)) \wedge \text{WOMAN}(f(x_2), f(w)) \wedge \text{LOVE}(f(x_1), f(x_2), f(w))) \text{ is true}\}$$

These assignments include a possible world variable in their domains. I adopt the standard assumption that one designated world variable w is shared by all parts of meaning of sentences (Heim+von Stechow 2008). The same world discourse referent w is maintained over the entire text. A text of fiction thus offers information about the world of fiction.⁷

Dynamic update, in this light version of dynamic semantics, is captured as the intersection of two sets of variable assignments. In order to get this idea to work, we must adjust the variable assignments so as to make them defined on the same domain of variables. Consider the following discourse.

$$(14) \quad A\ man_1\ loves\ a\ woman_2. \text{ } He_1\ sends\ her_2\ a\ bottle\ of\ whiskey_3.$$

⁶ For the sake of simplicity, I will not introduce separate ranges of times, eventualities or locations but assume that these are subsets of D_e .

⁷ This reconciles two seemingly conflicting views about the meaning of sentences. While intensional semantics maintains that propositions are sets of possible worlds (and we thus never know which world we are in), there is a strong intuition that stories are about *the* world of fiction. The DRT account of fiction predicts that we think about *the* world we're being told about and still do not know the identity of this world. To my knowledge, this synthesis of two conflicting views has not been proposed so far.

The first sentence denotes a set of variable assignments defined on $\{x_1, x_2, w\}$. The second sentence denotes a set of variable assignments defined on $\{x_1, x_2, x_3, w\}$. Hence, the two sets will have empty intersection. Before combining the two sentence meanings we thus have to extend every assignment in (13) to the larger domain $\{x_1, x_2, x_3, w\}$, by having it map x_3 to an arbitrary entity in D_e . This is captured by the following definition.

- (15) For any set of assignments A on domain V , and larger domain V' ($V \subset V'$), the extension of A to V' is defined as
 $\{ f' : \text{dom}(f') = V' \wedge \exists f (f \in A \wedge \forall x \in V (f(x) = f'(x))) \}$
 The extension of A to V' will be abbreviated as $A^{V'}$.

We can now return to the discourse in (14). The dynamic denotation of the first sentence was given in (13). The second sentence offers new information about x_1 and x_2 and moreover introduces a new DR x_3 .

- (16) $\llbracket \text{He}_1 \text{ sends her}_2 \text{ a bottle of whiskey}_3 \rrbracket^c =$
 $\{ f \mid (\text{SEND}(f(x_1), f(x_2), f(x_3), f(w)) \wedge \text{BOTTLE-O-WHISK}(f(x_3), f(w))) \text{ is true} \}$

The meaning of (14) is provided by extending (13) to $\{x_1, x_2, x_3, w\}$ and then taking the intersection with (16). We thus get (17).

- (17) a. $(\llbracket (13) \rrbracket^c)^{\{x_1, x_2, x_3, w\}} =$
 $\{ f \mid f \text{ is defined on } \{x_1, x_2, x_3, w\} \text{ and}$
 $(\text{MAN}(f(x_1), f(w)) \wedge \text{WOMAN}(f(x_2), f(w)) \wedge \text{LOVE}(f(x_1), f(x_2), f(w))) \text{ is true} \}$
 b. $\llbracket (14) \rrbracket^c = (\llbracket (13) \rrbracket^c)^{\{x_1, x_2, x_3, w\}} \cap \llbracket (16) \rrbracket^c$
 $= \{ f \mid (\text{MAN}(f(x_1), f(w)) \wedge \text{WOMAN}(f(x_2), f(w)) \wedge \text{LOVE}(f(x_1), f(x_2), f(w)))$
 $\wedge \text{SEND}(f(x_1), f(x_2), f(x_3), f(w)) \wedge \text{BOTTLE-O-WHISK}(f(x_3), f(w))) \text{ is true} \}$

The second sentence in the text refers back to DRs of the first sentence and offers new information about them. Both sentences are about the world w . Finally, the assignments in (17) are defined on the set $\{x_1, x_2, x_3, w\}$, which reflects the fact that the discourse is about three discourse referents (things and people) and a possible world. The general definition of update is given in (18).

- (18) Let A and B be two sets of assignments, that are defined on domains $\text{dom}(A)$ and $\text{dom}(B)$ respectively. Let $V := \text{dom}(A) \cup \text{dom}(B)$ the set of variables for which A or B (or both) are defined. The generalized intersection $A \cap^* B$ is defined as follows: $A \cap^* B := A^V \cap B^V$

In other words, we extend all assignments in A so as to cover all variables in $\text{dom}(B)$. We do the same with the assignments in B . We thus get two sets of assignments that are defined for the same domain V and can then intersect without risking trivial results.

While the interpretations above include contexts c as a possible factor, our examples so far didn't depend on c . This will change in the next section when we introduce subjective dynamic meanings by summation over possible contexts. The present format can trace how meanings add up and serve to code indefinite narrators. In order to achieve this transparency, the "light" dynamic semantic lacks other important features of dynamic semantics. For instance, the tracking and resolution of

anaphora in texts – illustrated in the present example as the decision that the second sentence refers to he_1 rather than to some arbitrary he_9 – was left undefined. I refer the reader to other work where the process is spelled out in detail (Kamp + Reyle 1993). We also gloss over complications entailed by negation, disjunction, conditionals and quantification (Groendijk+Stokhof 1990, Heim 1982, Kamp 1981, Kamp+Reyle 1993). The present version can be conservatively extended to cover these phenomena.

