

On speakers in narrative fiction¹

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Abstract. The paper investigates aspects of the contribution of indexicals to sentence meaning when the context, specifically the speaker, is unknown. One typical instance is the interpretation of the first person pronoun *I* in anonymous messages, another case are first and second person indexicals in narrative fiction. Whereas the speaker of an anonymous message can be found out, first speaker protagonists in fiction are *a priori* elusive. The paper argues that the meaning of indexicals in fiction and in anonymous utterances should be captured by forming the union over possible utterance contexts. It defines the *subjective meaning for the hearer/reader* as an appropriate level of semantic representation.

Keywords: context, Kaplan, indexicals, text.

1. Indexicals in fiction

Indexicals are expressions that must be interpreted relative to utterance context. The sentences in (1) are synonymous when uttered by Jim to Ada, but when uttered by Sally to Harry, they differ in meaning.

- (1) a. Jim loves Ada.
b. I love you.

In real utterance situations we commonly know who is speaking and who is the addressee. And even in the exceptional case that we receive an anonymous letter or send a message in the bottle, we can hope that facts in the actual world will eventually settle the utterance context, and with sufficient research or omniscience, the speaker or addressee can be determined. Texts of fiction radically differ from real utterances in this respect. When we read fictional texts, there is no external reality that determines the speaker behind the text. All the reader knows about the speaker is what is entailed by the text or can be inferred from it. The present paper explores how classical context theory can account for speakers in narrative fiction. It formalizes an earlier informal discussion of possible speaker constellations (Eckardt, 2015) and offers the foundations for Eckardt (2019/subm.), phrased in terms of classical (i.e., nondynamic) semantics.

Fictional texts can refer to speakers in various ways. First-person narratives rest on the use of *I/me*. They often provide extensive information about the speaker, sometimes but not always including the speaker's name (for a first-person narrative told by a nameless person, see Haruki Murakami, *The murder of the commendatore*). The text can create the impression of a reliable speaker (Daniel Defoe, *Robinson Crusoe*), or of a speaker who is uninformed or deceptive (Mark Twain, *Huckleberry Finn*; Vladimir Nabokov, *Lolita*). Texts can also refer to the speaker in less obtrusive ways by using speaker-oriented expressions, commentary items, emotives, attitudes that the reader ascribes to the person telling the story (Harris and Potts, 2009, Eckardt,

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2012). Knut Hamsun's *Growth of the Soil* provides an example of a text creating the fiction of someone telling the story, even though no first person pronoun ever refers to the teller. If we take into account the full range of indexicals in the broad sense, it becomes clear that a semantics of fictional texts has to capture what could be called "indefinite" speakers: The story creates the fiction that someone is telling it to me, the reader, but the text does not offer enough information to single out a specific person.

My starting point is Kaplan's seminal analysis of indexicals (Kaplan, 1989) in the by now standard implementation developed by Zimmermann (1991, 2012).² Kaplan argued that sentences should be interpreted in two steps: First we have to resolve expressions that refer to the context, and only then should we compute the truth conditional content. The meaning of a sentence *S* must thus be represented by its character $\text{char}(S)$, a function that maps utterance contexts *c* to propositions. Utterance contexts are entities that give access to the parameters speaker, addressee, time, place and world. Specifically, Kaplan proposes the functions *sp*, *ad*, *time*, *loc* and *world* that map each context *c* onto the respective *c*-parameter. Hence, $\text{sp}(c)$ is the person that counts as the speaker in *c*, and so on.

According to this analysis, sentence (1a) yields the same proposition for all contexts (disregarding utterance time), whereas sentence (1b) is context dependent.

- (2) a. $\text{char}(\textit{Jim loves Ada}) = \lambda c \lambda w [\text{LOVE}(\textit{Jim}, \textit{Ada}, w)]$
 b. $\text{char}(\textit{I love you}) = \lambda c \lambda w [\text{LOVE}(\text{sp}(c), \text{ad}(c), w)]$

In a context with speaker Jim and addressee Ada, the two characters map to the same proposition $\lambda w [\text{LOVE}(\textit{Jim}, \textit{Ada}, w)]$ and are thus synonymous. The opposition in (1) can be predicted. Generally, the utterance meaning of the sentence in context c_1 is derived by applying the character of *S* to c_1 , as we see in (3).

