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Abstract. In literary studies, temporal metalepsis is defined as a seemingly inconsistent transgression between the time of the telling and the time of the told. For instance, the past time of the told story may appear to overlap with the present time of the telling, as in *Ada began to climb the mountain. While Ada is climbing the mountain, we have time for a digression.* This paper tackles temporal metalepsis from a primarily linguistic point of view. It first draws attention to unexplored semantic properties of temporal metalepsis, focusing on the grammar of time (subordinators, tense, and aspect) and on anaphoric relations. This shows that the phenomenon deserves linguistic scrutiny. Second, a pretense-based analysis is proposed. Specifically, the temporal entanglement between narrative layers is argued to result in an ontological conflict that licenses the accommodation of an event in pretense at the actual layer. The proposal is spelled out in terms of a dynamic semantics that factors a game of pretense into transgressions between story worlds and actuality as known from para- and metafictional discourse.

Keywords: metalepsis, narrative discourse, tense, aspect, fiction, parafiction, metafiction, dynamic semantics.

1. Introduction

In literary studies, narrative metalepsis is defined as a "deliberate transgression between the world of the telling and the world of the told"; see Pier (2016: Sec. 1), who follows the original introduction of the term into narratology by Genette (1983). That is, in words by Martínez and Scheffel (2016: 219), metalepses suspend the border between intra- and extradiegetic position, contrary to their principled distinction by definition. The example in (1), which is cited in Genette (1983: 235) from Balzac's *Illusions perdues*, is a famous case in point: the past time of the told story is said to overlap with the present time of the telling.

(1) While the venerable churchman climbs the ramps of Angoulême, it is not useless to explain ...

In a made-up example such as (2), the relevant temporal transgression is made even more obvious.

(2) Ada began to climb the mountain. While Ada is climbing the mountain, we have time for a digression.

Most notably, both examples can be interpreted easily although, on the face of it, the transgression results in an inconsistent temporal entanglement between fiction and (some layer of) actuality.

Parts of this work were presented at "Fiction and narrative across media" in Groningen (September 2022), at "Sprachwissenschaftlich-sprachdidaktisches Kolloquium" in Siegen (November 2022), at "Semantik-Kolloquium" in Frankfurt (February 2023), at "Interdisziplinäres Linguistisches Kolloquium" in Augsburg (June 2023), and at "Sinn und Bedeutung 28" in Bochum. I thank the audiences for their helpful feedback. In particular, I owe thanks to Carolin Gerwinski, Emar Maier, Cécile Meier, Merel Semeijn, Carla Umbach, and Sonja Zeman.

Metalepses of various kinds have received considerable attention in literary studies and related fields such as media and cultural studies; see Kukkonen (2011) and Pier (2016) for overviews and Martínez and Scheffel (2016: 83-85) for a textbook introduction. However, these studies do not focus on linguistic details, but on more general issues such as the classification of metalepsis types, their effects on recipients, or their role in different media. Further famous examples include so-called *mise en abyme* (that is, some narrative x contains another narrative y which, paradoxically, again contains x) or breaking the fourth wall in theatre (that is, actors address the actual audience from within the play). In this paper, I will take a different route and tackle metalepsis from a primarily linguistic point of view, focusing on temporal metalepis. As far as I see, this is a desideratum. Two main goals will be pursued.²

First, I will draw attention to unexplored semantic properties of temporal metalepsis and thereby argue that it deserves linguistic scrutiny. For instance, the inconsistency in (2) cannot be expressed by past tense in the *while*-clause, as shown by its ungrammatical counterpart in (3). That is, the tense in the metaleptic *while*-clause is not determined by the statement about the story before, but by its contribution to the actual telling. This calls for a better understanding of how temporal metalepsis and grammar interact.

(3) *Ada began to climb the mountain. While Ada was climbing the mountain, we have time for a digression.

Furthermore, the semantic point of view suggests comparing temporal metalepsis with transgressions between actual and fictional worlds that lack the impression of inconsistency. Much discussed are parafictional statements such as (4a) and metafictional statements such as (4b).

- (4) a. In *Emil and the detectives*, Emil travels to Berlin.
 - b. Emil is a fictional character invented by Kästner.

The former inform about the truth in fiction from the perspective of the actual world, while the latter treat fictional entities according to their fictional status in the actual world; see, among many others, the more recent discussions in Maier (2017) (and the comments on it), Recanati (2018), Semeijn (2021), or Stalmaszczyk (2021) and canonical papers such as Lewis (1978) or Zucchi (2001). For instance, the intuitive coreference of Ada's fictional climb and her climb at the actual layer in example (2) seems to correspond to the puzzling coreference of proper names such as Emil across para- and metafiction.

Second, I will outline a pretense-based account of temporal metalepsis that integrates facets of para- and metafictional discourse. Specifically, I propose that the ontological conflict resulting from the temporal entanglement between fiction and (some layer of) actuality licenses the accommodation of an event in pretense at the actual layer. According to this proposal, the example in (2) conveys that having time for a digression is temporally included in Ada's climb, where this climb is conceived of as if it were an actual event. The implementation builds on two formal ingredients in particular, namely, the integration of the 'In-story' operator from Lewis (1978) into a dynamic semantics in Semeijn (2021), and the idea in Recanati (2018) that fictional names introduce multiple aspect objects that are referred to under their abstract

²I am not interested in the literary interpretation of specific temporal metalepses, but in the linguistic basis of temporal metalepses and their modeling. Therefore, I will use constructed examples such as (2) for the exemplification of relevant linguistic properties.

fictional aspect in metafiction and under their physical non-fictional aspect in parafiction. Most crucially, Recanati's semantics allows entities to instantiate inconsistent types of objects.

I conclude this introduction with a note of clarification. According to the given definition, metalepses involve a narrating instance that is extradiegetic and, thus, not part of the told story. Correspondingly, one cannot conceive of this instance as a narrator that talks about her own (past) world.³ In fact, metalepses are often related to the distinction between story worlds and actuality in the sense of our real world (or a world presented as our real world). This is why, typically, metalepses concern authors or readers that enter or address story worlds, or characters that enter or address the actual world; see Kukkonen (2011: 1) for such a take. For ease of presentation, I follow this simplified picture here. However, I also believe that the present approach to temporal metalepsis can be applied to any kind of layering as long as this layering involves a principled distinction between story worlds and some extradiegetic stance.

