Coping with Imaginative Resistance[*]

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Abstract Philosophers have argued there is a particular kind of jarring effect in certain types of narrative fiction that prevents readers from imaginative engagement and/or detracts from the author's authority over what's fictionally true. In this paper we argue that this so-called imaginative resistance effect does not usually prevent readers from engaging imaginatively, nor does it detract from the author's authority over what's fictionally true. We distinguish three possible interpretation strategies that readers can follow to overcome an initial resistance: Face Value, Character Perspective, and Narrator Accommodation. We present novel empirical evidence that shows that actual readers use these strategies. Subsequently, we flesh out the exact workings of the three strategies by integrating them into a general formal semantic framework for interpreting fiction.

Keywords: fiction; narrative; dynamic semantics; (unreliable) narrators; imaginative resistance; accommodation; coherence

Contents

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[*] This is a first draft of our manuscript, dated August 3, 2020. List of thank you's to be added later.

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1 Imaginative resistance

Consider the following mini-fiction:

(1)   Sara never liked animals. One day, her father caught her kicking the neighbor's dog. He got really angry and she was grounded for a week. To get back at her father she poured bleach in the big fish tank, killing the beautiful fish that he loved so much. Good thing that she did, because he was really annoying.

When we get to the final sentence our engagement with the fiction waivers. Although we grant the author the authority to decide that – in the fictional world – there's a girl who kills fish, it's apparently not up to the author to decide that this is a good thing to do (in that fictional world).

Philosophers of art have sought to explain when and why our imaginative engagement and/or the author's authority breaks down here (Gendler 2018; Tuna 2020). In this paper we acknowledge that there is something jarring in discourses like (1), but we suggest that this jarring effect does not prevent readers from engaging imaginatively, nor does it detract from the author's authority over what's fictionally true.

We distinguish at least three possible readings of jarring stories like (1). On the Face Value interpretation, we take the text as presenting us with a fictional world where killing the fish would, in fact, be the right thing to do in the circumstances described. In most fictional narratives this will be the default interpretation strategy: the text straightforwardly describes the fictional states of affairs and events in the story world. In fact, it seems that we speak of Imaginative Resistance precisely in those cases where this strategy would lead the reader to assume highly implausible, deviant, impossible, and/or immoral story worlds.[1] But for those suffering from

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1 David Hume's *Of the Standard of Taste* is usually cited as the first discussion of this phenomenon. The contemporary debate was kicked off by Walton (1994) and Moran (1994). Gendler (2000) was the

such resistance, there are other interpretation strategies which neutralize the jarring passage by attributing it to one of the fictional characters.

The Character Perspective strategy involves viewing a certain passage as involving a shift to the perspective of one of the salient characters. Such a perspective shift typically involves recognizing the passage as a (more or less covert) report construction, like free indirect discourse, which means we're describing not a deviant story world but the character's deviant thoughts. The Narrator Accommodation strategy, on the other hand, involves accommodating a personal narrator and interpreting the relevant passage as an description of their unreliable mental state.

There may be yet further coping mechanisms, like non-literal (ironic or metaphorical) interpretation of (certain phrases in) the offending passage, or 'pop-out' , where we break out of the pretense and take the evaluation as a comment from the actual author (Gendler 2006:156-162). In this paper we focus on the first two coping mechanisms, Character Perspective and Narrator Accommodation, and how they relate to the default strategy of taking the story at Face Value.

The paper proceeds as follows. In §2 we flesh out, exemplify, and motivate our hypothesized strategies in some detail. Building on previous experimental research on imaginative resistance (Liao et al. 2014; Kim et al. 2018) and narrative perspective shift (Kaiser 2015), we provide novel empirical evidence that these strategies are real, i.e. in a controlled experimental setting we found that actual readers do interpret the critical passages in purported examples of imaginative resistance as representing the point of view of a prominent fictional character or the implicit narrator, rather than as a reflection of the fictional world itself. Subsequently, in §3 − §4, we further flesh out the exact workings of the three hypothesized interpretation strategies by integrating them into a general formal semantic framework for interpreting fictional stories. Finally, in §5, we conclude the paper by summarizing our proposed framework in the context of prior work on imaginative resistance, noting outstanding questions for further research.

2   Three interpretation strategies: An empirical investigation

In this section we introduce and motivate the ideas behind our analysis of imaginative resistance informally, by presenting some results from an exploratory survey we conducted on Amazon's Mechanical Turk. The aim of this survey was to see how actual, naive readers of the alleged imaginative resistance stories from the philosophical literature interpret them. More specifically, we were looking for evidence of

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first to refer to the phenomenon as "the puzzle of imaginative resistance", defining it as "the puzzle of explaining our comparative difficulty in imagining fictional worlds that we take to be morally deviant" (*ibid*,56). There are a number of detailed and recent overviews of the state of the debate in philosophy, including Tuna (2020); Liao & Gendler (2016).

our three hypothesized interpretation strategies: Face Value, Character Perspective, and Narrator Accommodation.

We selected 10 imaginative resistance stories from the literature, exemplifying some of the alleged types of imaginative resistance (moral deviance, aesthetic deviance, physical impossibility, logical impossibility), slightly edited some of them for length and clarity and added two of our own. The twelve stories and sources can be found in the Appendix.

All stories were written 'in the third person', i.e. as if told by an impersonal omniscient narrator. For comparison we then made two minimal variations on each, one where the crucial evaluative or inconsistent assertion is explicitly embedded in a direct or indirect report and hence reflecting merely the opinion of one of the characters, and one where the narrator is a character in the story, referring to herself explicitly with first person pronouns.[2]

In a 3x1 design, we made three lists containing one version of each of the twelve stories. Participants were randomly assigned to a list, whose twelve items were presented randomly (using Qualtrics). Each participant first saw instructions, including:

(2) a. There are twelve short fictional mini-stories, each followed by three questions. The entire task should take about 15-17 minutes.

  b. Some questions are of the form "To what extent do you think it is true in the world of the story that such-and-such?", and your answer will be a number on a scale from 1 ("No, in the story I just read, such-and-such is definitely not true") to 5 ("Yes, in the story I just read, such-and-such is definitely true").

  c. Some questions will use the concept of a "fictional narrator". This narrator is the fictional entity that supposedly tells the story. In some types of stories this corresponds to the first person "I" character, while in others there's a more abstract "impersonal" or "omniscient" narrator. When we refer to "the author" we mean the actual person who wrote these little stories.

To measure resistance and detect the different coping strategies, each story was followed by: a control question (e.g. (3a)), a resistance question (e.g. (3b)), and a perspective question (e.g. (3c)). Here's an example item:

(3) **Giselda's Baby**

  After hours of painful labor, Giselda gave birth to a beautiful baby girl.

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2 The complete materials, all variations, lists, questions, etc. can be downloaded here: https://drive.google.com/file/d/120U9eIak5f8zur5IASG4-3BlsbrMlAsg/. The Appendix in this paper only includes the twelve original stories.

Unbeknownst to her husband however, the baby girl was not his; she had had a longstanding affair with another man. In cheating on her husband and lying to him about it, Giselda did the right thing though; after all, her husband didn't need to know.

a. To what extent do you take it to be true within the fictional world of this story that Giselda cheated on her husband?

   o   o   o   o   o
   1   2   3   4   5

b. To what extent do you take it to be true within the fictional world of this story that Giselda did the right thing?

   o   o   o   o   o
   1   2   3   4   5

c. Whose opinion is it that Giselda did the right thing?
☐ The author's
☐ The fictional narrator's
☐ Giselda's
☐ None of the above

We collected data from 24 participants, all from Amazon's Mechanical Turk, randomly assigned to one of the three lists. Two participants were excluded on the basis of failing 3 control questions, leaving 8 in list I, 6 in list II, and 8 in list III.[3]

In the remainder of this section we draw on data collected through this survey to substantiate the proposed three strategies for coping with imaginative resistance.

2.1 Face Value Strategy

When confronted with a strange or inconsistent story, one reaction might be to embrace authorial authority, and decide that, no matter how strange, immoral, or logically impossible, we accept that the state of affairs in the fictional world under construction is as the text describes it. Consider one of the most discussed examples in the literature: Weatherson's (2004) Death on the Freeway (abbreviated here to highlight the crucial passages; see Story 1 in the Appendix for original version):

(4) **Death on the Freeway**
Jack and Jill were arguing again. … This was causing traffic to bank up a bit. It wasn't significantly worse than normally happened around Providence … When Craig saw that the cause of the bankup had been Jack and Jill, he took his gun out of the glovebox and shot them. People then started driving

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3 Complete data file available as Google Sheet here: https://docs.google.com/spreadsheets/d/1JZ0s_f1N6RKrNqj3Lh1vGlGjtXA4zip_iSQCm7fHFQQ/.

over their bodies, and while the new speed hump caused some people to slow down a bit, mostly traffic returned to its normal speed. So Craig did the right thing, because Jack and Jill should have taken their argument somewhere else where they wouldn't get in anyone's way.

Readers have no trouble accepting that, in the fictional world of Death on the Freeway, Craig shot two people because they were arguing, i.e. we take the description of the shooting at Face Value. So, then, we might in principle do the same with the critical passage at the end, and just accept that, in that fictional world, that is the morally righteous thing to do.

Especially for stories that purport to present a logical impossibility – like Priest's (1997) *Sylvan's Box*, whose crucial passage is quoted in (5) (see Story 3 in the Appendix for original version) – it has been suggested that this is an appropriate and/or common reader response (Ryan 1991; Walton 1990; Priest 1997; Matravers 2014; Badura & Berto 2018).

(5)   **The Box**
        … At first, she thought it must be a trick of the light, but more careful inspection certified that it was no illusion. The box was absolutely empty, but also had something in it. Fixed to its base was a small figurine, carved of wood, Chinese influence, Southeast Asian maybe.

In our experiment we detect Face Value readings by looking at the answers to the resistance question: To what extent do you take it to be true in the world of the story that the box is full and empty at the same time? / that Giselda/Craig did the right thing? etc. High scores on the 5-point Likert scale here indicate that the reader accepts the immoral, impossible or unlikely proposition as a fictional truth, which indicates a face value interpretation. In figure 1 we plot our 12 stories with their mean acceptance rates.