4.2 *Dynamic meaning and summation over contexts*

The proposed dynamic meaning of discourse refers to a possible world parameter w , as we have it in static semantics. The possible values for w reflect that the content of sentences and texts hold true in more than one world. Thinking in terms of fiction, the discourse referent w reflects that we are concerned with *the* world of fiction. The possible values $f(w)$ reflect that the identity of the world of fiction is unknown. Dynamic meanings bracket many unknown identities — of persons, things, times and more. The present section spells out *what a sentence S means for hearer/reader R in context c*, based on the following principles.⁸

- **Universal context dependence:** The meaning of sentence S is context dependent not only in indexicals but also in the world parameter.
- **Possible contexts:** The meaning of the sentence depends on the set of possible contexts C_R of the addressee/hearer/reader R.
- **Summation over contexts:** The meaning of sentence S for R is the union of all context dependent meanings for all contexts in C_R .

Let me illustrate these principles on basis of an example.

(19) *I₁ love you₂*.

As in (11), the content of sentences corresponds to a formula with open variables. (19) is moreover context dependent in that the first DR x_1 is the speaker in c and x_2 is the addressee in c . I moreover assume that the world talked about is the world of context: $w = world(c)$. We hence compute the following – context-dependent – meaning of (19). The novel parts are printed in bold.

(20) $\llbracket I_1 \text{ love } you_2 \rrbracket^c =$
 $\{ f \mid \llbracket sp(c)=x_1 \wedge ad(c)=x_2 \wedge world(c)=w \wedge LOVE(x_1, x_2, w) \rrbracket^{f,c} = 1 \}$
 $= \{ f \mid sp(c)=f(x_1) \wedge ad(c)=f(x_2) \wedge world(c)=f(w) \wedge LOVE(f(x_1), f(x_2), f(w)) \}$

As Kaplan would have it, x_1 is the speaker and x_2 is the addressee of c . We moreover assume that the world talked about is the world of c . For the sake of illustration, assume that on Friday, 12.00 R finds a piece of paper with the note (19) slipped under the door of her office. These are R's possible contexts.

$$C_R = \{ c \mid ad(c)=R \wedge time(t)=12.00 \wedge loc(c)=R's \text{ office} \}$$

⁸ The account generalizes Ninan's (2010) sentence meanings as centered propositions (sets of pairs of worlds and speakers).

$$\wedge world(c) \in \text{EpiAlt}(R) \}$$

Summing over these contexts, we can now derive the subjective meaning of (19) for R. Like (20), it is a dynamic meaning, i.e., a set of variable assignments defined on $\{x_1, x_2, w\}$.

$$(21) \quad \llbracket I_1 \text{ love } you_2 \rrbracket \text{ in } C_R = \\ \bigcup_{c \in C_R} \{ f \mid \llbracket sp(c) = x_1 \wedge R = x_2 \wedge world(c) = w \wedge \text{LOVE}(x_1, x_2, w) \rrbracket^{f,c} = 1 \} \\ \text{“all assignments with } x_2=R, x_1=\text{ someone, } w = \text{ any world that R holds possible} \\ \text{and where } x_1 \text{ loves R in } w\text{”}$$

This is roughly the same as the DRS content of “someone loves me (and has told me this here and now)”. The final part – someone has uttered (19) – is part of the message if we furthermore assume that all c are *proper* contexts, as opposed to *improper contexts* (Kaplan 1989).

- (22) *Proper context*: A context c is called proper context iff $world(c)$ contains an event of $sp(c)$ making an utterance to $ad(c)$ at $time(c)$ and $loc(c)$. The context is thus part of $world(c)$.
Improper context: A context c is called improper context iff c is not part of $world(c)$.

Improper contexts will be necessary when we consider fiction that supposedly takes place in worlds without humans or before the advent of humans (see §7).

Further knowledge of hearer R can have an impact on the message taken. Consider a scenario where the note (19) is hand-written. R knows that her secret admirer Sam writes differently and thus concludes that he is not the author of the message. Hence she interprets (19) more narrowly.

$$(23) \quad \llbracket I_1 \text{ love } you_2 \rrbracket \text{ in } C_R = \\ \bigcup_{c \in C_R} \{ f \mid sp(c) = f(x_1) \wedge ad(c) = f(x_2) \wedge world(c) = f(w) \wedge \\ \text{LOVE}(f(x_1), f(x_2), f(w)) \} \\ = \{ f \mid f(x_1) \neq \text{Sam} \wedge f(x_2) = R \wedge f(w) \in \text{Epi.Alt}(R) \\ \wedge \text{LOVE}(f(x_1), f(x_2), f(w)) \} \\ \text{“all assignments } f \text{ with } x_2=R, x_1 \neq \text{Sam, } w = \text{ a world that R holds possible and} \\ \text{where } x_1 \text{ loves R in } w\text{.”}$$

R narrows down C_R by taking into account world knowledge about how different people write. This is just one of many ways in which hearers narrow down the range of possible speakers by identifying voices, faces or knowing who is sitting next door. In real world communication, R ideally knows the identity of $sp(c)$ and thus can interpret S in a maximally specific way.

In reading fiction, however, we can not resort to facts in the real world to identify the narrator. We rely on linguistic cues for his or her identity. A model of

interpreting fiction thus requires a detailed account of how we interpret such cues. Let us take (24) as a final illustration of the content of sentence S for R.