- (3) $[[\textit{I love you}]]^c = \lambda w [\text{LOVE}(\text{sp}(c_1), \text{ad}(c_1), \text{time}(c_1), w)]$

Note that the world parameter is not instantiated by c_1 ; by assuming this, Kaplan ensures that we arrive at a proposition (set of worlds) rather than a truth value. In the course of the paper we will explore other ways to connect worlds and contexts.

Unknown contexts were mostly discussed in connection with utterances like *I am here now* in their "funny" sense, in which the sentence states that the speaker is now at the place of utterance. Although this reading is *a priori* true, the sentence can still be used in this way (Zimmermann, 1991, 2012). To capture the reading, Zimmermann proposes to derive the *diagonal* where context and world parameter are equated.

- (4) Diagonal of '*I am here now*'
 $:= \lambda c [\text{char}(\textit{I am here now})(c)(c)]$
 $= \lambda c [\text{IS-AT}(\text{sp}(c), \text{loc}(c), \text{time}(c), \text{world}(c))]$

² For a more recent introduction, see also Schlenker (2018).

The proposal fleshes out a very vivid intuition: In a funny sense, the content of *I am here now* is true in any utterance context and the respective world.³ However, one ontological issue remains: What is the logical nature of propositions? Can propositions be sets of contexts, should they always be sets of worlds, or are the two domains the same? Several answers were pursued. Some authors resort to situation semantics where possible worlds are equated with possible situations, and thus, contexts could be integrated as a special type of situation (Kratzer, 1989, 2002, Barwise & Perry 1983, Barwise 1989). Others suggest to model contexts as centered worlds, i.e. a world with a pointer towards a specific utterance event (Stalnaker 2014, Ninan 2010), thus offering a different synthesis of world and context parameters. Independently of the advantages or disadvantages of these frameworks (see Eckardt subm.) I propose to leave intact the ontological separation of contexts c and possible worlds D_s , and to resolve the issue in a different manner. The next section explores the *subjective utterance meaning* of sentence S for interlocutors who lack information about the utterance context they are in.

2. Union over contexts

On Monday morning, Ada gets a note slipped under her office door. It says:

(5) I love you.

An utterance has been made. Ada is the addressee, but she does not know who wrote the note. Assuming that she trusts the utterance, she learns that “there is somebody who loves me (now, on Monday)”. How can we derive this?

Ada’s problem is that she does not know the utterance context c . While she knows some dimensions of her context, the speaker is open. Let C_A be the set of contexts Ada could be in as far as she knows. It can be defined as in (6), where $\text{Dox}(A)$ are the doxastic alternatives of Ada, i.e. the worlds that are compatible with Ada’s beliefs.⁴

(6) $C_A := \{ c \mid c \in c \wedge \text{world}(c) \in \text{Dox}(A) \}$

To paraphrase: c is a context such that the world in which c takes place is compatible with what Ada knows. Among other things, she knows that somebody has just slipped the note (5) under her office door. In the given example, we can hence say more about C_A .

$$C_A = \{ c \mid c \in c \wedge \text{ad}(c) = \text{Ada} \wedge \text{loc}(c) = \text{Ada's office} \wedge \text{time}(c) = \text{Monday} \\ \wedge \text{world}(c) \in \text{Dox}(A) \}$$

Ada will interpret the sentence in (5) as a disjunction over all contents that could arise in one of the contexts she could be in. We use Kaplan’s mapping from character to propositions, as given in (7), to model the meaning of (5) for Ada. This is defined in (8), by forming the union over possible contexts.

³ The close match between context and world will be challenged in section 3 where I discuss the set of possible contexts in more detail.

⁴ This definition will have to be adjusted after the discussion of possible contexts below.

- (7) $[[S]]^c := \{ w \mid \text{char}(S)(c) = 1 \text{ in } w \}$
 (8) $\bigcup_{c \in CA} [[S]]^c = \bigcup_{c \in CA} \{ w \mid [[S]]^c = 1 \text{ in } w \}$

In the situation in (5) we derive the subjective meaning in (9). $\text{LOVE}(x,y,t,w)$ is true iff x loves y at time t in world w .