The story that shows the highest acceptance – and hence is most prone to a Face Value interpretation – is Interstate, featuring a highly incredible but not logically impossible or morally impermissible state of affairs (2000 miles of highway have been painted with intricate floral patterns; see (28) in §4.1 and Story 6 in the Appendix). On the other side, The Fish Tank (see (1) and Story 11 in the Appendix) has the lowest acceptance: all participants judged it to be not true of the fictional world that killing the fish was a good thing to do. In other words, nobody took the stories explicit claim that the killing was a good thing at Face Value.
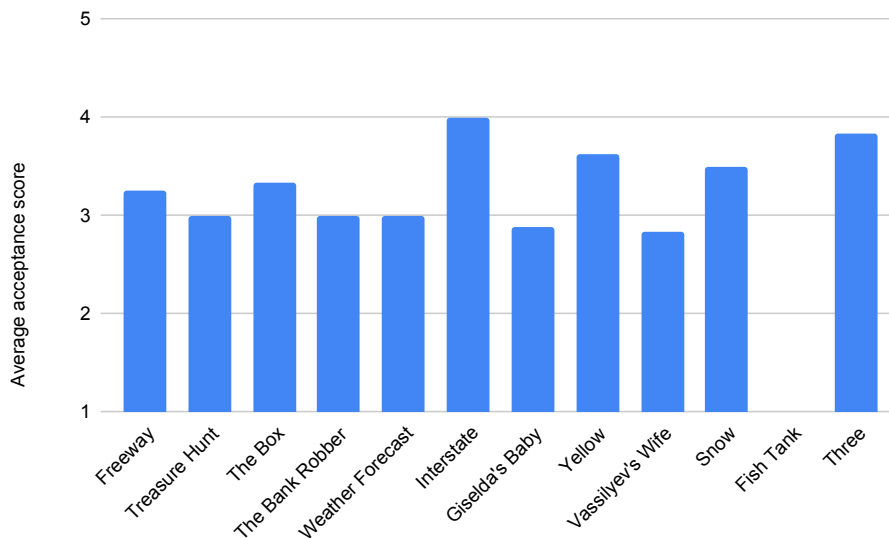
Figure 1 Average acceptance rates of target proposition in the original stories (1 = not true, 5 = true).

2.2 The Character Perspective strategy

2.2.1 No resistance with reports

Intuitively, embedding an immoral or illogical claim in a speech or attitude report should significantly reduce the reader's resistance. It's perhaps unpleasant to imagine someone who is convinced or claims that killing people or animals for causing minor annoyances is the right thing to do, but it's by no means as challenging as imagining a world where such killing really is okay. After all, we readily accept that some people – both real and fictional – may be delusional, psychotic, mistaken, lying, or even plain evil. Thus, while (6a) may cause imaginative resistance, (6b) and (6c) do not, as the latter two do not invite us to imagine a world where shooting people who are annoying in traffic is really fine.

(6)   … When Craig saw that the cause of the bankup had been Jack and Jill, he took his gun out of the glovebox and shot them. … mostly traffic returned to its normal speed.

a.   So Craig did the right thing, because Jack and Jill should have taken their argument somewhere else where they wouldn't get in anyone's way.

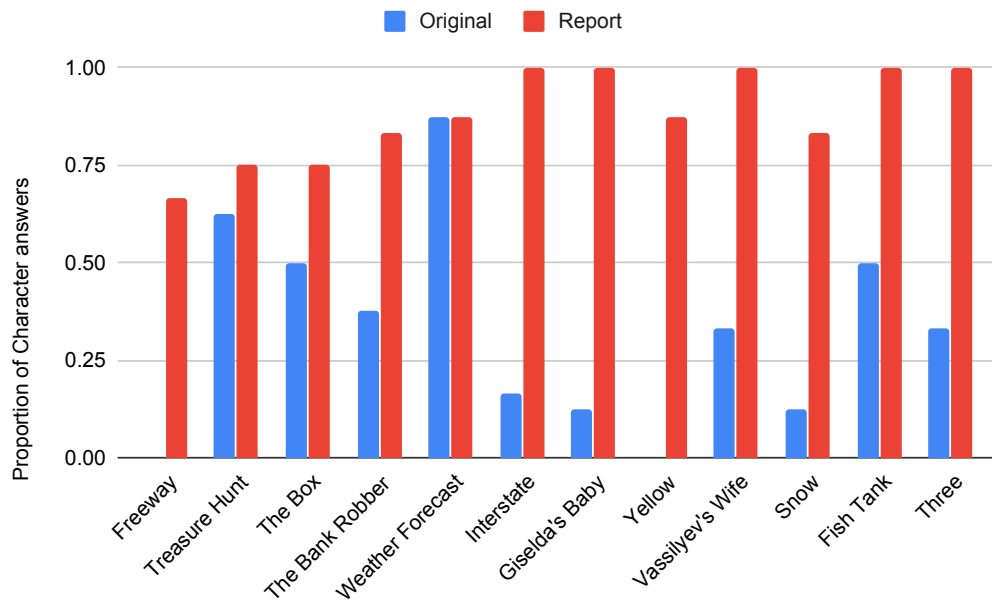b.   Craig thought that he did the right thing, because Jack and Jill should

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Figure 2   Proportion of character answers to the perspective question 'Whose opinion is it that p?' for both the original story and the explicit report manipulation.

    have taken their argument somewhere else where they wouldn't get in anyone's way

c.   "Hey buddy, you did the right thing" a passing motorist yelled out, "They should have taken their argument elsewhere!"

In our survey we included explicit report versions like (6b) and (6c) for all stories. Results show that participants are less likely to accept the crucial immoral or impossible proposition when it's embedded (see Figure 3), and instead overwhelmingly ascribe the relevant opinion to the character (see Figure 2), as expected.

Looking at the acceptance rates in Figure 3 we see two potential exceptions to our prediction: the previously mentioned The Fish Tank and Weather Forecast, provided below in (7), from Kim et al. (2018) (Story 5 in the Appendix). In what follows, we discuss the latter. We return to the former briefly in §2.3 and in more detail in §4.4.

(7)   **Weather Forecast**
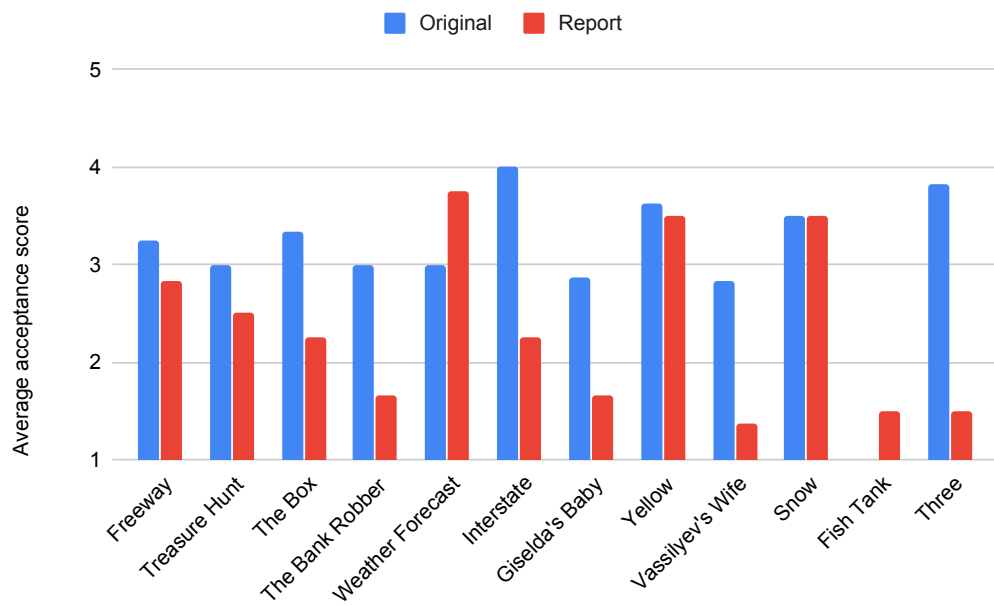   Jack and Mary are watching the weather forecast. The presenter says: "To-

Figure 3 Acceptance rates of target proposition in the original stories and the report manipulations (1 = not true, 5 = true).

morrow there will be two to three inches of snow. It will begin to snow at around 9am, and the temperature will fluctuate between 27° and 31°F." Jack and Mary look at each other and start to laugh.

    a.   This is understandable, since that weather forecast was very funny.

    b.   This is understandable, since they thought that weather forecast was very funny.

Observe that the first clause of the target sentence in (7a) and (7b) ("This is understandable") cannot be plausibly understood as part of a report of Jack and Mary's thoughts – that would mean that in the final part of the story they themselves are evaluating their own earlier laughter, which is not a salient reading of this story. Nevertheless, most readers took this statement as an expression of Jack and Mary's opinion as to whether the forecast was very funny. Why should that be the case? Below we offer a hypothesis, while acknowledging that more careful data collection and analysis is needed to reveal whether the reported difference in (7a) and (7b) is, in fact, significant.

One possible reason for why readers took the target sentence as an expression of Jack and Mary's opinion is a form of pragmatic perspective shifting that targets predicates of personal taste (Lasersohn 2005; Stephenson 2007; Pearson 2013) and other expressive or perspectival elements (Harris & Potts 2010; Barlew 2017; McNally & Stojanovic 2014). For example, an unembedded occurrence of *tasty* or *funny* is typically interpreted relative to the current speaker, but in certain special pragmatic contexts, e.g. when people are discussing cat food in the presence of a salient cat eating that food, the relevant perspectival parameter lexically built in to this particular lexical item can be shifted to that salient other:[4]

(8)   Look, that new cat food is really tasty – Felix is just gobbling it down!

There's a growing body of recent work in semantics trying to come to grips with the variety of seemingly different but overlapping forms of perspective shifting in language, and in fictional narrative in particular: viewpoint shift (Hinterwimmer 2017), protagonist projection (Stokke 2013), represented perception (Bimpikou 2020), character focus (Stokke 2020), and focalization (Genette 1980). We leave it for future research to take a closer look at whether any of these constructions or phenomena might play a role in overcoming imaginative resistance in stories. In the remainder of this section we discuss one particularly well-studied form of perspective shifting that is common in fictional narrative: free indirect discourse.

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4 Example (8) is based on a more complicated example from Stephenson 2007, attributed to Kai von Fintel.