The paper is organized as follows: In Section 2, I will discuss semantic properties of temporal metalepsis, focusing on grammar and the comparison to para- and metafiction. Section 3 will introduce a pretense-based account of temporal metalepsis and outline its formal implementation. Section 4 offers a conclusion.

2. Survey of semantic properties of temporal metalepsis

2.1. Tense and temporal subordinators in metaleptic temporal clauses

In the introduction, I have already pointed out that the tense in the metaleptic *while*-clause must correspond to the present tense in the matrix clause instead of the past tense in the textual statement before; see (5) = (2)/(3).

(5) Ada began to climb the mountain. While Ada {is / *was} climbing the mountain, we have time for a digression.

That is, the relevant temporal inconsistency is rather based on a seeming temporal relocation of Ada's climb than on a temporal conflict within the complex clause. The metaleptic temporal clause thus obeys a grammatical constraint imposed by *while*-clauses in general, namely, their requirement for temporal overlap between the event given by the *while*-clause and the event given by the matrix clause (see, e. g., Sæbø 2011). This indicates that the choice of tense is not arbitrary, but it follows the narrator's intention to provide a referential link between the fictional event and the actual situation of narrating in accordance with grammatical rules.

The given pattern can be observed for other metaleptic temporal clauses as well. Consider the metaleptic *before*-clause in (6).⁴

(6) Peter lived in Vienna and Paul in Berlin. They were brothers, but they had never met. Before they {get / *got} to know each other, a few comments on brothers in general are

³There are several linguistic and philosophical approaches to fictional narratives that proceed from assuming narrators that tell a story from within the story; see, for instance, Eckardt (2014) for linguistics and Predelli (2021) for philosophy.

⁴I thank Merel Semeijn for having inspired me to this kind of example.

in order. [...few comments ...] But now back to Peter and Paul. They got to know each other as the result of a series of barely possible coincidences.

As with the *while*-clause, the use of present tense in the *before*-clause deviates from the use of past tense in the textual statements that tell the story. Again, the tense choice complies with the grammar of *before*-clauses, in this case with the effect that the narrator refers to the fictional encounter as if it followed his actual commenting on brothers in general. The same reasoning applies to the *once*-clause in (7): in virtue of using future perfect here, the prospective return to the story about Ada is said to coincide with the prospective post state of Ada having reached the summit.

(7) Ada began to climb the mountain. Once she will have reached the summit, we will get back to her. However, before, we turn to her wife Erin.

It is also instructive to consider temporal clauses that are known to be subject to general referential restrictions. Temporal clauses introduced by *als* 'when' (lit. 'as') and *wenn* 'when' in German are cases in point.⁵ As argued, for instance, by Löbner (2002: 267), *als*-clauses prohibit reference to the present. This predicts that *als*-clauses cannot be used for relating a fictional event to a present narrating situation. In fact, corresponding metalepses with present tense in the *als*-clause such as (8) and (9) are clearly odd.

- (8) *Ada begann, den Berg hochzusteigen. Als sie den Berg hochsteigt, haben Ada began the mountain to climb as she the mountain climbs have wir Zeit für einen Exkurs.

 we time for a digression 'Ada began to climb the mountain. When she climbs the mountain, we have time for a digression.'
- (9) *Adas Aufstieg war beschwerlich. Als sie schließlich den Gipfel erreicht, wenden Ada's climb was arduous as she finally the summit reaches turn wir uns ihrem Bruder zu.

 we REFL her brother to 'Ada's climb war arduous. When she finally reaches the summit, we turn to her brother.'

Notably, *als*-clauses can be used with present tense if present tense is used for reference to the past (so-called historic present). For instance, the non-metaleptic example in (10) is fine, as it preserves the narrative retrospection despite the tense variation. *Als*-clauses can also support a metalepsis, as in (11). However, in contrast to (5)-(7), this has the effect that the surprise is conceived of as if it were co-temporal with the time of the told story. As specified by the grammar of *als*-clauses, the transgression to the extradiegetic narrating stance does not come with a referential shift to the present telling situation.

(10) Adas Aufstieg war beschwerlich. Als sie schließlich den Gipfel erreicht, ist Erin Ada's climb was arduous as she finally the summit reaches is Erin schon wieder auf dem Rückweg.

already again on the way back

⁵The temporal subordinators *als* and *wenn* from German are usually both translated to English *when*. Correspondingly, I will be agnostic as to the question of how to judge the English translations of the following examples from German.

'Ada's climb war arduous. When she finally reaches the summit, Erin is already heading back.'

Adas Aufstieg war beschwerlich. Als sie schließlich den Gipfel erreicht, sind auch Ada's climb was arduous as she finally the summit reaches are also wir überrascht: Erin ist nicht da. we surprised Erin is not there 'Ada's climb war arduous. When she finally reaches the summit, we are surprised as well: Erin isn't there.'

Temporal *wenn*-clauses provide a final example. They only license reference to the future; see Löbner (2002: 267). This predicts correctly that metaleptic *wenn*-clauses can be used for relating a fictional event to a prospective telling situation instead of a present one, as shown by the contrast in (12).

Ada begann, den Berg hochzusteigen. Wenn sie schließlich den Gipfel erreicht, Ada began the mountain to climb when she finally the summit reaches {werden wir ein anderes Thema haben / *haben wir jetzt ein anderes Thema}. {will we a different topic have / have we now a different topic} 'Ada began to climb the mountain. When she will finally reach the summit, {we will have a different topic / we have now a different topic}.'

The upshot of this discussion is that temporal metalepses do not build on arbitrary temporal inconsistencies, but on a close alignment of intended temporal reference with grammatical rules. From a semantic point of view, this is not a minor result. For one, it argues against an account of temporal metalepsis in terms of structured propositions that conjoin inconsistent propositions as it is proposed for the formal semantics of inconsistent pictures by Cresswell (1983); see, for instance, (13).