(24) *I₁ am the sister or the brother of Peter₂.*

Indexicals make reference to *c*. By dynamic interpretation, pronouns introduce DRs. We thus get the following context-dependent meaning. Note that the world parameter is also context-dependent (universal context dependence).⁹

(25) $\{ f \mid sp(c)=f(x_1) \wedge world(c)=f(w_1) \wedge f(x_2)=Peter \wedge (f(x_1)=y.SISTER(y, f(x_2), f(w_1)) \vee f(x_1)=z.BROTHER(z, f(x_2), f(w_1))) \}$

(25) is about three discourse referents x_1 , x_2 and w_1 . It states that

- DR x_2 is Peter
- and DR x_1 is identical to the Sister of Peter or the Brother of Peter in w_1
- and DR x_1 is the speaker $sp(c)$
- and DR w_1 = the world of the utterance context.

The reader R computes the following subjective content for (24).

(26) $\cup_{c \in CR} \{ f \mid sp(c)=f(x_1) \wedge world(c)=f(w_1) \wedge f(x_2)=Peter \wedge (f(x_1)=y.SISTER(y, f(x_2), f(w_1)) \vee f(x_1)=z.BROTHER(z, f(x_2), f(w_1))) \}$

If R were to read (24) as a piece of fiction, she would have to put herself in a – fictitious – utterance context *c* where someone utters (24) who is brother or sister of Peter in the world of fiction. The next section takes a closer look at this kind of make-believe.

5. Reading Fiction

Lewis (1978) discusses an analysis of fiction in terms of possible world semantics. He proposes that fiction is interpreted as “story told in a counterfactual world as known fact” (p. 266). To align his quote with the present paper: The story is told in a counterfactual context *c* as known fact. According to Lewis, the author writing up the story pretends to be the speaker in this counterfactual context, with the reader his addressee. While I do not side with Lewis’ assumption that every story has a narrator, his view is helpful when we consider the reader’s engagement with fiction. Applied to (24), Lewis predicts that the reader R will *imagine* to be in a counterfactual utterance context *c* where she interprets (24). As (24) uses the first person pronoun *I*, the interpretation will be context dependent. The content of the unfolding story will

⁹ I don’t spell out the full interpretation of definites but interpret them by iota operators in (25). Note that the ι here is not the same as the ι in Section 3.2.

be computed incrementally, combining the content of subsequent sentences by intersection as above. If reader R has interpreted the story S up to sentence S_n , the content of the next sentence S_{n+1} is updated by intersecting the (extended) denotations of earlier story and new sentence.

$$(27) \quad \llbracket S_1 \dots S_{n+1} \rrbracket = \llbracket S_1 \dots S_n \rrbracket \cap^* \llbracket S_{n+1} \rrbracket$$

At each point, the story content is reflected by the set of assignments that observe everything that the story has conveyed so far. The denotation in (26) illustrates the link between c and counterfactual worlds. DR_{w_I} is the world of the storytelling context(s) c and keeps track of all worlds that fit the content of (24). There is just one important epistemic difference between factual text and reading fiction. As Lewis argued, the reader R assumes that the value $f(w_I)$ is never the actual world @ even if the real world incidentally makes the story true.¹⁰ In order to remind ourselves of this difference, I use the label FC_R for possible *fictitious* utterance contexts c that R maintains when reading fiction, as opposed to F_R for possible *real* utterance contexts.¹¹ The set $FICTAlt(R, w)$ includes all worlds that R considers possible candidates for the world of fiction.

$$(28) \quad FC_R = \{ c_o \mid world(c_o) \in FICTAlt(R, w) \}$$

“The set of contexts that are compatible with what R believes about the world of fiction.”

Following earlier authors, I moreover assume that R hardly ever starts reading a novel with the empty information state (Lewis 1978, Bonomi-Zucch 2003, Maier+Semeijn, pres. vol.). R restricts FC_R accordingly by background knowledge about the real world that plausibly holds in the world(s) of fiction. For instance, R will usually assume that the laws of physics hold in $world(c)$ as they do in the real world, that the physical built of humans in $world(c)$ is the same as in the real world and so on.¹² In addition to the updates by further sentence content, the story content $\llbracket S_1 \dots S_n \rrbracket$ can therefore also be updated with sets of assignments that reflect R’s assumptions about the world of fiction and the discourse referents. Maier and Semeijn (pres. vol.) investigate in detail how story content and world knowledge give rise to further enrichment of story content.

The present analysis thus retains the two dimensions of Kaplan’s original theory. While FC_R play a crucial role in R’s interpretation of fictional text, the content of the story itself is *not* coded as a set of utterance contexts but as a set of variable assignments. The context itself doesn’t introduce a discourse referent. The present analysis entails that the only person who engages in play-acting or make-believe in

¹⁰ This is where fiction and assertive discourse diverge. See (Matravers 2014) for the relation between fiction and assertive report.

¹¹ It should be understood that both C_R and FC_R change as the reader R learns more about the real world, or the world of fiction respectively.

¹² Needless to say that any of these assumptions can be overwritten in suitably situated fiction.

written fiction is, in fact, the reader R. According to the present account, the author is *not* involved in the make-believe. Specifically, the author doesn't take part in the reader's imagination; the reader does not imagine that author such-and-such is telling the story as if it were known fact.¹³ It will be an interesting project for future research to elaborate on Lewis's case of oral story-telling where narrator and listener jointly engage in pretense.