2.2.2 Free indirect discourse

We've seen some evidence now that a resistance trigger can be neutralized when embedded in a report construction. It's not really difficult to imagine or accept that some person in a fictional story has a deviant conception of reality. But note that the category of report constructions is not exhausted by the direct and indirect discourse embeddings that we relied on in creating our report manipulations. Especially in fictional narratives, we find much more subtle types of perspective shifting that lead the reader to ascribe certain attitudes to a specific character in the story without any embedding or quotation marks. By far, the best known of these hidden report constructions is called free indirect discourse (Banfield 1982; Fludernik 1993):

(9)   Ashley was lying in bed freaking out. Tomorrow was her six year anniversary with Spencer and it had been the best six years of her life. What was she going to do? (Maier 2015)

There is no (overt) quotation or embedding verbs of saying or thinking, yet we intuitively read this passage as describing Ashley's thoughts. The question, for instance, does not signal that the narrator or author is asking the reader what to do, but is clearly a question that Ashley is asking herself. Similarly, *tomorrow* refers to Ashley's tomorrow, not the narrator's.

There is an ongoing debate within formal semantics about the nature of free indirect discourse: is it more like indirect discourse (Sharvit 2008), or more like direct discourse (Maier 2015), for instance? We remain agnostic on this matter. The point here is that free indirect discourse passages are reports of what a character is saying or thinking rather then a narrator's descriptions of what the (fictional) world is like. Hence, we predict that cases of apparent contradiction and deviant morality occurring in free indirect discourse should not give rise to sustained imaginative resistance, just as we established with explicit direct or indirect reports.

Of course, for a reader to apply this character perspective strategy thus requires that she indeed recognize the subtle grammatical markings of free indirect discourse as such. Free indirect discourse detection however is a notoriously difficult skill which leaves a lot of room for different interpretations, even for experienced literary critics. Empirical studies on free indirect discourse find that even seemingly clearly marked perspective shifts are not always recognized by unskilled participants (Salem et al. 2017; Maier et al. 2015).

Interestingly, one of our stories, Yablo's (2002) Treasure Hunt (Story 2 in the Appendix), shows many clear signs of free indirect discourse:

(10)   **Treasure Hunt**
         They flopped down beneath the giant maple. One more item to find, and yet

the game seemed lost. Hang on, Sally said. It's staring us in the face. This is a maple tree we're under. She grabbed a five-fingered leaf. <u>Here was the oval they needed!</u> They ran off to claim their prize.

The exclamation mark and the indexical *here* clearly express the excitement and location of the protagonist rather than the narrator, while the past tense (*was, needed*) and third person pronoun (*they*) by contrast reflect the (impersonal) narrator's third person perspective. The truth conditions of the crucial passage then can be quite accurately paraphrased as a direct or indirect speech report:[5]

(11)   a.   "Here is the oval we need!", she told them.
        b.   She told them that the oval they needed was right there.

Reading (10) as a free indirect discourse and thus as a report, roughly equivalent to something like (11), would be a rather effective strategy for the reader to cope with their initial resistance. Although a quick first glance might suggest a story world where a five-fingered maple leaf *is* an oval, a proper recognition of the markings of free indirect style will reveal that we're instead dealing with a perfectly consistent story world where a (confused, deceptive, or delusional) protagonist picks up a five-fingered leaf and *calls it* an oval. Looking at the data in Figure 2 we see that this story has the second highest proportion of character answers to the perspective question, suggesting that readers were able to identify the free indirect discourse here and hence interpret the judgment as a representing the character's perspective.

Among the stories with high proportions of character answers in Figure 2, The Box, which we repeat below, is likewise compatible with a free indirect discourse reading (of the underlined passage):

(12)   At first, she thought it must be a trick of the light, but more careful inspection certified that it was no illusion. <u>The box was absolutely empty, but also had something in it.</u>

Although no clear syntactic markers of free indirect discourse are present in the target sentence, the explicit attitude ascription in the previous sentence ("she thought it must be a trick of the light") sets up a perfect context for subsequent free indirect thought reporting.

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5 Paraphrasing it in indirect speech is less straightforward than in direct speech and inevitably some of the nuances get lost, but something like (11b) comes close. As for (11a), it is worth pointing out that Yablo's prose seems to suppress quotation marks in direct discourse in the remainder of the passage.
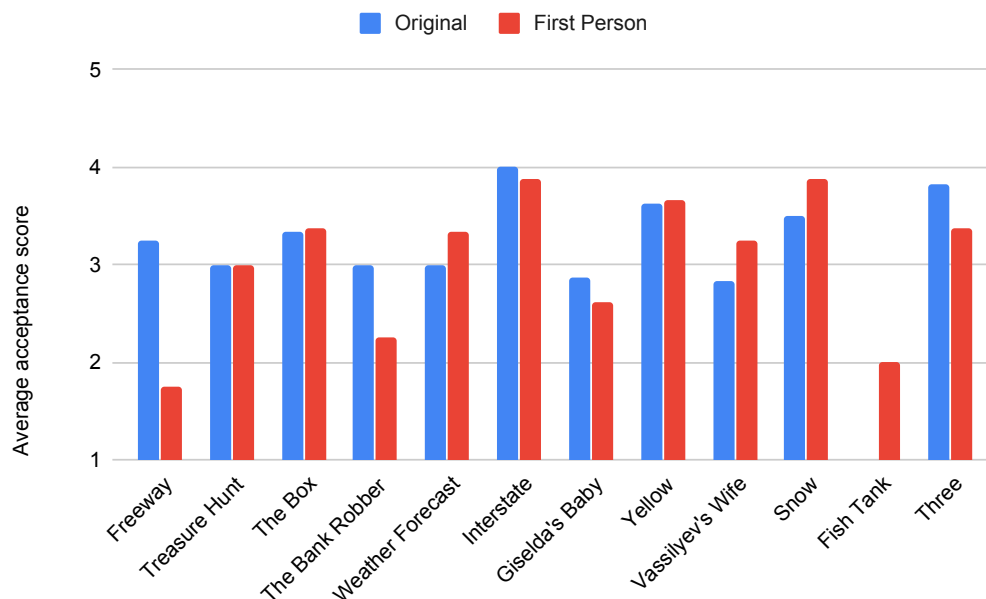
Figure 4 Acceptance rates of target proposition in the original stories and the first person manipulation (1 = not true, 5 = true).

2.3 The Narrator Accommodation strategy

2.3.1 First person unreliable narrators

We might expect that readers experience much less resistance if a story is told by a first person narrator, because in such stories we can just attribute the immoral view or the confusion to them, or we may even think they are lying. In narratological terms, we can simply assume that the narrator is 'unreliable' instead of accepting that the fictional world itself is morally or metaphysically deviant (Booth 1961; Margolin 2012).

To check this intuitive observation we constructed the explicit first person versions of all stories and looked at the acceptance rates. We would expect that acceptance goes down in the first person version compared to the original versions that all seemed to involve more detached, impersonal narration. We found no consistent evidence for this in our data, however; see Figure 4.

For Death on the Freeway, The Bank Robber, Interstate, Giselda's Baby, and Three (Stories 1, 4, 6, 7 and 12 in the Appendix, respectively) we see acceptance go down in the first person manipulation, in line with our expectations.

We can't explain why in a few first person versions acceptance seems to actually go up, while the proportion of Narrator and/or Author answers goes down (e.g. in The Fish Tank). Below we will however offer an explanation for why readers might arrive at similar interpretations for the third person and first person versions, viz. they might accommodate a narrator and thereby effectively turn the impersonal story into a first person narrative.

2.3.2 Impersonal narration and narrator accommodation

What happens when there is no character telling the story? When we're dealing with impersonal or third-person omniscient narration? There's a long standing debate about whether or not all fictional texts have a narrator, be it an explicit first person character, or a more abstract, impersonal point of view. Below we briefly compare what Eckardt (2020) calls the pan-narrator hypothesis (all stories have a narrator) with the optional-narrator hypothesis (some stories are narratorless). Ultimately we'll remain agnostic here and propose an account of what we will call 'narrator accommodation' that is compatible with both.

The standard argument for the pan-narrator hypothesis builds on speech act theory: an assertion comes with a commitment on the part of the asserter that they are telling what they know (or believe, or consider, or accept) to be true.[6] But the fiction author is not committed to the truth of the fictional assertion – Tolkien surely knew there are no talking dragons or magic rings. So if we want to maintain that a fictional text consists of fictional assertions (or assertion-like speech acts) we have to postulate some other, more committed 'speaker' who lives in the fictional world and knows what's happening and relays that to us by asserting what they know to be true (Lewis 1978; Genette 1980; Currie 1990; Ryan 1991; Margolin 2012).

Arguments for the optional-narrator hypothesis range from example stories about worlds without narration-capable beings (Byrne 1993) to the occurrence of 'unspeakable sentences' in modern literature (Banfield 1982).

Regardless of our stance in this debate, we can safely maintain that in impersonal narration, as opposed to first-personal narration, there is no *personal* narrator, i.e., no explicitly or implicitly introduced character that we can pinpoint as the one responsible for the speech acts making up the fictional text, and hence no specific individual that we can judge to be ironic, lying, confused, immoral, etc. We'll make this idea formally precise later on with the help of the notion of a discourse referent from dynamic semantics in §3.3.

Whether a story has some implicit narrator built in by definition or no narrator at all, in the right context, with the right linguistic trigger, a charitable interpreter can

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6 See Pagin 2016 for an overview of recent debates about such commitments and norms associated with assertion.

accommodate an explicit narrator, i.e. revise their initial interpretation by including an explicit representation (a discourse referent) of a certain character as a first person narrator (Lewis 1979). From a processing perspective we might say that narrator accommodation occurs in *every* reading of a (not yet familiar) first person narrative. In our first reading of a new story, we wouldn't go in assuming that any specific fictional character is the narrator until we encounter, say, a first person pronoun or perhaps another indexical. Take the opening lines of *Wide Sargasso Sea*:

(13)   They say when trouble comes close ranks, and so the white people did. But we were not in their ranks. The Jamaican ladies had never approved of my mother, 'because she pretty like pretty self' Christophine said. (Jean Rhys, *Wide Sargasso Sea*, 1966.)

The first sentence is arguably compatible with a narratorless or impersonal mode of story-telling. The first clear reference to a narrator is the occurrence of *we* in the second sentence. To interpret that first-person pronoun we have to accommodate the existence of a fictional character – as yet unnamed – that is telling us all this. We will formalize this process of 'narrator accommodation' more precisely below in terms of discourse referents and presupposition resolution in DRT.

Note that, while many novels reveal the presence of a narrator in their opening lines, the first person trigger could in principle occur much later. For instance, Konstantin Vaginov's *Goat Song* involves impersonal narration until Chapter 3, which opens (and continues) in the first person: "I'm sitting at the place of my friend, a famous artist."