- (9) Subjective meaning of S for Ada:
 $\bigcup_{c \in CA} [[S]]^c$
 $= \bigcup_{c \in CA} \{ w \mid \text{LOVE}(sp(c), \text{Ada}, \text{Monday}, w) \text{ is true} \wedge \text{world}(c) \in \text{Dox}(\text{Ada}) \}$

This comes close to the set of possible worlds denoted by the sentence *somebody loves Ada on Monday*, which is an appropriate result. There is yet an important difference. While the sentence *somebody loves Ada on Monday* does not impose any restrictions on Ada's lover, Ada only takes into account contexts that are compatible with what she believes otherwise. And Ada may know things that exclude certain persons as lovers. Say, her colleague Tim is obviously, ardently and exclusively in love with his new partner Sam. Hence, Ada knows that $sp(c) \neq \text{Tim}$. Thus, for Ada the meaning of (5) is already restricted by what she knows, whereas the meaning of *somebody loves Ada on Monday* is not restricted in this manner.

While Kaplan focused on the ideal case where the utterance context is known, real interlocutors often lack perfect knowledge. We therefore need what I will call the subjective meaning of the utterance for A. The proposition in (9) is the meaning of (5) for Ada when she receives the message (and assumes that she is the intended addressee). Analogously, speakers can make an utterance without being certain who the addressee will be. If shipwrecked Bob writes a message in the bottle saying *I need your help!* he intends to convey *Whoever finds this bottle, I need your help.* (10) reflects Bob's interpretation of the sentence.

- (10) $\bigcup_{c \in CB} [[I \text{ need your help}]]^c$
 $= \bigcup_{c \in CB} \{ w \mid \text{NEED.HELP}(\text{Bob}, ad(c), time(c), w) \wedge \text{world}(c) \in \text{Dox}(\text{Bob}) \}$

Subjective meanings will become more useful when we turn to the interpretation of narrative fiction in section 4. Before doing so, it will be necessary to take a closer look at contexts and to reconsider Kaplan's mapping from contexts to propositions.

3. Unions over contexts and kinds of contexts

The previous section considered the meaning of an utterance for individual A. Crucially, A could know something but not enough about the context to identify a single c . Thus subjectivity enters semantic interpretation. The present section investigates union over sets of contexts c if all contexts are considered. This will allow for any constellation of speaker, addressee, time and place and thus abstracts away from particular doxastic backgrounds. Let c be the set of all contexts. (11) shows the meaning of note in (5), interpreted relative to C .

- (11) Character union over contexts:
 $\bigcup_{c \in c} \text{char}(S)(c)$

$$\begin{aligned}
&= \bigcup_{c \in c} \llbracket S \rrbracket^c \\
&= \bigcup_{c \in c} \{ w \mid \text{LOVE}(sp(c), ad(c), time(c), w) \text{ is true} \}
\end{aligned}$$

This proposition can roughly be paraphrased as “someone loves someone at some time”, which is appropriate. However, a new question arises: Should the meaning of note (5) entail that (5) has actually been uttered? And if yes, how can we derive this?

In one sense, the meaning of a sentence S should be independent of whether S has been uttered. In this sense, the meaning of S in (11) is appropriate. Yet it can be useful to think about the utterance meaning of sentence S in situations where the dimensions of context c (speaker, addressee, time and place) are unknown. For instance, when the reader interprets the meaning of sentences in a first-person narrator novel, the fiction includes not only that the protagonist did this or that, but also that she is telling the reader about it. Rewriting the text in third person will not yield the same story. Hence, we need a notion of utterance meaning of S that is independent of whether the utterance context is known.

In order to define the utterance meaning of S , we must take a closer look at the set of contexts C . Formally, C is a set of entities in the domain of the functions sp , ad , loc , $time$ and $world$. The functions sp and ad map C to $\text{PERSON} \subset D_e$, $time$ and loc map C to the domains of times and places, and $world: C \rightarrow D_s$. For any sentence S and context c , $\text{char}(S)(c)$ is the meaning of S if it were uttered in $world(c)$ by $sp(c)$ to $ad(c)$ and so on. Nothing so far ensures that the sentence is *actually* uttered in $world(c)$ by $sp(c)$. For some c , however, the $world(c)$ might incidentally contain an utterance event e with $sp(c)$ the speaker, $ad(c)$ the addressee, at place $loc(c)$ and $time(c)$. Let us call such contexts *realistic contexts*. Contexts that are not realistic will be called *counterfactual contexts*.⁵