(13) a.
$$\langle p, \wedge, q \rangle$$
 b.
[copied from Cresswell (1983: 71)]

In a nutshell, Cresswell argues that a picture such as (13b) should be analyzed along the lines of a structured proposition such as (13a). The propositions p and q represent the meaning of consistent parts of the picture in terms of regular sets of worlds. Their inconsistency is reflected in the fact that the conjunction cannot be resolved by intersection of both sets, as this would result in the empty set. That is, the use of structured propositions protects possible world semantics from the undesirable prediction that inconsistent pictures are synonymous in virtue of denoting empty sets. However, as just discussed, temporal metalepses are not based on a simple juxtaposition of inconsistent propositions, but on a systematic interaction of the meaning components involved. A simple structured conjunction such as (13a) does not seem to provide the right tool in order to capture this interaction.

⁶It could very well be that more involved structured propositions can solve this problem. In fact, the discourse representation structures that are proposed in Section 3.2 provide such a further development.

The observations made so far are semantically revealing in yet another sense. In light of the alignment between grammatical form and intended reference, the behavior of temporal metalepses resembles the behavior of well-known cases of deferred reference in the non-temporal domain as discussed by Nunberg (1995); see (14), where the indexical *this* does not refer to the key, but to the car the key belongs to.

- (14) Context: A hands a key to B.
 - a. This is parked out back.
 - b. *The key I am holding is parked out back.

[= Nunberg (1995), (1), (10)]

As with temporal metalepsis, the grammatical behavior of deferred indexicals such as *this* is determined by the intended reference. Therefore, the deferred indexical complies with coordination of a predicate for cars instead of keys, as shown by (15). Furthermore, grammatical number depends on the number of cars instead of keys, as shown by (16).

- (15) This is parked out back and {may not start/??fits only the left front door}. [see Nunberg (1995), (4), (5)]
- (16) [Context: 1 key, >1 cars] {These are/*This is} parked out back.

However, there is also a principled difference between both kinds of referential shifts. In Nunberg's examples, deferred reference yields reference to an entity that is clearly distinct from the entity the indexical originally refers to. That is, the car and the key are conceived of as distinct objects in the world. Temporal metalepsis, by contrast, results in a more puzzling kind of distinction. On the one hand, the transgression between fiction and actuality seems to require reference to a new entity, simply because the same event cannot reasonably belong to both the fictional and the actual world. On the other hand, metalepses are based precisely on the contrary intuition that textual statement and metaleptic temporal clause are about the very same event. This puzzle will be pursued further in the next section.

2.2. The relationship of temporal metalepsis to para- and metafiction

Recall from the introduction that parafictional statements inform about fictional truths from the perspective of the actual world, as in (17a) (= (4a)), while metafictional statements inform about what is actually true of fictional entities, as in (17b) (= (4b)).

- (17) a. In *Emil and the detectives*, Emil travels to Berlin.
 - b. Emil is a fictional character invented by Kästner.

- (i) [Context: A hands a key to B.] I am parked out back. [= Nunberg (1995), (2)]
- (ii) I am parked out back and {have been waiting for 15 minutes / *may not start}.

[= Nunberg (1995), (8), (9)]

(iii) [Context: 1 speaker, >1 cars] {I am/*We are} parked out back.

⁷Notably, this does not apply to all types of meaning adaptations. Specifically, the example in (i) does not build on deferred reference, but on so-called predicate transfer. Correspondingly, the type of further predicates and the grammatical number are determined by the non-deferred literal reference of the indexical, as shown by the examples in (ii) and (iii).

In the following I will argue that temporal metalepses integrate facets of both para- and metafictional statements. However, I will also argue that this integration leads to crucial deviations from standard para- and metafiction.

2.2.1. Temporal metalepsis and parafiction

Temporal metalepses such as (2) share with a corresponding explicit parafictional statement such as (18) that they both rely on story content. This kinship suggests to simply integrate an implicit 'In story' operator in the spirit of Lewis (1978) into the interpretation of temporal metalepsis, as sketched in (19).

- (18) In the story, Ada climbs the mountain.
- (19) While Ada climbs the mountain, we have time for a digression.≈ While, in the story, Ada climbs the mountain, we have time for a digression.

One might even argue that the restriction to present tense in the metaleptic clause is rooted in the well-known more general preference for the present in parafiction; see (20) for ilustration and Zucchi (2001) and Semeijn (2021: ch. 7.3.3) for discussion.

(20) In *Emil and the detectives*, Emil {travels / #traveled} to Berlin.

However, this line of argument does not consider the following clear difference between standard parafiction and temporal metalepsis. The present in standard parafictional statements such as (20) is usually taken to convey an atemporal truth; see Zucchi (2001) and Semeijn (2021: ch. 7.3.3) for different accounts of this atemporality. Temporal metalepses, by contrast, build on an actualization of the transgressing event. Grammatical evidence for this claim can be drawn from aspectual contrasts such as (21).

- (21) a. #In *Emil and the detectives*, Emil is traveling to Berlin (now).
 - b. While Emil is traveling to Berlin (now), we have time for a digression.

The standard parafiction in (21a) does not support progressive aspect. Plausibly, the progressive requires a temporal link to the given now, which is at odds with an atemporal interpretation of tense. The temporal metalepsis in (21b) is fine with progressive aspect. In fact, the use of the progressive seems to even facilitate the temporal entanglement between the fictional event and the actual situation of having time for a digression. Furthermore, recall from Section 2.1 that the choice of tense in metaleptic temporal clauses covaries with the alignment of the intended reference and the type of temporal clause. This is also at odds with an account of temporal metalepsis in terms of atemporal parafiction.

Interestingly, Zucchi (2001) also draws attention to non-standard parafictional examples such as (22).

- (22) [Context: A is reading Sherlock Holmes, with B in the room.]
 - a. B: What is Holmes doing?
 - b. A: He is playing the violin. A murder took place and he is thinking about the evidence. He will soon discover the murderer.

[see Zucchi (2001), (26), due to p. c. by Martin Stokhof]

Zucchi is only concerned with the tense use in this example. Specifically, the past, the present, and the future seem to be used here for arranging the fictional events along the timeline of the story, which challenges his assumption that tense is generally atemporal in parafictional statements. Zucchi meets this challenge by proposing that tenses can have scope over an implicit intensional operator that factors the reading time into the interpretation, as sketched in (23).⁸

(23) In the part of the text that I am reading now, Holmes is playing the violin. In the part that I read before, a murder took place and he is thinking about the evidence. In the part that I'll read, he will soon discover the murderer.