Finally, the trigger that prompts the narrator accommodation need not be a first person pronoun. There are many indexical, perspectival, and speaker-oriented expressions, constructions and speech act types that seem to presuppose a first-person speaker/narrator parameter. The extent and definitions of perspective-dependence is a hotly debated topic but it ranges from local and temporal indexicals, to epistemic modals, pejoratives, questions, imperatives, honorifics, discourse particles and exclamatives (Bylinina et al. 2014; Eckardt 2020). Arguably, occurrences of such perspectival constructions in an otherwise seemingly impersonal narrative could force the reader to accommodate a first-personal narrator to serve as perspective anchor.

We suggest that narrator accommodation is also a common and effective strategy for coping with imaginative resistance, as the switch to first-person narration allows the reader to ascribe the deviant judgment to a deviant narrator instead of taking it at face value as a property of a fundamentally deviant fictional universe (as discussed in §2.3.1).

On closer inspection of our example stories we indeed find some arguably

perspectival terms in the critical sentences. First of all, there are the explicitly moral terms (*good*) and esthetic evaluatives (*beautiful*, *funny*). Now, to what extent the underlying ethical and esthetic concepts are really subjective is a matter of ethics and esthetics, respectively, but it seems plausible that (some) uses of such terms presuppose a 'perspective holder' or 'judge' (McNally & Stojanovic 2014), which has to be a salient, sentient person rather than an abstract, impersonal omniscient viewpoint.[7] In some cases, one of the salient, non-narrating fictional characters may serve as the relevant judge (as we suggested for Weather Forecast in §2.2.1). In other cases we might take the perspectival element as a cue for a free indirect discourse interpretation (as discussed in §2.2.2). Both of these strategies lead to an interpretation where the evaluation is attributed to one of the salient characters, and hence fall under the Character Perspective strategy. An alternative for the interpretation of such judge-dependent expressions in impersonal narratives is to simply accommodate a first-person narrator to be the judge. This is what we call the Narrator Accommodation strategy.

The same holds for more subtly perspectival cues like epistemic modals (*maybe* in The Box, (5)) or causal/evidential connectives like (*so*, *therefore* in Death on the Freeway (4)). In other words, all arguably perspective-sensitive elements could play a role in triggering either a Character Perspective interpretation (Abrusán 2020) or a Narrator Accommodation interpretation (Eckardt 2020).

Finally, there may be cases where there is no lexical trigger, but only a pragmatic inference that leads the reader to accommodate a personal narrator. Perhaps the mere difficulty of imagining a world where a box is full and empty at the same time could already lead the reader to accommodate that there is in fact a confused or deliberately misleading fictional character here that is telling us all this.

Regardless of whether it is triggered lexically or pragmatically, the accommodation of a narrator can in theory be an effective way to cope with imaginative resistance, i.e. a way to avoid a face value interpretation where the fictional world really is fundamentally deviant, by shifting to a reinterpretation where the story (or the relevant part) is presented as filtered through the perspective of a specific narrator who is confused about the reality of the fictional world she inhabits.

Finally, let's consider the evidence for narrator accommodation in our experimental data. Recall that in Figure 1 we already saw that in almost all stories, a significant portion of subjects report that the critical proposition, *p*, is not true in the fictional world. When we look at the perspective answers in Figure 5 we see that when asked whose opinion it is that *p*, a significant portion of subjects answer 'the fictional narrator's'. Since the stories were written in a mostly impersonal style (no

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7 It is well-known that not all perspectival terms are as rigidly indexical as the English first person pronoun. For instance, we've already seen in example (8) that a predicate of personal taste, while by default indexically anchored to the speaker, can be anchored to other salient discourse referents.
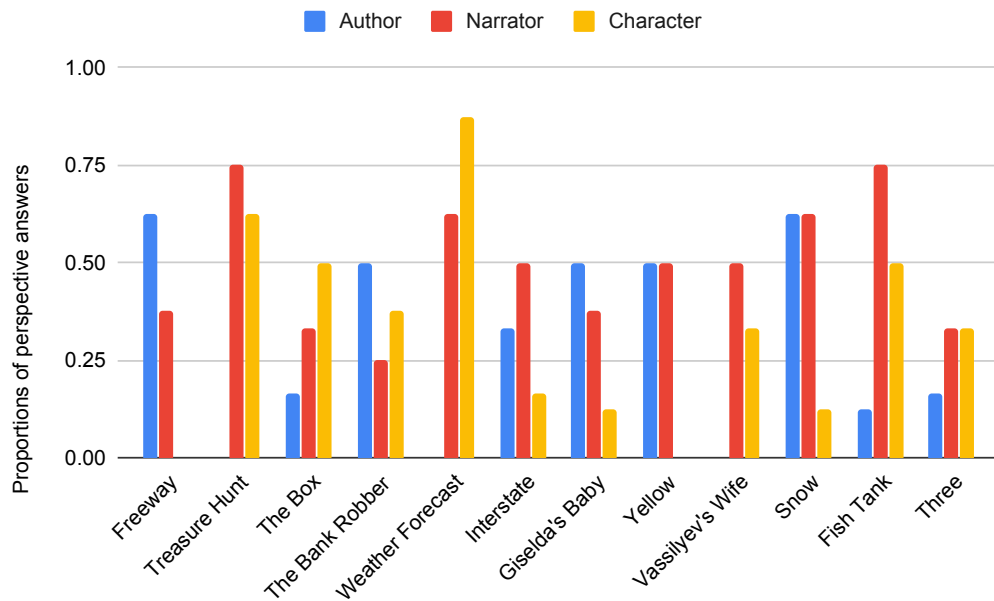
Figure 5   Proportions of narrator, character, and author answers in the original stories.

occurrences of first (or second) person pronouns, (mostly) past tenses), we conclude that those readers accommodated a narrator. Depending on the story, this Narrator Accommodation may have been prompted by the lexical semantic requirements of a certain perspectival element, or it may have been prompted pragmatically, by the desire to make sense of a seemingly radically unusual story world.

3   A formal framework for interpreting fiction

In the following sections, we propose a uniform (Segmented) Discourse Representation Theoretic implementation of the main coping mechanisms we hypothesized above. Doing so we integrate the underlying fiction interpretation strategies into a general theory of discourse interpretation, and make precise predictions about what might trigger what strategy, and what kind of truth-conditional impacts and processing costs are associated with each available interpretation option.

We start in this section by making room for fiction in standard DRT, a general representational framework for analyzing discourse meaning beyond the individual sentence level, and then add the basics of SDRT, an extension of DRT that takes discourse coherence as a guiding principle of interpretation.

3.1 Introducing DRT

Let's take a standard version of Discourse Representation Theory (DRT, Kamp 1981) as our starting point. According to this theory, interpreting a discourse, spoken or written, involves the interpreter updating an information state, represented in the formal language of Discourse Representation Structures (DRS).

We'll use a standard box notation for DRSs. By way of illustration, the box in (14b) is meant to represent the information conveyed by (14a):

(14)   a.   Farmer Sam owns a donkey.

b.
x y
farmer(x) donkey(y)
sam(x) own(x,y)

The top compartment (the universe of a DRS) houses the discourse referents, which can be thought of as existentially quantified variables of first-order logic, representing, roughly, the entities that the discourse is about. The bottom compartment contains descriptive conditions, expressing properties of, and relations between, discourse referents. The DRS language comes with a modeltheoretic semantics that says that, for instance, (14) is true iff there is an assignment function that maps drefs to indiviudals in the domain of the model such that the descriptive conditions are satisfied.

Note that the syntax of the DRS language is just a notational variant of that of first-order logic, and the model-theoretic semantics is static as well (Kamp & Reyle 1993). The dynamic nature of DRT resides in the way utterances in a discourse are interpreted as successive updates on the discourse representation. To illustrate, lets assume that the sentence in (14) continues with (15):

(15)   She thinks it is happy.

The *DRS construction algorithm* has to add the information of the new sentence to the input DRS in (14). One of the key characteristics of the algorithm is its distinct treatments of indefinites and definites. Indefinites introduce a new discourse referent and an accompanying condition into the input DRS, while definites are treated as *anaphoric*: they introduce free variables that search for antecedents to bind to (indicated by question marks) (Kamp 1981; Heim 1982). In DRT, anaphors such as third person pronouns are resolved by unifying them with prominent previously introduced discourse referent.

(16)

$$
\begin{array}{|c|}
\hline
x \quad y \\
\hline
\text{farmer(x)} \quad \text{donkey(y)} \\
\text{sam(x)} \quad \text{own(x,y)} \\
\text{BEL}_? \boxed{\text{happy(?)}} \\
\hline
\end{array}
\rightsquigarrow
\begin{array}{|c|}
\hline
x \quad y \\
\hline
\text{farmer(x)} \quad \text{donkey(y)} \\
\text{sam(x)} \quad \text{own(x,y)} \\
\text{BEL}_x \boxed{\text{happy(y)}} \\
\hline
\end{array}
$$
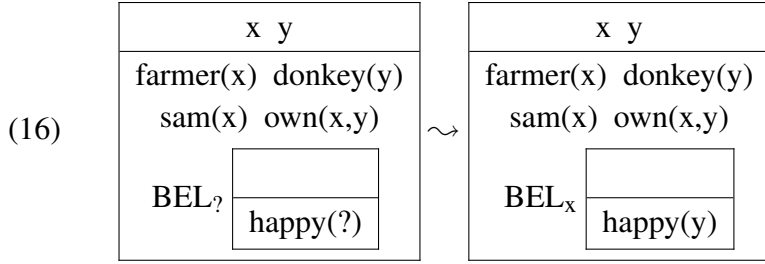
3.2 The fiction operator

To model the interpretation of fictional discourse, we represent the information we get from engaging with a work of fiction inside a dedicated 'fiction box', i.e. a subDRS embedded under a fiction operator FIC.