6. Introducing vs. referring to the speaker

6.1 *Speaker denoting terms are anaphors*

While we can now interpret first person pronouns in fiction – no matter whether the speaker introduces herself by name or not – the analysis so far does not distinguish between referring to the speaker and introducing a speaker DR. For instance, the first sentence of *Robinson Crusoe* ‘*I was born in the year 1632, in the city of York,...*’ and the first sentence of a hypothetical third person variant of the same book ‘*Robinson Crusoe was born in the year 1632, in the city of York...*’ for now will yield synonymous denotations. This is inappropriate, and the present section makes up for this flaw. In order to trace that Robinson Crusoe not only took part in the events reported in the book but also is the one who narrates them, I introduce a novel property $DSP(x,w)$, the “designated speaker”.

- (29) *The designated speaker*: The relation $DSP(x,w)$ holds true iff in the utterance context c , $w=world(c)$ and $x=sp(c)$. Unlike other speaking individuals, x is special in w in that w is centered on utterance context c and $x=sp(c)$.¹⁴

$DSP(x,w)$ is a metalinguistic property. It states that x acted as speaker in the context c in which the story is told. The DR x can be a protagonist (*Robinson Crusoe*), an outside reporter (*Lisa and Lottie*), or a nameless commentator (*Growth of the Soil*). Restricting attention to fiction with only one narrating instance, we can assume that the designated speaker is unique. Multi-voice fiction would raise the additional challenge that we have to trace which speaker is responsible for which parts of the information conveyed, and I leave this complication aside for now.

I assume that all reference to the speaker is anaphoric. First person pronouns must be resolved to a discourse referent that has the property of being the DSP. The restriction generalizes to implicit speaker parameters in other expressions, to be discussed in section 6.2. If a first person pronoun is used for the first time: *I, ich, jag* ... it triggers the accommodation of a speaker DR: A new DR x_j gets chosen, and the sentence meaning includes the information ($x_j = sp(c) \wedge DSP(x_j,w)$). Remember that,

¹³ At least, the reader will not unless the story explicitly states so. The new genre of literary autobiography, as illustrated by Karl Ove Knausgård's *Min kjemp*, poses a new challenge to theories of the role of authors as narrators.

¹⁴ The condition $x=sp(c)$ does not suffice because, as soon as we instantiate the context parameter, $sp(c)$ is the value of function sp , i.e. some individual in D_e , which no longer reflects that it was introduced *qua* being the speaker.

due to summing over contexts c , x_j can refer to different persons (similar to indefinites). All subsequent first person pronouns are interpreted as anaphors that carry the presupposition that the antecedent a must have the property $DSP(a,w)$. In a discourse with only one narrating instance, the anaphor is resolved to the unique designated speaker.¹⁵

First person pronouns are however not the only speaker anaphors, and not the only triggers to accommodate a speaker. As we saw in *Growth of the Soil*, speaker-oriented items can likewise trigger the introduction of a speaker DR. These include emotives, evidentials, exclamatives, modal particles and more (Banfield 1982, Anand + Nevins 2004, Eckardt 2012, 2015, Harris + Potts 2009, Maier 2017, Maier and Bary 2018). I assume that speaker-oriented items have an anaphoric speaker parameter x , which has to be resolved to an antecedent a with $DSP(a,w)$. Their use can likewise trigger the accommodation of a speaker DR which, in fiction, leads readers R to perceive a narrator.¹⁶

Section 2 illustrated different means to establish a discourse referent x_j with $DSP(x_j,w)$. While *Robinson Crusoe* is introduced by first person I , Kästner's narrator is established with the first question act *Do you know Seebühl, incidentally?* We can thus diagnose that information-seeking questions also establish a speaker.

Growth of the Soil leaves more room for readers' interpretation. The initial question *The long, long road over the moors and up into the forest — who trod it into being first of all?* could still be interpreted as a theme-setting question (and thus not necessarily evoking a narrator). However, the exclamative *Oh that simple and innocent Isak, ...* expresses the emotional state of the speaker. In terms of the present account, emotives have an anaphoric parameter x that must be resolved to an antecedent a with $a: DSP(a,w)$. As a first reference to the narrator, an exclamative thus triggers accommodation of a speaker DR.

Other non-assertive speech acts can introduce a speaker DR. The first line of Jane Austin's *Pride and Prejudice* „It is a truth universally acknowledged that a single man in possession of a good fortune must be in want of a wife,“ has been argued to be ironic and therefore reveal a narrator. The fact that non-assertive speech acts like irony introduce narrators is to date beyond formal analysis and should be taken seriously in future research.¹⁷

At this point, the semantic answer to the search for the narrator can be stated as follows: A text has a narrator iff there is a DR x_i with $DSP(x_i,w)$ (which is the case iff $x_i = sp(c)$ for the global utterance context c). Items beyond first person pronouns can introduce a speaker DR. Any text that supplies such items will be read and interpreted as a text with a narrator. Conversely, a text that entirely lacks such items doesn't

¹⁵ The account must obviously be generalized to direct speech in fiction, using the DSP locally within direct speech. This case could offer an argument to add the speech event e as an additional parameter in $DSP(x,w,e)$. I will not discuss the consequences for fiction. Note that Portner, Pak+Zanuttini (2019) face a similar problem in their treatment of honorifics in discourse, and propose a system of alternating speaker/addressee roles to model turn taking in dialogue.

¹⁶ I disregard the FID interpretation as an alternative to satisfy the speaker requirement of speaker-oriented items.