[= Zucchi (2001), (27), my emphasis]

According to this proposal, the tenses in (22) relate the reading times of parts of the text to the time of utterance of the parafictional statements. The temporal relations between the fictional events then just follow from correlating the temporal order of the reading times with the one of the events. Correspondingly, the potential conflict of (22) with Zucchi's original assumption is avoided.

I agree with Zucchi that temporal examples such as (22) should be distinguished from atemporal parafictional statements. However, I suggest a different analysis. As will become clear shortly, this analysis is inspired by relating temporal parafiction to temporal metalepsis.

For one, the variant of the parafictional example (22) in (24) is at odds with factoring the reading time into the interpretation.

(24) A: He is playing the violin. That is, a murder took place. The text hasn't said so yet, but, you know, Holmes only plays the violin in case he thinks about how to discover a murderer.

The past tense in the second clause is felicitous here although there is no previous reading time that could be correlated with the murder. This argues against a complex implicit operator and in favor of a more direct link between the fictional event and the actual time of utterance. Furthermore, Zucchi does not pay attention to the fact that the example in (22) licenses progressive aspect; see the present progressive in both B's question and A's answer. This also indicates that the temporal parafictional statements provide an actualization of fictional events at the layer of the utterrance situation.

In light of these observations, temporal parafiction and temporal metalepsis bear intriguing similarities. Both types of transgressions build on actualizations of fictional events. More specifically, I claim that these actualizations involve a comparable game of pretense: For (23), A pretends that her time of utterance is included in the time of Holmes playing the violin, as the narrator in (2) pretends that the time of having time for a digression is included in the time of Ada's climb. This claim accounts easily for the given use of tense and aspect. Furthermore, it suggests that temporal parafiction is a more general colloquial equivalent of temporal metalepsis, which broadens the empirical scope of the phenomenon under discussion considerably. The difference is that temporal metalepsis is built into a fictional text, while

⁸Zucchi (2001) anyway assumes that parafictional statements can involve high scope of tenses, as in (i).

⁽i) In Patrick O'Brian's first novel, Jack Aubrey was a post captain, in his new novel, he is a commodore, in the next novel he will be an admiral. [= Zucchi (2001), (10), taken from Katz (1996)]

temporal parafiction is bound to talk about a fictional text. The upshot for the semantic analysis of both cases is that it should integrate some game of pretense into an otherwise direct link between fictional events and the respective relevant layer of actuality above.

2.2.2. Temporal metalepsis and metafiction

Standard metafictional statements such as (25) (= (4b)) ascribe abstract properties to fictional entities. This agrees with their status in the actual world, which is why metafictional statements can inform about what is true about fictional entities in the actual world.

(25) Emil is a fictional character invented by Kästner.

In principle, the ascription of abstract properties is feasible for the temporal domain as well. In particular, events can be described as fictional, as in the metafictional statements in (26). The same holds for even more abstract time specifications, as in (27).

- (26) a. Emil's journey to Berlin is invented by Kästner.
 - b. Ada's climb is a fictional event.
- (27) Rainday, May 15, 2000 before Sol does not exist.

Temporal metalepses share with standard metafictional statements that they aim at the truth on the actual layer. Recall, for instance, that in (28) (= (2)), the story content provides a temporal frame for the actual telling and thus contributes to a predication that applies to the actual world of telling.

(28) Ada began to climb the mountain. While Ada is climbing the mountain, we have time for a digression.

However, there is also a very obvious difference. In temporal metalepses, the ascription of abstract properties such as *not exist*, *fictional*, etc. are missing. By constrast, the time of the fictional event is used as if the event were not abstract, but actual. In other words, temporal metalepses are metafictional in a peculiar sense, the key difference from standard metafiction being that the fictional events are pretended to be actual rather than abstract. This ties in nicely with the result from Section 2.2.1, where a game of pretense has been motivated from the perspective of the relationship between temporal metalepsis and parafiction.

It is noteworthy that the given reasoning sharpens our understanding of metalepses more generally. Recall from the introduction that definitions of metalepses usually foreground their transgressive nature. However, standard metafictional statements such as (25)-(27) involve transgressions between fiction and (some layer of) actuality as well. In order to capture the peculiarity of metalepses, one needs to consider the ontological consequences of the transgression. In standard metafiction, the entities under discussion change their ontological status from, for instance, human to abstract or eventive to abstract. While this change results in the puzzling situation that the very same entity can be both concrete and abstract (see Section 3), it does not come along with the impression of inconsistency. In metalepses, by contrast, the entities under discussion do not change their basic ontological status. For (28), Ada's climb is an event at both the fictional and the actual layer. The same holds for other types of metalepses not dis-

cussed here. For instance, if Emil in *Emil and the detectives* spoke to the book's author Erich Kästner, this would count as a metalepsis precisely because Emil crosses the border between fiction and non-fiction as the human he is within the fiction. It is therefore the preservation of ontological traits across narrative layers that is constitutive for metalepsis and the impression of inconsistency it creates. In the following I will outline a pretense-based account of temporal metalepsis that relies on ontological distinctions and thereby keeps an eye on the similarities with meta- and parafiction and the differences from them.

3. Outline of a pretense-based account of temporal metalepsis

3.1. Introduction to the formal framework

The integration of para- and metafiction within one model is usually discussed for fictional names and their coreferential anaphora; see the example in (29) for illustration and Semeijn (2021: ch. 6) for a survey of prominent approaches and their evaluation.

(29) Emil_i is a fictional character. In *Emil and the detectives*, he_i travels to Berlin.

The basic challenge can be summarized as follows. Intuitively, the name *Emil* in the metafictional statement and the pronoun he in the parafictional statement refer to the same entity. This intuition is in line with the reasonable more general hypothesis that a pronoun can be anaphoric to a name only if the pronoun and the name corefer. However, this coreference results in a contradiction. The very same entity would be said to not exist (namely, to be fictional, as in the metafictional statement) and to exist (namely, to travel to Berlin, as in the parafictional statement). The challenge seems almost trivial, but the analysis is not. It is probably tempting to pursue some anti-realist approach to the interpretation of fictional names. For instance, one could introduce existential binding of a variable x for Emil as part of the story content and allow x to be accessible outside of the story, independently of the story-internal existence claim. However, this runs into at least two major problems. For one, according to standard constraints for anaphoric relations, variables that are introduced at a local embedded layer are not accessible at global layers above. Furthermore, even if this can be fixed, the approach still leads to what Semeijn (2021) calls 'the problem of the wrong kind of object'. Specifically, x would be native to the story and therefore count as a physical object. Correspondingly, it cannot be an abstract object invented by Kästner. Obviously, pursuing an opposing realist approach to fictional names leads to the flip side of the same ontological problem: x would be native to the actual world and therefore count as an abstract object. Correspondingly, it cannot travel to Berlin in a physical sense.