(17)

$$
\begin{array}{|c|}
\hline
x \quad y \\
\hline
\text{author(x)} \quad \text{book(y)} \\
\text{tolkien(x)} \quad \text{wrote(x,y)} \\
\text{lordoftherings(y)} \\
\text{FIC}_y \boxed{\begin{array}{c} u \quad v \\ \text{frodo(u)} \quad \text{sam(v)} \\ \text{friends(u,v)} \end{array}} \\
\hline
\end{array}
$$
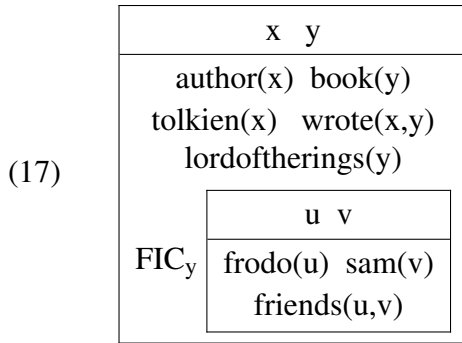
The operator FIC_y here means that the DRS that follows is interpreted as describing the fictional universe created by the work y. Following Lewis (1978), we can interpret FIC_y as a modal operator:

(18) $[\![\text{FIC}_x \varphi]\!]^{w,f} = 1$ iff for all w' compatible with fictional work $f(x)$,
   $[\![\varphi]\!]^{w',f} = 1$

We don't want to take a stance on the difficult semantic question what exactly it should mean for a possible world to be compatible with a fictional work. Instead we focus on the 'dynamic question' of fiction interpretation: how does engaging with a work of fiction, as opposed to engaging in non-fiction discourse, affect the discourse context as represented by a DRS? Our answer is that while non-fiction interpretation amounts to updates on the global DRS, fiction interpretation amounts to identifying a discourse referent representing the work in question, adding the corresponding FIC operator, and updating the DRS embedded under that box.[8]
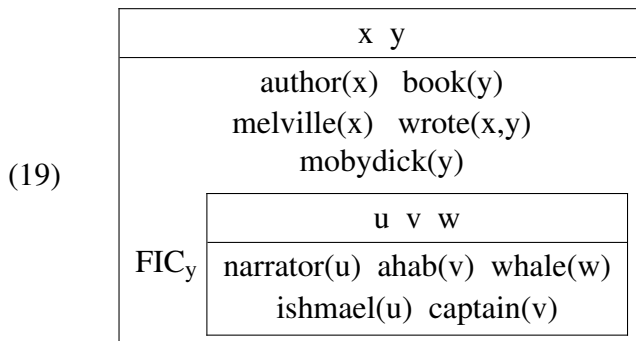
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8 See Lewis (1978) for a classic answer to the semantic question, and see Maier (2017) and Maier & Semeijn (2020) for alternative ways of addressing the dynamic question within a DRT framework.

3.3 The narrator

Within this general framework we can give a precise account of the distinction between the two basic kinds of narration discussed in §2.3: impersonal and first-personal narration. Recall, in impersonal (or third-person omniscient) narration, the narrator is a more or less omniscient, non-intrusive purely abstract entity surveying the events occurring in the story world, including the protagonists' innermost thoughts and feelings, and presenting them to the reader. In first-personal (or homodiegetic) narration, by contrast, the narrator is herself one of the protagonists in the story, and hence does not always have full access to what other characters are thinking or doing behind her back.

We model this distinction in terms of the presence or absence of a discourse referent representing the narrator. Impersonal narrations are those that do not give rise to a discourse referent for a narrator. Take (18), based on a typical reading of *The Lord of the Rings* as an impersonal narrative.[9] In a fuller DRS representation of the whole book there will be discourse referents for many fictional characters and events but none of them is singled out as the narrating *I*, the first person source of the speech act that constitutes the text as a whole. Instead, the information expressed by the fictional text gets processed and added to the fiction-box without the mediation of a narrating speaker.

A first-personal narration, we propose, is one whose interpretation gives rise to a discourse referent for a fictional narrating *I*. Consider the DRS in (19) representing a reading of the prototypical first-person narrative *Moby Dick*, which opens with 'Call me Ishmael'.

(19)

$x \quad y$
author(x)   book(y)
melville(x)   wrote(x,y)
mobydick(y)

$$\text{FIC}_y \begin{array}{|c|} \hline u \quad v \quad w \\ \hline \text{narrator(u)}\ \ \text{ahab(v)}\ \ \text{whale(w)} \\ \text{ishmael(u)}\ \ \text{captain(v)} \\ \hline \end{array}$$

We use the condition 'narrator(u)' to indicate that u is the narrating source or speaker of the speech acts being interpreted, i.e. the fictional *I* that is supposedly telling us the whole story. Any first person pronoun occurring anywhere[10] in the narrative will

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9 We'll ignore the prologue in which Tolkien inserts himself into the narrative as someone who has come into possession of an old manuscript.

10 We're putting aside local context shifting due to direct quotation or monstrous operators (Schlenker

necessarily pick out this unique narrator discourse referent – just like a first person pronoun outside a fictional narrative will always pick out the discourse referent designated as representing the actual speaker of the current speech act.[11]

One common way of addressing the metaphysical question behind the semantics of the fiction operator (What does it mean for a world to be compatible with a fictional work?) builds in the existence of a narrator. In Lewis's own formulation, for instance, for a world w' to be compatible with a fictional work t requires that t is told in w' (but "as known fact rather than than fiction"). Hence, all fictional worlds by definition contain a fictional narrator asserting the text. Crucially, the logically necessary existence of a narrator doesn't entail that the text gives rise to an actual discourse referent for this narrator. We can compare this situation to 'Partee's marble':

(20)   Nine out of the ten marbles are in the bag. # It is under the sofa. (approximately cited by Heim (1982:21))

Logically speaking, it follows from the first sentence that there is a unique missing marble, yet it is not introduced into the discourse record explicitly, which explains why the unique missing marble is not available as antecedent for the subsequent pronoun 'it'.

It has been observed about the marble case that with some small tweaks hearers readily *accommodate* a discourse referent for the missing marble, for instance if we add some descriptive content to the context or to the anaphoric element (Roberts 1989).

(21)   Nine out of the ten marbles are in the bag.

     a.   I've been looking for hours but … oh wait, maybe it's under the sofa.
     b.   {The missing marble/the red one/the bloody thing} is under the sofa.

The analogue of this in the domain of fiction is what we called narrator accommodation above. A fiction may start off as an impersonal narration, i.e., without a dedicated narrator discourse referent in the fiction box. If at some point in the text we encounter an indexical or perspectival element that needs to be anchored to a 'speaker', we can accommodate a narrator discourse referent. Note that we thereby effectively switch from impersonal to first-personal narration.

In sum, we want to remain agnostic about the optional-narrator vs pan-narrator debate. For the pan-narrator theorist, just think of the narrator as a Partee marble: there may always be a narrator, logically speaking, but only in the case of first-

11 See Bittner (2007) and Hunter (2013) for ways of incorporating Kaplanian rigidity intuitions into a dynamic semantic framework where indexicals are treated as essentially anaphoric pronouns.

personal narration is the narrator explicitly represented as a discourse referent. Importantly, narrator discourse referents (like missing marble discourse referents) can be accommodated, thereby causing an impersonal narration to switch to a first-personal narration.

3.4   Coherence relations in SDRT

So far, we've considered discourses where anaphora resolution was predictable given the associated semantic features of the pronouns. However, we know from psycholinguistic research that things are much more complex. Consider the following discourse from Smyth (1994):

(22)   a.   Phil tickled Stanley.
         b.   Liz poked him.

One can understand (22) as describing two events that happened to Stanley: Phil abused poor Stanley by tickling him, while Liz abused Stanley by poking him. In this reading the two sentences form a coherent discourse through the inference of a discourse or coherence relation called Parallel. A truth-conditionally distinct interpretation is also available. (22b) can describe what happened as a *result* of the event described by (22a): Phil's tickling Stanley resulted in Liz playing hero and poking Phil so that he would stop the abuse. This reading involves the inference of a coherence relation called Result. Crucially, the choice of discourse relation doesn't just add implicit, truth-conditional information about the temporal, causal or other relationships connecting eventualities, it also affects the structure of the discourse, thereby affecting for instance pronoun and presupposition resolution.

The term 'coherence relation' goes back to pioneering research in AI by Hobbs (1979, 1985, 1990), who used it to define discourse coherence: a discourse is coherent if and only if the discourse units that make up the discourse are related by one or more coherence relations. Examples of coherence relations include Result, Explanation, Narration, Background, Parallel, Contrast and Elaboration.[12]

In the remainder of this subsection, we will outline some formal tools we will need to model the role that discourse coherence plays in coping with imaginative resistance. To that end, we introduce an extension of our DRT framework known as Segmented Discourse Representation Theory (SDRT), which is a formal theory of coherence relations (Asher & Lascarides 2003).

In SDRT, the interpretation of a discourse yields an SDRS. Unlike in classic DRT, where we dynamically update a single DRS box, each elementary discourse

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12 For recent overviews of coherence relations, see Jasinskaja & Karagjosova (2019), Altshuler & Truswell (forthcoming:Ch.5-6).

unit gives rise to its own separate, labeled DRS box. A so-called Glue Logic provides axioms that constrain the inference of various coherence relations between these elementary discourse units (see Asher & Lascarides 2003 for details). For instance, the Result reading of the discourse about Phil and Stanley would be represented as in (23). Note that from here onwe'll be using a standard (Neo-)Davidsonian event semantics where verbs introduce eventualities (events or states) into the DRS):

(23)   a. π_1: Phil tickled Stanley. π_2: Liz poked him.

b.

π_1:

e x y
phil(x)
stanley(y)
tickled(e)
agent(e,x)
theme(e,y)

π_2:

e' z
liz(z)
poked(e')
agent(e',z)
theme(e',x)

Result(π_1, π_2)
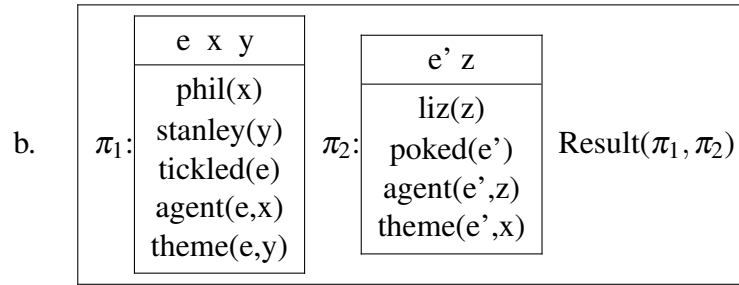
The model-theoretic interpretation of SDRSs is guided by the semantic interpretation of the coherence relations. The interpretation rule for a veridical relation like Narration or Result tells us to update the common ground with the contents of the DRS boxes associated with both discourse units, in addition to the relational information specific to the coherence relation in question – in this case, that the event introduced by first relatum is the cause of the event introduced by the second.[13] We'll use some standard abbreviations like K_{π_1} for the DRS box labeled with π_1, e_{π_1} for the main eventuality introduced in the universe of the DRS box labeled with π_1, and $\oplus$ for the merging of DRS boxes (formally: the universe of $K \oplus K'$ is the union of the universes of K and K', and its condition set is the union of the two condition sets, note also that we suppress empty universes in our notations). DRS boxes are semantically interpreted relative to a possible world index w and a variable assignment f.