(12) Definition: A context $c \in C$ is called realistic iff in $world(c)$ at $time(c)$ and $loc(c)$, an utterance takes place with speaker $sp(c)$ and addressee $ad(c)$. A context is called counterfactual if it is not realistic. Let $\text{Real.C} \subset C$ the set of realistic contexts and Cf.C the set of counterfactual ones.⁶

(13) Fact: $C = \text{Real.C} \cup \text{Cf.C}$

Returning to (11), we predict that the character union over all contexts could involve realistic as well as counterfactual contexts. The worlds of counterfactual contexts do not include a corresponding utterance event. Therefore, the proposition derived in (11) does not entail that the sentence was uttered in $world(c)$. If we define the utterance meaning of S as in (14), however, we predict that an utterance took place.

(14) Utterance meaning of S :

$$\begin{aligned}
&\bigcup_{c \in C.\text{Real}} \llbracket S \rrbracket^c \\
&= \bigcup_{c \in C.\text{Real}} \{ w \mid \text{LOVE}(sp(c), ad(c), time(c), world(c)) \text{ is true} \wedge w = world(c) \}
\end{aligned}$$

⁵ The relation between utterance events and contexts is further highlighted in Eckardt (2015a).

⁶ In a refined version of the distinction, we could take the uttered sentence S as another parameter of c . A context is realistic for sentence S iff c is realistic and S is uttered in the respective speech event in $world(c)$.

The union in (14) differs from (11) in two respects: First, we restrict the union to realistic contexts. Secondly, (14) states that the worlds in question are the worlds of the respective contexts. This part of the definition is reminiscent of Kaplan's diagonalization in (4) (see Zimmermann 1991, 2012 for detailed discussion) but plays out slightly differently, as we will see below. Since we only consider realistic contexts, (14) entails that an utterance was made. If we restrict the range of contexts further to those being realistic for S, (14) can be paraphrased as in (15).

- (15) Someone loves someone at some time and utters (5) to the person at the same time (and place).

Our analysis of first person narrative fiction in the next section will be based on the utterance meaning of S in (14). Before moving on, let us see how union over *all* contexts plays out when diagonalization is added. I will call this semantic object the *counterfactual utterance meaning* of S. (16) shows this union for example (5).

- (16) Counterfactual utterance meaning (CUM) of (5)

$$\bigcup_{c \in c} \llbracket (5) \rrbracket^c$$

$$= \bigcup_{c \in c} \{ w \mid \text{LOVE}(sp(c), ad(c), time(c), world(c)) \text{ is true} \wedge w = world(c) \}$$

This proposition can be paraphrased as “someone loves someone at some time, but possibly this hasn't been said.” Is this the same as the character union in (11)? Not necessarily. Imagine a world w_{17} such that someone loves someone at some time in w_{17} but incidentally, C does not contain any context c with $world(c) = w_{17}$. The world w_{17} is thus in the character union of (5) but not in CUM in (16). Hence the two sets are not identical. What seems to go wrong is that C misses a context that should be there. If we could ensure that c provides enough contexts, then (16) would be equivalent to (11), the union that is in accordance with Kaplan's character. We therefore need a way to state that the set of contexts is “big enough”, which is achieved by the following definition.

- (17) Definition: The set of contexts C in a model **M** with PERSON $\subset D_e$, TIME $\subset D_t$, PLACE $\subset D_e$ and worlds D_s is *complete* iff for all tuples $\langle a, b, t, p, w \rangle \in \text{PERSON} \times \text{TIME} \times \text{PLACE} \times D_s$ there is a context $c \in C$ such that $sp(c) = a$, $ad(c) = b$, $time(c) = t$, $loc(c) = p$ and $world(c) = w$.

This entails the following useful fact: If the set of contexts C is complete, then for any sentence S, the CUM of S is the same as the union over characters for S (as defined in (11)). Formally:

- (18) If C is complete, then

$$\bigcup_{c \in c} \{ w \mid \text{Char}(S)(c)(w) \text{ is true} \}$$

$$= \bigcup_{c \in c} \{ w \mid \text{Char}(S)(c)(w) \text{ is true} \wedge w = world(c) \}$$

This means that if C is complete, then the CUM of S is just what the sentence conveys, abstracting away from which context it has been uttered. Only if we restrict attention to realistic contexts Real.C will the union over contexts derive a proposition that entails “S was also uttered”. The effect of diagonalization ($w = world(c)$) in definition (14) depends on the size of the set of contexts C. Neither the utterance meaning of S nor the counterfactual utterance

meaning CUM of S are subjective. In this they differ from the propositions we got when we asked *What does the note in (5) mean for Ada, the addressee?*

To sum up: Section 2 made use of union over contexts to derive the subjective meaning of utterances for a specific speaker or addressee. The present section demonstrates that union over contexts can also be used to define sentence meanings, abstracting away from the utterance context and still having a proposition (rather than a character, as in Kaplan's definition). The semantic object in (14) provides for any sentence *S* the proposition $\{ w \mid S \text{ is true in } w \text{ and has been uttered in } w \}$.