In order to avoid the given problems and the ontological dilemma on which they are based, it seems necessary to give up on a simple picture of ontology and coreference. Meaning adaptations such as ambiguity phenomena and type coercion provide independent evidence for the integration of relatively fine-grained ontological distinctions into the semantics-pragmatics interface; see the plea for qualia structures in, for instance, Pustejovsky (1995) or the plea for rich typing systems in Type Composition Logic (e.g., Asher 2011, Bücking 2014, Bücking and Maienborn 2019) and Modern Type Theory (e.g., Luo 2012, Chatzikyriakidis and Luo 2020). Specifically, it is argued that there are natural language expressions for objects that bear

types for multiple aspects, so-called dot-types. For instance, the noun book introduces objects that are both physical and informational objects, as a consequence of which they bear both a physical and an informational aspect, type PHYS \bullet INFO. It is then the predicational context that determines whether the complex type or one of the aspect types is chosen; see (30) for illustration.

(30) Ada read the book_{PHYS•INFO}, understood it_{INFO}, liked it_{INFO}, and put it_{PHYS} on the shelf with her favorite novels.

The modeling in terms of multiple aspects reconciles two otherwise incoherent intuitions. On the one hand, the relevant aspects are co-present for the same object. This is why the predications in (30) are conceived of as being about the same book, and why the use of coreferential anaphora is licensed. On the other hand, this co-presence does not require both types to be compatible with each other. In fact, it is typical for multiple aspect objects that their aspects are ontologically distinct and thus do not have a common meet.⁹

Against this background, Recanati (2018) suggests that fictional names such as *Emil* introduce objects that bear two aspects, namely, an abstract and a physical one. Correspondingly, the name *Emil* refers to the abstract aspect of Emil in metafiction, while it refers to his physical aspect in parafiction. I implement this idea by integrating the typing system proposed by Asher (2011) into the dynamic take on fiction in Semeijn (2021). The former facilitates a transparent representation of ontological types and their relations to each other in the case of multiple aspect objects, the latter facilitates the integration of a standard 'In story' operator in the spirit of Lewis (1978) into a Discourse Representation Structure (= DRS) as used in Discourse Representation Theory (see Kamp and Reyle 2011 for an overview). As I am merely interested in the exposition of core ideas in this paper, I will not go into the formal details of type composition and dynamic semantics here. Notably, Semeijn (2021: ch. 6.4.4) already proposes an integration of Recanati's idea into her framework. While our proposals do not differ substantially, my use of typing information in the sense of Asher (2011) provides a particularly clear representation of the underlying ontological structure.

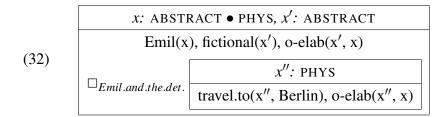
For the example (31) (= (29)), the approach just outlined leads to the DRS in (32). In this DRS, \Box_{story} symbolizes the relevant 'In story' operator, v: TYPE says that v bears type TYPE, and o-elab(v', v) says that v' is object v under a given aspect, that is, that v' elaborates on v by specifying the conceptualization under which v is referred to.

(31) Emil_i is a fictional character. In *Emil and the detectives*, he_i travels to Berlin.

⁹For our purposes, this very rough introduction into multiple aspect objects should suffice. However, I would like to point out that type-based approaches usually distinguish between different kinds of types and different modes of their interaction. For instance, the co-presence of incompatible types as motivated for *book* needs to be distinguished from the ambiguity of homonyms such as *bank*. As shown by (i), *bank* does not license coreferential anaphora across meanings.

⁽i) The bank of the river were lined with trees. #It managed the money of the rich.

In Type Composition Logic, the ambiguity of *bank* between 'river bank' and 'financial institution' is therefore not modelled in terms of multiple aspects, but in terms of disjunctive types. For disjunctive types, the choice of one type blocks access to the other type in the further context.



This analysis solves the problems that arise for the analysis of fictional names as follows. The name Emil introduces an object x that bears the multiple aspect type ABSTRACT \bullet PHYS. Therefore, the name can refer to an abstract or physical aspect of this object, where the choice between both options depends on the predicational context. The metafictional predicate *fictional* can thus apply to the abstract elaboration of Emil x', while the parafictional predicate *travel* to can apply to his physical elaboration x''. That is, although meta- and parafiction are about the same object x, the respective statements relate to mutually exclusive aspects of this object, as a consequence of which no problem of the wrong kind of object arises. Furthermore, the accessibility problem does not arise either because the multiple aspect object x is introduced at the global actual layer. This predicts x to be accessible for elaborations within the local context of the story content.

3.2. Analysis of temporal metalepsis: Accommodation of an event in pretense

In order to apply the framework outlined in Section 3.1 to temporal metalepsis, I propose two extensions.

First, multiple object types are generalized to all types of fictional entities, including events. The examples in (33) provide independent evidence for the assumption that fictional events can be conceived of as coreferential abstract and spatio-temporal entities.

- (33) a. Ada is fictional, and so is her leaving $_i$ her wife. In "Ada and the detectives", it $_i$ causes much trouble.
 - b. In the story, Ada leaves $_i$ her wife. The author describes this $_i$ in harsh terms.

In (33a), Ada's leaving her wife is introduced as an abstract entity in the metafictional statement and then taken up by *it* as a spatio-temporal entity in the following parafictional statement. In (33b), the order is reversed, that is, the metafictional anaphor *this* corefers with the spatio-temporal event introduced in the parafiction before. It is noteworthy that events can also participate in multiple aspect objects that are introduced by lexical means. A prominent instance is the noun *lunch*, which can introduce lunches as physical objects and as events. Furthermore, Bücking (2014) argues that English *by* and German *indem* 'in that' lead to multiple aspect events; see (34) for exemplification.