(24) $[\![\text{Result}(\pi_1, \pi_2)]\!]^{w,f} = \left[\!\left[K_{\pi_1} \oplus K_{\pi_2} \oplus \boxed{\text{cause}(e_{\pi_1}, e_{\pi_2})} \right]\!\right]^{w,f}$

Result, as defined in (24) is a veridical coherence relation, because an occurrence of Result(π_1, π_2) commits us to evaluating both K_{π_1} and K_{π_2} as updates on the context in which the relation occurs.

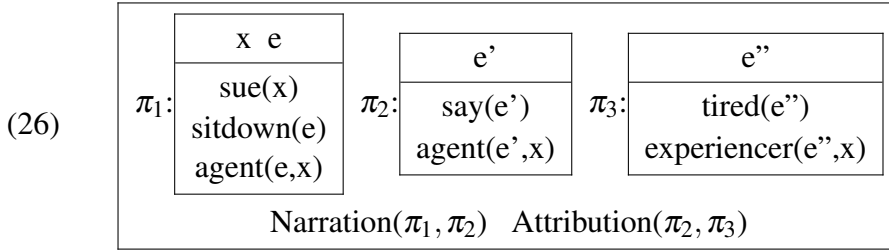13 For more discussion of Result, see Altshuler (2016:Ch.3).

3.5 Attribution

To model the Character Perspective and Narrator Accommodation strategies as possible coping mechanisms for readers struggling with imaginative resistance, we first need a general account of reported speech and thought in terms of a non-veridical discourse relation called Attribution (Hunter 2016; Cumming 2020).

Our starting point is the idea that a regular indirect discourse report construction ("She said she was tired" in (25a)) should be decomposed into two separate discourse units ("She said something") and ("She was tired"), as shown in (25b):

(25)   a.   Sue sat down. She said she was tired
        b. π_1: Sue sat down. π_2: She said π_3: she was tired

With this segmentation the standard SDRT Glue Logic axioms will allow us to connect the speech segment (π_2) to the sitting segment (π_1) by Narration. We'll assume that grammatical indirect discourse constructions encode that Attribution holds between the speech segment (π_2) and the complement segment (π_3).

(26)

$$\pi_1: \begin{array}{|l|} \hline \text{x e} \\ \hline \text{sue(x)} \\ \text{sitdown(e)} \\ \text{agent(e,x)} \\ \hline \end{array} \quad \pi_2: \begin{array}{|c|} \hline \text{e'} \\ \hline \text{say(e')} \\ \text{agent(e',x)} \\ \hline \end{array} \quad \pi_3: \begin{array}{|c|} \hline \text{e''} \\ \hline \text{tired(e'')} \\ \text{experiencer(e'',x)} \\ \hline \end{array}$$

$$\text{Narration}(\pi_1, \pi_2) \quad \text{Attribution}(\pi_2, \pi_3)$$

The semantic effect of Narration is that the second event is interpreted as immediately following the first (cf. Partee's (1984) time 'just after'). As illustrated in (27a), SDRT states this relation in terms of enablement: the post-state of the first event is the pre-state of the second event (Hobbs 1985; Asher & Lascarides 2003; Altshuler 2016:Ch.3). The semantic effect of Attribution is that the second segment specifies the propositional content of the speech event introduced in the first.[14] This is illustrated in (27b), where we employ the Montagovian notation: $^\wedge K$ refers to the possible worlds proposition expressed by K ($[\![^\wedge K]\!]^{w,f} = \lambda w. [\![K]\!]^{w,f}$).

(27)   a. $[\![\text{Narration}(\pi_1, \pi_2)]\!]^{w,f} = \left[\!\left[K_{\pi_1} \oplus K_{\pi_2} \oplus \boxed{\text{post}(e_{\pi_1}) \approx \text{pre}(e_{\pi_2})} \right]\!\right]^{w,f}$

        b. $[\![\text{Attribution}(\pi_2, \pi_3)]\!]^{w,f} = \left[\!\left[K_{\pi_2} \oplus \boxed{\text{content}(e_{\pi_2}) \subset ^\wedge K_{\pi_3}} \right]\!\right]^{w,f}$

Using SDRT terminology, we say that Narration is veridical, while Attribution

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14 Here, we borrowing from event-based semantic approaches to reporting (e.g., Kratzer 2006, Hacquard 2010).

is non-veridical: unlike Narration(π_2, π_3), the truth of Attribution(π_2, π_3) does not require the truth of both relata.

In effect we've now moved the analysis of reporting out of the syntax–semantics interface and into the realm of discourse pragmatics. In the case of indirect discourse this is mostly a matter of terminology, as we allow the syntax to inform the pragmatics (the Glue Logic) directly, i.e. by enforcing Attribution when parsing a grammatical report construction. However, the choice of modeling indirect discourse via Attribution as a discourse relation also allows us to capture reports that are not grammatically marked as such by an overt clausal embedding construction. This includes, for instance, unembedded report continuations, slifted parenthetical reports, free (i.e. unmarked) quotations, and free indirect discourse. We return to the latter below in our reconstruction of the Character Perspective strategy.

4 Coping with imaginative resistance in SDRT

Let's combine the theoretical ingredients from the previous sections, the DRT account of fiction and narration and the SDRT account of inferring coherence and attributions, into a more powerful framework for studying the interpretation of stories. In the following we illustrate our framework by formally analyzing in some detail three stories exemplifying our three strategies.

4.1 Face Value interpretation in Interstate

Let's illustrate our framework's default interpretation strategy for fiction, Face Value, by analyzing the story with the highest acceptance score:

(28) **Interstate**
      Jenny was driving along Interstate 95, ... Last summer, this highway was painted solid yellow and superimposed with intricate black flower patterns for its entire 2000-mile length.

We use regular DRT boxes to represent the general common ground information relevant to the interpretation of this piece of fiction, e.g. that there's an author who wrote a little story called 'Interstate'. The interpretation of the actual linguistically structured story takes place inside a fiction-box, and is modeled in the more fine-grained framework of SDRT. For clarity we represent just the bare bones of the story: there's an event of Jenny driving on the highway, and there's a state of the highway being painted yellow with floral patterns. We'll assume that the state described in the second discourse unit forms the background for the action described in the first. Thus, the overall structure should come out something like this:

(29)

$$\text{FIC}_x \begin{array}{|c|} \hline x \quad y \\ \hline \text{author(x)} \quad \text{story(y)} \\ \hline \pi_1: \begin{array}{|c|} \hline u \quad v \quad e \\ \hline \text{jenny(u)} \\ \text{highway(v)} \\ \text{drive(e)} \\ \text{agent(e,u)} \\ \hline \end{array} \quad \pi_2: \begin{array}{|c|} \hline e' \\ \hline \text{painted(e')} \\ \text{theme(e',v)} \\ \text{yellow(v)} \\ \text{time(e',last.summer)} \\ \hline \end{array} \\ \hline \text{Background}(\pi_1, \pi_2) \\ \hline \end{array}$$
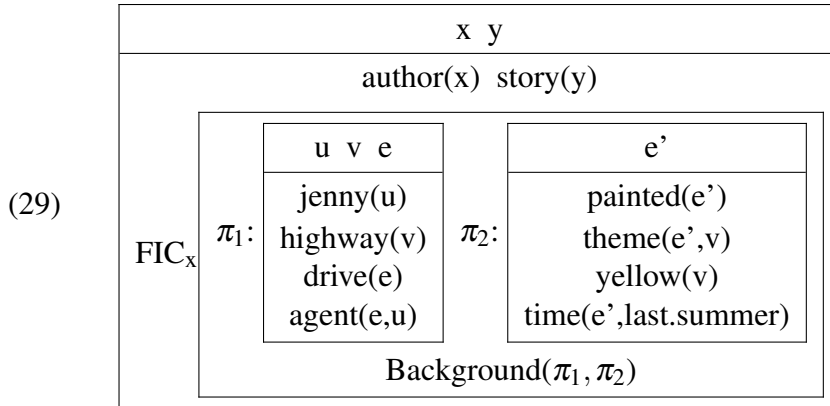
Since Background, like Narration and Result, is a veridical relation, this representation entails that it holds within the fiction box that the highway is indeed painted yellow – in other words, the reader is taking the story at Face Value.[15]

4.2 Character Perspective in Treasure Hunt

In §2.2 we discussed Yablo's (2002) Treasure Hunt as our prime example of a story triggering the Character Perspective strategy. Let's see what happens when we model the interpretation of this story in SDRT, focusing on the last three lines, straightforwardly segmented as follows:

(30)   . . . π_1: She grabbed a five-fingered leaf. π_2: Here was the oval they needed! π_3: They ran off to claim their prize.

As illustrated below, a Face Value interpretation arises if we connect π_2 directly to π_1 with the veridical relation, Elaboration(π_1,π_2): we understand the direct object of the grabbing event, namely a five-fingered leaf, to be elaborated upon as being the oval (that is needed to win a competition).[16] Interpreting the resulting SDRS involves merging the fiction box with both π_1 and π_2, so it follows that in the worlds of the story there is a five-fingered leaf that is oval.

---

15 For more discussion of Background, see Asher et al. (2007).
16 For more discussion of Elaboration, see Hobbs (1979); Asher (1993).