The semantic objects in (11) and in (16) do not entail that *S* was uttered, but they are useful for a different reason. Both could be good candidates to avoid diagonalization in the traditional sense (i.e., equating contexts and worlds) and thereby also avoiding the ontological blurs that come along with it. Both give us the worlds in which the sentence is true, irrespective of whether it was uttered or not. Both could be good candidates for the meaning of *I am here now* in the sense of "somebody is at some place at some time". Indeed, it turns out that the two semantic objects are identical if the set of contexts *c* is complete in the sense of (17).

Now that we better understand the impact of the "right" set of characters to be used in union over characters, let us briefly return to (6), which is the set of "contexts where Ada thinks she could be in". We adapt the definition slightly, using the new terms introduced in the present section: Ada believes the content of the note (*I love you*) and moreover that someone told her so. In other words, Ada only takes contexts in Real.C into consideration, which leads to the set in (19).

- (19) $C_A =$ the set of contexts Ada could be in, as far as she knows
 $C_A := \{ c \mid c \in \text{Real.C} \wedge \text{world}(c) \in \text{Dox}(A) \}$

(19) includes the condition that Ada only takes $c \in \text{Real.C}$ into account and thus spells out what was implicit in definition (6) above. After all, *world(c)* is a world that coheres with Ada's beliefs and she does believe that someone slipped her a note. (19) spells out that "having been said" is part of the subjective utterance meaning. This becomes more important when we now turn to fiction. While reading fiction, Ada has access to events and experiences reported in the text. Reading a first person narration is certainly an important part of that experience.

4. Fiction

4.1 Truth in narrative fiction

Possible worlds are recognized as one of the basic entities in formal semantics, they are useful to model the meaning of modal and counterfactual statements (Lewis 1973). Lewis (1978) argues that they can also help to model texts of fiction. He proposes that fictional texts are interpreted as if the speaker told the story as true facts, thus extending the semantic analysis of assertions to a semantics for fiction.

The worlds we should consider, I suggest, are the worlds where the fiction is told, but as known fact rather than fiction. The act of storytelling occurs, just as it does here at our world; but there it is what here it falsely purports to be: truth-telling about matters whereof the teller has knowledge. (Lewis 1978: 266)

Lewis can thus generalize known techniques from assertive semantics to fiction. We continue to capture the content of sentences as propositions and to combine sentence meanings by intersection, thus deriving the content of the story (Stalnaker 1999, 2002, 2014). Adopting Lewis' view, we also predict that the reader uses pragmatic mechanisms (implicatures) to enrich the content of sentences, which – as Lewis argues – puts the proposal in advantage over alternative semantic analyses of fiction. I adopt Lewis' term *teller* in the following to refer to the role *sp* in the particular case of narrative fiction, and the reader *R* for *ad*. This reminds us of the special situation created by fiction; I do *not* mean to give up any of Kaplan's assumptions about contexts and characters.

Lewis shows that sentences in narrative fiction do not update the reader's belief worlds or the common ground of teller and reader. What is updated are the fictitious beliefs that reader *R* would have if the story was told as known fact. Let us call these worlds $FICT(R,S)$ = the set of possible worlds that make the story *S* true, as interpreted by reader *R*. Lewis and later authors (Lewis 1978, 1980, Bonomi & Zucchi 2003, Matravers 2014) point out that $FICT(R,S)$ is restricted by more propositions than those provided by the content of the story. Readers *R* add further plausible assumptions; for example a reader of a Sherlock Holmes story will add true facts about Britain (e.g., 'cars drive on the left side of the road') even if these are not stated in the novel explicitly. As these enrichments can depend on the reader's knowledge, the account predicts that the meaning of narrative fiction is reader-dependent. The account allows that the author of the story never had any specific enrichments in mind. The author is not responsible for readers' subjective interpretations and thus – as has been argued in literary theory – is not to be equated with the teller of the narration.