(34) Ada kept a promise by dancing with Cem.

In this example, Ada's keeping a promise and her dancing with Cem are perceived as two facets of the same event. This intuition can be captured in a straightforward way by assuming that by introduces a multiple aspect object. Specifically, the multiple aspect combines the fine-grained

verbal predications that are linked by by, as a consequence of which (34) is about an object of type KEEP PROMISE • DANCE WITH CEM. ¹⁰

Second, I suggest that in addition to aspects for abstract and spatio-temporal events, an aspect for pretense events can be accommodated. Pretense events are events that are treated as if they were spatio-temporal events although they are not. As a result of this game in pretense, the very same event can bear three different aspects, namely, the usual spatio-temporal type EVENT, the abstract type ABSTRACT EVENT, and the type for pretense PRETENSE EVENT.

With these two extensions to the formal framework in place, I propose the analysis in (36) for the temporal metalepsis in (35), repeated from (2) above. For ease of presentation, the typing of Ada, the mountain, and the digression is ignored here.

(35) While Ada is climbing the mountain, we have time for a digression.

(36)

$$e: \text{ EVENT, } e': \text{ ABSTRACT} \bullet \text{ EVENT} \bullet \text{ PRETENSE-EVENT, } e'': \text{ PRETENSE-EVENT}$$

have.time.for(e, we, d), digression(d)

climb(e', a, m), Ada(a), mountain(m), o-elab(e'', e')

$$\tau(e) \supset \text{now, } \tau(e) \subseteq \tau(e'')$$

$$\Box_{story} \qquad e''': \text{ EVENT}$$

$$o-elab(e''', e')$$

In prose: At the actual layer, there is a spatio-temporal event of the narrator and her addressee having time for a digression. There is also an event of Ada climbing the mountain that can be referred to under its abstract aspect, its spatio-temporal aspect, and its pretense aspect. The spatio-temporal aspect of Ada's climb exists in the story, while the pretense aspect exists at the actual layer. Furthermore, the runtime of the pretense aspect includes the present runtime of having time for a digression. In a nutshell, (35) thus receives the interpretation that the narrator and her addressee have time for a digression, where the digression time is temporally framed by Ada's climb conceived of as if it were actual.

The merits of the proposed analysis are the following: For one, the multiple aspect conception of the fictional event complies with the intuition that the climbing introduced in the *while*-clause corefers with the climbing introduced within the story. This is confirmed by the observation that temporal metalepsis is also licensed by anaphors, as in (37).

(37) Ada began to climb; the mountain. Meanwhile; we have time for a digression.

Furthermore, the representation is ontologically sound. On the one hand, there is not need to say that the spatio-temporal aspect of Ada's climb of the mountain actually exists. In lieu thereof, it is the pretense aspect that is native to the actual layer and thus exploitable for actual reference. On the other hand, the pretense aspect is still conceived of as a spatio-temporal particular and thereby differs from abstract aspects as used in standard metafiction. This is why the pretense aspect has a runtime relative to which the digression time can be located temporally. Finally, the choice of tense and aspect has a reason. Given the goal of contributing an actualization in pretense, the time of the climbing in pretense should include the present digression time,

 $^{^{10}}$ The by-locution has received considerable attention in philosophy and linguistics; see, for instance, Bennett (1994), Sæbø (2008), and Schnieder (2009) for discussion and different solutions to the puzzle posed by by.

which calls for present tense and imperfective aspect in this specific case. The more general prediction is that the grammar of temporal metalepsis depends on which temporal relations the narrator intends to establish between the actual timeline and pretense aspects of story-based events. This is in line with the upshot of Section 2.1, according to which the narrator uses standard grammatical rules for linking the fictional event to the actual situation of narrating.

The proposed analysis suggests some further issues worth discussing. Let me start by considering how the accommodation of an event in pretense is licensed. I assume that this accommodation is licensed by the threat of an ontological conflict. That is, in order to obtain a consistent interpretation of temporal metalepsis, the event on which the temporal metalepsis is based needs to be adapted. Conversely, the need for conflict resolution is reflected in the intuition that the metalepsis brings with it a light form of inconsistency. I speculate that the inconsistency is perceived as light because recipients are familiar with the relevant game of pretense and, thus, also with the accommodation that it supports; see below for the role of pretense in conversations about fictional contents more generally. However, to avoid misunderstandings, I should add that the proposed analysis of temporal metalepsis does not suggest a pretense-based approach to standard parafictional statements as well, rather the opposite. Contents in the scope of the 'In story' operator should not be adapted. It is crucial for Ada's climb of the mountain that it inhabits the story worlds as an ordinary spatio-temporal particular. The same holds for the ontological type of Ada, the mountain, etc. The additional game of pretense is only licensed in those cases where entities that exist in the fiction seem to transgress the border established by the 'In story' operator. It is therefore the actualization built into temporal metalepsis that results in the accommodation of an event in pretense.¹¹

It is also worth taking a brief look at a more general consequence of the proposed multiple aspect conception of events. The analysis builds on the assumption that the multiple aspect event is assigned to the actual global layer. As already motivated for the corresponding treatment of fictional characters in Section 3.1, the assignment to the global layer enables the fictional event to be accessible at the local layer for the story content as well. As a consequence, the representation of the story content is based on object elaborations across the entire range of fictional entities. While this may seem counterintuitive at first, I consider it plausible upon closer inspection. The type-based representations merely capture a defining trait of fictional entities. Arguably, fictional entities come with at least two aspects, one for the type of entity they are within a fiction, and one that identifies them as fictional at a fiction-external layer. In other words, once representations are sensitive to the different aspects fictional entities can instantiate, they can, or even must, be said to exist in both fictional and actual worlds, with the overarching complex type being assigned to the actual layer.

¹¹Semeijn (2021: ch. 7) distinguishes between $In\ s$, ϕ and $According\ to\ s$, ϕ . She argues that the 'In' operator treats s as a fictional text, as a consequence of which ϕ is not about what is actually true. This is fully in line with my argument above. The 'According to' operator receives a different analysis. Specifically, it is argued that statements of the form $According\ to\ s$, ϕ are about what is actually true according to what is expressed by s. Therefore, the 'According to' operator treats s as a non-fictional text. The distinction between both operators accounts for the preference of the 'In' operator for fiction, and the preference of the 'According to' operator can also be used with a fictional text s. In this case, it suggests the pretense that s is non-fictional and, thus, also the pretense that the fictional events might be non-fictional; see Semeijn (2021: 165-166) in particular. I will leave to further research how this game of pretense relates to the pretense involved in temporal metalepsis. There is at least one main difference, namely, in temporal metalepsis, the pretense of actual events is not relativized to what is expressed by the fictional text.