¹⁷ I thank Manuel García-Carpintero for drawing my attention to this example.

introduce a speaker DR and doesn't create the fiction of a narrator. The semantic answer hence sides with the *optional-narrator* view and rejects the *pan-narrator* view.¹⁸

6.2. Narrator accommodation vs. reference to narrators

While speaker-oriented items always trigger the accommodation of a speaker, there is a range of predicates that can refer to a speaker but do not have to. It will be a major empirical research agenda to provide intersubjective evidence as to which items must always refer to a speaker (and hence trigger narrator accommodation in fiction) and which ones do not. So far we relied on introspective judgements, but ideally these judgements should be backed up with empirical evidence. There are some preliminary studies that provide evidence for *optional narrator accommodation*. I take predicates of personal taste (PPT), like *disgusting*, as an example.

(30) *When I came into the room, Eliza put the muffin on a plate. It was disgusting.*

Kaiser+Lee (2017) offer experimental evidence that the predicate *disgusting* in (30) can express a judgement by the speaker, by *Eliza* or by "everybody". The study includes other predicates like *taste*, *look*, *smell*.¹⁹ Subjects were asked to rate the truth of subsequent assertions like

- a. I think that the muffin is disgusting.
- b. Eliza thinks that the muffin is disgusting.
- c. Everybody thinks that the muffin was disgusting.

They show that subjects accepted all continuations as possibly true, which shows that PPT don't necessarily refer to the speaker. Translating this into a hypothesis about PPT in fiction, we would expect that PPT do not necessarily force upon the reader the presence of a narrator. This expectation seems to be borne out. To my intuition, a sentence like (31) can be part of a narratorless story.

(31) *Baker Baxter was known for his tasty chocolate cake.*

Some informants find it difficult to voice intuitions about examples "as parts of a story", and in particular what a sentence does, or does not, tell about the story around. To bring out the intuition more clearly, it can be helpful to contrast examples like (31) with one that includes an attested speaker-oriented item. For instance, we could add an exclamation, as in (32).

(32) *Oh, this Baker Baxter. He was well-known for his tasty chocolate cake.*

¹⁸ The proposal aligns with Altshuler + Maier (2018) who also argue for the *optional-narrator* view in terms of dynamic semantics.

¹⁹ Kaiser managed to show that if a sense allows for shared experiences more readily („look“, „smell“) then subjects are more likely to allow orientation to the speaker, i.e. the a. answer.

The exclamative forcefully evokes the presence of a narrator. While (31) allows for many kinds of potential stories, (32) conveys that there is a speaker who voices emotions about Baker Baxter and perspectivizes the narrative.

The observation that PPT do not necessarily force the presence of a narrator converges with Laserson's (2005) diagnosis that the judge parameter of PPT can be instantiated generically: "everybody believes". Taking the evidence together, we find that PPT *can* be anaphorically linked to the speaker (Kaiser+Lee 2017, Kaiser 2019) but do not have to be. PPT do not by themselves trigger the accommodation of a speaker DR. PPT are thus unreliable predictors for the presence of a narrator.

We find the same distinction between *narrator-accommodating* items and *optional narrator-referring* items in the domain of evidential expressions. Some evidentials necessarily require the presence of a narrator in fiction. For example, the German evidential *wohl* conveys that a speaker is voicing a subjective inference (Zimmermann 2008, Eckardt 2020). The passage in (33) tells us that *the speaker is guessing* that Isak was glad.

- (33) *Isak war wohl froh, als er endlich glücklich aus dem Hause draußen war.*
'Isak was **-evid-** relieved as he finally ...
'Isak **may** well have been glad to get safely out of the house at last.'
(*Growth of the Soil*, chapter 8)

Other expressions could arguably be evidentials but do not give rise to the impression that a narrator is speaking. Consider hearsay evidentials like *allegedly* / *angeblich* as an example. To my judgement, (34) and (35) can both be part of a narratorless story ((35) translates (34) into German).

- (34) *Allegedly, Baker Baxter had earned a fortune by selling cakes.*
(35) *Angeblich war Bäcker Baxter mit dem Verkauf von Kuchen steinreich geworden.*

The examples have a generic hearsay reading of *allegedly/angeblich* in the sense of "everybody has heard rumours that...". This is consistent with Bary+Maier's (2018) finding that such expressions are non-eventive evidential markers.

The present account thus provides a new criterion to profile the semantics of PPT, hearsay evidentials, epistemic modals, emotives and other expressions of an individual's subjective state. One class of expressions always force the accommodation of a narrator in fiction. They have a parameter that must refer to the speaker DR and triggers the accommodation of a narrator. The other class of expressions do not force the accommodation of a narrator, even though they can possibly refer to the speaker, express her taste judgements, emotion or other subjective judgements. The interpretation of judge-dependent and speaker-oriented items in fiction thus offers important independent evidence for their semantic analysis.

7. Unreliable narrators and stories in humanless worlds

So far we assumed that the content of the story is the content of the sequence of sentences told by the narrator. The *unreliable narrator* challenges this simple view. A classical case in question is Mark Twain's *Huckleberry Finn*. For the sake of our study, I will discuss the following made-up passage (inspired by the Widow mumbling over her victuals).

(36) (Huck Finn reports:) *The priest was wearing a cozie. He waved at me.*

This is what the reader will understand: The first person narrator in (36) is mistaken. Huck believes that priests wear cozies. The priest wore a mitra. Huck does not know what a "mitra" is.