(31)

$$
\begin{array}{|c|}
\hline
x \quad y \\
\hline
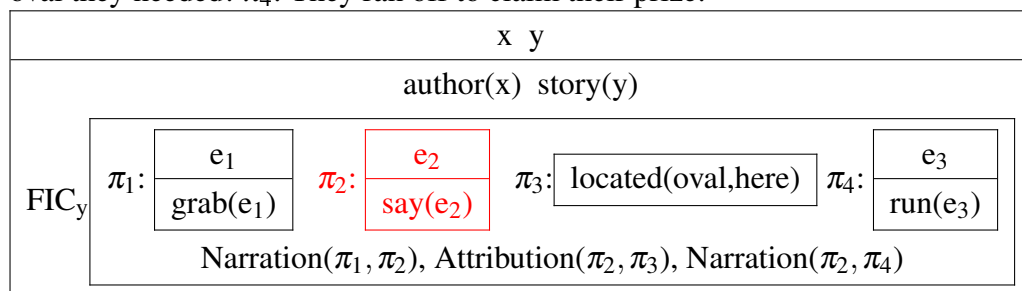\text{author}(x) \quad \text{story}(y) \\
\hline
\text{FIC}_y \quad
\begin{array}{|c|c|c|}
\hline
\pi_1: \begin{array}{|c|}\hline e_1 \\\hline \text{grab}(e_1) \\\hline\end{array} &
\pi_2: \boxed{\text{located(oval,here)}} \; \pi_3: \begin{array}{|c|}\hline e_2 \\\hline \text{run}(e_2) \\\hline\end{array} \\
\hline
\multicolumn{1}{|c|}{\text{Elaboration}(\pi_1,\pi_2), \text{Narration}(\pi_1,\pi_3)} \\
\hline
\end{array} \\
\hline
\end{array}
$$
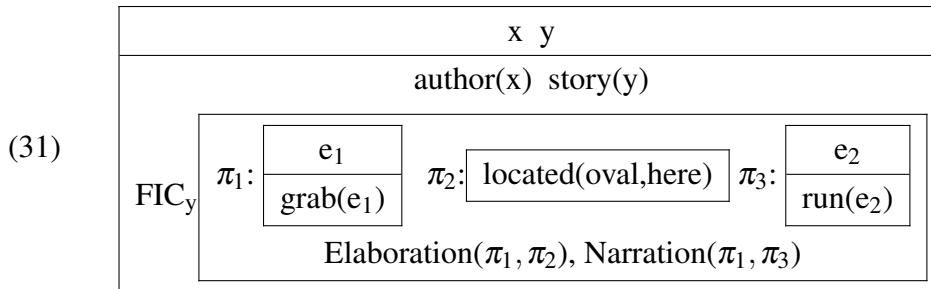
Since this is clearly quite difficult to imagine, the reader might try to overcome their resistance through Character Perspective, i.e. inferring an Attribution effectively interpreting π_2 as the content of a thought (or perhaps more naturally in this case a speech event).

Formally we'd want to infer an Attribution with π_3 as the second argument. But what would be the first? Given the event-based report semantics of Attribution the first argument has to describe a speech or thought event, or perhaps an attitudinal state – something that can plausibly be said to have a propositional content. Earlier in the story we encountered a speech event by Sally ("Hang on, Sally said"), so the reader may readily accommodate a follow-up speech (or thought) event with the same agent. This gives the following SDRS representation for the final part of Treasure Hunt. (We'll represent the accommodated unit π_2 (introducing implicit speech event e_2) in red):[17]

(32)   ... π_1: She grabbed a five-fingered leaf. π_2: (She said:) π_3: Here was the oval they needed! π_4: They ran off to claim their prize.

$$
\begin{array}{|c|}
\hline
x \quad y \\
\hline
\text{author}(x) \quad \text{story}(y) \\
\hline
\text{FIC}_y \quad
\begin{array}{|c|c|c|c|}
\hline
\pi_1: \begin{array}{|c|}\hline e_1 \\\hline \text{grab}(e_1) \\\hline\end{array} &
\pi_2: {\color{red}\begin{array}{|c|}\hline e_2 \\\hline \text{say}(e_2) \\\hline\end{array}} &
\pi_3: \boxed{\text{located(oval,here)}} &
\pi_4: \begin{array}{|c|}\hline e_3 \\\hline \text{run}(e_3) \\\hline\end{array} \\
\hline
\multicolumn{1}{|c|}{\text{Narration}(\pi_1,\pi_2), \text{Attribution}(\pi_2,\pi_3), \text{Narration}(\pi_2,\pi_4)} \\
\hline
\end{array} \\
\hline
\end{array}
$$

4.3 Unreliable narration as Attribution

Before we discuss the Narrator Accommodation strategy we should first discuss the case of unreliable first-person narration.
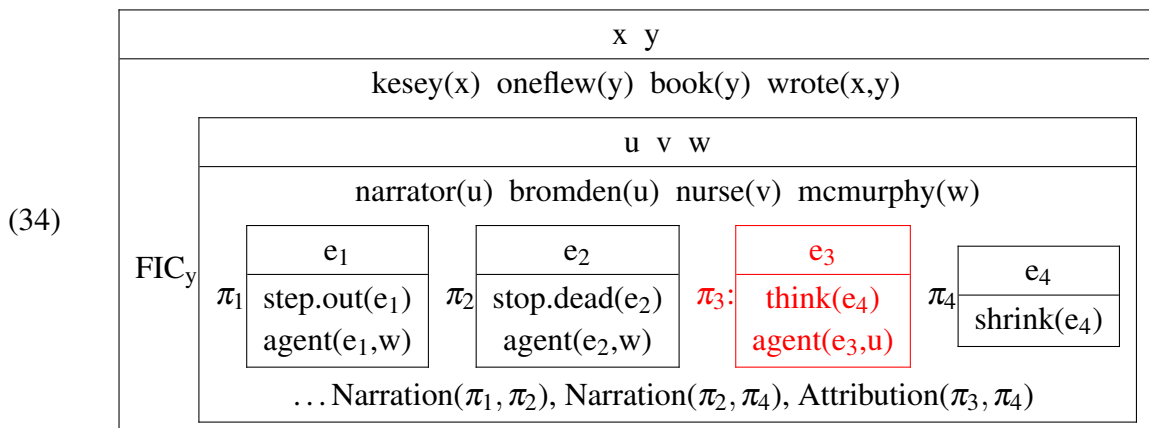
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17 Much more needs to be said about free indirect discourse in this Attribution framework. With the current semantics of Attribution we're just treating it as implicitly embedded indirect discourse. But of course true free indirect discourse is characterized by its mixing of direct and indirect features. Working out the details here would lead us too far afield.

Consider a typical case of an unreliable first person narrator, like Ken Kesey's *One Flew Over The Cuckoo's Nest*, which tells the story of McMurphy's rebellion against nurse Ratchett in a psychiatric hospital, through the eyes of one of the inmates, Chief Bromden. Consider the following passage:

(33) Then, just as she's rolling along at her biggest and meanest, McMurphy steps out of the latrine door right in front of her, holding that towel around his hips – stops her *dead*! She shrinks to about head-high to where that towel covers him. I lift the sponge up above my head so everybody in the room can see how it's covered with green slime and how hard I'm working. (Ken Kesey *One Flew over the Cuckoo's Nest* 1962.)

Reading the novel, we note that there's a first person narrator, Chief Bromden, but we mostly take the story at Face Value nonetheless. With respect to this passage, it seems true in the story that Nurse Ratchett is stopped by McMurphy coming from the latrine, but her shrinking and the green slime are probably best interpreted as Bromden's hallucination.

Given our SDRT framework we can bring in the non-veridicality of the unreliable part through the inference of an Attribution relation.[18] Just like in Interstate and Treasure Hunt, a Face Value interpretation amounts to inferring veridical relations, but when that fails or leads to a highly implausible or incoherent overall reading of the narrative we might instead accommodate, as in Treasure Hunt, an implicit speech or thought event (π_4) and connect a fragment of the discourse graph (π_3) to it through Attribution. As before, we'll represent the accommodated discourse unit in red. Moreover, as part of the background for interpreting this passage we'll assume discourse referents u, v, w for the main characters already set up in the global universe of the fiction-box.

(34)

x y
kesey(x) oneflew(y) book(y) wrote(x,y)

FIC$_y$

u v w
narrator(u) bromden(u) nurse(v) mcmurphy(w)

π_1

e_1
step.out(e_1)
agent(e_1,w)

π_2

e_2
stop.dead(e_2)
agent(e_2,w)

π_3:

e_3
think(e_4)
agent(e_3,u)

π_4

e_4
shrink(e_4)

… Narration(π_1, π_2), Narration(π_2, π_4), Attribution(π_3, π_4)

---

18 Alternatively, Maier & Semeijn (2020) propose a way of dealing with this type of unreliable narration without discourse relations and SDRT, using instead a form of Eckardt's (2014) Cautious Updating.

In (34) the reader accepts the narrator's words as reliably presenting events in the story world, until she gets to the nurse shrinking part, which she takes as a description of the content of a thought by the narrator instead.

On the current analysis, unreliable narration and free indirect discourse interpretation involve very similar interpretation processes: a Face Value strategy, involving veridical discourse relations, leads to the assumption of an unexpectedly deviant storyworld, so we reinterpret the passage in question by accommodating a mental or linguistic event and connecting it to the offending passage through the non-veridical discourse relation, Attribution. From the current discourse theoretic perspective, the main difference is that we get attribution to the narrator in (what we call) unreliable narration, while free indirect discourse involves attribution to any salient characters.
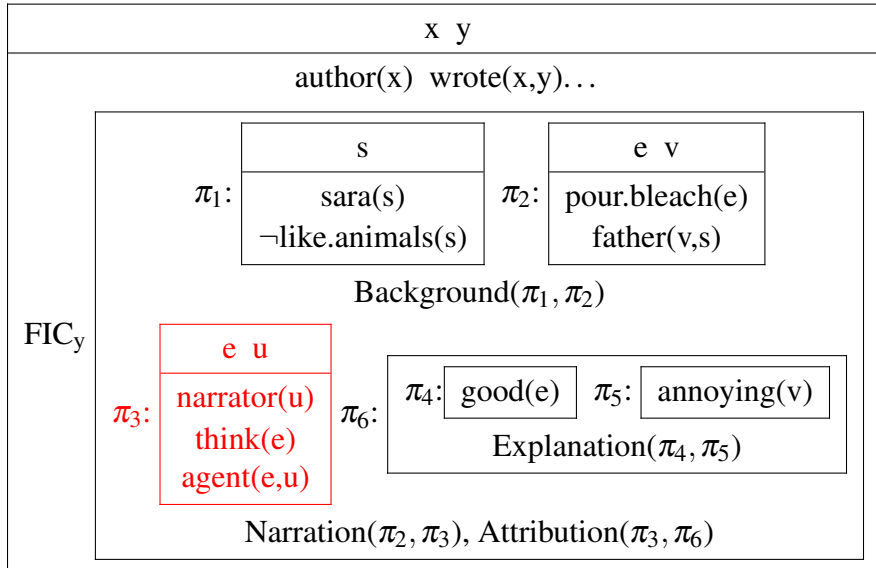
4.4   Narrator accommodation in The Fish Tank

As discussed above on the basis of our data, most of our stories do not readily admit a free indirect discourse interpretation, either because they don't meet the morphosyntactic criteria, or because ascribing the thought to one of the salient characters does not make sense. And unreliable narration, as described above, requires a first person narrator, so that option seems blocked in the original versions which were all impersonal narrations, without any first person pronouns or other clear signs of a first person narrator. We propose that in such cases, when faced with a jarring passage, the reader will accommodate a narrator, i.e. accommodate a discourse referent 'u' with condition 'narrator(u)', thus switching from impersonal to personal narration. This would allow the reader to interpret the jarring passage by attributing it to that narrator.