Finally, I would like to address the transfer of the given analysis of temporal metalepsis to temporal parafiction; recall (38) (= (22)) from Zucchi (2001).

- (38) [Context: A is reading Sherlock Holmes, with B in the room.]
 - a. B: What is Holmes doing?
 - b. A: He is playing the violin. A murder took place and he is thinking about the evidence. He will soon discover the murderer.

In Section 2.2.1, I have argued that temporal parafiction is a colloquial equivalent to temporal metalepsis, where the former differs from the latter by being bound to the text-external talk about a fictional text. More specifically, I have claimed that temporal parafiction also builds on an actualization of fictional events at the actual layer and thus shares a comparable game of pretense with temporal metalepsis. This kinship can be captured in a straightforward way by applying the key ingredients of the analysis in (36) to temporal parafiction. For instance, A's first parafictional statement in (38) can be given the representation in (39).

(39)
$$e: ABSTRACT \bullet EVENT \bullet PRETENSE-EVENT, e': PRETENSE-EVENT play(e, h, v), Holmes(h), violin(v), o-elab(e', e)
$$\tau(e') \supset now$$

$$\Box_{story} e'': EVENT \\ \hline o-elab(e'', e)$$$$

In prose: The actual layer provides an event of Holmes playing the violin that can be referred to under its abstract aspect, its spatio-temporal aspect, and its pretense aspect. The spatiotemporal aspect only exists in the story, while the pretense aspect exists at the actual layer. Furthermore, the runtime of the pretense aspect includes the actual now. As desired, the now of the given conversation between A and B is thus temporally framed by the pretense aspect of Holmes playing the violin. The choice of present tense and progressive aspect follows smoothly from A's intention to convey precisely this temporal relationship. The same reasoning can be applied to the further event descriptions. Specifically, the murder under its pretense aspect should precede the now of the conversation, which accounts for the use of past tense in this case, and the discovery of the murderer under its pretense aspect should follow it, which accounts for the use of future tense. Notably, this pretense-based analysis can dispense with the accommodation of complex operators that factor the reading time into the interpretation; recall in the part of the text that I am reading now, in the part of the text that I read before, etc. from Zucchi's analysis in (23). The intuitive relation to reading times is merely a byproduct of contextual information. As the conversation between A und B is bound to a situation where A is reading Sherlock Holmes, the reading times of parts of the text can be correlated with the given now and thus also with the different fictional events under their respective pretense aspect.

4. Conclusion and outlook

This paper has been concerned with temporal metalepsis from a linguistic point of view. As a first step, I have examined its semantic properties. This has shown that temporal metalepses are subject to grammatical constraints. Specifically, the choice of tense, aspect, and temporal

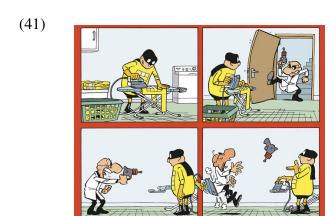
subordinators depends on the narrator's intention to actualize story-internal fictional events at a story-external actual layer. Furthermore, anaphors indicate identities across narrative layers. Temporal metalepses thereby intertwine facets of parafictional and metafictional statements. On the one hand, content from within the story is used for predications at a narrative layer above; on the other hand, the relevant content is not conceived of as abstract, but as real. As a second step, I have proposed a pretense-based account of temporal metalepsis that builds on a dynamic semantics for para- and metafiction. According to this proposal, the temporal entanglement between narrative layers results in an ontological conflict that is resolved by the accommodation of an event in pretense at the actual layer. This accommodation leads to a multiple aspect object that can be referred to under its spatio-temporal aspect, its abstract aspect, or its pretense aspect, where the choice between these options depends on the layer at which the fictional event is accessed. In addition, I have suggested that temporal metalepsis has a colloquial variant that can be exploited in the talk about fictional texts while reading them. This, then, broadens the empirical scope of the phenomenon considerably.

I conclude with a brief outlook for two issues that may be worthy of discussion in future research. For one, in Section 2.1 I have pointed out that temporal metalepsis shares features with the deferred reference of non-temporal indexicals. This begs the question of how temporal metalepsis relates to potential cases of deferred reference in the temporal domain. A candidate for such a case is given in (40), which follows Welke (2005: 338-339).

(40) Wer bekam die Linsensuppe? who got the lentil soup 'Who did get the lentil soup?'

Let (40) be uttered by a waiter in a restaurant. In this case, the verbal content relates to the actual event of getting the lentil soup, which is at odds with reference to the past as indicated by the preterit. This conflict can be resolved by the accommodation of another event, namely, by assuming reference to the order of the lentil soup. The example, then, shares the accommodation-based resolution of an impending ontological conflict with temporal metalepsis. However, there is also a principled difference between both cases. This difference is fully analogous to the difference that has already been established between temporal metalepsis and non-temporal deferred reference. In contrast to temporal metalepsis, the conflict in (40) concerns times alone, not worlds. Correspondingly, a cross-world game of pretense for the same event is no help. In lieu thereof, the accommodation results in a sortally different event (namely, the order of the meal) that is related to the given event (namely, the reception of the meal) merely indirectly. As a consequence, the order and the reception of the meal are not conceived of as different aspects of the same event, but as different events.

The second issue relates to the question of how the proposed pretense-based approach to temporal metalepsis fits into the analysis of metalepses more generally. A satisfying answer to this question is certainly beyond the scope of this paper, given the wide range of metalepses possible. I will just mention one intriguing case in point for a metalepsis in comics, namely (41), which is copied from the back cover of Jousselin (2018).