The present account predicts that something "goes wrong" when R reads (36). R interprets each sentence as $\bigcup_{c \in FCR} \llbracket S \rrbracket^c$. Reading *Huckleberry Finn*, R has computed the set $FICTAlt(R)$, the set of worlds in which, R believes, the story could take place. $FICTAlt(R)$ can be restricted in several ways (Lewis 1978, Bonomi+Zucchi 2003):

- by the previous content of the story,
- by world knowledge as far as it is transferred to the worlds of the story.
- and informed by plausibility inferences of R.

Hence, the contexts c in FC_R are restricted by R's expectations about $world(c)$.

$$FC_R = \{ c \mid ad(c)=R \wedge sp(c)=\text{Huck-Finn} \wedge world(c) \in FICTAlt(R) \wedge \dots \}$$

We can reasonably assume that R believes that priests in the worlds of fiction in (36) do not wear cozies, as little as they do in the actual world. The subjective meaning of (36) for R is as follows.

$$(37) \quad \bigcup_{c \in FCR} \{ f \mid f(x_j)=sp(c)=\text{HUCK-FINN} \wedge f(w_1)=world(c) \\ \wedge \text{PRIEST}(f(x_3),f(w)) \\ \wedge \text{WEAR}(f(x_3),f(x_4),f(w)) \wedge \text{COZIE}(f(x_4),f(w)) \\ \wedge \text{WAVE}(f(x_3),f(x_j),f(w)) \} \\ = \emptyset$$

As R does *not* believe that a priest wears a cozie in the world of fiction $f(w)$, the set of assignments is $= \emptyset$ for every c . Hence (37) yields the empty set \emptyset . But R will not assume that the narrative is meant to be contradictory. Instead, R can choose to interpret the content of (37) relative to a hypothesized C_{Huck} , the set of contexts c that *Huck* considers possible. R infers that Huck believes to be in a world possible where priests wear cozies.

Reader R will then make plausible assumptions about the "real fictive" state of affairs that triggers Huck's report. She could infer that Huck saw priests with mitras

and believed that these were cozies. R will thus update the story content not with (37), but with (38) which in turn entails (39).

$$(38) \quad \text{Believe}_{\text{Huck},w} (\{ f \mid f(x_j)=sp(c)=\text{HUCK-FINN} \wedge f(w_1)=\text{world}(c) \\ \wedge \text{PRIEST}(f(x_3),f(w_1)) \\ \wedge \text{WEAR}(f(x_3),f(x_4),f(w_1)) \wedge \text{COZIE}(f(x_4),f(w_1)) \\ \wedge \text{WAVE}(f(x_3),f(x_j),f(w_1)) \})$$

$$(39) \quad \{ f \mid f(x_j)=sp(c)=\text{HUCK-FINN} \wedge f(w)=\text{world}(c) \\ \wedge \text{PRIEST}(f(x_3),f(w)) \\ \wedge \text{WEAR}(f(x_3),f(x_4),f(w)) \wedge \text{MITRA}(f(x_4),f(w)) \\ \wedge \text{WAVE}(f(x_3),f(x_j),f(w)) \}$$

Maier+Semijn (this vol.) discuss in more detail how the belief states of R lead to inferences like (39). The present analysis aligns with their reanalysis mechanism by making the prediction that (37), the content of Huck's assertion, produces a contradictory story content for R. This inconsistency triggers reanalysis.

As a final piece of application, consider stories in a humanless world. Here is a made-up example.

$$(40) \quad \textit{The world is in its early Eons. The sun rises over a virgin forest. Hey, there's a dinosaur stomping by! ...}$$

While this story opening may not be prize-winning prose, it certainly can be part of fiction. The story takes place in a humanless world, yet this doesn't exclude the presence of a narrator. The information conveyed is thus in conflict with R's pretense to be in a context c in the world of fiction. This contradiction can be resolved if the reader R has the option to include improper contexts in FC_R . Remember that a context c is called *improper* iff c is not part of $\text{world}(c)$. In other words, the world of c does not include an event of $sp(c)$ talking to $ad(c)$ at the respective time and place. The reader R evaluates (40) against the following FC_R .

$$FC_R = \{ c \mid c \text{ is a context with } ad(c)=R \text{ and } \text{world}(c) \in \text{FICTAlt}(R) \}$$

where for all w in $\text{FICTAlt}(R)$, w doesn't include c as a part

Improper contexts c could be likened to a reporter's booth in a stadium which can oversee a world, but is not really part of the world reported on. Beyond the case of stories in humanless worlds, improper contexts have further important applications in the interpretation of indexicals (Predelli 1998, 2005, 2011, Eckardt 2019). They allow to extend the denotation of sentences to worlds beyond those where the sentence is being uttered. Improper contexts are thus independently motivated and can be recruited in the analysis of storytelling about a world without humans.

8. Summary

Stories can create the fiction of a narrator as part of a story. If we want to analyse the narrator as part of the story, we have to spell out how context parameters and story content interleave and how we can model a unique but unknown narrator. I propose an analysis in terms of dynamic semantics, which is designed to capture unique but indefinite protagonists. The reader R interprets fiction S relative to FC_R , the set of contexts in which—as far as R knows—the story could be told. These contexts are restricted by the information that the story conveys about the narrator (=speaker). Taking the union $\bigcup_{c \in FC_R} \llbracket S \rrbracket^c$ of these allows us to integrate unknown speakers and other protagonists in S in a uniform dynamic semantic format.