As a consequence, narrative fiction regularly presents us with the kind of utterance situation that we studied in the previous section. The fictitious situation of a teller talking plays a crucial part in the process of me interpreting the text, even as I do not yet know who the teller is. The teller can be a fictitious person (e.g., in homodiegetic, first-person narration) or altogether unknown, as in novels with an extra-heterodiegetic narrator (Pier 2016). The teller can use first person pronouns to refer to herself but can, alternatively, use indirect perspectivizing devices to make herself heard (Harris & Potts 2009, Eckardt 2015). Stories may also fail to provide a proper name to which the teller could be linked. And there is no external reality that identifies the teller. Narrative fiction must therefore be interpreted in terms of subjective meaning, as defined in the previous section.

4.2 Tellers: speakers in narrative fiction

Consider (20) from the first chapter of Mark Twain's *Huckleberry Finn*.

- (20) Tom and me found the money that the robbers hid in the cave, and it made us rich. We got six thousand dollars apiece—all gold.

The reader assumes a fictitious context where somebody called Huckleberry Finn asserts (20) as if it were a known fact. In terms of character union over contexts (11), the sentence conveys the following:

$$(21) \quad \bigcup_{c \in c} \text{char}(S)(c) \\ = \{ w : \text{there is an } x \text{ such that } x \text{ and Tom found gold and } x \text{ and Tom are rich in } w \}$$

The proposition in (21) does not entail that the story has a teller who coincides with x , nor that anyone uttered (20). Section 3 discussed how these entailments can be forced by restricting the union to realistic contexts Real.C .

$$(22) \quad \bigcup_{c \in \text{Real.C}} \text{char}(S)(c) \\ = \{ w : \text{there is an } x \text{ such that } x \text{ and Tom found gold, and } x \text{ and Tom are rich in } w, \\ \text{and } x \text{ is telling this in } w \}$$

(22) captures the “meaning of the sentence” as part of the unread novel (i.e. without any specific reader). The reader’s subjective interpretation when reading the novel is more informative: We must bring in the set of reader R ’s possible contexts as defined in (19), repeated below.

$$(23) \quad C_R = \text{the set of contexts } R \text{ could be in, as far as she knows} \\ C_R := \{ c \mid c \in \text{Real.C} \wedge \text{world}(c) \in \text{Dox}(R) \}$$

As the doxastic alternatives of R do not support the content of fiction, we have to adjust the definition for the interpretation of narrative fiction. Let us first use Lewis’ insight that R has certain beliefs about worlds where the story could take place.

$$(24) \quad \text{Fict}(R) \text{ is the set of worlds where, according to } R\text{'s beliefs (at that point), the content of} \\ \text{the fictional story holds true.} \\ \text{Fict}(R) = \{ w \mid R \text{ believes that the story could take place in } w \}$$

$\text{Fict}(R)$ serves the same function as R ’s doxastic alternatives in the interpretation of assertive texts. As discussed in 4.1, $\text{Fict}(R)$ is informed by general knowledge of R about world and time where the story is situated. — We can now define the context set $C.\text{FICT}_R$ as the set of utterance contexts that could, as far as R believes, be a context in which R reads the story as if it were told as known fact.

$$(25) \quad C.\text{FICT}_R = \{ c \mid c \in \text{Real.C} \wedge \text{world}(c) \in \text{FICT}(R) \} \\ \text{‘contexts that, as far as } R \text{ believes, could be the context in which } R \text{ is told the story’}$$

Remember that Real.C does not say that c is part of the actual world. It ensures that the world of c contains a corresponding utterance at the right time and place and with the correct participants. If reader R views herself as the addressee of the first person narration, then R takes part as $ad(c)$ in all $\text{world}(c)$ in $C.\text{FICT}_R$. We can now define what the story (20) means for R . As before, I assume diagonalization: The world that the sentence talks about is the world in which the utterance context takes place (i.e., $\llbracket (20) \rrbracket^c(\text{world}(c))$ is true).