As an example of this Narrator Accommodation strategy, consider Fish Tank. A Face Value interpretation would lead to a story world where it is in fact a good thing to kill your father's beloved pets because you are annoyed. In the context of this very short story this seems rather far-fetched and hard to accept, so we might want to look for a different interpretation, where the morality of the story world is more in line with our own sense of morality, while allowing for immoral individuals. The second option, following the Character Perspective strategy, attributing the final evaluation to Sara, is not impossible, but it's a bit unexpected for Sara herself to explicitly evaluate her own actions by saying to herself "good thing that I did". The third option, Narrator Accommodation, consists in accommodating an explicit personal narrator and then attributing the evaluation to them. The resulting reading is represented in (35), with the inferred content that constitutes the Narrator Accommodation marked in red.

(35)   Sara never liked animals . . . she poured bleach in the big fish tank . . . Good

thing that she did, because he was really annoying.

$$
\text{FIC}_y
\begin{array}{|l|}
\hline
x \ \ y \\
\hline
\text{author}(x) \ \ \text{wrote}(x,y)\ldots \\
\hline
\pi_1{:}\begin{array}{|c|}\hline s \\ \hline \text{sara}(s) \\ \neg\text{like.animals}(s) \\ \hline\end{array}
\quad
\pi_2{:}\begin{array}{|c|}\hline e \ \ v \\ \hline \text{pour.bleach}(e) \\ \text{father}(v,s) \\ \hline\end{array} \\
\text{Background}(\pi_1,\pi_2) \\[4pt]
\pi_3{:}\begin{array}{|c|}\hline e \ \ u \\ \hline \text{narrator}(u) \\ \text{think}(e) \\ \text{agent}(e,u) \\ \hline\end{array}
\quad
\pi_6{:}\begin{array}{|c|}\hline \pi_4{:}\boxed{\text{good}(e)} \quad \pi_5{:}\boxed{\text{annoying}(v)} \\ \text{Explanation}(\pi_4,\pi_5) \\ \hline\end{array} \\
\text{Narration}(\pi_2,\pi_3), \ \text{Attribution}(\pi_3,\pi_6) \\
\hline
\end{array}
$$

5 Conclusion

Some stories are hard to take at Face Value. It may not be impossible to imagine a fictional world where people mostly look, talk, and behave like we would, but where the moral, logical, or physical laws are fundamentally different. Stories that ask readers to imagine such worlds give rise to what is known as imaginative resistance. Philosophers have long been debating the existence, nature, and causes of imaginative resistance. We have contributed to these debates by (i) hypothesizing a number of strategies that could be deployed as coping mechanisms to initial imaginative resistance, (ii) providing empirical evidence that readers actually use these strategies, and (iii) incorporating the strategies into a precise formal semantic model of fiction interpretation.

The existence of effective coping mechanisms explains why some philosophers have argued that imaginative resistance does not exist (Todd 2009). On our view, readers and writers rely on various ways to overcome imaginative resistance and thus prevent disengagement with the narrative. However, it is mistaken to say, with Todd, that the sorts of extreme examples invented by philosophers do not exist in real fictional narratives. For example, the poem below, by Daniil Kharms, describes an air balloon that is both "completely empty" and "with someone inside":[19]

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19 In this way, the poem is exactly like Priest's (1997) The Box, discussed earlier (see (5)). However, while Priest's intent was to show that contradictions can be true (fictionally or otherwise), Kharms' intent was to show the absurdity of a city appearing to be alive, while people were being taken away (and murdered) by the state.

(36) On Tuesdays, above the pavement
an air balloon would fly, completely empty.
In the air it would quietly soar,
with someone inside smoking a pipe,
looking at the squares, the gardens,
looking calmly until Wednesday,
and on Wednesday, having put out the lamp,
he would say: "You see, the city is alive!"

Moreover, it is mistaken to think that the sorts of examples invented by philosophers are not useful. If we want to understand how it is that we interpret and process fictional narrative, we *need* to try and construct negative data to empirically delineate the phenomenon.

In accordance with Walton (2006:143) and subsequent experimental studies on imaginative resistance like Liao et al. (2014) and Kim et al. (2018), we take the existence of imaginative resistance as an empirical matter. One of the main contributions of this paper is to show that in a controlled experimental setting actual readers interpret certain passages in traditional imaginative resistance stories as representing the point of view of a prominent fictional character (Character Perspective) or the implicit narrator (Narrator Accommodation), rather than as a reflection of a strange or even impossible or immoral fictional world itself (Face Value).

A further contribution of this paper is the way we made our hypothesized interpretation strategies precise, by integrating them into a general formal semantic framework for interpreting fictional stories. The key innovation in our model was the use of Attribution in SDRT to make precise what's involved in following a Character Perspective or Narrator Accommodation strategy. In the future, we would like to further experiment with and formally analyze other possible coping mechanisms not discussed here, like non-literal (ironic or metaphorical) interpretation, or 'pop-out', where we break out of the pretense and take the evaluation as a comment from the actual author (Gendler 2006:156-162).[20]

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20 We already added the author as a potential answer to the perspective question in our survey, but we haven't yet figured out how to make sense of the results in terms of an effective and formalizable coping mechanism. We hope to do so in subsequent work.

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Appendix: Experimental materials

(37) **Story 1: Death on the Freeway** (Weatherson 2004)
      Jack and Jill were arguing again. This was not in itself unusual, but this time they were standing in the fast lane of I-95 having their argument. This was causing traffic to bank up a bit. It wasn't significantly worse than normally happened around Providence, not that you could have told that from the reactions of passing motorists. They were convinced that Jack and Jill, and not the volume of traffic, were the primary causes of the slowdown. When Craig saw that the cause of the bankup had been Jack and Jill, he took his gun out of the glovebox and shot them. People then started driving over their bodies, and while the new speed hump caused some people to slow down a bit, mostly traffic returned to its normal speed. So Craig did the right thing, because Jack and Jill should have taken their argument somewhere else where they wouldn't get in anyone's way.

(38) **Story 2: Treasure Hunt** (Yablo 2002)
      They flopped down beneath the giant maple. One more item to find, and yet the game seemed lost. Hang on, Sally said. It's staring us in the face. This is a maple tree we're under. She grabbed a jagged five-fingered leaf. Here was the oval they needed! They ran off to claim their prize.

(39) **Story 3: The Box** (Priest 1997)
      Carefully, Mary broke the tape and removed the lid. The sunlight streamed through the window into the box, illuminating its contents, or lack of them. For some moments Mary could do nothing but gaze, mouth agape. At first, she thought it must be a trick of the light, but more careful inspection certified that it was no illusion. The box was absolutely empty, but also had something in it. Fixed to its base was a small figurine, carved of wood, Chinese influence, Southeast Asian maybe.

(40) **Story 4: The Bank Robber** (Weatherson 2004)
Peter saw his friend Sue Remnick rushing out of a bank carrying in one hand a large bag with money falling out of the top and in the other hand a sawn-off shotgun. Sue Remnick recognized Peter across the street and waved with her gun hand, which frightened Peter a little. Peter was a little shocked to see Sue do this, because despite a few childish pranks involving stolen cars, she'd been fairly law abiding. So Peter decided that it wasn't Sue who robbed the bank but really a shape-shifting alien that looked like Sue. Although shape-shifting aliens didn't exist, and until that moment Peter had no evidence that they did, this was a rational belief. False, but rational.

(41) **Story 5: Weather Forecast** (Kim et al. 2018)
Jack and Mary are watching the weather forecast. The presenter says: "Tomorrow there will be two to three inches of snow. It will begin to snow at around 9am, and the temperature will fluctuate between 27° and 31° F," Jack and Mary look at each other and start to laugh. This is understandable, since that weather forecast was very funny.

(42) **Story 6: Interstate** (Kim et al. 2018)
Jenny was driving along Interstate 95, the main Interstate Highway on the East Coast of the United States, running largely parallel to the Atlantic Ocean and U.S. Highway 1. Last summer, this highway was painted solid yellow and superimposed with intricate black flower patterns for its entire 2000-mile length.

(43) **Story 7: Giselda's Baby** (Kim et al. 2018)
After hours of painful labor, Giselda gave birth to a beautiful baby girl. Unbeknownst to her husband however, the baby girl was not his; she had had a longstanding affair with another man. In cheating on her husband and lying to him about it, Giselda did the right thing though; after all, her husband didn't need to know.

(44) **Story 8: Yellow** (Kim et al. 2018)
Adaleine, Picasso's greatest student, was a prolific painter, whose work was unfortunately lost to history - with the exception of her last painting: A 3 x 4' canvas, painted from edge to edge in the exact same shade of yellow as the McDonald's golden arches. It is without doubt one of the most beautiful works ever made.

(45) **Story 9: Vassilyev's Wife** (translated and adapted from Daniil Kharms)
Feodor Vassilyev was a peasant from Shuya, Russia. His first wife lived to be 76 and, between 1725 and 1765, had many children. On one particular

day, she gave birth to twenty eight baby girls. Few other details are known about the life of Vassilyev's wife, such as her name and date of birth or death.

(46) **Story 10: Snow** (Kim et al. 2018)
According to the forecast I heard, there would be two to three inches of snow on Tuesday. It would begin to snow at around 9am, and the temperature would fluctuate between 74° and 81° F. There was no doubt at all that all this would be true, for the forecast has never been wrong.

(47) **Story 11: The Fish Tank** (original)
Sara never liked animals. One day, her father caught her kicking the neighbor's dog. He got really angry and she was grounded for a week. To get back at her father she poured bleach in the big fish tank, killing the beautiful fish that he loved so much. Good thing that she did, because he was really annoying.

(48) **Story 12: Three** (Kim et al. 2018)
Long, long ago, when the world was created, the number three was the sum of two primes. Although most people suspected that this was the case, Moira was not completely certain. When Zaro heard about this uncertainty, he became angry. He proclaimed that from that day forth, nothing could be the sum of two primes anymore. And from then on, three was the sum of four and six.