This comic strip is interesting for at least two reasons. First, a simple conjunction of propositions as proposed for inconsistent pictures by Cresswell (1983) does not seem to be enough for its analysis. In particular, the transgression of the iron between the panels three and four is crucial to the narrative progression at hand and to the causal relations on which this progression is based. Notably, the position of the iron is not arbitrary. Rather, it follows rules of spatial contiguity and, thus, the "grammar" of common pictorial representations. This suggests a link to the more general question of how to account for narrative progression in pictorial narratives as opposed to linguistic narratives; see Abusch (2014) and Altshuler and Schlöder (2021) for discussion. Second, the example is also challenging for a simple pretense-based approach to metalepses. It is not just pretended that the iron is part of the actual world represented by the gutter. Instead, the interpretation seems to build on the pretense that the structure of the gutter is relevant to the events and their causal relations within the fiction. This, then, calls for factoring a game of pretense into the story content that is in the scope of the 'In story' operator. I will leave to future research whether such a complex approach can be upheld upon closer scrutiny.

References

Abusch, D. (2014). Temporal succession and aspectual type in visual narrative. In L. Crnič and U. Sauerland (Eds.), *The Art and Craft of Semantics: A Festschrift for Irene Heim*, pp. 9–29. Cambridge, MA: MIT Working Papers in Linguistics.

Altshuler, D. and J. Schlöder (2021). If pictures are stative, what does this mean for discourse interpretation? In P. Grosz, L. Martí, H. Pearson, Y. Sudo, and S. Zobel (Eds.), *Proceedings of Sinn und Bedeutung* 25, pp. 19–36. Konstanz: University of Konstanz.

Asher, N. (2011). *Lexical Meaning in Context. A Web of Words*. New York: Cambridge University Press.

Bennett, J. (1994). The "namely" analysis of the "by" locution. *Linguistics and Philosophy 17*, 29–51.

Bücking, S. (2014). Elaborating on events by means of English *by* and German *indem*. In Christopher Piñón (Ed.), *Empirical Issues in Syntax and Semantics 10*, pp. 19–36. http://www.cssp.cnrs.fr/eiss10/: CNRS.

Bücking, S. and C. Maienborn (2019). Coercion by modification – The adaptive capacities of event-sensitive adnominal modifiers. *Semantics & Pragmatics* 12, 1–39.

- Chatzikyriakidis, S. and Z. Luo (2020). *Formal Semantics in Modern Type Theories*. Hoboken, NJ: Wiley.
- Cresswell, M. J. (1983). A highly impossible scene. The semantics of visual contradictions. In R. Bäuerle, C. Schwarz, and A. v. Stechow (Eds.), *Meaning, Use, and Interpretation of Language*, pp. 62–78. Berlin: de Gruyter.
- Eckardt, R. (2014). The Semantics of Free Indirect Discourse. How Texts Allow Us to Mind-Read and Eavesdrop. Leiden: Brill.
- Genette, G. (1983). Narrative Discourse. An Essay in Method. Translated by Jane E. Lewin. Foreword by Jonathan Culler. Ithaca, NY: Cornell University Press.
- Jousselin, P. (2018). Unschlagbar. 1. Gerechtigkeit und frisches Gemüse. Aus dem Französischen von Marcel Le Comte. Hamburg: Carlsen.
- Kamp, H. and U. Reyle (2011). Discourse representation theory. In C. Maienborn, K. von Heusinger, and P. Portner (Eds.), *Semantics: An International Handbook of Natural Language Meaning. Volume 1*, pp. 872–923. Berlin: de Gruyter.
- Katz, G. (1996). States, events and representations. Manuscript, University of Tübingen.
- Kukkonen, K. (2011). Metalepsis in popular culture: An introduction. In K. Kukkonen and S. Klimek (Eds.), *Metalepsis in Popular Culture*, pp. 1–21. Berlin: de Gruyter.
- Lewis, D. (1978). Truth in fiction. American Philosophical Quarterly 15, 37-46.
- Löbner, S. (2002). Is the German Perfekt a perfect perfect. In G. Katz, S. Reinhard, and P. Reuter (Eds.), *Proceedings of SuB 6*, pp. 255–273. Osnabrück: University of Osnabrück.
- Luo, Z. (2012). Formal semantics in modern type theories with coercive subtyping. *Linguistics and Philosophy 35*, 491–513.
- Maier, E. (2017). Fictional names in psychologistic semantics. *Theoretical Linguistics 43*, 1–45.
- Martínez, M. and M. Scheffel (2016). *Einführung in die Erzähltheorie* (10. ed.). München: C. H. Beck.
- Nunberg, G. (1995). Transfers of meaning. *Journal of Semantics* 12, 109–132.
- Pier, J. (2016). Metalepsis (revised version; uploaded 13 july 2016). In P. Hühn, J. C. Meister, J. Pier, and W. Schmid (Eds.), *The Living Handbook of Narratology*. Hamburg University.
- Predelli, S. (2021). Fictional tellers: A radical fictionalist semantics for fictional discourse. *Organon F* 28, 76–106.
- Pustejovsky, J. (1995). The Generative Lexicon. Cambridge, MA: MIT Press.
- Recanati, F. (2018). Fictional, metafictional, parafictional. *Proceedings of the Aristotelian Society 118*, 25–54.
- Sæbø, K. J. (2008). The structure of criterion predicates. In J. Dölling, T. Heyde-Zybatow, and M. Schäfer (Eds.), *Event Structures in Linguistic Form and Interpretation*, pp. 127–147. Berlin: de Gruyter.
- Sæbø, K. J. (2011). Adverbial clauses. In K. von Heusinger, C. Maienborn, and P. Portner (Eds.), *Semantics: An International Handbook of Natural Language Meaning. Volume 2*, pp. 1420–1441. Berlin: de Gruyter.
- Schnieder, B. (2009). 'by'. A refutation of the Anscombe thesis. *Linguistics and Philosophy 31*, 649–669.
- Semeijn, M. (2021). *Fiction and Common Ground. A Workspace Account.* Ph. D. thesis, Rijksuniversiteit Groningen, Groningen.

Stalmaszczyk, P. (Ed.) (2021). Names and Fictions. Organon F 28.

Welke, K. (2005). *Tempus im Deutschen. Rekonstruktion eines semantischen Systems*. Berlin: de Gruyter.

Zucchi, S. (2001). Tense in fiction. In C. Cecchetto, G. Chierchia, and M. T. Guasti (Eds.), *Semantic Interfaces. Reference, Anaphora and Aspect*, pp. 320–355. Stanford: CSLI Publications.