(26) Utterance meaning of (20):

$$\bigcup_{c \in C.FICT-R} \{ w \mid w = world(c) \wedge \llbracket (20) \rrbracket^c(world(c)) \text{ is true } \}$$

The given example yields the following proposition.⁷

(27) $\bigcup_{c \in C.FICT-R} \{ w \mid sp(c) \text{ and Tom found the money in } world(c)$
 $\wedge sp(c) \text{ and Tom became rich in } world(c)$

$$\wedge w = world(c) \}$$

$$= \{ w \mid \text{there is someone } x \text{ such that } x \text{ and Tom found gold}$$

$$\text{and } x \text{ and Tom became rich in } w$$

$$\text{and } x \text{ and } R \text{ share a context in } w \text{ as teller and hearer}$$

$$\text{and } w \text{ is a world where } R \text{ thinks that the story takes place } \}$$

This final version spells out how R is involved in the world of the story where (20) is told as if it were a known fact. The semantic evaluation (26) also enriches the sentence content by R's beliefs about the story settings. In the given case, R could be a reader who has already read *Tom Sawyer*. If so, then R will restrict possible worlds accordingly. The first sentence of *Huckleberry Finn* actually alludes to this possible background.

4.3 Deceptive and unreliable speakers

The reader-independent interpretation defined in (22) might suggest that the teller has unchallenged authority on the content of the story. This is problematic, as it has been pointed out that tellers can be unreliable or even deceptive. The subjective interpretation can account for such constellations. Let us look at the following (hypothetic) utterance of *Huckleberry Finn* as part of the novel.

(28) The priest was wearing a cozy.

If (28) were part of the story told, the reader would rather assume that Huck is mistaken about the nature of clerical headgear than believe that a priest had a coffee warmer on his head. The unfiltered subjective interpretation would therefore produce the empty set:

$$(29) \bigcup_{c \in C.FICT-R} \{ w \mid \text{the priest wore a cozy in } world(c)$$

$$\wedge w = world(c) \}$$

$$= \{ w \mid \text{the priest wore a cozy in } world(c)$$

$$\wedge x \text{ and } R \text{ are engaged in } w \text{ as teller and hearer}$$

$$\wedge w \text{ is a world where } R \text{ thinks that the story takes place } \}$$

$$= \emptyset$$

The reader R must react to the fact that the story content now is contradictory. Like in real-world communication, R will conduct a meta-linguistic plausibility check. She takes into account her knowledge about the protagonist, for instance that Huck is not acquainted with or interested in traditional religious practices. She assumes that Huck does not aim to ridicule the

⁷ I leave the definite NPs unresolved.

reader but aims to use what he believes to be the proper word for the thing he saw. In brief, R is trying to reconstruct worlds w that could be described by Huck in this way and plausibly be worlds where the story holds true. I will not investigate the necessary belief revisions in detail, but see (Maier & Semeijn, 2019/subm.) for similar cases.

While the error in (28) was easy to detect, other unreliable tellers require more knowledge of the human nature to be unmasked. The reader's questioning the truth of the teller's statements as part of the given fiction rests substantially on what the reader learned about the teller in the preceding story. Interpretation rests on the fact that the reader equates $sp(c)$ with the protagonist x in the story.⁸ In the classical semantic framework we used so far the equation will need auxiliary descriptions such as $THE.SPEAKER(x)$ in order to mirror the status of x independently of the contexts in $C.FICT_R$. A dynamic semantic framework could facilitate the task of tracking the teller and equating him with a protagonist.

5. Going dynamic

This section addresses an unwelcome asymmetry that we inherit from Kaplan's framework. His character theory does not treat all context parameters alike: The context determines speaker, addressee, place and time, but the world parameter is left aside, which allows Kaplan to derive propositions (see (2),(3)). The present paper explores an analysis that alleviates this asymmetry: The subjective meaning account assumes that the sentence predicates about $world(c)$. While this predicts that all context parameters contribute to meaning in a uniform manner, one may still have the feeling that the world parameter is not treated like all other parameters. While all context parameters play out in computing the sentence meaning, only the world parameter $world(c) = w$ determines the objects we sum up. This is needed to ensure that the definitions in (8), (9), (11) and all following derive sets of worlds, not sets of contexts.