In dynamic semantics, to be part of a story is to be the value of a discourse referent. 1st / 2nd person pronouns add discourse referents (DRs) for speaker and addressee to the story's DRS. The story-telling situation is part of the fiction told and the (real) reader mock-acts to be the (fictitious) addressee in the story-telling situation. More items than 1st person pronouns can add speaker DR to the DRS and hence, stories can create the impression of a narrator without using a 1st person pronoun. Among such items are emotives, exclamatives, questions and other non-assertive speech acts, (certain) evidentials, (certain) epistemic adverbs and modals.

We distinguished between *narrator accommodating* items and items that can *optionally* refer to the narrator. Among the latter are predicates of personal taste (PPT) and (some) evidentials. The former include exclamatives, information seeking questions, irony, and (other) evidentials.

Finally, the semantic answer to the search for a narrator can be stated as follows: A text has a narrator if and only if there is a DR x_i with $DSP(x_i, w)$ (i.e., iff $x_i = sp(c)$ for the global utterance context c). The DR must be introduced by suitable linguistic triggers, which include but are not limited to first person pronouns. A text that entirely lacks such triggers doesn't introduce a speaker DR and doesn't create the fiction of a narrator. Some stories do not use any item that introduces a speaker DR and hence, not every story has a narrator.

References

- Altshuler, Daniel and Emar Maier (2019/t.a.). 'Death on the Freeway: Imaginative resistance as narrator accommodation', in Ilaria Frana, Paula Menendez Benito and Rajesh Bhatt (eds.), *Making Worlds Accessible: Festschrift for Angelika Kratzer*. Amherst: UMass ScholarWorks (forthcoming). Available online at <https://philarchive.org/rec/ALTDOT-2> (accessed September 2020).
- Anand, Pranav and Andrew Nevins (2004). 'Shifty operators in changing contexts', in K. Watanabe and R. B. Young (eds.), *Proceedings of SALT 14*. Ithaca, NY: CLC Publications: 20–37.
- Banfield, Ann (1982). *Unspeakable Sentences*. Cambridge: Cambridge University Press.

- Bary, Corien and Emar Maier (2018). 'The landscape of speech reporting', Ms. (Currently under revision; earlier title 'Eventive and evidential speech reports')
- Birke, Dorothee and Tilmann Köppe (eds.) (2015). *Author and Narrator. Transdisciplinary contributions to a narratological debate*. Berlin: DeGruyter.
- Bonomi, Andrea and Alessandro Zucchi (2003). 'A pragmatic framework for truth in fiction', *Dialectica* 57(2), 103–120.
- Eckardt, Regine (2012). 'Particles as speaker indexicals in free indirect discourse', in Lotte Hogeweg, Eric McCready (eds.): *Particles*. Special issue of *Sprache und Datenverarbeitung*. 99 - 119.
- Eckardt, Regine (2015). 'Author and Narrator', in Birke and Köppe (2015): 153–186.
- Eckardt, Regine (2019). 'On speakers in narrative fiction', in Mingya Liu (ed.) *Proceedings of Sinn+Bedeutung* 24: 179 – 192.
- Eckardt, Regine (2020). 'Conjectural questions: The case of German verb-final ,wohl' questions', *Semantics & Pragmatics*. DOI: <https://doi.org/10.3765/sp.13.9>
- Fine, Kit (2017). 'Truthmaker Semantics', in Bob Hale, Crispin Wright, and Alexander Miller (eds.) *A Companion to the Philosophy of Language*. 2nd ed. Vol. 2. Wiley Blackwell.
- Frank, Anette and Hans Kamp (1997). 'On context dependence in Modal Constructions', *Proceedings of SALT 7*. CLC Publications and Cornell University: 151 – 168.
- Franzén, Nils (pres. vol). 'Fictional Truth. In defense of the reality principle', present volume: xx – xx.
- Friedemann, Käte (1965[1910]). *Die Rolle des Erzählers in der Epik*. Darmstadt, Wissenschaftliche Buchgesellschaft.
- Groenendijk, Jeroen and Martin Stokhof (1990). 'Dynamic Montague Grammar', in L. Kalman and L. Polos (eds), *Proceedings of the Second Symposium on Logic and Language*, Budapest, Eotvos Lorand University Press, 1990: 3–48 Available online at <http://dare.uva.nl/document/3702> (30.4.2013)
- Haas-Spohn, Ulrike (1995). *Versteckte Indexikalität und subjektive Bedeutung*. *Studia Grammatica* 38. Berlin: deGruyter. DOI: <https://doi.org/10.1515/9783050071695>.
- Hamburger, Käte (1994[1957]). *Die Logik der Dichtung*. Stuttgart: Klett. English translation by Marilyn J. Rose, *The Logic of Literature*. Bloomington, Indiana University Press, 1973.
- Harris, Jesse and Christopher Potts (2009). 'Perspective-shifting with appositives and expressives', *Linguistics and Philosophy* 32(6), 523–552.
- Heim, Irene (1982). 'File Change Semantics, and the Familiarity Theory of Definiteness', in Rainer Bäuerle, Christoph Schwarze, Arnim von Stechow (eds.): *Meaning, Use and Interpretation of Language*. Berlin: Mouton deGruyter: 223 - 248.
- Hunter, Julie (2012). 'Presuppositional indexicals', *Journal of Semantics* 30(3): 381 – 421. DOI: 10.1093/jos/ffs013.