The asymmetry can be resolved if we transfer the present definitions into a dynamic semantic framework (Kamp 1981, Heim 1982, Groenendijk & Stockhof 1990, a.o.). These frameworks have in common that sentences essentially denote sets of variable assignments instead of sets of worlds (van Leusen & Muskens 2003 make this point most clearly). Variables x_1, x_2, \dots, x_i represent discourse referents, and for each assignment f the value $f(x_i)$ is one of the entities that x_i could refer to. These sets of assignments show up in different notations (as DRS boxes, as sets of files, as pairs of assignments etc.) which blurs the commonalities of theories. Sentence meanings in dynamic semantics boil down to sets of assignment functions; or in other words, sets of tuples of objects.⁹ This framework allows us to integrate other context parameters into the meaning of sentences. Let us return to the beginning of Huckleberry Finn.

(30) Tom and me found the money that the robbers hid in the cave, and it made us rich.

⁸ The ultimate challenge for any theory are narratives where the reader only in *retrospect* will understand that the teller was unreliable early on. Such narratives require a second reading by necessity (see *Mottenlicht* by Antje Wagner for an example). I leave a detailed discussion of such cases aside.

⁹ Whether finite or infinite tuples serve the purpose, was a hotly debated issue in early dynamic literature. Both assumptions lead to a consistent theory and I will talk in terms of finite tuples, for the sake of simplicity.

If analysed in DRT, the sentence introduces the following discourse referents: x_1 for ‘Tom’, x_2 for the referent of ‘me’, x_3 for ‘the money’, x_4 for ‘the robbers’ and x_5 for ‘the cave’. The sentence meaning will be tantamount to the set of all variable assignments f that map $f(x_1)$ to the person called Tom (and having the Tom-properties of volume 1), $f(x_2)$ to the speaker $sp(c)$, $f(x_3)$ to ‘the money’ and so on. All context parameters that are explicitly introduced by words (*I, you*) or other expressions (*luckily, Alas!*) introduce a discourse referent. Being mirrored by the semantic representation is no longer the privilege of possible worlds. A dynamic rendering of narrative text also records teller, reader (if mentioned) and other indexical parameters.

Let me stress a last time that the present account cannot be replaced by Kaplan’s classical characters, evaluated in single contexts c . Kaplan predicts that $sp(c)$ is always the one and same person named Huck Finn in all possible worlds. Yet, speakers in narrative fiction cannot generally be captured by stipulating a single teller T that acts in all possible worlds where the story is true. There are first person stories (or passages in the beginning) where the speaker’s name is unknown and speaker identity open: Someone is telling you this. Examples include not only anonymous first person narrations like Murakami, *The murdering of the commendatore*, but also implicit first person tellers as in Knut Hamsun’s *Soil of the Earth*.¹⁰ This kind of story meaning, at the latest, rests on union over possible utterance contexts and the auxiliary notions in sections 2 – 4. In a potential dynamic representation we will not only consider the union over context worlds but also include context speakers, context times, context places and possibly context addressees.¹¹ Dynamic semantics thus offers a symmetric treatment for all context parameters, levelling out the asymmetry between world and other. I will not provide the dynamic version of the analysis here, but see Eckardt (2019/subm.) for an extension in this direction.

6. Summary

Kaplan’s interpretation of indexicals rests on the basic assumption that speaker and addressee know each other in normal utterance situations. His step from character to proposition offers a systematic interpretation of indexicals in truth conditional semantics. The analysis is challenged by examples where the hearer has incomplete information about the context. Our main examples were the anonymous message and the message in the bottle. I proposed that the proposition conveyed is computed by summing over all utterance contexts c that the addressee holds possible. Section 3 argued that the union over contexts offers an alternative way to derive propositions from characters, and showed how these semantic objects depend on the overall set of contexts C . C and its subsets must be carefully controlled for in order to predict adequate denotations of sentences. This was an important prerequisite for investigating the meaning of fiction.

Section 4 turned to the analysis of fiction. Following the lead of Lewis, I generalized notions like doxastic alternatives, possible contexts and subjective meaning to the domain of fiction. We arrived at a definition of what sentences in fiction mean for readers, bringing in their beliefs about the story worlds and the content of the text. The analysis can also capture anonymous

¹⁰ See Eckardt (2019/subm.) for extended discussion of examples and speaker-oriented items in fiction.

¹¹ Epistolary novels like Goethe’s *Werther* create the fiction that the teller is talking to the letters’ addressee, not the reader.

tellers of stories and deal with unreliable and deceptive tellers. Section 5 proposed some potential advantages of re-setting the analysis in a dynamic semantic framework.

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