- Kaiser, Elsi and Jamie Herron Lee (2017). 'Experience matters: A psycholinguistic investigation of predicates of personal taste', *Proceedings of SALT 27*: 323 – 339.
- Kaiser, Elsi (2019). 'Effects of evidential information source on the interpretation of predicates of personal taste', paper presented at *Expressing Evidence*. Workshop held at Konstanz, June 6 - 8, 2019.
- Kayser, Walter (1961). *Das sprachliche Kunstwerk*. Bern.
- Kamp, Hans (1981). 'A Theory of Truth and Semantic Representation', in Jeroen Groenendijk et al. (eds.). *Formal Methods in the Study of Language*. Amsterdam: Mathematics Center: 1–41.
- Kamp, Hans and Uwe Reyle (1993). *From Discourse to Logic*. Dordrecht: Kluwer Academic Publishers.
- Kania, Andrew (2005). 'Against the Ubiquity of Fictional Narrators', *The Journal of Aesthetics and Art Criticism* 63(1): 47–54.
- Kaplan, David (1989). 'Demonstratives', in Almog, John, Perry, John + Wetterstein, Howard (eds.): *Themes from Kaplan*. Oxford, OUP: 481–563.
- Köppe, Tilmann and Jan Stühling (2011). 'Against Pan-Narrator Theories', *Journal of Literary Semantics* 40: 59–80.
- Köppe, Tilmann and Jan Stühling (2015). 'Against Pragmatik Arguments for Pan-Narrator Theories', in Köppe+Stühling 2015: 13-44.
- Köpping, Jan (2018). *The individual parameter*. Dissertation, University of Frankfurt.
- Lasersohn Peter (2005). 'Context dependence, disagreement, and predicates of personal taste', *Linguistics and Philosophy* 28(6): 643–686.
- van Leusen, Noor and Muskens, Reinhard A (2003). 'Construction by description in discourse representation', in Peregrin, J. (ed.). *Meaning: The dynamic turn*. (Current Research in the Semantics/Pragmatics Interface; no. 12). Amsterdam: Elsevier, p. 33–65.
- Lewis, David (1978). 'Truth in Fiction', *American Philosophical Quarterly* 15(1): 37–46.
- Lewis, David (1980). 'Index, context, and content', in S. Kanger, S Öhman (eds.) *Philosophy and Grammar*. Dordrecht: Reidel. (Reprinted in Lewis 1998).
- Lewis, David (1998). *Papers in Philosophical Logic*. Cambridge: Cambridge University Press.
- Maier, Emar (2017). 'The pragmatics of attraction: explaining unquotation in direct and free indirect discourse', in Paul Saka + Michael Johnson (eds.), *The Semantics and Pragmatics of Quotation*. Berlin: Springer, 259–280. doi: 10.1007/978-3-319-68747-6_9
- Maier, Emar and Merel Semeijn (pres. vol). 'Extracting fictional truth from unreliable sources', present volume: xx – xx.
- Matravers, Derek (2014). *Fiction and Narrative*. Oxford: Oxford University Press.
- Ninan, Dilip (2010). 'Semantics and the objects of assertion', *Linguistics and Philosophy* 33: 355 - 380.
- Portner, Paul, Pak and Raffaella Zanuttini (2019). 'The speaker-addressee relation at the syntax-semantics interface', *Language* 95(1): 1 – 36.

- Predelli, Stefano (1998). 'Utterance, Interpretation and the Logic of Indexicals', *Mind and Language* 13: 400 – 414.
- Predelli, Stefano (2005). *Contexts. Meaning, Truth and Use of Language*. Oxford University Press.
- Predelli, Stefano (2011). 'I am still not here now.' *Erkenntnis* 74: 289 – 303.
- Schlenker, Philippe (2018). 'Indexicals', in Sven Ove Hansson and Vincent F. Hendricks (eds): *Introduction to Formal Philosophy*. New York, NY: Springer, 297–321.
- Stalnaker, Robert (1978). 'Assertion', *Syntax and Semantics* 9: 315 - 332.
- Stalnaker, Robert (1999). *Context and Content*. Oxford: Clarendon Press.
- Stalnaker, Robert (2002). 'Common Ground', *Linguistics and Philosophy* 25: 701–721.
- Stalnaker, Robert (2014). *Context*. Oxford: Oxford University Press.
- Stanzl, Franz (1989). *Theorie des Erzählens*. Göttingen: Vandenhoeck & Ruprecht.
- von Stechow, Arnim and Thomas Ede Zimmermann (2005). 'A Problem for a Compositional Treatment of De Re-Attitudes', in G. Carlson, F. J. Pelletier (eds.), *Reference and Quantification: The Partee Effect*. Stanford (CSLI): 207–228.
- Wartenberg, Thomas (2007). 'Need there be implicit narrators of literary fictions?', *Philosophical Studies* 135: 89–94.
- Zimmermann, Malte (2008). 'Discourse particles in the left periphery', in B. Shaer, P. Cook, W. Frey, C. Maienborn (eds.): *Dislocated Elements in Discourse*. London: Routledge, 200–231
- Zimmermann, Thomas Ede (1991). 'Kontextabhängigkeit', in D. Wunderlich, A.v. Stechow (eds.) *Semantics/Semantik. Ein Internationales Handbuch*. Berlin: Mouton de Gruyter.
- Zimmermann, Thomas Ede (2012). 'Context dependence', in Klaus v. Heusinger, Claudia Maienborn, Paul Portner (eds.): *Semantics. An International Handbook*. Vol. 3: 2360–2407. Berlin: deGruyter Mouton.
- Zipfel, Frank (2015). 'Narratorless Narration?', in Birke+Köppe 2015: 45-80.
- Zucchi, Alessandro (pres. vol). 'On the generation of content', present volume: xx – xx.